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# PRELIMINARY BASELINE HUMAN HEALTH RISK ASSESSMENT REPORT

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3400 BENNING ROAD, N.E.  
WASHINGTON, DC**

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**February 2016**





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## List of Acronyms and Abbreviations

AAF	Absorption Adjustment Factor
ACS	American Cancer Society
ADAF	Age-Dependent Adjustment Factor
AECOM	AECOM Technical Services, Inc.
ATSDR	Agency for Toxic Substances and Disease Registry
BAF	Bioaccumulation Factor
BERA	Baseline Ecological Risk Assessment
BHHRA	Baseline Human Health Risk Assessment
BMD	Benchmark Dose
CalEPA	California Environmental Protection Agency
CAS	Chemical Abstracts Service
CADD	Chronic Average Daily Dose
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COC	Chemical of Concern
COPC	Constituent of Potential Concern
CSF	Cancer Slope Factor
CSM	Conceptual Site Model
CTE	Central Tendency Exposure
DAF	Dermal Absorption Fraction
DOEE	Department of Energy and Environment
ED	Exposure duration
EF	Exposure frequency
EFH	Exposure Factors Handbook
ELCR	Excess Lifetime Cancer Risk
EPC	Exposure Point Concentration
FS	Feasibility Study
FI	Fraction Ingested
GLFATF	Great Lakes Fish Advisory Task Force
HASP	Health and Safety Plan
HEAST	Health Effects Assessment Summary Tables
HI	Hazard Index
HHRA	Human Health Risk Assessment
HQ	Hazard Quotient
IRIS	Integrated Risk Information System
LADD	Lifetime Average Daily Dose



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LMS	Linearized Multi-Stage
LOAEL	Lowest Observed Adverse Effect Level
LWZ	Lower water-bearing zone
MDE	Maryland Department of Environment
MF	Modifying Factor
mg/kg	milligrams per kilogram
MLLW	Mean lower low water
MRL	Minimal Risk Levels
NCEA	National Center for Environmental Assessment
NCP	National Contingency Plan
NHANES	National Health and Nutrition Examination Survey
NJDEP	New Jersey Department of Environmental Protection
NOAEL	No Observed Adverse Effect Level
NPS	National Park Service
OEHHA	Office of Environmental Health Hazard Assessment
PBDE	Polybrominated diphenyl ether
PC	Permeability constant
PCBs	Polychlorinated Biphenyls
PPE	Personal Protective Equipment
POD	Point of departure
PPRTV	Provisional Peer Reviewed Toxicity Values
QAPP	Quality Assurance Project Plan
QC	Quality control
RAGS	Risk Assessment Guidance for Superfund
RBSL	Risk-based screening level
RI	Remedial Investigation
RME	Reasonable Maximum Exposure
RfC	Reference Concentration
RfD	Reference Dose
RPF	Relative potency factor
RSL	Regional Screening Level
SAB	Science Advisory Board
SAF	Soil-to-skin Adherence Factor
SSQL	Sample-specific quantitation limit
TCDD	2,3,7,8-Tetrachlorodibenzo- <i>p</i> -dioxin
TEF	Toxicity Equivalency Factor
TEQ	Toxicity Equivalence



UCL	Upper Confidence Limit on the Mean
UF	Uncertainty Factor
USEPA	United States Environmental Protection Agency
UWZ	Upper water-bearing zone
VISL	Vapor Intrusion Screening Level
WHO	World Health Organization

## 1 Introduction

This preliminary baseline human health risk assessment (BHHRA) has been prepared by AECOM on behalf of Potomac Electric Power Company and Pepco Energy Services (collectively referred to as Pepco) to evaluate potential human health risks associated with the Benning Road Facility. This preliminary BHHRA was based on the remedial investigation (RI) activities completed to date (between January 2013 and December 2014). The District Department of Energy and Environment (DOEE) has determined that additional field investigation is necessary to address remaining data gaps and uncertainties. This preliminary BHHRA will be revised based on the results of these investigations. In addition, in accordance with discussions between Pepco and DOEE in a meeting held at DOEE offices on November 9, 2015, the revised BHHRA will be expanded to include several new landside exposure scenarios: current/future construction worker, future industrial worker, and future recreational user. The revised BHHRA will be documented following the completion of the additional field investigation. This work is being performed by Pepco pursuant to a consent decree that was entered by the U.S. District Court for the District of Columbia on December 1, 2011 (the Consent Decree). The Consent Decree documents an agreement between Pepco and the District of Columbia (District) which is part of the District's larger effort to address contamination in and along the lower Anacostia River. The RI/FS project is overseen by DOEE, which is responsible for reviewing and approving the work plans and reports submitted by Pepco. The results of the BHHRA will be used to help inform the need for any additional evaluation and/or remedial action at the Benning Road Facility.

The general site location is shown on **Figure 1**. The Benning Road Facility is located on the east side of the Anacostia River approximately 4.7 miles upstream of the confluence of the Anacostia and Potomac Rivers. Together, the Site and the adjacent segment of the River are referred to herein as the "Study Area". The Study Area consists of a "landside" component which consists of the Site itself, and a "waterside" component which consists of the shoreline and sediments in the segment of the river adjacent to and immediately downstream of the Site (**Figure 2**). The Benning Road Facility has been the subject of several site investigations and removal actions since 1985; detailed discussions of the historical environmental activities at the Site are provided in Section 1 of the RI Report.

Consistent with United States Environmental Protection Agency (USEPA) guidance (2002a, 2005a), a risk-based framework has been adopted for the Benning Road Facility RI/FS. This framework utilizes an iterative approach coupled with site-specific information to define the conceptual site model, assess potential risks, and evaluate further actions. The use of site-specific information is consistent with principles articulated by the National Academy of Sciences (NRC 2001) and USEPA

guidance on risk assessment and risk management decision-making at contaminated sites (USEPA, 1989a, 2002a, 2005a, 2011, 2014).

### 1.1 Preliminary BHHRA Methodology

The BHHRA has been performed in accordance with the DOEE approved Risk Assessment Work Plan (AECOM, 2012a) as well as the resolution of responses to comments (AECOM, 2012b). The work plan for the BHHRA was included as Appendix E of the *RI/FS Work Plan* (AECOM, 2012a).

In the absence of DOEE-specific guidance, and as discussed with DOEE staff, the BHHRA was conducted to comply with USEPA guidance for conducting a risk assessment including, but not limited to, the following:

- Risk Assessment Guidance for Superfund (RAGS): Volume 1 - Human Health Evaluation Manual (Part A) (USEPA, 1989a);
- Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions. OSWER 9655.0-30. April, 1991 (USEPA, 1991);
- Guidance for Data Usability in Risk Assessment (Part A) (USEPA, 1992a);
- Guidelines for Exposure Assessment (USEPA, 1992b);
- Land Use in the CERCLA Remedy Selection Process (USEPA, 1995);
- Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites (USEPA, 2002b);
- Human Health Toxicity Values in Superfund Risk Assessments, OSWER Directive 9285.8-53 (USEPA, 2003a);
- RAGS: Volume I. Human Health Evaluation Manual. Part E, Supplemental Guidance for Dermal Risk Assessment (USEPA, 2004a);
- Guidelines for Carcinogen Risk Assessment (USEPA, 2005b);
- Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005c);
- Exposure Factors Handbook (EFH) (USEPA, 2011);
- Tier 3 Toxicity Value White Paper (USEPA, 2013a)
- ProUCL Version 5, Statistical Software for Environmental Applications for Data Sets with and without Nondetect Observations (USEPA, 2013b);



- RAGS, Human Health Evaluation Manual Supplemental Guidance: Update of Standard Default Exposure Factors (USEPA, 2014)
- Regional Screening Levels (USEPA, 2015a,b).

The BHHRA evaluated potential human health effects using the following four step paradigm, as identified by the USEPA (USEPA, 1989a):

- Data Evaluation and Hazard Identification
- Toxicity Assessment
- Exposure Assessment
- Risk Characterization

The BHHRA is organized into the following sections:

- Section 2 – Site Characterization and Conceptual Site Model
- Section 3 – Data Evaluation and Hazard Identification
- Section 4 – Toxicity Assessment
- Section 5 – Exposure Assessment
- Section 6 – Risk Characterization
- Section 7 – Uncertainty Analysis
- Section 8 – Summary and Conclusions
- Section 9 – References

Tables and figures are presented at the end of the text. Note that tables are numbered based on the Section in which they are referenced. Informational tables embedded within the text of the BHHRA are not numbered.

## 2 Site Characterization and Conceptual Site Model

A description of the Site and its setting is provided below, followed by a discussion of the human health CSM. The CSM describes potential sources, migration routes, routes of exposure, and potential receptors, based on available information. The receptor/exposure pathway scenarios that are potentially complete and require further evaluation are identified. The CSM presented in this BHHRA report updates the preliminary CSM presented in the RI/FS Work Plan (AECOM, 2012a).

### 2.1 Site Description

The Site has two distinct operational areas: a power plant area to the west and the Benning Service Center to the east (see **Figure 2**). The Benning Service Center supports activities related to construction, operation and maintenance of Pepco's electric power transmission and distribution system serving the Washington, D.C., area. The Service Center occupies the largest part of the property (about 78%), and accommodates approximately 700 Pepco employees. Service Center employees work in maintenance and construction of Pepco's electric distribution system; system engineering; vehicle fleet maintenance and refueling; and central warehouses for all the materials, supplies and equipment needed to operate the Pepco electrical distribution system. The Service Center also houses three electrical substations supporting Pepco's transmission and distribution system. The Benning Road Power Plant was constructed in 1906. Over the years, the power plant operated and subsequently retired several different generating units, reflecting the advances in technology and operating on different types of fuels. Benning Road Power Plant stopped burning coal in 1976 and operated an average of 10 to 15 days a year since 1985 to meet peak electricity demand. The power plant was shut down in 2012. Demolition and removal of the power plant building and related infrastructure commenced in 2014, and all demolition and site restoration activities are expected to be completed in May 2015. The Site will continue to be used as a Pepco Service Center.

The Site has been identified as a suspected source of contamination along the Anacostia River. There have been five instances between 1985 and 2003 in which materials containing polychlorinated biphenyls (PCBs) were released at the Site, all of which were promptly addressed by Pepco. It is suspected that these releases and possibly other historical operations at the Site may have contributed to the contamination of the river. The Final Site Inspection Report (TetraTech, 2009) linked PCBs and inorganic constituents detected in Anacostia River sediment to potential past Site discharges. A detailed summary of previous environmental investigations and response actions is presented in Section 1 of the RI Report.

The Site is completely surrounded by a fence with two guarded entrances. The guard stations are manned 24 hours a day, 7 days a week. The majority of the Site is covered by impervious material



such as concrete or asphalt. Storage areas not covered in impervious material are covered in gravel. Railroad tracks enter the site from the south and run to the north. The tracks were formerly used to transport coal to the power plant and are no longer active.

As shown in **Figure 3**, land uses in the vicinity of the 77-acre Site include a mix of commercial, residential, parkland/green space, and transportation. The Site is bordered by a DC Solid Waste Transfer Station to the north, Kenilworth Maintenance Yard (owned by the National Park Service, NPS) to the northwest, the Anacostia River to the west, Benning Road to the south and residential areas to the east and south (across Benning Road). Major transportation corridors in the area include the Anacostia Freeway running north-south and East Capitol Street NE running east-west. The Minnesota Avenue Metrorail Station of the Washington Metropolitan Area Transit Authority (WMATA) light rail system is located immediately to the east of the Site.

The Site is located in Ward 7 in the District of Columbia, within the 20019 zip code (AECOM, 2013). Ward 7 contains a mix of residences and parkland, including Fort Mahan Park, Fort Davis Park, Fort Chaplin Park, Fort Dupont Park, Kenilworth Park and Aquatic Gardens, Watts Branch Park, Anacostia River Park and Kingman and Heritage Islands Park. The neighborhoods to the south of the Site along the east side of the river include River Terrace, Mayfair and Eastland Gardens. Four schools are located within a 0.25-mile radius of the Site boundary: Thomas Elementary School, Cesar Chavez Middle and High School, Benning Elementary School, and River Terrace Elementary School (Google Earth). Drinking water in the area is provided by a remote municipal source (DC Water) that originates on the upper Potomac River.

### **2.1.1 Anacostia River**

The Anacostia River begins in Bladensburg, MD, at the confluence of its two major tributaries, the Northwest Branch and the Northeast Branch, and flows a distance of approximately 8.4 miles before discharging into the Potomac River in Washington, DC (Sullivan and Brown, 1988). It is a tidal river with habitat suitable for a variety of freshwater and estuarine species, including American eel, brown bullhead, channel catfish, largemouth and smallmouth bass, carp, and sunfish. A water body-specific fish consumption advisory is in effect for the Anacostia and Potomac Rivers recommending against consumption of some species (catfish, carp and American eel) and limited consumption of other species (e.g., largemouth bass, sunfish) (DOEE, 2014a). However, people may not be aware of the advisory, or may choose to catch and eat river fish despite the presence of the advisory.

The public may access the river at several locations, including parks, boat docks and launches. Anacostia Park, a 1200 acre unit of National Capital Parks - East stretches five miles along the banks of the Anacostia River between the Fredrick Douglas Memorial Bridge and the DC-Maryland line. Within the park, the Anacostia Riverwalk Trail runs along the shorelines of the river continuing





beyond the North and South boundaries of the park. A public boat launch is located about 1.5 miles downstream from the Pepco site. Dense vegetation along the east bank adjacent to the Pepco Site may limit access to the river in this area. The Langston golf course is located directly across the river from the Pepco site. Kingman Island divides the Anacostia Channel from Kingman Lake to the west and provides recreation opportunities via pier and trail access. Based on the bathymetric survey conducted in 2013, water depths in the Study Area range from approximately 4 ft to 14 ft below Mean Lower Low Water (MLLW) level in the channel and shallower toward the banks (see RI Report). The average variation in the river's stage over a tidal cycle is approximately three feet.

Because of its location in the Washington metropolitan area, the majority of the watershed is highly urbanized. The Anacostia River has been the subject of numerous environmental studies, and was identified by USEPA as one of the most contaminated rivers in the Chesapeake Bay watershed (SRC and NOAA, 2000). The Benning Road Facility is one of six sites that have been identified by USEPA as potential sources of sediment contamination in the river (Fritz and Weiss, 2009).

Section 305(b) of the Federal Clean Water Act (CWA) requires each State/District to monitor, assess and report on the quality of its waters relative to designated uses established in accordance with the District's Water Quality Standards. Section 303(d) of the CWA requires each State/District to list waters not meeting water quality standards and prioritize those waters for management. Reporting for these waters is submitted to USEPA every two years. According to the 2014 District of Columbia integrated water quality assessment report, the Anacostia River is on the District's 305(b) list of impaired waters. The impaired designated uses include fish consumption, as well as habitat for fish, other aquatic life, and wildlife due to nutrient/eutrophication biological indicators and chemical pollutants (DOEE, 2014b).

## **2.2 Human Health Conceptual Site Model**

The human health CSM provides the framework for the human health risk assessment, and is used to identify appropriate exposure pathways and receptors for evaluation in the risk assessment. The purpose of the CSM is to identify 1) potential source areas, 2) potential migration pathways of constituents from source areas to environmental media where exposure can occur, 3) potential human receptors, and 4) potential exposure pathways by which constituent uptake into the body may occur. Potentially complete exposure pathways are identified for consideration for further evaluation in the risk assessment. For an exposure pathway to be complete, the following conditions must exist (USEPA, 1989a):

1. A source and mechanism of constituent release to the environment;
2. An environmental transport medium (e.g., air, water, soil);

3. A point of potential receptor contact with the medium; and
4. A human exposure route at the contact point (e.g., inhalation, ingestion, dermal contact).

The first step in developing the CSM is the characterization of the Site setting and surrounding area. This includes characterization of current and reasonably foreseeable future land uses and potential receptors (e.g., residential, recreational, commercial/industrial). Potential exposure scenarios identifying appropriate environmental media and exposure pathways for current and reasonably foreseeable future land uses and receptors are then developed. Constituents of Potential Concern (COPCs) are identified for each exposure pathway based on the application of risk-based screening criteria and other evaluation of the field sampling data. (The selection of COPCs is discussed in detail in Section 3.2.2.) Each potentially complete exposure pathway for any COPC is evaluated quantitatively in the risk assessment. The CSM is meant to be a “living” model that can be updated and modified as appropriate when additional data become available.

Some receptor populations may be potentially exposed to COPCs by more than one pathway. Although there may be more than one potential exposure pathway, USEPA guidance (USEPA, 1989a) cautions that the first step is to identify reasonable exposure pathway combinations, and then to determine “whether it is likely that the same individuals would consistently face the reasonable maximum exposure by more than one pathway.” [emphasis in the original] With this in mind, the CSM is developed by constructing potential exposure scenarios and identifying the hypothetical receptors to be used in evaluating these exposures. It is important to note that the exposure scenarios are typically constructed for hypothetical receptors who are assumed to be the most frequently exposed. The receptors are not intended to represent specific individuals.

A preliminary human health CSM based on available data was presented in the Risk Assessment Work Plan (Appendix E of the RI/FS Work Plan (AECOM, 2012a)). The preliminary CSM identified potential sources of COPCs including spills and releases, surface runoff, groundwater migration, storm sewers and outfalls, and atmospheric deposition. These sources may have resulted in impacts to environmental media, including soil, groundwater, sediment and surface water in the river. Because of the presence of bioaccumulative chemicals, including PCBs, potential uptake into the food chain and bioaccumulation into biota including sport fish may also have occurred. Human receptor populations may subsequently contact COPCs present in these environmental media via direct contact (i.e., incidental ingestion and dermal contact) with sediment and surface water, and via indirect exposure, specifically consumption of fish tissue. **Figure 4** presents an updated human health CSM for the Site.



### 2.2.1 Landside Investigation Area

For the Landside Investigation Area, all direct human exposure pathways are judged to be incomplete or insignificant, based on the limited access and tight security at the Site, and the presence of pavement and/or soil cover across the vast majority of the areas of the Site where current or historical operations took place. Consequently, there is very little potential for individuals to trespass onto the Site and come into contact with impacted surface soils. The presence of pavement and soil cover also limits the potential for on-site workers to come into contact with surface soils. The facility's health and safety plan (HASP) includes an employee hazard communication program and procedures that prevent or manage potential exposure to impacted subsurface soils by workers who may perform excavation activities on-Site. Based on current and anticipated future Site conditions and uses, the Risk Assessment Work Plan concluded that direct current and future contact exposure pathways for on-Site soils are incomplete or insignificant (AECOM, 2012a,b). The existing operational and institutional controls that are in place at the Site continue to provide effective exposure prevention measures. Thus, on a preliminary basis, the conditions in the Landside Investigation Area do not pose any unacceptable human health risks. However, at the request of DOE, the potential for future direct contact exposures to surface and subsurface soils will be evaluated pending collection of additional landside soil data and updates to the CSM.

Site groundwater is not used as a source of drinking water; thus, consumption of groundwater is not a complete exposure pathway. The depth to groundwater (upper water bearing zone) generally ranges from 9 to 16 feet bgs across the Site, with depths up to 26 feet bgs in the south-central portion of the Site (see Section 3.5.2 of the RI Report). While groundwater may be encountered in the event of excavation depths in excess of 9 feet bgs, most underground utilities and other subsurface infrastructure at the Site that may require future maintenance, repair or replacement are located at depths well less than 9 feet bgs. Electric utility lines at the Site range from 3 to 8 feet bgs, which is above the shallowest depth of the upper water bearing zone. Therefore, no contact with groundwater is expected during maintenance of electric utility lines. The metro and sewer lines are located deeper below ground surface. According to Pepco Underground, any maintenance on these lines would be performed from the inside by a designated confined-space permitted contractor outfitted with appropriate personal protective equipment (PPE). Therefore, it is not anticipated that excavation below the water table for the purposes of utility maintenance will take place in the future. Additionally, based on past experience, worker exposure to contaminated groundwater under a short-term excavation scenario typically poses minimal risk. Thus, direct contact with groundwater is considered to be an incomplete or insignificant potential exposure pathway, and does not warrant further consideration in the BHHRA.

Vapor intrusion is also considered to be an insignificant potential exposure pathway. Detections of volatile organic compounds (VOCs) in landside soils were limited and all were below the RI screening levels (see Section 4.2 of the RI Report). Detections of VOCs in groundwater were limited to PCE and TCE along the southern boundary in the vicinity of an off-Site dry cleaner (DP-09 and MW-09), and MW-01 on the downgradient perimeter of the Site. The maximum concentrations of PCE (160 ug/L at DP-09) and TCE (15 ug/L at MW-09) were observed in the upper water-bearing zone at depths of 25 to 30 ft bgs. While no permanent buildings are located in the vicinity of DP-09 and MW-09, temporary work trailers are located nearby. Methyl tert butyl ether (MTBE) was also sporadically detected in Site groundwater with a maximum concentration of 740 ug/L at DP-32 (observed at 38 to 43 ft bgs). A building/warehouse is located in the vicinity of this well. The detections of other VOCs in Site groundwater were limited and low (i.e., generally close to sample reporting limits). Given that the maximum detections of VOCs occurred at depths of 25 to 40 ft bgs, considerable attenuation is expected to occur in the vadose zone. The tight soils in the vicinity of the PCE and TCE detections further reduce soil permeability and limit vapor migration.

To evaluate the significance of potential vapor intrusion, the maximum concentrations of PCE, TCE, and MTBE in Site groundwater were evaluated in a screening analysis using USEPA's vapor intrusion screening level (VISL) model (Version 3.4) (USEPA, 2015d). Using the model's conservative default assumptions, including a commercial worker scenario (assumed to be present 8 hours per day, 250 days per year for 25 years), the estimated inhalation cancer risks are at or below the low end of the USEPA's target risk range of  $10^{-6}$  to  $10^{-4}$  (approximately  $2 \times 10^{-6}$  for PCE,  $3 \times 10^{-6}$  for TCE, and  $3 \times 10^{-7}$  for MTBE). The estimated inhalation noncancer hazards are below the USEPA goal of protection of a hazard index of 1 for all three VOCs. The groundwater to indoor air risk calculation spreadsheet from the USEPA's VISL model is provided in Attachment F. Given the conservatism in the screening-level assessment and the limited presence of VOCs in landside soil and groundwater, vapor intrusion to indoor air is considered to be an insignificant potential exposure pathway, and does not warrant further consideration in the BHHRA. Vapor intrusion from groundwater into an excavation trench may also occur, however, this potential route of exposure is anticipated to be of short duration, and any volatiles in trench air would be subject to windblown dispersion. The potential for vapor intrusion into a future excavation trench will be evaluated further in the revised BHHRA to be performed pending completion of the additional field sampling.

In summary, the only potentially complete exposure pathway for Site groundwater is migration to the river. Based on local hydrogeology and topography, Site groundwater may discharge to the Anacostia River. Therefore, the BHHRA included an evaluation of the potential impacts of Site groundwater on surface water.



### 2.2.2 Waterside Investigation Area

For the Waterside Investigation Area, a number of potential human exposure pathways are potentially complete. Potential receptors include shoreline workers, anglers, and other receptors who visit the river to recreate (e.g., swimmers, waders, boaters). The potential Waterside receptors and how they may contact COPCs are described below, and summarized in **Figure 4**. The potential receptors and potentially complete exposure pathways evaluated in this BHHRA are as follows:

- Recreational Visitors. Recreational visitors (adults and children) may potentially contact COPCs in nearshore surface sediment and surface water while wading or swimming in the Anacostia River.
- Anglers. Anglers may potentially contact COPCs in nearshore surface sediment and surface water while fishing, and may ingest COPCs in fish from the Anacostia River.
- Workers. Shoreline workers may potentially contact COPCs in nearshore surface sediment and surface water while performing maintenance, landscaping, or other activities along the shoreline of the river.

### 2.3 Consideration of Background Conditions

The Anacostia River has been impacted by a variety of historical and ongoing sources of chemical, physical, and biological stressors from point and non-point sources, including NPDES discharges, surface runoff, combined sewer and storm sewer outfalls, refuse disposal practices, tributary inputs, and atmospheric deposition (SRC and NOAA, 2000). The multitude of sources has resulted in diffuse distributions of some contaminants, including PAHs, metals, PCBs, and pesticides, with some localized hot spots (Wade et al., 1994; Velinsky et al., 1994; Velinsky et al., 2011). Surficial sediment concentrations have decreased over the past few decades, likely due to improved environmental practices, PCB use restrictions, and deposition of cleaner sediment (Velinsky et al., 2011). Based on fish tissue monitoring, concentrations of PCBs in tissue have also declined over the years (Pinkney, 2014), although levels are still sufficiently elevated throughout the Anacostia and Potomac Rivers to warrant issuance of advisories warning against consumption of some species of fish (DOEE, 2014a, MDE, 2014).

The risk calculations presented in the BHHRA reflect total contaminant concentrations, whether related to past Site activities or attributable to some other source. However, for purposes of evaluating responses to potential risks, it is essential to consider background and reference area information. USEPA's guidance on the role of background in the Superfund cleanup process (USEPA, 2002e) notes that a primary objective of CERCLA risk assessments is to provide information on risks that can be effectively addressed through remedial actions. Taking into account



background and reference area information during the risk assessment process provides a basis for distinguishing risks associated with site releases from risks resulting from the presence of contaminants that may have migrated into the site, or that may reflect regional conditions related to human activities (Judd et al., 2003).

USEPA (2002d) defines background as: “Substances or locations that are not influenced by the releases from a site and are usually described as naturally occurring or anthropogenic: (1) Naturally occurring substances are present in the environment in forms that have not been influenced by human activity; (2) Anthropogenic substances are natural and human-made substances present in the environment as a result of human activities (not specifically related to the CERCLA site in question).” It further defines a background reference area as: “The area where background samples are collected for comparison with samples collected on site. The reference area should have the same physical, chemical, geological, and biological characteristics as the site being investigated, but has not been affected by activities on the site.”

USEPA (2002e) provides the following guidance on addressing background in the risk assessment:

“Specifically, the COPCs with high background concentrations should be discussed in the risk characterization, and if data are available, the contribution of background to site concentrations should be distinguished. COPCs that have both release-related and background-related sources should be included in the risk assessment.”

Therefore, consistent with USEPA guidance (2002e), the potential contribution from background has been evaluated in this BHHRA using data representative of Site-specific background conditions. Appendix V of the RI report provides a preliminary evaluation of background. As noted in Appendix V, the preliminary background evaluation will be revised pending completion of an additional round of field sampling to be conducted to address remaining data gaps.

### 3 Data Evaluation and Hazard Identification

The purpose of the hazard identification process is two-fold: 1) to evaluate the nature and extent of constituents present in Site media; and 2) to identify COPCs for further quantitative evaluation in the risk assessment. This step involves compiling and summarizing the data relevant to the risk assessment, and selecting COPCs based on a series of screening steps. Section 3.1 describes the data sets that were used, including the assessment of data quality, and Section 3.2 describes the data evaluation that was performed, including the calculation of summary statistics and COPC screening process.

#### 3.1 Data Sets Used in BHHRA

As discussed in detail in the RI Report, analytical chemistry data collected in 2013 and 2014 comprise the soil, groundwater, sediment, and surface water data sets for the BHHRA. Details regarding the sampling and analysis program are found in the RI/FS Work Plan (AECOM, 2012a) and the RI Report and associated appendices. The fish tissue data were obtained from publically available sources, including DOEE and MDE fish sampling programs. The data sets utilized in the BHHRA are summarized below for the landside and waterside evaluations.

##### 3.1.1 Landside Data

Samples of surface soil (0-1 feet bgs) were collected in February 2013 at 24 locations distributed across the Site (see Figure 2-1 in RI Report<sup>1</sup>) and submitted for chemical analysis, including, inorganics, PCBs, pesticides, total petroleum hydrocarbon (TPH) fractions, SVOCs, dioxins and furans and PAHs. Not all constituents were analyzed in each sample (note: all samples were analyzed for PCBs (Aroclors), PAHs, and TPH). The surface soil sample locations are depicted in **Figure 5**.

Samples of subsurface soil (>1 feet bgs) were collected between March and June 2013 at 47 locations distributed across the Site (see Figure 2-1 in RI Report), with samples collected at 3 depths from each location. Most of the borings went to about 20 feet, with samples generally taken at about 4.5-5.5 ft, 9.5-10.5 ft, and 14.5-15.5 ft bgs. Samples were submitted for chemical analysis, although not all constituents were analyzed in each sample. The subsurface soil sample locations are depicted in **Figure 5**. Because subsurface excavations typically do not exceed 10 to 15 feet bgs, only subsurface soil data from samples collected between 1 and 16 feet bgs were included in the BHHRA.

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<sup>1</sup> One sample identified in the RI as a surface soil sample was collected from 1-1.75 feet bgs (SUS2100N); this sample was included in the subsurface soil data set for the BHHRA.



Samples of groundwater from the upper and lower water-bearing zones were collected in September and October 2014 at 15 locations across the Site. As previously noted, exposure pathways for on-Site groundwater are judged to be incomplete or insignificant with the possible exception of groundwater migration to the river. To evaluate the potential impact of groundwater on the river, groundwater data from the four monitoring wells located adjacent to the western downgradient boundary of the Site were used (MW-01, MW-02, MW-03, and MW-04), as well as MW-08 and MW-11, which are located along the northwestern and northern downgradient Site boundary. The groundwater data from these six locations have been identified as representative of the types and concentrations of constituents that may be migrating from the Site into the Anacostia River. The monitoring wells utilized in the groundwater-to-surface water analysis are depicted in **Figure 5**.

### **3.1.2 Waterside Data**

Samples of surface sediment (0-6 inches) were collected between November 2013 and January 2014 at 56 locations in the Anacostia River (46 Site-adjacent and ten background). These locations are depicted in **Figures 6** (Site-adjacent) and **7** (background). All 56 samples were analyzed for PCBs (Aroclors), metals, and PAHs. A subset of 21 samples (14 Site-adjacent and 7 background) were analyzed for VOCs, SVOCs, pesticides, dioxins and furans. Subsurface sediment samples collected at depths greater than 6 inches were not included in the risk assessment, per the approved Risk Assessment Work Plan.

Samples of surface water were collected in September and October 2013 at 20 locations in the Anacostia River (ten Site-adjacent and ten background). These locations are depicted in **Figures 6** (Site-adjacent) and **7** (background). All 20 samples were analyzed for PCBs (Aroclors), total and dissolved metals, and PAHs. A subset of 11 samples (5 Site-adjacent and 6 background) were analyzed for VOCs, SVOCs, pesticides, dioxins and furans.

### **3.1.3 Fish Tissue Data**

As agreed with DOEE, samples of fish tissue were not collected during this program (AECOM, 2012b). Rather, as specified in the Risk Assessment Work Plans, other studies conducted in the Anacostia River were evaluated to determine whether relevant and appropriate fish tissue data are available. Fish tissue samples were collected in 2015 as part of the Anacostia River Sediment Project Remedial Investigation (TetraTech, 2014). These data were not available for inclusion in this preliminary BHHRA, but will be considered in the revised BHHRA. This preliminary BHHRA considers total PCBs as the only COPC for the fish tissue evaluation, however the revised BHHRA will consider a broader array of organic and inorganic COPCs in fish tissue and will consider the most recent fish tissue data collected as part of the ongoing Anacostia River Sediment Project RI/FS.





Several investigations of chemical contaminants in fish tissue data exist for the Anacostia River, including data summarized by Velinsky and Cummins (1996), SRC and NOAA (2000), Haywood and Buchanan (2007), Pinkney et. al. (2001), and Pinkney (2009, 2014). Fish tissue data collected within the last 10 years were considered for inclusion in this evaluation based on the assumption that tissue collected recently will better reflect current site conditions. Two sources of recent fish tissue data were identified: 1) sampling conducted by U.S. Fish and Wildlife in the District's stretch of the Anacostia River, and 2) sampling conducted by MDE in the upper main stem of the Anacostia River above the DC-Maryland state line and the northeast and northwest tributaries. The tissue samples for each program are presented in **Figure 8** and discussed below. The fish tissue data were divided into three areas based on the sampling program designs: Upper Anacostia River Area (which includes the area adjacent to the Site), Lower Anacostia River Area, and Upstream Maryland Area (north of the Maryland state line). It is important to recognize that the fish tissue data evaluated in this BHHRA were not collected as part of an RI and therefore were not intended to assign attribution to any upland source. It is unknown if these samples reflect conditions in the vicinity of the Site or simply reflect the several mile long river reach that was sampled.

#### 3.1.3.1 U.S. Fish and Wildlife Tissue Data

Pinkney (2014) reported on the collection of fish tissue samples in 2013 by U.S. Fish and Wildlife in the Upper and Lower Anacostia River sampling areas to support DOEE's fish consumption advisories. DOEE also conducted tissue sampling in these areas in 2000 (Pinkney et al., 2001) and 2007 (Pinkney, 2009). A substantial decline in median PCB tissue concentrations was observed in all species except sunfish (Pinkney, 2014). **Figure 9** presents box plots comparing PCBs in the Upper and Lower Anacostia sampling areas (as defined by Pinkney) for the DOEE fillet data (all species combined) for sampling years 2000, 2007, 2013 (the upper and lower sampling areas is delineated by the CSX railroad bridge). As shown in **Figure 9**, both the median and ranges have declined between 2000 and 2013. The decline does not appear to be related to differences in fish size or lipid content as Pinkney (2014) noted that similar-sized fish were collected over the years and there was no discernable pattern in lipid content among species over time.

The 2013 tissue data were selected for evaluation in the BHHRA because these data best represent current conditions, and the Upper Anacostia sampling area includes the stretch of the river adjacent to the Benning Road facility. In the Upper Anacostia River sampling area, seven species-specific composite samples were collected including brown bullhead (*Ameiurus nebulosus*), blue catfish (*Ictalurus furcatus*), carp (*Cyprinus carpio*), channel catfish (*Ictalurus punctatus*), largemouth bass (*Micropterus salmoides*), northern snakehead (*Channa argus*), and sunfish (*Centrarchidae* family). In the Lower Anacostia River sampling area, six species-specific composite samples were collected including American eel (*Anguilla rostrata*), blue catfish, carp, channel catfish, largemouth bass, and



sunfish. Composite samples were composed of three to four individual fish; the sunfish samples and one sample of bullhead and eel were composed of seven to ten individuals.

All specimens were filleted and the skin was left on for most species with the exception of channel and blue catfish (skin-off fillets) and American eel (skin and viscera removed and muscle and bone included in the sample). The fillet is the principal part of the fish typically consumed by anglers, and therefore is the tissue type of greatest interest for risk assessment (USEPA, 2000; Gibson and McClafferty, 2005). Three or more individual fish were composited by species for chemical analyses which included PCB congeners, PAHs, pesticides, polybrominated diphenyl ethers (PBDEs), metals, lipids, and moisture content. PCB congener analysis included a list of 119 congeners, including the 12 congeners with presumed dioxin-like effects (USEPA, 2010). Total PCB concentrations in fish tissue, which were calculated as the sum of detected congeners, were taken from Pinkney (2014). The concentrations of PCB-toxicity equivalence (PCB-TEQ) in fish tissue, which were calculated using detected dioxin-like congeners and the World Health Organization's (WHO) mammalian toxicity equivalency factors (TEFs), were also taken from Pinkney (2014).<sup>2</sup>

### 3.1.3.2 Maryland Department of Environment Tissue Data

MDE sampled fish at three locations in the upper Anacostia River (in Maryland) to support the state's evaluation of fish consumption advisories (MDE, 2012). For the purposes of this evaluation, data from the three upstream sampling locations were combined into one area (i.e., Upstream Maryland Area). In the Upstream Maryland Area (**Figure 8**), 23 species-specific composite tissue samples were collected in 2003<sup>3</sup>, 2007, 2008 and 2010, including two American eel samples, two blue catfish samples, two brown bullhead samples, one yellow bullhead sample, one carp sample, four channel catfish samples, six redbreast sunfish (*Lepomis auritus*) samples, one pumpkinseed sunfish (*Lepomis gibbosus*) sample, and four white sucker (*Catostomus commersonii*) samples. All specimens were filleted and skin and ribs removed with the exception of the sunfish, for which the skin and ribs were left on. Composite samples were composed of three to five individual fish. Eighteen (18) samples were analyzed for 116 PCB congeners, including eight of the 12 dioxin-like congeners (MDE, 2012). Total PCB concentrations were calculated as the sum of congeners (MDE, 2012). Due to the limited suite of dioxin-like PCBs available in the MDE tissue data set, concentrations of PCB-TEQ were not

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<sup>2</sup> The WHO 1998 TEFs were used to calculate the PCB-TEQ concentrations reported in Pinkney (2014). More recent (2005) TEFs have been published by WHO (Van den Berg et al. 2006). If the WHO 2005 TEFs were used, the PCB-TEQ fish tissue concentrations would be slightly lower than reported in Pinkney (2014) based on a review of the fish tissue data. Any future updates of the risk assessment will use current WHO TEFs, consistent with USEPA guidance (2010).

<sup>3</sup> Only tissue data from 2003 are available for the Northwest Branch; while these data were collected more than 10 years ago, the 2003 tissue data for the Northwest Branch and the 2003 tissue data for the Northeast Branch were included in the Upstream Maryland data set for the BHHRA. An evaluation of PCB tissue concentration trends in the Anacostia River can be found in the RI Report (Appendix V).

calculated. A subset of samples was analyzed for mercury (n=15), pesticides (n=2), and PBDEs (n=6).

#### **3.1.4 Data Quality Assessment**

The data collected as part of the RI program for the Benning Road Facility were validated by project chemists as specified in the Quality Assurance Project Plan (QAPP) (AECOM, 2012a). All project data from laboratory chemical analyses were validated using criteria specified in the approved QAPP, the relevant EPA reference methods, and EPA's National Functional Guidelines for Inorganic and Organic Data Review. Note that the data quality assessment performed as part of the Benning Road RI did not include the tissue data collected by other parties. The fish tissue data sets collected by DOEE (Pinkney, 2014) and MDE (2012) used in the BHHRA to evaluate fish consumption included quality control (QC) results. Pinkney (2014) noted that quality assurance procedures followed included the analysis of blanks, laboratory and field replicates, and standard reference materials. The MDE data set included field replicates; however, there is no information available on other quality assurance procedures followed. It is uncertain whether formal data validation was conducted on either data set.

The laboratory QC results for the RI samples, specified as laboratory deliverables in the QAPP, were reviewed. The method-specific QC results included method blanks, equipment blanks, laboratory control samples, matrix spikes, matrix duplicates, laboratory duplicates, field duplicates, and/or surrogates, and were summarized on QC forms, where applicable. Additional method specific parameters and the laboratory report narratives, which detail all QC non-conformances, were also reviewed with regard to any potential impacts to the sample data usability.

Qualifiers were applied to the data due to QC non-conformances where applicable. Upon completion of the data validation of each data set, data validation reports were prepared, which summarize the sample delivery group(s) and parameter(s) reviewed, and any QC non-conformances. In addition, the reports summarize the qualifiers applied to the data as a result of any non-conformances noted during the validation process. Data validation reports for each data set are included in Appendix Q of the RI Report. A summary of the data validation and project quality assurance assessments is provided in Section 4 of the RI Report. Overall, greater than 99% of the data reviewed were found to be reliable and acceptable for use in risk assessment and remedial decision-making.

Analytical data were compiled and tabulated in a database for statistical analysis. Tables 3-1 to 3-5 identify the on-Site surface soil, on-Site subsurface soil, river surface sediment, river surface water, and fish tissue samples, respectively. Attachment A presents the data used in the BHHRA, as summarized in the table below:

Area	Matrix	Number of Samples for BHHRA <sup>a</sup>
Landside	On-Site Surface Soil (0-1 ft bgs)	10 - 24
	On-Site Subsurface Soil (1-16 ft bgs)	9 - 114
	On-Site Groundwater (downgradient boundary)	8
Waterside	Anacostia River Surface Sediment (adjacent to Site)	14 - 46
	Anacostia River Surface Sediment (background)	10
	Anacostia River Surface Water (adjacent to Site)	5 - 10
	Anacostia River Surface Water (background)	6
	Fish Tissue (Lower Anacostia) <sup>b</sup>	6
	Fish Tissue (Upper Anacostia) <sup>c</sup>	5
	Fish Tissue (Upstream Maryland) <sup>d</sup>	18
<sup>a</sup> Not all samples were analyzed for the same suite of analytes; data qualified as rejected not included; field duplicates not included in sample counts. <sup>b</sup> Sample count for species evaluated in COPC screening including: American eel, blue catfish, channel catfish, carp, largemouth bass, and sunfish (2013 data). <sup>c</sup> Sample count for species evaluated in COPC screening including: blue catfish, channel catfish, carp, largemouth bass, and sunfish (2013 data). <sup>d</sup> Sample count for species evaluated in COPC screening including: American eel, brown bullhead, blue catfish, channel catfish, carp, white sucker, and sunfish (2003, 2007, 2008, and 2010 data).		

### 3.2 Hazard Identification

Hazard identification is the first step in a four-step process of a BHHRA (USEPA, 1989a). As noted above, a major purpose of the hazard identification step is to identify a subset of *constituents of potential concern* (COPCs) from all constituents detected during the investigation. These COPCs are then carried forward for quantitative evaluation in the subsequent baseline risk assessment.

The COPC screening process is intended to identify the following:

- 1) Constituents that pose negligible risks and can be eliminated from further evaluation, and
- 2) Constituents that merit further evaluation, either quantitatively or qualitatively, based on their potential to adversely affect humans depending on specific types of exposures

This section describes the approach used to summarize the data and the steps followed to identify the human health COPCs. The results of the screening process are presented, and the COPCs retained in each medium for further evaluation in the BHHRA are summarized.

#### 3.2.1 Summary Statistics

Summary statistics, consisting of frequency of detection, minimum and maximum detects, and arithmetic mean concentration, were calculated for detected constituents in on-Site surface soil, on-



Site subsurface soil, river surface sediment, river surface water, and fish tissue, as shown in Tables 3-6 through 3-13. Summary statistics were calculated separately for each fish species for which tissue chemistry data are available. The calculation of summary statistics for TCDD-TEQ, total PCBs, and PCB-TEQ was performed using the results for detected congeners or Aroclors (i.e., non-detect results were assumed to equal zero).

Data for samples and their duplicates were averaged before summary statistics were calculated, such that a sample and its duplicate were treated as one sample for calculation of summary statistics (including maximum detection and frequency of detection). Where constituents were not detected in both the sample and its duplicate, the resulting values are the average of the sample-specific quantitation limits (SSQLs). Where both the sample and the duplicate contained detected constituents, the resulting values are the average of the detected results.<sup>4</sup> Where a constituent in one of the pair was reported as not detected and the constituent was detected in the other, the detected concentration was conservatively used to represent the value. The following summary statistics are presented:

- Frequency of Detection: The frequency of detection is reported as a ratio based on the total number of samples analyzed and the number of samples reported as detected for a specific constituent. The number of samples reflects the treatment of non-detects described above.
- Maximum Detected Concentration: This is the maximum detected concentration for each constituent/area/medium combination, after duplicates have been averaged.
- Mean Detected Concentration: This is the arithmetic mean concentration for each constituent/area/medium combination, after duplicates have been averaged, based on detected results only.
- Minimum Detected Concentration: This is the minimum detected concentration for each constituent/area/medium combination, after duplicates have been averaged.

### 3.2.2 Selection of COPCs

COPCs are a subset of the complete set of constituents detected at a site that are carried through the quantitative risk assessment process. The selection of COPCs identifies those chemicals observed in site media that have the most potential to be a significant contributor to human health risk (USEPA 1993a, 1989a). As stated in USEPA guidance (USEPA, 1993a):

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<sup>4</sup> Six sediment samples and one surface water sample had parent and duplicate sample pairs. The impact of using the average of the parent and duplicate versus a different statistic (e.g., the higher of the two) will be addressed during the data evaluation step in the revised BHHRA. Given the limited number of parent-duplicate sample pairs, the averaging approach used in the preliminary BHHRA is expected to have limited impact on results.



*“Most risk assessments are dominated by a few compounds and a few routes of exposure. Inclusion of all detected compounds at a site in the risk assessment has minimal influence on the total risk. Moreover, quantitative risk calculations using data from environmental media that may contain compounds present at concentrations too low to adversely affect public health have no effect on the overall risk estimate for the site. The use of a toxicity screen allows the risk assessment to focus on the compounds and media that may make significant contributions to overall risk.”*

Several factors are typically considered in identifying COPCs for risk assessment, including toxicity and magnitude of detected concentrations, frequency of detection, and essential nutrient status. Whether a constituent's presence is a result of site-related activities or is an artifact of natural and/or anthropogenic background conditions may also be considered, although upfront elimination of COPCs based on consistency with background is generally not performed<sup>5</sup> (USEPA, 2002e). For this BHHRA, a toxicity screening approach was used to identify COPCs by comparing the maximum concentrations of constituents detected in each medium/area to conservative risk-based screening levels (RBSLs).<sup>6</sup> In addition, essential nutrient status was considered; calcium, iron, potassium, and sodium were not identified as COPCs as they are considered essential nutrients. The identification of appropriate RBSLs and the results of the COPC screening are discussed below on a medium-specific basis. For constituents with RBSLs for both potential carcinogenic and noncarcinogenic effects, the lower of the two was used for screening.

### **3.2.2.1 Landside COPC Selection**

#### On-Site Surface Soil

As previously noted, the vast majority of on-Site soil is covered with pavement or gravel cover, such that direct contact exposure with surface soil is highly unlikely. In the event that the cover is compromised and the underlying soil exposed, a screening-level evaluation was conducted that consisted of comparing Site-wide maximum detected concentrations in surface soil to USEPA Regional Screening Levels (RSL) for industrial soil (USEPA, 2015a). The industrial soil RSLs are derived assuming daily year-round soil contact by an adult worker assuming incidental ingestion, dermal contact, and inhalation of soil derived dusts and vapors for 25 years. The RSLs are based on

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<sup>5</sup> Because of the broad presence of some bioaccumulative compounds in the Anacostia River watershed, coupled with no history of usage or release at the Site, and the large home range of fish species of human health interest, background conditions was considered in the identification of COPCs for fish tissue, as discussed further in Section 3.2.2.2.

<sup>6</sup> The RBSL for lead is derived using the Adult Lead Model (USEPA, 2003b), which uses the average soil exposure concentration in the calculation of the fetal blood lead concentration of an adult female worker. For consistency with the recommended application of the model, the average concentration of Site lead is used in COPC screening.

a target risk of  $1 \times 10^{-6}$  for potential carcinogens and a target hazard quotient (HQ) of 1 for potential noncarcinogens (or a target HQ of 0.1 to account for potential additivity of chemicals with the same toxic endpoint) (USEPA, 1993a, 2015a). For screening of noncarcinogenic constituents, the more conservative RSLs corresponding to a HQ of 0.1 were used. Use of these RSLs for screening occasional worker or trespasser soil contact exposures is very conservative.

Table 3-6 presents the COPC screening results for on-Site surface soil.

The maximum detects of the following constituents exceeded their respective screening levels, and thus were identified as COPCs in surface soil:

- 2,3,7,8-tetrachlorodibenzo(p)dioxin toxicity equivalence (TCDD-TEQ)
- arsenic
- chromium
- cobalt
- vanadium
- PCBs
- benzo(a)pyrene
- benzo(b)fluoranthene
- dibenz(a,h)anthracene
- benzo(a)anthracene
- benzo(k)fluoranthene
- chrysene
- indeno(1,2,3-cd)pyrene

The identification of chromium as a COPC in surface soil is based on the assumption that the form of chromium present in the soil is hexavalent chromium, which has a more stringent RSL than total chromium. However, given that there is not a history of using chromium at the Site, it is likely that the form of chromium present in soil is trivalent (ATSDR, 2012). Hexavalent chromium in the environment is typically reduced to trivalent chromium by reducing agents, such as organic matter, ferrous iron minerals, and reduced sulfur (USEPA, 1994). If the RSL corresponding to total chromium is used, chromium would not be identified as a COPC in surface soil.

#### On-Site Subsurface Soil

Site-wide maximum detected concentrations of constituents detected in on-Site subsurface soil were compared to the industrial soil RSLs. Table 3-7 presents the COPC screen for on-Site subsurface soil. Results for subsurface soil are similar to surface soil. Most of the inorganics and all of the pesticides, VOCs, and SVOCs except for a limited number of PAH compounds, were below their



respective RSLs. The maximum concentration of TCDD-TEQ in subsurface soil was also below its screening level. Therefore, these constituents were not identified as COPCs and do not require any further evaluation.

The maximum detects of the following constituents exceeded their respective screening levels, and thus were identified as COPCs in subsurface soil:

- arsenic
- chromium
- thallium
- PCBs
- Diesel Range Organics (C10-C20)
- benzo(a)anthracene
- benzo(a)pyrene
- benzo(b)fluoranthene
- dibenz(a,h)anthracene
- indeno(1,2,3-cd)pyrene
- benzo(k)fluoranthene
- chrysene

The same caveat noted above regarding chromium also applies to the identification of chromium as a COPC for subsurface soil.

Table 3-8 presents a summary of the landside soil COPCs, which includes dioxins and furans (surface soil only), arsenic, chromium, cobalt, thallium, vanadium, PCBs, Diesel Range Organics TPH fraction (subsurface soil only), and potentially carcinogenic PAH compounds. Even though these constituents have been identified as COPCs in landside soils, as explained in Section 2.2.1, soil exposure pathways are currently incomplete due to engineering and institutional controls in place at the Site, and are expected to remain so into the foreseeable future. Thus, on a preliminary basis, the conditions in the Landside Investigation Area do not pose any unacceptable human health risks. However, as previously noted, the potential for future direct contact exposures to surface and subsurface soils will be evaluated pending collection of additional landside soil data and updates to the CSM.

### **3.2.2.2 Waterside COPC Selection**

#### Anacostia River Surface Sediment (Adjacent to Site)

The routes of potential exposure to constituents in sediment were considered to identify appropriate sediment RBSLs. As identified in the CSM, receptors who visit the river may incidentally ingest and



dermally contact sediment while recreating at the river. A comprehensive set of risk-based sediment screening levels based on occasional direct contact exposures is not available from either USEPA or DOEE. In the absence of sediment screening levels based on direct contact exposures, the USEPA Regional Screening Levels (RSL) for residential soil were used to identify COPCs for the recreational receptor sediment direct contact scenarios. The residential soil RSLs are derived assuming a highly conservative exposure scenario (i.e., daily year-round soil contact by an adult and child assuming incidental ingestion, dermal contact, and inhalation of soil derived dusts and vapors for 26 years). Because the inhalation pathway is included, and because exposure to sediment is expected to be much less frequent and intensive than exposure to residential soil, the residential soil RSLs represent highly conservative screening levels for sediment. Consistent with the approach used for soil, the RSLs are based on a target risk of  $1 \times 10^{-6}$  for potential carcinogens and a target hazard quotient (HQ) of 1 for potential noncarcinogens (or a target HQ of 0.1 to account for potential additivity of chemicals with the same toxic endpoint) (USEPA, 1993a, 2015a). For screening of noncarcinogenic constituents, the RSLs derived based on an HQ of 0.1 were used in this BHHRA.<sup>7</sup>

Table 3-9 presents the COPC screening for Anacostia River surface sediment (adjacent to the Site). The following COPCs were identified for river surface sediment:

- 2,3,7,8-TCDD-TEQ
- aluminum
- arsenic
- chromium
- cobalt
- manganese
- nickel
- thallium
- vanadium
- PCBs<sup>8</sup>
- benzo(a)anthracene
- benzo(a)pyrene
- benzo(b)fluoranthene
- dibenz(a,h)anthracene

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<sup>7</sup> Note that this is a more conservative approach to screening river sediment than presented in the Risk Assessment Work Plan (AECOM, 2012a). The work plan proposed using RSLs based on a target risk of  $10^{-5}$  and a HQ of 1 to account for the fact that assuming continuous year-round exposure to river sediment is overly conservative. Based on DOEE comment, the RSLs corresponding to  $10^{-6}$  and a HQ of 0.1 were used.

<sup>8</sup> The limited PCB congener data collected in sediment for forensic purposes will be evaluated in the revised BHHRA.



- indeno(1,2,3-cd)pyrene
- benzo(k)fluoranthene
- chrysene

Table 3-9 also presents preliminary background values, which are the maximum concentrations in the background surface sediment samples that were collected in the Anacostia River (see **Figure 7**). While consistency with background was not considered in the identification of surface sediment COPCs, it should be noted that the background levels of several metals and PAH constituents identified as surface sediment COPCs are comparable to levels adjacent to the Site (see Appendix V in RI Report). It should also be noted that the background comparison will be updated using a revised background conditions assessment that will be prepared in conjunction with the additional field investigation.

#### Anacostia River Surface Water

The routes of potential exposure to constituents in surface water were considered to identify appropriate RBSLs. As identified in the CSM, receptors who visit the river may incidentally ingest and dermally contact surface water while recreating at the river. A comprehensive set of risk-based surface water screening levels based on occasional direct contact exposures is not available from either USEPA or DOEE. In the absence of relevant surface water screening levels, the following hierarchy of surface water screening levels was used for COPC screening:

1. DOEE, Title 21 of the District of Columbia Municipal Regulations, Chapter 11, Water Quality Standards. Effective November 1, 2013 (DOEE, 2013);
2. USEPA, National Recommended Water Quality Criteria for Priority Pollutants. Value for Human Health for the consumption of organisms. 2009 (USEPA, 2009);
3. USEPA, Regional Screening Levels (RSL) for tapwater, November 2015 (USEPA, 2015a).

The DOEE water quality standards and USEPA national recommended water quality criteria are based on protection of fish and shellfish that may be consumed by humans. These criteria are typically derived by relating acceptable risk-based concentrations in fish tissue to concentrations in surface water via a bioaccumulation factor (BAF). As such, the use of these criteria, as well as the RSLs for tapwater, to select COPCs for evaluating occasional direct contact exposures to surface water is highly conservative. Table 3-10 identifies the three sets of surface water criteria, and the criterion that was selected for screening.

Table 3-11 presents the COPC screening for Anacostia River surface water (adjacent to the Site). The following COPCs were identified for river surface water:



- 2,3,7,8-TCDD-TEQ
- arsenic
- chromium
- cobalt
- manganese
- 4,4'-DDT

While PCBs was not detected in Site-adjacent or background surface water samples, the analytical method that was used (Method 8082) achieves a detection limit of approximately 0.01 ug/L, which is above the applicable surface water screening level of 0.000064 ug/L for total PCBs. Therefore, PCBs was conservatively identified as a surface water COPC and carried forward in the risk calculations assuming it is present at the lowest reporting limit achieved for surface water (0.0094 ug/L).

Table 3-11 also presents preliminary background values, which are the maximum concentrations in the background surface water samples that were collected in the Anacostia River (see **Figure 7**). While consistency with background was not considered in the identification of surface water COPCs, it should be noted that the background levels of the surface water COPCs are comparable to levels adjacent to the Site (see Appendix V in RI Report). As previously noted, the background comparison will be updated using a revised background conditions assessment that will be prepared in conjunction with the additional field investigation.

#### Anacostia River Fish Tissue

Total PCBs and PCB-TEQ were identified as COPCs for fish tissue. PCBs are known to accumulate in fish tissue via ingestion of contaminated sediment or prey. Some inorganics may also accumulate in tissue, such as mercury. However, mercury was not identified as a COPC in on-Site soil (all detected concentrations were below the screening level). Mercury was not detected in surface water, and mercury concentrations in sediment did not exceed human or ecological screening values (see the Ecological Risk Assessment report (Appendix AA of the Draft RI Report)). Further, levels of mercury in sediment adjacent to the Site were found to be similar to background levels (see Appendix V in RI Report). Other inorganics can accumulate in tissue, but aquatic organisms vary in how they metabolize and regulate metals and comparison of a measured total metal concentration in fish tissue to a literature-derived tissue threshold is not recommended (Adams et al., 2011). While pesticides are known to accumulate in fish tissue, pesticides are found throughout the watershed at comparable levels and are not associated with past Site operations (see Appendix V in Draft RI Report). Therefore, for this preliminary BHHRA, PCBs and dioxin-like PCBs were identified as the only COPCs for the evaluation of fish tissue. As previously noted, pending the availability of additional fish tissue



data collected as part of the river-wide RI/FS, the inclusion of other bioaccumulative chemicals will be evaluated.

Table 3-12 presents a comparison of maximum detected total PCB concentrations (sum of congeners) and dioxin-like PCBs (as PCB-TEQ) in fish tissue to their respective PCB screening levels<sup>9</sup>. The comparison is presented by species for the three areas of the Anacostia River, with the exception of PCB-TEQ in the upstream Maryland area, for which the available PCB congener data is incomplete for dioxin-like congeners.

Table 3-13 presents a summary of the waterside COPCs. These COPCs are carried forward in the human health risk calculations for the Benning Road BHHRA.

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<sup>9</sup> USEPA no longer provides default RSLs for fish tissue ingestion (USEPA, 2015a). Therefore, the fish tissue RSLs for PCBs were calculated using USEPA's Regional Screening Level (RSL) calculator using default input values, including the same fish ingestion rate of 54 grams per day previously used by USEPA in setting fish tissue screening levels, and a target risk level of  $10^{-6}$  and a HI of 0.1 (USEPA, 2015b, 1991).

## 4 Dose-Response Assessment

The purpose of the dose-response assessment is to identify the types of adverse health effects that may be associated with potential exposure to a chemical, and to define the relationship between the dose of a chemical and the likelihood and magnitude of an adverse effect (response) (USEPA 1989a). Combining the results of the toxicity assessment with information on the magnitude of potential exposure (developed in the exposure assessment) provides an estimate of potential risk (provided in the risk characterization).

Adverse effects are classified by USEPA as potentially carcinogenic or noncarcinogenic (i.e., potential effects other than cancer). Dose-response relationships are typically defined by USEPA for oral exposure and for exposure by inhalation. Because of the scarcity of toxicological data and established values for the dermal route of exposure, oral toxicity values are used to assess dermal exposures, with appropriate adjustment for differences in absorption (USEPA, 2004a).

For evaluation of potential noncancer effects, USEPA has developed oral reference doses and inhalation reference concentrations (RfDs and RfCs, respectively) for effects known or assumed to be produced through a nonlinear mode of action (USEPA, 2016). The RfDs and RfCs are developed based on the assumption that thresholds exist for certain toxic effects (such as gastrointestinal effects). The RfD is expressed in units of milligrams of a chemical per kilogram of body weight per day (mg/kg-day), and the RfC is expressed in units of milligrams of a chemical per cubic meter of air (mg/m<sup>3</sup>). In general, the RfDs and RfCs are estimates (with uncertainty spanning perhaps an order of magnitude) of a daily exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime. For evaluation of potential noncarcinogenic effects, exposures are characterized as chronic (i.e., lasting longer than 7 years) or subchronic (i.e., lasting 7 years or less). Consistent with the Science Advisory Board (SAB) recommendation cited in the soil screening-level guidance (USEPA, 2002c), a child of 1 to 6 years is considered to have a chronic exposure.<sup>10</sup>

For evaluation of potential cancer effects, USEPA has characterized the weight of evidence for human carcinogenicity, and developed oral slope factors and oral and inhalation unit risks (USEPA, 2016). The quantitative dose-response estimates are presented in three ways. The slope factor is presented as the risk per (mg/kg-day). The unit risk is the quantitative estimate in terms of either ingestion risk per ug/L drinking water or inhalation risk per ug/m<sup>3</sup> air breathed. The third form in which risk is

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<sup>10</sup> The SAB noted that the combination of the six-year childhood exposure with a chronic RfD may be appropriate for chemicals with toxic endpoints specific to children or with steep dose-response curves, but is likely to be over protective for most chemicals (USEPA, 1993c).



presented is a chemical concentration in drinking water or air based on predicted cancer risks of 1 in 10,000, 1 in 100,000 or 1 in 1,000,000.

The dose-response assessment is presented in five subsections. Section 4.1 describes the basis of the dose-response relationships characterized by USEPA. Section 4.2 describes the sources of toxicity values applied in this assessment. Section 4.3 describes the toxicity values developed by USEPA for the evaluation of potential noncarcinogenic effects. Section 4.4 describes the toxicity values developed by USEPA for the evaluation of potential carcinogenic effects. Section 4.5 discusses the use of oral toxicity values and absorption adjustment factors to estimate dermal exposure. Section 4.6 discusses specific toxicity approaches used for certain chemicals.

#### **4.1 Basis of Dose-Response Relationships**

The dose-response relationships characterized by USEPA toxicity values are often determined from studies of laboratory animals conducted under controlled conditions designed to minimize responses due to confounding variables, and are conducted at relatively high dose levels to ensure that responses can be observed using as few animals as possible in the experiments. Mathematical models and uncertainty factors are used to extrapolate the relatively high doses administered to animals to predict potential human responses at dose levels far below those tested in animals.

Humans are typically exposed to chemicals in the environment at levels much lower than those tested in animals. These low doses may be detoxified or rendered inactive by the myriad of protective mechanisms that are present in humans (Ames et al., 1987) and which may not function at the high dose levels used in animal experiments. Moreover, as noted by USEPA (1993b) “in the case of systemic toxicity, however, organic homeostatic, compensating, and adaptive mechanisms exist that must be overcome before a toxic endpoint is manifested.” Therefore, the results of these animal studies may only be of limited use in accurately predicting a dose-response relationship in humans (USEPA, 1989a). In fact, many effects seen in laboratory animals at the high doses tested are not seen in human exposures to chemicals. For example, while PCBs have been demonstrated to produce tumors in animals, human epidemiological data do not support the carcinogenicity of PCBs (Shields, 2006; Golden et al. 2003, Golden and Kimbrough, 2009).

Despite these uncertainties, and with the goal of being protective of human health, USEPA assumes that the results of animal toxicity studies are predictive of potential toxicity in humans. Moreover, based on the assumption that humans are more sensitive to chemicals than laboratory animals, USEPA incorporates conservative assumptions and uncertainty factors when deriving numerical toxicity values from laboratory studies, as discussed in Sections 4.3 and 4.4 below. However, USEPA explicitly recognizes these extrapolations from high doses to low doses and from animal studies to predict responses in humans as uncertainties in the risk assessment process (USEPA, 1989a).



In some cases, data from human exposure to chemicals are used to develop dose-response values. However, these data also have uncertainties because often it is not possible to determine from human exposure studies whether one or more chemicals are responsible for the observed effects, and in general it is even more difficult to determine precise exposure levels (USEPA, 1989a). Moreover, where effects are observed in humans, they generally occur at high exposure levels (often in industrial settings), and it is difficult to predict potential human responses at the much lower dose levels that occur in environmental exposure scenarios (USEPA, 1989a).

#### 4.2 Sources of Toxicity Data

The USEPA's (2003a) guidance regarding the hierarchy of relevant human health dose-response values for use in risk assessment was followed in this assessment:

- Tier 1 - USEPA's IRIS, an online database of the Agency's most current, verified, consensus-based toxicity values (USEPA, 2016)
- Tier 2 - USEPA's National Center for Environmental Assessment (NCEA), Superfund Health Risk Technical Support Center Provisional Peer Reviewed Toxicity Values (PPRTV) (USEPA 2015c)
- Tier 3 - Other sources of information, such as the PPRTV screening toxicity values, California Environmental Protection Agency (CalEPA), the Agency for Toxic Substances and Disease Registry (ATSDR), and the Health Effects Assessment Summary Tables (HEAST) (USEPA, 1997a), with priority given to those sources that are most current, transparent, and have been peer reviewed (USEPA, 2003a)

Numerical toxicity values used in this assessment are oral RfDs and oral CSFs. Table 4-1 presents the noncancer toxicity values used in this BHHRA, and Table 4-2 presents the cancer toxicity values used in this BHHRA. As indicated in Tables 4-1 and 4-2, the toxicity values, with the exception of the oral RfDs for aluminum, cobalt, and thallium, and the oral CSFs for TCDD-TEQ and chromium, are Tier 1 values found in the IRIS database (USEPA, 2016). The Tier 2 and 3 values used are as follows:

- Aluminum – PPRTV (Tier 2)
- Cobalt – PPRTV (Tier 2)
- Chromium (hexavalent) – NJDEP (Tier 3)
- Thallium – PPRTV screening value (Tier 3)
- TCDD-TEQ – CalEPA (Tier 3)

It should be noted that the Tier 2 and 3 values used in this BHHRA are also used by USEPA in RSL development (USEPA, 2015a).

#### 4.3 Noncarcinogenic Toxicity Assessment

Constituents with known or potential noncarcinogenic effects are assumed to have a dose below which no adverse effect occurs or, conversely, above which an adverse effect may be seen. This dose is called the threshold dose. A conservative estimate of the true threshold dose is called a No Observed Adverse Effect Level (NOAEL). The lowest dose at which an adverse effect has been observed is called a Lowest Observed Adverse Effect Level (LOAEL). The NOAEL, or if not available, the LOAEL are used as the point of departure (POD) for extrapolating from experimental data to predict a threshold level for humans. By applying uncertainty factors to the NOAEL or the LOAEL, RfDs for chronic exposure to chemicals with noncarcinogenic effects have been developed by USEPA (1997a, 2002f, 2016).

In more recent derivations, USEPA has used a benchmark dose (BMD) approach to define the POD for an observed adverse outcome, or benchmark response, from experimental observations. The BMD approach provides a more quantitative alternative to the first step in the dose-response assessment than the current NOAEL/LOAEL process for noncancer health effects. Derivation of the BMD is a two-step process: (1) response data are modeled in the range of empirical observation; and then (2) extrapolation below the range of observation is accomplished by modeling. The POD for BMD modeling is the BMDL, or the lower 95% bound on the dose/exposure associated with the benchmark response (i.e., adverse response), typically 10% above the control response. Using the lower bound accounts for the uncertainty inherent in a given study, and assures (with 95% confidence) that the target benchmark response is not exceeded. Uncertainty factors are then applied to the BMDL, as in the case for the NOAEL/LOAEL approach, to derive an RfD.

In regulatory toxicity assessment, USEPA assumes that humans are as sensitive, or more sensitive, to the toxic effects of a chemical as the most sensitive species used in the laboratory studies. Moreover, the RfD is developed based on the most sensitive or critical adverse health effect observed in the study population, with the assumption that if the most critical effect is prevented, then all other potential toxic effects are prevented. Uncertainty factors are applied to the BMDL or NOAEL (or LOAEL, when a NOAEL is unavailable) for this critical effect to account for uncertainties associated with the dose-response relationship. These include using an animal study to derive a human toxicity value, extrapolating from a LOAEL to a NOAEL, extrapolating from a subchronic (partial lifetime) to a chronic lifetime exposure, and evaluating sensitive subpopulations. Generally, a 10-fold factor is used to account for each of these uncertainties; thus, the total uncertainty factor can range from 10 to 10,000, although USEPA (2002f) recommends limiting the total combined UF for a chemical to 3000. In addition, an uncertainty factor or a modifying factor of up to 10 can be used to account for





inadequacies in the database or other uncertainties. The uncertainty factors for the COPCs evaluated in this risk assessment range from 3 to 3,000. USEPA's standard uncertainty factors and the modifying factor are identified below (USEPA, 1993b).

Standard Uncertainty Factors (UFs):

- Use a 10-fold factor when extrapolating from valid experimental results in studies using prolonged exposure to average healthy humans. This factor is intended to account for the variation in sensitivity among the members of the human population and is referenced as "10H".
- Use an additional 10-fold factor when extrapolating from valid results of long-term studies on experimental animals when results of studies of human exposure are not available or are inadequate. This factor is intended to account for the uncertainty involved in extrapolating from animal data to humans and is referenced as "10A".
- Use an additional 10-fold factor when extrapolating from less than chronic results on experimental animals when there are no useful long-term human data. This factor is intended to account for the uncertainty involved in extrapolating from less than chronic NOAELs to chronic NOAELs and is referenced as "10S".
- Use an additional 10-fold factor when deriving an RfD from a LOAEL, instead of a NOAEL. This factor is intended to account for the uncertainty involved in extrapolating from LOAELs to NOAELs and is referenced as "10L".

Uncertainty and modifying factors were applied by USEPA for COPCs included in this HHRA as follows:

- Aluminum – A total UF of 100 was applied: 3 for use of a minimal LOAEL, 10 for interspecies extrapolation and 3 for intrahuman variability where the critical effects have been observed in a sensitive sub-group (USEPA, 2006).
- Arsenic – A total UF of 3 was applied to account for both the lack of data to preclude reproductive toxicity as a critical effect and to account for some uncertainty in whether the NOAEL of the critical study accounts for all sensitive individuals (USEPA, 2016).
- Chromium - A total UF of 300 was applied: 3 for use of subchronic studies, 10 for interspecies extrapolation, and 10 for intrahuman variability (USEPA, 2016). An additional MF of 3 was applied due to concerns raised in a study that was not used as the basis of the RfD.



- Cobalt – A total UF of 3000 was applied: 10 for use of a LOAEL as the point of departure, 10 for lack of data on intrahuman variability and sensitive individuals, 10 for extrapolation from subchronic to chronic duration, and 3 for lack of multi-generation toxicity data (USEPA, 2008).
- Manganese – A MF of 3 was applied to account for potential increased manganese exposure and uptake from water and the diet by sensitive individuals (USEPA, 2016).
- Nickel - A total UF of 300 was applied: 10 for interspecies extrapolation, 10 for intrahuman variability, and 3 to account for inadequacies in the reproductive studies (USEPA, 2016).
- Thallium - A total uncertainty factor of 3,000 (10 for interspecies extrapolation, 10 for intraspecies extrapolation, 3 for extrapolation from a subchronic to chronic study, and 10 for database deficiencies) was applied to the point of departures (PODs) to yield candidate RfD values for thallium (in the form of soluble thallium salts) (USEPA, 2012a).
- Vanadium - A total UF of 100 was applied: 10 for interspecies extrapolation and 10 to provide added protection for unusually sensitive individuals (USEPA, 2016).
- 4,4'-DDT – A total UF of 100 was applied: 10 for interspecies extrapolation and 10 to protect sensitive human subpopulations (USEPA, 2016).
- Total PCBs (based on the RfD for Aroclor 1254) – A total UF of 300 was applied: 10 to account for sensitive individuals, 3 for extrapolation from rhesus monkeys to humans, and 3 for extrapolation from subchronic to chronic, lifetime exposure (USEPA, 2016).

The resulting RfDs are conservative, i.e., health protective, because of the use of often multiple uncertainty and modifying factors. Consequently, an RfD provides reasonable certainty that no noncarcinogenic health effects are expected to occur, even for sensitive individuals and if daily exposures were to occur at the RfD level for a lifetime. RfDs and exposure doses are expressed in units of milligrams of a chemical per kilogram of body weight per day (mg/kg-day). The lower the RfD value, the lower is the assumed threshold for effects, and the greater the assumed toxicity.

Table 4-1 summarizes the chronic toxicity information for the 11 COPCs with potential noncarcinogenic effects for the oral route of exposure:

- 2,3,7,8-TCDD-TEQ
- Aluminum
- Arsenic
- Chromium
- Cobalt



- Manganese
- Nickel
- Thallium
- Vanadium
- PCBs (total)
- 4,4'-DDT

For each COPC, the chemical abstracts service number (CAS number), the dose-response value (RfD), and the reference for the toxicity value are presented. In addition, the USEPA confidence level in the value, the uncertainty factor, the modifying factor, the study animal, study method, target endpoint or critical effects upon which the toxicity value is based are presented for each COPC, where available. USEPA's confidence in the toxicity value is based on confidence in the selected study and the extent of available toxicity information. Adjustments for dermal absorption are discussed in Section 4.5.

#### 4.4 Carcinogenic Toxicity Assessment

USEPA has developed carcinogen risk assessment guidelines (USEPA, 2005b) that revise and replace the previous carcinogen risk assessment guidelines (USEPA, 1986). However, the carcinogen risk assessments for many of the constituents listed in USEPA's IRIS database, including PCBs, still follow the classification system developed in the previous guidance (USEPA, 1986). The classification system in the previous guidance was developed according to the weight of evidence from epidemiologic and animal studies:

- Group A Human Carcinogen (sufficient evidence of carcinogenicity in humans)
- Group B Probable Human Carcinogen (B1 - limited evidence of carcinogenicity in humans; B2 – sufficient evidence of carcinogenicity in animals with inadequate or lack of evidence in humans)
- Group C Possible Human Carcinogen (limited evidence of carcinogenicity in animals and inadequate or lack of human data)
- Group D Not Classifiable as to Human Carcinogenicity (inadequate or no evidence)
- Group E Evidence of Noncarcinogenicity for Humans (no evidence of carcinogenicity in adequate studies)

In the previous guidance, it was assumed that there is some finite level of risk associated with each non-zero dose. The USEPA has developed computerized models that extrapolate dose-response



relations observed at the relatively high doses used in animal studies to the low dose levels encountered by humans in environmental situations. The mathematical models developed by USEPA assume no threshold, and use both animal and human data (where available) to develop a potency estimate for a given chemical. The potency estimate for oral and dermal exposure, called a cancer slope factor (CSF) is expressed in units of  $(\text{mg}/\text{kg}\text{-day})^{-1}$ ; the higher the CSF, the greater the carcinogenic potential.

USEPA (2005b) places greater emphasis on critically evaluating all available data from which a default linear low-dose extrapolation option may be invoked if needed in the absence of critical information. The guidance also emphasizes the consideration of mode of action data. Mode of action is defined as a sequence of key events and processes, starting with interaction of an agent with a cell and resulting in cancer formation. Some modes of action are anticipated to be mutagenic and are assessed with a linear approach. Other modes of action may be modeled with either linear or nonlinear approaches after a rigorous analysis of available data under the guidance provided in the framework for mode of action analysis. USEPA (2005b) uses a weight of evidence narrative rather than the classification system that was used in the previous guidance. The following descriptors are recommended along with the weight of evidence narrative:

- Carcinogenic to humans – this descriptor indicates strong evidence of human carcinogenicity.
- Likely to be carcinogenic to humans – this descriptor is appropriate when the weight of evidence is adequate to demonstrate carcinogenic potential to humans.
- Suggestive evidence of carcinogenic potential – this descriptor is appropriate when the weight of evidence is suggestive of carcinogenicity; a concern for potential carcinogenic effects in humans is raised, but the data are judged not sufficient for a stronger conclusion.
- Inadequate information to assess carcinogenic potential – this descriptor is appropriate when available data are judged inadequate for applying one of the other descriptors.
- Not likely to be carcinogenic to humans – this descriptor is appropriate when the available data are considered robust for deciding that there is no basis for human hazard concern.

More than one descriptor can be used when a constituent's effects differ by dose or exposure route.

While these narrative descriptions represent important advances in carcinogen risk assessment, the approach has not generally been implemented for constituents with toxicity values on IRIS. Therefore, the alphanumeric system is still presented on IRIS and is included here as PCBs remain classified as B2 under the older system. While cadmium is classified as a B1 carcinogen for the inhalation route, there is no evidence of carcinogenic response via the oral route of exposure (USEPA, 2016). None of the other COPCs are classified as potential carcinogens.



Table 4-2 summarizes the oral toxicity information for the COPCs with presumed carcinogenic effects. The CAS number, USEPA carcinogenicity class, the oral CSF and the reference are provided. In addition, the study animal and route of exposure upon which the CSF is based are presented. Adjustments for dermal absorption are discussed in Section 4.5.

#### 4.4.1 Mutagenic Mode of Action

USEPA guidance for early life exposure to carcinogens (USEPA 2005b) requires that potential risks from chemicals that act by a mutagenic mode of action be calculated differently than chemicals that do not act via a mutagenic mode of action. For carcinogens presumed to act via a mutagenic mode of action, dose-response values are generally based on the linearized multistage (LMS) model, which assumes that cancer risks are linear in the low-dose region (USEPA 2005b, c). Consistent with the Cancer Guidelines and Supplemental Guidance for Assessing Susceptibility for Early-Life Exposure to Carcinogens (USEPA 2005c), the application of age-dependent adjustment factors (ADAFs) for chemicals with a mutagenic mode of action has been used in the calculation of risk from specific chemicals, including potentially carcinogenic PAHs and hexavalent chromium.

In this BHHRA, the following ADAFs were applied to potentially carcinogenic PAHs and hexavalent chromium, as recommended by USEPA (2005b):

- Ages 0-2: ADAF = 10;
- Ages 2-6: ADAF = 3;
- Ages 6-16: ADAF = 3;
- Ages >16: ADAF = 1.

Age-weighted ADAFs were calculated for the young child and older child age group based on the exposure durations. For the RME scenarios, the ADAFs for the entire age span of the receptor were averaged. The ADAFs used for the RME scenarios were also used for the CTE scenarios. The derivation of the ADAFs for each age range is presented below.

Receptor Age (years)	1<7	7<19
RME Exposure Duration (years)	6	12
CTE Exposure Duration (years)	3	6
Age Range		
0<1		
1<2	10	
2<3	3	



Receptor Age (years)	1<7	7<19
<b>RME Exposure Duration (years)</b>	6	12
<b>CTE Exposure Duration (years)</b>	3	6
3<4	3	
4<5	3	
5<6	3	
6<7	3	
7<8		3
8<9		3
9<10		3
10<11		3
11<12		3
12<13		3
13<14		3
14<15		3
15<16		3
16<17		1
17<18		1
18<19		1
<b>RME and CTE ADAF (a)</b>	<b>4.2</b>	<b>2.5</b>
(a) RME ADAF is the average of the ADAFs for the receptors assumed exposure duration, which is the same as the age span of the receptor. The RME ADAFs were also applied to the CTE scenarios.		

#### 4.5 Absorption Adjustment for Dermal Toxicity Values

As there are no dermal dose-response values available for the COPCs addressed in this BHHRA, oral dose-response values were used to evaluate dermal exposures. The equation for calculating dermal absorption gives rise to an absorbed dose, making it necessary to adjust the oral toxicity factor to account for an absorbed rather than an administered dose. This adjustment accounts for the gastrointestinal absorption efficiency in the critical study that forms the basis of the RfD or CSF. For example, in the case where oral absorption in the critical study is essentially complete (i.e., 100%), the absorbed dose is equivalent to the administered dose, and therefore no adjustment is necessary. USEPA (2004a Exhibit 4-1) provides recommended adjustment factors for oral dose-response values.



For organic constituents, no adjustment is considered necessary, since their gastrointestinal absorption is generally high. Four of the inorganics evaluated in this risk assessment require adjustment, as indicated in Tables 4-1 and 4-2 (chromium, manganese, nickel, and vanadium).

#### 4.6 Chemical-Specific Approaches

The toxicity assessment approach used for COPCs with specific toxicological issues is discussed in this section:

- Dioxins and Furans (Section 4.6.1)
- PCBs (Section 4.6.2)
- PAHs (Section 4.6.3)

##### 4.6.1 Dioxins and Furans

Dioxins and furans, expressed as TCDD-TEQ, were identified as COPCs in surface sediment and surface water. The approaches used to estimate potential carcinogenic and noncarcinogenic risks associated with TCDD-TEQ are described below. Because dioxins and furans occur in complex mixtures, the toxicity of 2,3,7,8-TCDD, by far the most extensively studied of the group, is used as a reference for the other members of this family of chlorinated chemicals. Based on their ability to bind to the aryl hydrocarbon (Ah) receptor, seven 2,3,7,8-chlorinated dioxin and ten 2,3,7,8-chlorinated furan congeners are assumed to have a mechanism of toxicity similar to that of TCDD. TEFs have been developed by the WHO (Van den Berg et al., 2006) to equate the toxicity of each dioxin-like congener to that of TCDD. TEFs have been identified for 17 dioxins and furans, ranging from 0.0003 to 1, as shown below. In December 2010, USEPA published guidance that adopts the 2005 WHO mammalian TEFs for risk assessment (USEPA, 2010).

Chemical	WHO 2005 TEF
<i>Chlorinated dibenzo-p-dioxins</i>	
2,3,7,8-TCDD	1
1,2,3,7,8-PeCDD	1
1,2,3,4,7,8-HxCDD	0.1
1,2,3,6,7,8-HxCDD	0.1
1,2,3,7,8,9-HxCDD	0.1
1,2,3,4,6,7,8-HpCDD	0.01
OCDD	0.0003
<i>Chlorinated dibenzofurans</i>	
2,3,7,8-TCDF	0.1
1,2,3,7,8-PeCDF	0.03
2,3,4,7,8-PeCDF	0.3
1,2,3,4,7,8-HxCDF	0.1



Chemical	WHO 2005 TEF
1,2,3,6,7,8-HxCDF	0.1
1,2,3,7,8,9-HxCDF	0.1
2,3,4,6,7,8-HxCDF	0.1
1,2,3,4,6,7,8-HpCDF	0.01
1,2,3,4,7,8,9-HpCDF	0.01
OCDF	0.0003
Source: Van den Berg et al., 2006, USEPA, 2010.	

By multiplying the concentration of each dioxin-like congener in an environmental sample by its TEF, and summing the results, a TCDD-TEQ can be calculated for that sample; alternatively, the TEF can be applied to the TCDD oral CSF to derive congener-specific CSFs. In this BHHRA, TCDD-TEQs have been calculated for each sample and EPCs were derived based on the TEQ concentrations.

The CalEPA (2015) CSF of  $1.3E+05 \text{ (mg/kg-day)}^{-1}$  was used to evaluate potential carcinogenic effects of TCDD-TEQ, which is consistent with USEPA's hierarchy and RSL derivation (USEPA 2003a; 2015a). The USEPA RfD for TCDD (USEPA, 2016) of  $7E-10 \text{ mg/kg-day}$  was used to estimate the potential noncancer hazard associated with TCDD-TEQ exposure.

#### 4.6.2 Polychlorinated Biphenyls (PCBs)

PCBs was identified as a COPC in surface sediment, surface water, and fish tissue. For sediment and surface water, PCBs were evaluated as total PCBs (sum of Aroclors). For fish tissue, PCBs were evaluated as both total PCBs (sum of congeners) and as PCB-TEQ. This approach recognizes two potential mechanisms of toxicity and the potential for enrichment of certain presumed dioxin-like congeners in biotic media (USEPA, 2010, 2016). Therefore, for the angler receptor who is assumed to eat fish, two separate sets of PCB and cumulative Site cancer risk and noncancer hazard estimates have been presented in the BHHRA. The uncertainty associated with the PCB toxicity approaches is discussed in the uncertainty section (Section 7). The approaches used to estimate potential carcinogenic and noncarcinogenic risks associated with PCBs are described below.

##### 4.6.2.1 Total PCBs Approach

For the total PCBs approach, the potential cancer risks and noncancer hazards posed by PCBs were calculated using the toxicity factors published on IRIS for PCB mixtures and specific Aroclors (USEPA 2016). The approach for evaluating carcinogenic effects is described first, followed by noncarcinogenic effects.





### Carcinogenic Effects

USEPA provides three tiers of oral CSFs for evaluation of total PCBs: 1) high risk and persistence, 2) low risk and persistence, and 3) lowest risk and persistence (USEPA, 2016). The choice of CSF depends on the route and medium of exposure and PCB chlorine content (USEPA 2016), as shown below. The CSFs are derived from animal cancer bioassay studies, and as mixtures of PCBs were used, the toxicity observed is the result of the combined effects of the mixtures on the whole animal (including presumed dioxin-like effects, as discussed in the uncertainty analysis).

Scenario	Upper-Bound Slope Factor (mg/kg-day) <sup>-1</sup>	Central-Estimate Slope Factor (mg/kg-day) <sup>-1</sup>	Slope Factor Basis	Criteria for use:
High Risk and Persistence	2	1	Several studies on carcinogenicity of Aroclor 1260 and 1254	<ul style="list-style-type: none"> <li>• Food chain exposure</li> <li>• Sediment or soil ingestion</li> <li>• Dust or aerosol inhalation</li> <li>• Dermal exposure, if an absorption factor has been applied</li> <li>• Presence of dioxin-like, tumor-promoting, or persistent congeners</li> <li>• Early-life exposure (all pathways and mixtures)</li> </ul>
Low Risk and Persistence	0.4	0.3	Several studies of carcinogenicity of Aroclor 1242	<ul style="list-style-type: none"> <li>• Ingestion of water-soluble congeners</li> <li>• Inhalation of evaporated congeners</li> <li>• Dermal exposure if no absorption factor has been applied</li> </ul>
Lowest Risk and Persistence	0.07	0.04	Several studies of carcinogenicity of Aroclor 1016	<ul style="list-style-type: none"> <li>• Congener or isomer analyses verify that congeners with more than 4 chlorines comprise less than 0.5% of total PCBs.</li> </ul>

Source: USEPA, 2016.

Cancer risks associated with Total PCBs were evaluated as follows:

- RME Scenario: Ingestion of sediment and fish tissue, and dermal contact with sediment - high-risk and persistence, upper-bound CSF of 2 (mg/kg-day)<sup>-1</sup>



- CTE Scenario: Ingestion of sediment and fish tissue, and dermal contact with sediment - high-risk and persistence, central estimate CSF of  $1 \text{ (mg/kg-day)}^{-1}$
- RME Scenario: Ingestion of and dermal contact with surface water - low risk and persistence, upper-bound CSF of  $0.4 \text{ (mg/kg-day)}^{-1}$
- CTE Scenario: Ingestion of and dermal contact with surface water – low risk and persistence, central estimate CSF of  $0.3 \text{ (mg/kg-day)}^{-1}$

#### Noncarcinogenic Effects

USEPA has not developed an oral RfD for PCBs as a class<sup>11</sup>; however, USEPA has conducted threshold effect assessments for the following individual PCB mixtures: Aroclor 1254, 1016, and 1248. The USEPA provides an oral RfD of  $2\text{E-}05 \text{ mg/kg-day}$  for Aroclor 1254 and an oral RfD of  $7\text{E-}05 \text{ mg/kg-day}$  for Aroclor 1016. Information on Aroclor 1248 was reviewed but a value was not estimated by USEPA.

The Aroclor oral RfDs on IRIS (USEPA, 2016) were used to evaluate potential noncarcinogenic effects from PCBs. Although no specific guidance has been provided by USEPA or others concerning whether to use the oral RfD for Aroclor 1016 or Aroclor 1254, it is reasonable and scientifically valid to use the oral RfD for the Aroclor that most closely approximates the congener composition in the environmental media being evaluated. The RfD for Aroclor 1254 was used for this BHHRA based on the available data for Aroclor patterns in sediment. PCBs in river sediment samples collected adjacent to the Site were identified by Method 8082 as primarily an Aroclor 1248 and Aroclor 1260 mix, and Aroclor 1254 is midway between 1248 and 1260 in congener/homologue range.

#### **4.6.2.2 Dioxin-Like PCBs Approach**

Certain PCB congeners have been identified as having a mechanism of toxicity similar to that of TCDD (USEPA, 1996; 2010; Van den Berg et al., 1998, 2006). The designation as a “dioxin-like compound” (DLC) is based on Ah receptor binding and similarities in biochemical activity and bioaccumulation potential. Twelve coplanar PCBs with four or more chlorines with one or no substitutions at ortho positions have been identified as having dioxin-like toxicity, and TEFs have been developed to equate the toxicity of each dioxin-like PCB congener to that of TCDD (Van den Berg et al., 1998, 2006). The “coplanar” PCBs lack ortho chlorines on both rings, allowing the rings to orient in the same plane, but this conformation is not rigid. USEPA’s December 2010 guidance adopts the 2005 WHO mammalian TEFs for the 12 coplanar PCBs (USEPA, 2010). The TEFs for dioxin-like PCBs are shown below for both the WHO 1998 and 2005 schemes. The WHO 1998 TEFs are

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<sup>11</sup> An IRIS assessment of the potential noncarcinogenic effects of PCB mixtures is underway (USEPA, 2016).



included because they were used by Pinkney (2014) to derive the PCB-TEQ concentrations for the 2013 Anacostia River fish tissue samples used in this BHHRA.

Chemical	WHO 1998 TEF	WHO 2005 TEF
<i>Non-ortho–substituted PCBs</i>		
3,3',4,4'-tetraCB (PCB 77)	0.0001	0.0001
3,4,4',5-tetraCB (PCB 81)	0.0001	0.0003
3,3',4,4',5-pentaCB (PCB 126)	0.1	0.1
3,3',4,4',5,5'-hexaCB (PCB 169)	0.01	0.03
<i>Mono-ortho–substituted PCBs</i>		
2,3,3',4,4'-pentaCB (PCB 105)	0.0001	0.00003
2,3,4,4',5-pentaCB (PCB 114)	0.0005	0.00003
2,3',4,4',5-pentaCB (PCB 118)	0.0001	0.00003
2',3,4,4',5-pentaCB (PCB 123)	0.0001	0.00003
2,3,3',4,4',5-hexaCB (PCB 156)	0.0005	0.00003
2,3,3',4,4',5'-hexaCB (PCB 157)	0.0005	0.00003
2,3',4,4',5,5'-hexaCB (PCB 167)	0.00001	0.00003
2,3,3',4,4',5,5'-heptaCB (PCB 189)	0.0001	0.00003
Van den Berg et al., 1998, 2006; USEPA, 2010.		

The potential cancer risk posed by PCB-TEQ was evaluated in the BHHRA using the CSF for 2,3,7,8-TCDD of 130,000 (mg/kg-day)<sup>-1</sup>.

#### Noncarcinogenic Effects

The oral RfD of 7E-10 mg/kg-day derived for TCDD (USEPA, 2016) was used to evaluate the potential noncarcinogenic effects of PCB-TEQ.

To avoid double counting of PCB risks, two separate sets of cancer risks and noncancer hazards have been derived for the fish consumption scenario, with one set based on the toxicity factors for total PCBs and the other based on the toxicity factors for dioxin-like PCBs as PCB-TEQ.<sup>12</sup>

<sup>12</sup> Summing total PCB and PCB TEQ cancer risks overestimates the risk posed by an environmental PCB mixture, as co-planar PCBs were present in the commercial Aroclor mixture used to derive the total PCBs CSF; hence, there is “double counting” of the risk posed by the coplanar PCBs if total PCB and PCB TEQ risks are summed.



#### 4.6.3 Polycyclic Aromatic Hydrocarbons (PAHs)

The following potentially carcinogenic PAHs were identified as COPCs in surface sediment:

- Benz(a)anthracene
- Benzo(a)pyrene
- Benzo(b)fluoranthene
- Benzo(k)fluoranthene
- Chrysene
- Dibenz(a,h)anthracene
- Indeno(1,2,3-cd)pyrene

Benzo(a)pyrene (BaP) is the most studied of the PAHs and the only one for which rodent bioassay data are adequate for estimating an oral CSF. Therefore, the carcinogenic potency of the other PAHs with presumed carcinogenic effects (USEPA, 1993c) is evaluated relative to BaP using relative potency factors (RPFs). The current USEPA RPFs for the five PAH COPCs are shown below. By multiplying the BaP CSF by each of the RPFs, a PAH-specific oral CSF can be calculated. The resulting CSFs applied in the BHHRA are shown below.

Chemical	Relative Potency Factor (USEPA 1993c)	Oral Cancer Slope Factor (mg/kg-day) <sup>-1</sup>	CSF Source
Benzo(a)pyrene	1	7.3	USEPA 2016
Benzo(a)anthracene	0.1	0.73	BaP CSF x RPF
Benzo(b)fluoranthene	0.1	0.73	BaP CSF x RPF
Benzo(k)fluoranthene	0.01	0.073	BaP CSF x RPF
Chrysene	0.001	0.0073	BaP CSF x RPF
Dibenz(a,h)anthracene	1	7.3	BaP CSF x RPF
Indeno(1,2,3-c,d)pyrene	0.1	0.73	BaP CSF x RPF
Source: USEPA 2016, USEPA, 1993c.			

Currently, oral RfDs for the potentially carcinogenic PAHs are not available from USEPA's hierarchy of sources (USEPA, 2003a). The USEPA RSLs for carcinogenic PAHs were derived based on carcinogenic potential only. Therefore, oral RfDs have not been assigned to the potentially carcinogenic PAHs.

## 5 Exposure Assessment

The objective of the exposure assessment is to estimate the magnitude, frequency, duration, and routes of current and reasonably anticipated future human exposure to COPCs associated with the Site. The extent of a receptor's exposure is estimated by identifying exposure scenarios that describe the potential pathways of exposure to COPCs and the specific activities and behaviors (e.g., wading, fishing) of individuals that might lead to contact with COPCs in the environment.

USEPA guidance documents stress the importance of using data that represent the characteristics of the local population(s) and site when possible and appropriate (USEPA, 1989a, b, 1998, 2000, 2011). Default exposure assumptions, which are often intentionally conservative, may be appropriate when site-specific data are lacking, or when there is little reason to believe site conditions and/or receptor characteristics differ substantively from the default (e.g., human body weight, lifetime). Consistent with USEPA guidance and the approved Risk Assessment Work Plan (AECOM, 2012a), the exposure assessment for the Benning Road Facility utilizes both site-specific and default assumptions.

This section is organized as follows:

- Section 5.1 discusses potential exposure scenarios, based on the CSM presented in Section 2.2, including the potentially affected media, and the pathways by which people may be exposed to Site media.
- Section 5.2 presents the methods used to quantify potential exposures for each potential exposure scenario.
- Section 5.3 identifies the exposure parameters and values used to quantify potential exposures.
- Section 5.4 presents constituent-specific parameters.
- Section 5.5 describes exposure point concentrations (EPCs).
- Section 5.6 presents the groundwater-to-surface water screening evaluation.

### 5.1 Identification of Potential Exposure Scenarios

Exposure scenarios were developed based on the HHRA CSM, as described in Section 2.2. The public may access the river at several locations, including parks, boat docks and launches (**Figure 3**). Anacostia Park, a 1200 acre unit of National Capital Parks – East, stretches five miles along the banks of the Anacostia River between the Fredrick Douglas Memorial Bridge and the DC-Maryland line. Within the park, the Anacostia Riverwalk Trail runs along the shoreline of the river continuing



beyond the north and south boundaries of the park. A public boat launch is located about 1.5 miles downstream from the Pepco site.

Most of the eastern shoreline adjacent to the Site is stabilized with either sheet pile or rockwall. Dense vegetation along much of the shoreline adjacent to the Site may limit access in this area. Kingman Island divides the Anacostia Channel from Kingman Lake to the west and provides recreation opportunities via pier and trail access. The western shoreline is uniformly stabilized with a continuous rock wall with dense tree cover throughout.

As shown in **Figure 4**, recreational and worker exposure scenarios were identified in the CSM as potentially complete and warranting further evaluation. Visitors to the river may wade, swim, fish, boat, or engage in other activities that bring them into contact with river media. It is assumed that shoreline workers and recreational receptors, including swimmers, wader, and anglers, are exposed to COPCs via direct contact (incidental ingestion and dermal contact) with nearshore surface sediment and surface water while wading or swimming in the river. It is also assumed that anglers keep and eat fish they catch in the river, and bring fish home to share with other members of the household.

Table 5-1 presents a summary of the receptors and exposure scenarios evaluated in the BHHRA. Because of the differences in activity patterns and sensitivity to exposures, three age groups were evaluated (USEPA, 2014)<sup>13</sup>:

- young child age 1-6 years (from 1 up to the 7<sup>th</sup> birthday),
- older child age 7-18 years (from 7 up to the 19<sup>th</sup> birthday), and
- adult (>18 years of age)

For carcinogenic risk characterization, which assumes that effects are additive over a lifetime, potential risks for the young child and adult age groups were calculated separately, and then summed to estimate the total potential lifetime excess cancer risk for the receptor. For noncarcinogenic risk characterization, effects were evaluated over the period of exposure. Therefore, noncancer risks were calculated and presented separately for the young child, older child, and adult age groups.

## 5.2 Quantification of Potential Exposures

To estimate human health risk from COPCs at the Site, it is necessary to estimate the potential exposure dose for each COPC. The exposure dose is estimated for each COPC for each exposure

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<sup>13</sup> Infants under one year of age are assumed to not be exposed to Site-related media; the potential contribution from early life exposures to lifetime risk is discussed in the uncertainty evaluation.



pathway by which the receptor is assumed to be exposed. Exposure dose equations combine the estimates of COPC concentrations in the environmental medium of interest with assumptions regarding the type and magnitude of each receptor's potential exposure to provide a numerical estimate of the exposure dose (intake). The exposure dose is defined as the amount of COPC taken into the receptor and is expressed in units of milligrams of COPC per kilogram of body weight per day (mg/kg-day) (USEPA, 1989a).

Exposure doses are defined differently for potential carcinogenic and noncarcinogenic effects. The chronic daily intake is used to estimate a receptor's potential average daily dose from exposure to a COPC with noncarcinogenic effects. According to USEPA (1989a), the chronic daily intake should be calculated by averaging the exposure dose over the period of time for which the receptor is assumed to be exposed. Therefore, the averaging period is the same as the exposure duration (ED) for COPCs with noncarcinogenic effects. For COPCs with potential carcinogenic effects, however, the chronic daily intake is calculated by averaging the exposure dose over the receptor's assumed lifetime (70 years). Therefore, the averaging period is the same as the receptor's assumed lifetime. The standardized equations for estimating a receptor's intake (both chronic and lifetime) are presented below. Receptor-specific parameters are discussed in Section 5.3.

### 5.2.1 Estimating Potential Exposures to COPCs in Sediment

The following equations were used to calculate the estimated exposures to COPCs in sediment (USEPA, 1989a, 2004a).

Intake (lifetime and chronic) following incidental ingestion of sediment (mg/kg-day):

$$Intake = \frac{CS \times IR_s \times FI \times EF \times ED \times AAF_o \times CF}{BW \times AT}$$

where:

Intake	=	intake (mg/kg-day)
CS	=	sediment concentration (mg/kg sediment – dry weight)
IRs	=	ingestion rate of sediment (mg sediment/day)
FI	=	fraction ingested from Site (unitless)
EF	=	exposure frequency (days/year)
ED	=	exposure duration (year)
AAFo	=	oral sediment absorption adjustment factor (chemical-specific) (unitless)
CF	=	unit conversion factor (kg sediment /10 <sup>6</sup> mg sediment)
BW	=	body weight (kg)
AT	=	averaging time (days)

Intake (lifetime and chronic) following dermal contact with sediment (mg/kg-day):

$$Intake = \frac{CS \times SA \times AF \times EF \times ED \times DAF \times CF}{BW \times AT}$$

where:

Intake	=	intake (mg/kg-day)
CS	=	sediment concentration (mg/kg sediment – dry weight)
SA	=	exposed skin surface area (cm <sup>2</sup> /day)
AF	=	sediment to skin adherence factor (mg sediment/cm <sup>2</sup> )
EF	=	exposure frequency (days/year)
ED	=	exposure duration (year)
DAF	=	dermal absorption factor (chemical-specific) (unitless)
CF	=	unit conversion factor (kg sediment /106 mg sediment)
BW	=	body weight (kg)
AT	=	averaging time (days)

## 5.2.2 Estimating Potential Exposures to COPCs in Surface Water

The following equations were used to calculate the estimated exposures to COPCs in surface water (USEPA 1989a, 2004a).

Intake (lifetime and chronic) following incidental ingestion of surface water (mg/kg-day):

$$Intake = \frac{CW \times IR_w \times ET \times EF \times ED \times AAF_o}{BW \times AT}$$

where:

Intake	=	intake (mg/kg-day)
CW	=	water concentration (mg/L)
IR <sub>w</sub>	=	ingestion rate of water (L/hour)
ET	=	exposure time (hr/day)
EF	=	exposure frequency (days/year)
ED	=	exposure duration (year)
AAFo	=	oral water absorption adjustment factor (chemical-specific) (unitless)
BW	=	body weight (kg)
AT	=	averaging time (days)

Calculation of the dose from dermal exposure to surface water follows USEPA guidance (2004a), which differentiates between organic and inorganic chemicals, as presented below. The following





equations are used to estimate the dermally absorbed dose following dermal contact with surface water:

Dermally absorbed dose (lifetime and chronic) following dermal contact with surface water (mg/kg-day):

$$DAD = \frac{DA_{event} \times EF \times EV \times ED \times SA}{BW \times AT}$$

where:

DAD	=	dermally absorbed dose (mg/kg-day)
DA <sub>event</sub>	=	absorbed dose per event (mg/cm <sup>2</sup> -event)
SA	=	body surface area (cm <sup>2</sup> )
EF	=	exposure frequency (days/year)
EV	=	event frequency (1 event/day)
ED	=	exposure duration (years)
BW	=	body weight (kg)
AT	=	averaging time (days)

The calculation of the dose absorbed per unit area per event (DA<sub>event</sub>) is as follows for inorganics or highly ionized organics:

$$DA_{event} = CW \times PC \times ET \times CF$$

where:

DA <sub>event</sub>	=	absorbed dose per event (mg/cm <sup>2</sup> -event)
CW	=	concentration in water (mg/L)
PC	=	permeability constant (cm/hr)
ET	=	exposure time (hr/event)
CF	=	conversion factor (L/1000 cm <sup>3</sup> )

The calculation of DA<sub>event</sub> is as follows for organics:

If  $ET < t^*$ , then:  $DA_{event} = 2 FA \times PC \times CW \times CF \sqrt{\frac{6T \times ET}{\pi}}$

If  $ET > t^*$ , then:  $DA_{event} = FA \times PC \times CW \times CF \times \left[ \frac{ET}{1+B} + 2T \left( \frac{1+3B+3B^2}{(1+B)^2} \right) \right]$

where:

$DA_{event}$	=	absorbed dose per event (mg/cm <sup>2</sup> -event)
FA	=	fraction absorbed water (dimensionless)
PC	=	permeability constant (cm/hour)
CW	=	concentration in water (mg/L)
T	=	lag time per event (hr/event)
ET	=	exposure time (hr/event)
$t^*$	=	time to steady state (hr)
B	=	dimensionless ratio of the PC of a chemical through the stratum corneum relative to its permeability constant across the viable epidermis
CF	=	conversion factor (l L/1000 cm <sup>3</sup> )

### 5.2.3 Estimating Potential Exposures to COPCs in Fish Tissue

The following equation used to calculate the estimated exposures to COPCs via fish consumption (USEPA, 1989a):

Intake (lifetime and chronic) following fish consumption (mg/kg-day):

$$Intake = \frac{C_{tiss} \times IR \times FI \times (1 - Loss) \times AAF_o \times EF \times ED}{AT \times BW}$$

where:

Intake	=	intake (mg/kg-day)
CF	=	concentration in fish tissue (mg/kg - wet weight)
IR	=	ingestion rate (kg/day)
FI	=	fraction ingested from Site
Loss	=	preparation/cooking loss (unitless)
$AAF_o$	=	oral - diet absorption adjustment factor (constituent-specific)
EF	=	exposure frequency (days/year)
ED	=	exposure duration (years)
BW	=	body weight (kg)
AT	=	averaging time (days)



### 5.3 Receptor-Specific Exposure Parameters

This section identifies the receptor-specific exposure parameters that were used to estimate exposure doses for the potential receptors in the BHHRA. As described in the Risk Assessment Work Plan, both reasonable maximum exposure (RME) and central tendency exposure (CTE) scenarios were evaluated. The CTE uses average exposure parameters to calculate an average exposure to an individual. The RME provides an estimate of the upper range of exposure in a population (the 90th percentile or greater of expected exposure, consistent with USEPA, 1992b) and is based on a combination of the upper-bound and central estimates of exposure parameters. As stated in the RAGS Part A (USEPA, 1989a),

*“Actions at Superfund sites should be based on an estimate of the RME expected to occur under both current and future land-use conditions. The reasonable maximum exposure is defined here as the highest exposure that is reasonably expected to occur at a site. RMEs are estimated for individual pathways.”*

It is not appropriate to set all RME exposure factor inputs to upper-percentile values, inasmuch as the resulting exposure estimates may exceed RMEs for the population of interest (USEPA, 2004b). The intent of the RME is to estimate a conservative exposure case that is above the average case but still within the range of possible exposures (USEPA, 1989b, 1992b). The purpose of evaluating both CTE and RME scenarios in the BHHRA is to provide risk managers and stakeholders with an estimate of the range of risks from average to upper-bound.

There are a number of parameters for which site-specific data are critical, and use of default exposure assumptions, such as those provided in USEPA risk assessment guidance documents (USEPA, 1989a, 2011, 2014), may overestimate or underestimate site-specific conditions. For example, recreational exposures at a river depend on factors such as water quality, land and waterway uses, public access, fishery characteristics, as well as demographics of the population. For parameters such as fish ingestion rate, exposure frequency, and the duration of exposure events, use of site-specific information promotes development of exposure parameter values that are realistic. For the Benning Road BHHRA, local fish consumption studies, water quality and fishery information, land use and recreation information, and demographic data were considered.

Tables 5-2, 5-3, and 5-4 present the exposure parameter values used to quantitatively estimate potential risks from exposures to sediment, surface water, and fish tissue, respectively. In accordance with guidance (USEPA, 1989a), the assumptions are intended to capture exposures under both current and future Site conditions. Uncertainties associated with the selected exposure parameters are discussed in the uncertainty analysis.



A description of each receptor evaluated in the BHHRA is provided in Sections 5.3.1 through 5.3.4. The remaining exposure parameters are discussed in the following sections:

- **5.3.5** – Fish Consumption Exposure Parameters
- **5.3.6** – Sediment Ingestion Rates
- **5.3.7** – Surface Water Ingestion Rates
- **5.3.8** – Body Surface Areas Exposed
- **5.3.9** – Sediment Adherence Factors
- **5.3.10** – Exposure Frequency
- **5.3.11** – Exposure Duration
- **5.3.12** – Body Weight

### **5.3.1 Angler**

Angler receptors are defined as those individuals who consume self-caught fish from the Anacostia River in spite of the consumption advisories. Adults and older children (7 to 18 years old) are assumed to fish in the Anacostia and consume their catch. These anglers are assumed to share self-caught fish with other members of their household.

Anglers can fish from various locations along the shoreline, including parks, bulkheads, bridges, boat launches, and docks, as well as from boats. Anglers are not expected to contact surface water or river sediment on days when they fish from bridges or bulkheads. However, on days when anglers fish from areas such as mudflats or accessible shoreline, they may be exposed to COPCs in sediment and surface water. Although young children may eat Anacostia River fish that is caught by the adult or older child angler and shared with others in the household, they are expected to rarely accompany the family member who is fishing. Exposures would be less than those experienced by young children who visit the river specifically to wade or swim (discussed below). Therefore, the exposure of a young child angler to sediment and surface water is not evaluated under the angling scenario.

It is assumed that the current/future angler receptor may be exposed to COPCs via:

- Consumption of fish caught in the Anacostia River
- Direct contact (incidental ingestion and dermal contact) with surface sediment
- Direct contact (incidental ingestion and dermal contact) with river surface water



### 5.3.2 Swimmer

Recreational users of the Anacostia River may occasionally swim in the river, although this is expected to be an infrequent activity. The swimmer receptor includes the young child (1 to 6 years), older child (7 to 18 years), and adults (>18 years). Given visible deterrents, including the presence of trash and debris along the shoreline and floating in the water, the generally urban setting including CSOs, lack of designated swimming spots along the river, as well as pathogen loadings<sup>14</sup>, the frequency and duration of swimming is expected to be low under both current and future Site conditions.

It is assumed that the current/future swimmer may be exposed to COPCs via:

- Direct contact (i.e., incidental ingestion and dermal contact) with surface sediment
- Direct contact (i.e., incidental ingestion and dermal contact) with river surface water

### 5.3.3 Wader

Recreational users of the Anacostia River may occasionally wade along the river's edge. This includes individuals who may boat and contact sediment and surface water while entering and exiting their boat (e.g., canoe, kayak, scull), as well as a variety of other activities, such as general play, dog walking, bird watching, etc.. Waders include the young child (1 to 6 years), older child (7 to 18 years), and adults (>18 years).

It is assumed that the current/future wader may be exposed to COPCs via:

- Direct contact (incidental ingestion and dermal contact) with surface sediment
- Direct contact (incidental ingestion and dermal contact) with river surface water

### 5.3.4 Worker

Workers, including National Park Service employees, may perform outdoor activities such as trash collection, shoreline maintenance, or other activities that bring them into contact with surface sediment and surface water along the edge of the river. The worker receptor is assumed to be an adult.

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<sup>14</sup> The presence of high levels of pathogens in the Anacostia is the primary reason the river is not considered safe for swimming (DOEE, 2008, 2014b).



It is assumed that the current/future worker may be exposed to COPCs via:

- Direct contact (incidental ingestion and dermal contact) with surface sediment
- Direct contact (incidental ingestion and dermal contact) with river surface water

### **5.3.5 Fish Consumption Exposure Parameters**

A number of parameters were used to calculate the potential risk from consumption of fish, including: consumption rate, species, body parts consumed, fraction ingested from the site, preparation and cooking methods, and years of fishing at the Site. In selecting appropriate fish consumption exposure parameters, USEPA guidance (USEPA, 1989a,b, 1998, 2000, 2011) discusses the importance of considering site-specific factors, including water quality, public access, abundance of desirable species, proximity of other desirable water bodies, as well as characteristics of the angling population.

The Anacostia River is a tidal river with habitat suitable for a variety of freshwater and estuarine species, including American eel, brown bullhead, channel catfish, largemouth and smallmouth bass, carp, and sunfish. Angling has been observed from shore and boat, as discussed below. A water body-specific fish consumption advisory is in effect for the Anacostia and Potomac Rivers recommending against consumption of some species (catfish, carp and American eel) and limited consumption of other species (e.g., largemouth bass, sunfish) (DOEE, 2014a). However, people may not be aware of the advisory, or may choose to catch and eat river fish despite the presence of the advisory.

To aid in the development of appropriate fish consumption exposure parameters for the Pepco risk assessment, available local and regional angler studies were consulted. Fish consumption rates and fraction of diet/fraction ingested are discussed below. Cooking loss factors are constituent-specific and are discussed in Section 5.4.

#### **5.3.5.1 Fish Consumption Rate**

A review of available angler surveys was conducted to identify data that could serve as a source of consumption rates for the Anacostia River. Three regional studies were identified, and are summarized below:

- Survey of Chesapeake Bay occupational and recreational fishers (Harris et al., 2009)
- Chesapeake Bay Angler Survey (Gibson and McClafferty, 2005)
- Anacostia River Angler Survey (OpinionWorks, 2012)



### Chesapeake Bay Occupational and Recreational Fishers Survey

Researchers from the University of Toronto and Virginia Commonwealth University, with support from the Virginia Department of Health, conducted a survey of occupational and recreational anglers that fish in Chesapeake Bay (Harris et al., 2009). The participants (n=99) were recruited from an existing cohort of an epidemiological study examining exposure to a seafood toxin (*Pfiesteria*), and included occupational anglers as well as recreational anglers with occupations not related to fishing. The majority (80%) were male, 85% had at least a high school education, and 98% were white (2% were black). In 2001, participants were administered an in-person questionnaire that focused on current fish consumption, species consumed, past fish consumption, and perceptions of risk. Fish consumption included all fish meals, including store-bought, self-caught, restaurant, etc. Information on fish meal frequency was solicited two ways: 1) on the basis of average fish consumption on a weekly, monthly, or annual basis, and 2) on a species-specific basis. Using the two methods, the median number of annual fish meals was estimated to be 52 based on “average” reported fish meal frequency, and 65 based on summing species-specific reported fish meal frequencies. Species most frequently consumed included flounder, tuna (including canned tuna), striped bass, sea trout, and croaker. Approximately 70% of the fish consumed was self-caught (with about half of that from Virginia waters), and the average fish meal size was approximately 9 ounces (median of 8 ounces). The authors found a statistically significant relationship between consumption and occupation, with higher consumption by occupational anglers and other water-related occupations versus non-water related occupations. The authors suggest that the consumption estimates based on summation of different fish types are likely upwardly biased by approximately 30%.

The 2001 Chesapeake Bay occupational and recreational fishers survey is of limited usefulness to the Pepco Anacostia River risk assessment for several reasons: fish consumption represents all sources of fish, not just self-caught, the predominantly White study population differs from Anacostia River anglers (largely non-White), and marine fish that would not typically be present represent a large portion of the diet (e.g., flounder and sea trout).

### Chesapeake Bay Angler Survey

In 2004, researchers from Virginia Polytechnic Institute and State University, under contract to Chesapeake Bay Program, conducted on-site angler interviews in three regions of concern: 1) Baltimore, Maryland area, 2) Washington, D.C. area, and 3) Tidewater, Virginia area (Gibson and McClafferty, 2005). The purpose of the study was to characterize anglers' demographic characteristics and consumption behaviors, as well as their knowledge of consumption advisories. The interviews were conducted over 8 weeks in June-August at nine pre-determined fishing sites in each study area. Of the nine intercept sites in the Washington, D.C. study area, seven were located on the Potomac



River, one on the Anacostia River (Anacostia Park South<sup>15</sup>), and one on the bay south of the confluence of the two rivers. The individual site sampling frequencies were weighted to sample more frequently the sites where anglers were expected, based on consultations with fishery managers and visual observations of survey staff (Gibson and McClafferty, 2005). Interview teams visited assigned sites for 8 hour shifts (morning shift of 6 am to 2 pm and afternoon shift of 12 pm to 8 pm).

A total of 247 interviews were conducted in the DC area. The study attempted to interview each angler only once, although the authors report that 9% of the 247 intercepts were with anglers that had been interviewed earlier in the summer. Most anglers (91%) were male and the average age was 45. Most (84%) had obtained at least a high school education. Half of the anglers were African-American, 33% were White, 10% were Hispanic, and 6% were Asian. About 40% reported annual household incomes above \$80,000, about 30% reported annual household incomes of \$40,000-\$80,000, and 30% reported less than \$40,000. About 9% reported annual household incomes of less than \$20,000.

About 37% reported eating some of their catch and 63% reported practicing catch and release only. Of those who reported consuming their catch, 75% reported avoiding certain species. About half of anglers who reported not consuming their catch said they sometimes give away their catch. When consuming anglers were asked to name up to four species consumed and consumption frequency, catfish (listed as a “do not eat” species) was the most popular species, followed by stripers and largemouth bass. For the other two “do not eat” listed species (carp and eel), only 3 anglers reported consuming carp and none reported consuming eel.

Most anglers reported fishing and eating their catch in the warmer months (April-September). During these warmer months, 53% of consuming anglers reported a consumption rate of 1-3 times per month, and 20% reported a consumption rate of 1-2 times per week. On average throughout the year, anglers ate their catch less than once per month (44%) or between one and three times per month (29%). Only 2% reported eating self-caught fish more than twice a week throughout the year. Asians and Hispanics anglers were more likely to consume their fish than anglers of other ethnicities, as well as to provide catch to other family members. The majority (~60%) reported removing the skin and trimming the fat, and most (78%) reported eating 8 ounces or less for a typical meal. Of the

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<sup>15</sup> Gibson's 2005 Master's thesis: *Fish Consumption Advisories in Tributaries to the Chesapeake Bay: Improving the Communication of Risk to Washington, DC Anglers*, provided additional information on the 2004 survey. In the thesis, the Anacostia South Park survey site was depicted on a map on the east side of the river adjacent to the Pennsylvania Ave. Bridge (Sousa Bridge). This location is approximately 1.8 miles downriver from the Pepco Site. Anacostia South Park (site 9) was visited 6 times during the 8 week survey period. Two of the visits were conducted on weekend days, while the other four were on weekdays. Five of the six visits took place during the afternoon shift, and one visit took place during the morning shift. A total of 13% (about 30 interviews) of all DC area interviews were conducted at the Anacostia South Park site, ranking fourth out of the 9 DC area sites.





247 DC area anglers interviewed, only 6 reported eating crabs. When asked about reasons for fishing, over 90% of the anglers reported being outdoors or relaxing as very important. About 20% reported getting fresh fish for a family meal as a very important reason. About 56% of the interviewed anglers reported awareness of the consumption advisories.

The 2004 Chesapeake Bay Angler Survey includes consumption and behavior data for anglers on the Potomac River and Anacostia River that may be useful for the risk assessment. The survey questions asked about consumption and sharing habits related to “self-caught” fish from the Washington DC area, although not necessarily specific to the Anacostia River. Population statistics were not generated, and sampling weights were not provided. Thus, there is uncertainty as to the representativeness of the interview data to the larger population of Anacostia River anglers and consuming anglers. In addition, the survey was administered over an 8 week period of high fishing activity, and anglers were asked to recall year-round practices. There is uncertainty in using one-time recall data to estimate long-term consumption rates (USEPA, 2011). Recall survey methods tend to bias consumption rates high, especially for more avid anglers and with longer recall periods (USEPA, 1998, Connelly and Brown, 1995, Fisher et al., 1991). “Recall bias” may be further amplified when the respondent is interviewed at the height of fishing season, and responses extrapolated to cold weather months when fishing activity is much lower. This bias will lead to overestimating annual consumption rates (USEPA, 2011).

#### Anacostia River Angler Survey

OpinionWorks, under contract to the Anacostia Riverkeeper and with multi-agency support, conducted a study to assess the characteristics, practices, and attitudes of Anacostia River anglers (OpinionWorks, 2012). On-site interviews were conducted on various days of the week and hours of the day from early morning to evening, over five weeks in August and September 2011 at ten fishing sites between Bladensburg, Maryland and the mouth of the Anacostia River near Hains Point in the District of Columbia. Interviews were administered predominantly in English (85%), with the remainder in Spanish (14%) and Vietnamese (1%). Information was gathered on fishing practices, fish consumption and sharing, and awareness of health risks. Of the 111 anglers interviewed, 67% were African American, 18% were Hispanic, 8% were Asian, and 6% were White. About 62% had a high school education and 25% never completed high school. About 63% of the interviewed anglers reported fishing at least once a week during the warm weather months, and 18% reported fishing daily during warm weather months. When shown a photo sheet of fish species in the river, catfish was reported as caught most often (65% of anglers), followed by brown bullhead (33% of anglers) and sunfish (20% of anglers). About 75% of anglers reported eating or sharing some or all of their catch, and about 25% practice catch and release only. About one third (35%) reported eating or sharing



their catch once per week, and 7% reported eating fish every day. Nearly half (46%) reported sharing self-caught fish outside of their family.

### **Selected Fish Consumption Rates**

The Chesapeake Bay angler survey was selected as the most appropriate study for use in deriving consumption rates for the Benning Road BHHRA. This study was selected because it followed general survey design methods, recorded 247 interviews over an 8 week period, included the Anacostia River, identified species preferences, and presented consumption frequency ranges. While the Chesapeake Bay angler survey was not conducted with the intention of collecting data for use in a baseline human health risk assessment, the available data are sufficient to develop consumption estimates for DC area anglers. Since the survey was conducted during the warm weather period when fishing activity tends to be highest, angler responses regarding fishing and consuming frequency are likely to be biased upward (recall bias). As previously noted, this bias tends to lead to overestimating annual consumption rates (USEPA, 2011). The more recent Anacostia River angler survey conducted by OpinionWorks (2012) provides useful qualitative information on anglers, motivations for fishing, and general consuming and sharing practices; this information has also been considered in the development of the fish consumption exposure parameters.

For the RME scenario, a fish consumption rate of 20 grams/day was used for the adult angler. This rate equates to approximately 32 half-pound meals per year of self-caught fish, and was derived based on angler responses on frequency of eating their catch. The rate assumes one half-pound self-caught fish meal per week during the six warmer months of the year (April through September) and one meal per month during the six cooler months of the year (October through March). For the CTE scenario, a fish consumption rate that is half of the RME rate (10 grams/day) was used for the adult angler. The assumption that a typical fish meal consists of a half-pound of fish is conservative, as nearly 80% of anglers reported consuming 8 ounces or less (Gibson and McClafferty, 2005).

Consumption rates for the older child and young child were based on the assumption that intakes are approximately two thirds and one third, respectively, that of the adult. This assumption is based on the ratios of mean child-to-adult fish ingestion rates for fish consumption (USEPA, 2011). The derivation of the recreational angler consumption rates is presented in Table 5-5. The RME and CTE fish consumption rates used in the BHHRA are shown below in units of grams per day and fish meals per year, assuming typical meal sizes of 8 ounces (227 grams) for the adult, 6 ounces (170 grams) for the older child, and 4 ounces (113 grams) for the young child.



Angler Age Group	Fish Consumption Rates			
	RME		CTE	
	g/day	meals/year	g/day	meals/year
Adult	20	32	10	16
Older Child	13	28	7	15
Young Child	7	23	3	10

According to both surveys, anglers reported sharing self-caught fish with household members and others. The uncertainty analysis includes an evaluation of the impact of various consumption rates, including the potential risks/hazards to subsistence (high-end) consumers of Anacostia River fish.

### 5.3.5.2 Fraction Ingested

The RAGS Part A includes a term “fraction ingested” (FI) that is defined as, “fraction ingested from contaminated source (unitless)” (USEPA, 1989a). Anglers fish at multiple locations and likely obtain catch from several locations throughout the Anacostia River and the broader DC area, including the Potomac River and upper Chesapeake Bay. The use of a FI of less than 1 translates to assuming that a portion of the angler’s self-caught fish diet comes from locations other than the Anacostia River in the vicinity of the Site. The size of the Site (approximately one half mile of shoreline) relative to the length of the Anacostia River (approximately 8.4 miles from Bladensburg to the confluence with the Potomac River) is relatively small (less than 6 percent). In addition, fish move throughout the river, with home ranges for some species of up to several miles (e.g., catfish, carp, striped bass). For the RME scenario, it was assumed that half of the fish consumed by the angler comes from the Anacostia River in the vicinity of the Site (FI = 0.5). For the CTE scenario, a FI of 0.25 was used to account for anglers who catch and eat fish from throughout the greater DC area.

### 5.3.6 Sediment Ingestion Rates

While a number of studies on incidental ingestion of soil as a result of hand-to-mouth behaviors have been conducted, as summarized in USEPA guidance (2011), similar data for sediment are lacking. Incidental ingestion of sediment is generally expected to be limited since submerged sediments tend to be washed off of the exposed skin (USEPA, 2004a). Since empirical, site-specific measurements of sediment ingestion are not feasible, the development of appropriate incidental sediment ingestion rates for the BHHRA entailed a literature review to identify any recent studies that may be useful, and the use of soil ingestion rates published in USEPA guidance (USEPA, 2011, 2014).

#### 5.3.6.1 Young Child Ingestion Rate Literature Summary

When characterizing RME exposures to residential soils, the USEPA’s default upper-bound soil ingestion rates are 200 mg/day for young children (1 to 6 years of age) and 100 mg/day for adults (USEPA, 2014). These soil ingestion rates are intended to capture exposure to outdoor soil and



household dust of outdoor soil origin (USEPA, 2011). The rate for the young child is based on two soil ingestion studies (Özkaynak et al, 2010, Stanek and Calabrese, 1995).

Additional studies of soil ingestion published in the peer-reviewed literature indicate that these daily rates may overestimate soil intake. Stanek et al. (1999) and Stanek and Calabrese (2000) published a study of soil ingestion by children. As described by Stanek and Calabrese (2000), which is also referenced in USEPA (2011), this newer study implemented several improvements in study design and analytical procedures that occurred since the publication of their earlier (1995) paper. The advantages of the more recent study included: (1) a relatively large study group (n = 64 children); (2) improved particle size measurements that focused attention on soil of smaller particle size; (3) a longer study duration (365 days); (4) randomized selection of participants; (5) the use of a relevant age group (1 to 4 year old children); (6) use of a random sample of the population for that age group; and (7) better control for input/output error. The soil ingestion rates reported by Stanek and Calabrese (2000) for these children were:

- A 95th percentile rate of 106 mg/day (when evaluated over a 365-day period);
- An arithmetic mean ingestion rate of 31 mg/day; and
- A median (50th percentile) ingestion rate of 17 mg/day.

This study also calculated the best linear unbiased predictors of the 95th percentile of soil ingestion over different time periods and reported the following results:

- Over a 7-day exposure period, the 95th percentile soil ingestion rate was 133 mg/day;
- Over a 30-day exposure period, the 95th percentile soil ingestion rate was 112 mg/day;
- Over a 90-day exposure period, the 95th percentile soil ingestion rate was 108 mg/day; and
- Over a 365-day exposure period, the 95th percentile soil ingestion rate was 106 mg/day.

These data suggest that, as the length of time that the children are studied increases and as the precision of the analysis improves (i.e., reduced uncertainty), the daily ingestion rates decline. This is reasonable due to the fact that daily fluctuations in soil ingestion rates will tend to average out over time. This narrowing of the distribution in the soil ingestion estimates when daily variability and uncertainty are reduced is not unexpected and is referred to as “regression to the mean” (Stanek and Calabrese, 2000). The authors suggest that longer-term estimates are more appropriate when assessing chronic exposure (Stanek and Calabrese, 2000). These more recent data, as well as the literature review of Bierkens et al. (2011), support an upper-bound soil ingestion rate for the young child of approximately 100 mg/day, rather than the default of 200 mg/day.



### 5.3.6.2 Adult Ingestion Rate Literature Summary

The default RME adult soil ingestion rate recommended by USEPA (2014) of 100 mg/day is based on the 1991 version of the standard default exposure factors, because USEPA (2011) does not provide upper-bound values. Stanek et al. (1997) published an adult soil study in addition to the child studies noted above. As with the child study, the adult study included a number of improvements over the older studies upon which USEPA's default soil ingestion rates are based: (1) a larger number of subjects and days of participation; (2) improved study design that considered seven consecutive days of fecal sampling; (3) improved selection of soil tracers; (4) a broader range of soil ingestion validation; and (5) enhanced capacity for additional assessments including particle size of the soil ingested. The result was more reliable daily estimates of soil ingestion and a greater capacity for more reliable long-term modeling estimates. The study investigators have recommended that the upper 75th percentile of 50 mg/day from Stanek et al. (1997) is the most appropriate value to use as an estimate of high-end soil ingestion by adults due to an aberrant result causing the upper 95<sup>th</sup> percentile to be inflated. This adult rate is consistent with the mean soil ingestion rate of outdoor soil and indoor dust estimated by Davis and Mirick (2006). The adult data were more variable than the children data, possibly indicating an important occupational contribution of soil ingestion in some of the adults (Davis and Mirick, 2006; USEPA, 2011).

### 5.3.6.3 Selected Sediment Ingestion Rates

As noted above, available literature suggests that soil ingestion rates are lower than the defaults published by USEPA (2011, 2014). However, because of uncertainty in the fraction of total daily intake that is comprised of sediment versus soil, and to provide a conservative, upper-bound estimate, the default values for incidental residential soil ingestion (USEPA, 2014) have been used as the basis of the RME sediment ingestion rates for the recreational receptors (angler, wader, and swimmer). The rates have been adjusted to account for the fraction of the total daily intake derived from river sediment relative to the fraction derived from the backyard, household dust, and other non-Site sources. It is conservatively assumed that on the days when the recreational receptor visits the river, approximately 50% of the total daily intake is derived from river sediment and 50% is from backyards, household dust, and other non-Site related locations. The same relative source apportionment has been applied to the CTE rates, which are assumed to be 50% of RME rates.

The incidental ingestion rates for river sediment are summarized below by age group:



	Total Daily Soil/Sediment Intake Rate <sup>(a)</sup>		River Sediment Intake Rate (50% of total daily rate)	
	RME	CTE	RME	CTE
	mg/day	mg/day	mg/day	mg/day
Recreational Receptors				
Adult	100	50	50	25
Older Child	100	50	50	25
Young Child	200	100	100	50
<sup>(a)</sup> It is assumed that 50% of the receptor's total daily intake rate is associated with backyard soils, household dust and other off-Site sources, which are not included in the BHHRA, and that 50% is river sediment.				

The RME and CTE sediment ingestion rates for the shoreline worker receptor are USEPA's defaults of 100 mg/day and 50 mg/day, respectively (USEPA, 2014, 2011).

### 5.3.7 Surface Water Ingestion Rate

While a number of studies on drinking water ingestion rates have been conducted, as summarized in USEPA guidance (2011), similar data for incidental surface water ingestion are generally lacking, especially for activities such as wading or boating. However, USEPA (2011) provides incidental water ingestion rates during swimming: mean values of 0.049 L/hr for children <18 years old (rounded to 0.05 L/hr) and 0.021 L/hr for adults, and upper percentile values of 0.12 L/hr for children <18 years old and 0.071 L/hr for adults. The mean rates are used for both the RME and CTE swimmer.

Estimates of incidental water ingestion that occurs during water recreational activities other than swimming are not provided in USEPA guidance. However, a study of incidental water ingestion during limited-contact recreation was identified in the peer reviewed literature (Dorevitch et al., 2011). Self-reported estimates of incidental water ingestion were obtained from approximately 2,700 people (6 years of age or older) who were canoeing, kayaking and fishing in Chicago area surface waters. A second study evaluated 662 people in swimming pools involved in full contact (i.e., swimming) and limited contact recreational activities, such as canoeing, kayaking (including capsizing), simulated fishing, and wading/splashing. The surface water study was an observational design study with no time limit on the duration of the activity. The swimming pool study was a controlled exposure design of 60 minutes and a 24 hour subsequent urine analysis to measure levels of cyanuric acid (a tracer of swimming pool water). Of the surface water participants, less than 2% reported swallowing a teaspoon or more, and less than 0.5% reported swallowing a mouthful or more (Dorevitch et al., 2011).

The authors report mean and upper confidence limit for incidental surface water ingestion rates of 3-4 mL per event and 10-15 mL per event, respectively, for limited-contact recreational exposures to



surface water (e.g., canoeing, kayaking, fishing) (Dorevitch et al., 2011). The midpoint of the upper confidence limit rate of 13 mL per event and the mean rate of 4 mL per event were used for the RME and CTE incidental surface water ingestion rates, respectively, for the non-swimming exposure scenarios (angler, wader, worker) and all age groups.

### 5.3.8 Body Surface Area Exposed

Recreational receptors may come into contact with surface sediment and surface water while wading in shallow areas of the river to play, fish, or occasionally swimming in the river. The worker receptor may contact surface sediment and surface water while performing maintenance or other work-related activities along the shoreline. For the evaluation of potential risk from direct contact with sediment during swimming, wading, and angling, it is assumed that some sediment remains adhered to the skin surface after the event.

#### 5.3.8.1 Swimmer Receptor

For the swimmer receptor, the entire body surface area is assumed to be exposed to surface water. The body surface areas for the swimmer, calculated using the average of males and females, are as follows (USEPA, 2011, 2014):

- Adult swimmer = 20,900 cm<sup>2</sup>
- Older child swimmer = 14,825 cm<sup>2</sup>
- Young child swimmer = 7,500 cm<sup>2</sup>

Table 5-6 presents the calculation of the total body surface area for the young child and older child swimmer. The total body surface area for the adult swimmer was taken from USEPA (2014).

For the swimmer's exposure to surface sediment, not all of the body surface area is assumed to remain in contact with sediment. Sediment from deeper water is expected to wash off of the body upon exiting the water (USEPA, 2004a). For the adult and older child swimmer, the lower legs and feet are assumed to remain in contact with sediment. For the young child swimmer, more of the body surface is assumed to remain in contact with sediment, including the hands, forearms, lower legs, and feet.

Thus, using the average of males and females and weighted averages by year for each child body part, the body surface areas exposed to sediment are as follows for the swimmer (USEPA, 2011):

- Adult swimmer = 3,800 cm<sup>2</sup>
- Older child swimmer = 2,710 cm<sup>2</sup>
- Young child swimmer = 2,057 cm<sup>2</sup>



### 5.3.8.2 Wader and Angler Receptors

For the water and angler receptor's exposure to surface sediment and surface water, the same body surface areas exposed to sediment for the swimmer are used. These are:

- Adult wader and angler = 3,800 cm<sup>2</sup>
- Older child wader and angler = 2,710 cm<sup>2</sup>
- Young child wader = 2,057 cm<sup>2</sup>

Tables 5-7 through 5-9 present the calculation of the exposed body surface areas for the adult, older child, and young child receptors, respectively. The same exposed skin surface areas are used in the RME and CTE scenarios.

### 5.3.8.3 Worker Receptor

For the adult shoreline worker, the head, hands and forearms are assumed to remain in contact with sediment and surface water. Using the average of males and females, this body surface area is 3,527 cm<sup>2</sup> (USEPA, 2011).

### 5.3.9 Sediment Adherence Factors

To account for differences in adherence for different parts of the body, an area-weighted adherence factor is calculated using body part-specific adherence levels. For each receptor, the skin surface area of each exposed body part is multiplied by its body part-specific adherence factor to yield a total mass adhered to that body part. The total masses are then summed for all exposed body parts, and then divided by the total body surface area exposed to derive the area-weighted adherence factor.<sup>16</sup>

USEPA (2004a, 2011) recommends adherence data from several studies, including children playing indoors, at daycare, in dry soil, in wet soil, in mud, on tidal flats, during gardening, and while playing soccer. The activity and conditions that most closely align with receptor activities at the river is children playing in wet soil. Therefore, the sediment adherence factors for the older child and the young child were based on the 50<sup>th</sup> percentile surface area weighted soil adherence data for children playing in wet soil (USEPA, 2004a, Exhibit 3-3). The sediment adherence factor is 0.25 mg/m<sup>2</sup> for the older child (see Table 5-8) and 0.28 mg/m<sup>2</sup> for the young child (see Table 5-9).

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<sup>16</sup> An implicit assumption in the dermal dose model is that exposure (and absorption of contaminants by the skin) occurs for each event in which soil/sediment contacts the exposed body surface area without regard to the duration of the exposure event. This is a conservative assumption, as desorption of contaminants from soil/sediment is a slow diffusive process driven by the magnitude of the concentration gradient between internal regions where contaminants are sequestered and the surface where a low concentration is maintained (Shor et al. 2004). Further, not all of the soil contaminant may be absorbed for various reasons, including matrix effects, volatilization, skin loading, washing or abrasion of soil from skin, etc. (Spalt et al. 2009).





For adult receptors, the reed gatherer data were selected as the most appropriate high-end contact activity. The reed gatherer data are based on a study of adults on tidal flats. The calculation of the adherence factors for adults using the geometric mean data is presented in Table 5-7. The sediment adherence factor for recreational adults and the worker is  $0.3 \text{ mg/m}^2$ .

### 5.3.10 Exposure Frequency and Exposure Time

Exposure frequency is the number of days per year that a receptor engages in a particular activity that could result in exposure. Exposure time is the duration of the event that brings the receptor into contact with the environmental medium. Exposure frequencies and exposure times for recreational scenarios involving direct contact with sediment and surface water have been based on site-specific factors, including:

- Nature of the activity (e.g., swimming vs. wading)
- Characteristics of the area, including access, nearby land use
- Climate factors such as temperature and precipitation (e.g., sediment contact is curtailed during cold weather months when the sediment is frozen or snow covered)

Exposure to sediment and surface water is expected to occur predominantly in the warmer months of the year, when people are more likely to visit the river and more of the skin surface area is exposed. It is assumed that swimming occurs during the three summer months (June, July and August) when monthly average water temperatures are comfortable for swimming, typically above 70 degrees Fahrenheit (USGS, 2015). However, given the absence of designated swimming locations on the Anacostia, as well as aesthetic and safety considerations, swimming is expected to be an infrequent event now and in the future. It is assumed that wading may occur during the months of May, June, July, August and September, when monthly average water temperatures are above 60 to 65 degrees Fahrenheit (USGS, 2015). While some anglers may fish year-round, most fishing takes place during the months of April through September (Gibson and McClafferty, 2005). It is assumed that the shoreline worker may contact shoreline sediment and surface water once a week when the ground is not frozen or snow covered, or when such activity is not precluded by inclement weather.

Based on consideration of climate, characteristics of the Study Area, and the nature of the activity, the sediment and surface water exposure frequencies for each receptor scenario are summarized below. The exposure frequency is assumed to be once or twice a week during the months of the year when the activity is assumed to take place. For the swimmer and wader receptors, exposure frequencies for the older child are higher than for the young child and adult, as older children are more likely to engage in activities that may bring them into direct contact with river sediment and surface water.



Receptor Population	Age Group <sup>a</sup>	Sediment Exposure Frequency (day/year)		Surface Water Exposure Frequency (day/year)	
		RME	CTE	RME	CTE
Angler	Adult	26	13	26	13
	Older child	26	13	26	13
	Young child	NA	NA	NA	NA
Swimmer	Adult	13	6	13	6
	Older child	26	13	26	13
	Young child	13	6	13	6
Wader	Adult	35	17	35	17
	Older child	44	22	44	22
	Young child	35	17	35	17
Worker	Adult	50	25	50	25

<sup>a</sup> Age groups: adult = 19+ yrs; older child = 7 to <19 yrs; young child = 1 to <7 yrs.

The surface water exposure times for each receptor scenario were also selected taking into consideration the characteristics of the Study Area and the nature of the activity. As previously noted, exposure time is not used in the calculation of intake from sediment dermal contact. The surface water exposure times are summarized in the table below.

Receptor Population	Age Group <sup>a</sup>	Surface Water Exposure Time (hour/day)	
		RME	CTE
Angler	Adult	1	0.5
	Older child	1	0.5
	Young child	NA	NA
Swimmer	Adult	0.5	0.25
	Older child	0.5	0.25
	Young child	0.5	0.25
Wader	Adult	1	0.5
	Older child	1	0.5
	Young child	1	0.5
Worker	Adult	2	1

<sup>a</sup> Age groups: adult = 19+ yrs; older child = 7 to <19 yrs; young child = 1 to <7 yrs.



### 5.3.11 Exposure Duration

Exposure duration is the estimate of the total time of exposure (in years) that a receptor engages in a particular activity that could result in exposure. To estimate residential exposure duration, both the total occupancy period for individuals in the target population and the likelihood that at the end of each occupancy period the individual moves out of the area must be known. Estimating exposure duration (i.e., residence time) is complicated by a number of factors, including data availability and the statistical treatment of the data. Few studies are available with which to estimate population mobility within a targeted area, and the use of county data requires a detailed analysis that accounts for age at onset, mortality, and county-to-county mobility.

In USEPA's 2014 recommended default exposure factors, USEPA identifies 26 years as the upper bound default for residential exposure duration (USEPA, 2014). Therefore, under the RME scenario, a 26 year exposure duration has been selected for the recreational receptors, assuming that these individuals live within the vicinity of the Site. Under the CTE scenario, an exposure duration of 12 years has been selected, based on the mean residential occupancy period (USEPA, 2011).

### 5.3.12 Body Weight

In accordance with USEPA (1989a), the value for body weight is the average body weight over the exposure period. There are extensive data on human body weight, much of which has been compiled in EFH (USEPA, 2011). The EFH provides recommended body weights for adults and children, which are based on data derived from the National Health and Nutrition Examination Survey (NHANES) for the years 1999-2006. The NHANES study is a nationally representative sample of the U.S. population, with participants selected using a probability-based sampling design, and has been continuously conducted since 1999. Since the 2011 update to EFH, more recent anthropometric reference data for U.S. children and adults collected under NHANES for the years 2007-2010 have been published by the National Center for Health Statistics (Fryar et al., 2012)<sup>17</sup>. Not only are these data more recent, they are provided for each year of a child's age from birth to 19 years, unlike the body weight data in EFH, which are weighted averages for multi-year age groups (e.g., 3<6 yrs, 6<11 yrs). The use of single year body weight data rather than averages for multiple years of age allows for calculation of age group specific body weights on a more refined basis. Therefore, the NHANES 2007-2010 body weight data (Fryar et al., 2012) have been used to estimate body weight for the young child and older child. Consistent with the approach in EFH, the average of the body weights for males and females for each year of age is used to calculate the average receptor body weight over the exposure period.

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<sup>17</sup> The NHANES 2007-2010 sample included participants of all ages. Those aged 60 and over, Hispanics, Blacks, and those with low incomes were oversampled to improve the precision of the statistical estimates for these groups (Fryar et al., 2012).



National values are typically used, unless a specific population that differs from the nation as a whole is targeted. Since the receptor population in the vicinity of the Anacostia River is not expected to differ from the rest of the U.S., national average body weight values were used.

The selected body weight for the young child receptor is 17 kilograms (kg) for both the RME and CTE scenarios, and was calculated as follows:

<b>Age (Years)</b>	<b>Young Child (Age 1 to &lt;7 years) (kg)</b>
1<2 yr	11.1
2<3 yr	13.7
3<4 yr	16.0
4<5 yr	18.1
5<6 yr	21.2
6<7 yr	24.0
Average	17

The selected body weight for the older child receptor is 53 kg for both the RME and CTE scenarios, and was calculated as follows:

<b>Age (Years)</b>	<b>Older Child (Age 7 to &lt;19 years) (kg)</b>
7<8	26.8
8<9	31.6
9<10	36.1
10<11	40.6
11<12	47.1
12<13	51.9
13<14	58.0
14<15	62.8
15<16	66.7
16<17	68.8
17<18	70.6
18<19	73.4
Average	53



The selected body weight for adult receptors under both the RME and CTE scenarios is 80 kg, which is the national average for male and female adults (USEPA, 2011, 2014). This adult body weight is 10 kg greater than the 70 kg body weight typically used in human health risk assessments for the past several decades, and will result in a lower but more realistic estimated potential risk. However, USEPA notes in the EFH that a body weight that best represents the population to be evaluated should be used. USEPA's 2011 EFH update suggests that body weight of US adults has increased over the past decades, and provides a recommended mean body weight for adults of 80 kg (USEPA, 2011). USEPA's recently published update to the Standard Default Exposure Factors also recommends a default body weight of 80 kg (USEPA, 2014). Therefore, an adult body weight of 80 kg was selected.

#### **5.4 Constituent-Specific Parameters**

The constituent-specific dermal and oral absorption and preparation/cooking loss parameters identified in the equations presented in Section 5.2 are described below.

##### **5.4.1 Dermal Absorption Fractions**

The dermal absorption fraction (DAF) accounts for lower absorption through the skin. USEPA chemical-specific DAFs were used where available (USEPA, 2004a). The DAFs for COPCs were compiled from RAGS Part E (USEPA, 2004a) and are presented in Table 5-10. The uncertainty associated with using USEPA's default DAFs is discussed in the uncertainty analysis.

##### **5.4.2 Oral Absorption Adjustment Factors**

Absorption adjustment factors (AAFs) are used in risk assessment to account for absorption differences between humans exposed to substances in environmental situations and experimental animals in the laboratory studies used to derive dose-response values. Support for use of AAFs is provided in USEPA guidance (1989a, 1992b). The AAF is the ratio between the estimated human absorption factor for the specific medium and route of exposure, and the known or estimated absorption factor for the laboratory study from which the dose-response value was derived.

$$\text{AAF} = \frac{\text{(fraction absorbed in humans for the environmental exposure)}}{\text{(fraction absorbed in the dose-response study)}}$$

The use of an AAF allows the risk assessor to make appropriate adjustments if the efficiency of absorption between environmental exposure and experimental exposure is known or expected to differ because of physiological effects and/or matrix or vehicle effects. When the dose-response curve is based on administered dose data, and if it is estimated that the fraction absorbed from the site-specific exposure is the same as the fraction absorbed in the laboratory study, then the AAF is 1. In the absence of detailed toxicological information on every constituent, it has been common practice



for risk assessors to use a default oral AAF value of 1. However, use of AAFs in standard risk assessment calculations can provide more accurate and more realistic estimates of potential human health risk.

For all sediment COPCs except arsenic, a conservative default oral AAF value of 1 was used, which is consistent with the approach used by USEPA in the derivation of RSLs (USEPA, 2016). For arsenic, the default oral AAF of 0.6 was used, which is also consistent with the derivation of soil RSLs (USEPA, 2012b, 2015a). The default oral sediment AAFs are presented in Table 5-10. The uncertainty associated with the using default absorption factors is discussed in the uncertainty analysis.

#### **5.4.3 Preparation/Cooking Loss**

Preparation and cooking procedures can modify the amount of COPC ingested by fish consumers (USEPA, 2000). Numerous studies have demonstrated the loss of chemicals such as PCBs and other organic constituents from fish tissues during preparation and cooking (e.g., Bayen et al., 2005; Hori et al., 2005; Moya et al., 1998; Schecter et al., 1998; Zabik et al., 1994, 1995a, 1995b, 1996; Skea et al., 1979). Cooking loss factors have been included in HHRAs for several sediment sites, including the Housatonic River (Weston, 2005), Lower Fox River (RETEC, 2002), and Kalamazoo River (CDM, 2003). In addition, a preparation and cooking loss factor of 50% for PCBs is used in the derivation of consumption advisories for the Great Lakes (*Protocol for a Uniform Great Lakes Sport Fish Consumption Advisory*) (GLFATF, 1993).

While there is variability and uncertainty in the amount of chemical that is lost during preparation and cooking, the default assumption that no contaminant is lost is overly conservative. An assumption of 0% loss represents consumption of a raw, untrimmed fish, since even consuming the cooking juices is unlikely to result in 100% of all of the contaminants lost. Consistent with the intent of using an upper-bound (e.g., 90<sup>th</sup> percentile) value for the RME scenario, a lower 10<sup>th</sup> percentile on the range of cooking loss factors represents an RME estimate for cooking loss. Table 5-11 presents the calculation of selected percentiles of cooking loss factors for PCBs in fish tissue based on a review of the literature. As shown in Table 5-11, the 10<sup>th</sup> percentile corresponds to 13% and the median corresponds to 30%. Thus, PCB cooking loss factors of 13% and 30% were used for the RME and CTE fish consumption scenarios, respectively. Attachment D presents the derivation of the cooking loss values.

#### **5.4.4 Dermal Water Parameters**

The estimation of exposure resulting from incidental dermal contact with surface water requires the use of a dermal permeability constant (PC) in units of centimeters per hour (cm/hr). This method assumes that the behavior of chemicals dissolved in water is described by Fick's Law. In Fick's Law,



the steady-state flux of the solute across the skin ( $\text{mg}/\text{cm}^2/\text{hr}$ ) equals the permeability constant (PC  $\text{cm}/\text{hr}$ ) multiplied by the concentration difference of the solute across the membrane ( $\text{mg}/\text{cm}^3$ ). This approach is discussed by USEPA (USEPA, 1989b, 2004b).

The PC values were derived from USEPA (2004b) Exhibit B-3. For the COPCs lacking PCs in the USEPA guidance, PCs were calculated using the USEPA (2004b) algorithms. In addition to PCs, several other parameters are necessary to calculate dermal dose from exposure to organic chemicals in water. These parameters, also obtained from USEPA (2004b), Exhibit B-3, include the ratio of the permeability coefficient of a chemical through the stratum corneum relative to its permeability coefficient across the viable epidermis (B, dimensionless), lag time ( $\tau$ , hours/event), and time to steady state ( $t^*$ , hours). Parameters for chemicals not available from USEPA (2004b) were calculated. Note that the spreadsheets that accompany RAGS Part E (USEPA, 2004b) (available on USEPA's website <http://www.epa.gov/oerrpage/superfund/programs/risk/ragse/>) were used to obtain the specific numerical values for the dermal water dose parameters, as the printed version shows 0.0 for small values.

Table 5-12 presents the dermal water parameters used in the BHHRA, as well as calculations for COPCs lacking values in USEPA (2004b).

## 5.5 Exposure Point Concentrations

Exposure points are located where potential receptors may contact COPCs at or from the Site. The concentration of COPCs in the environmental medium that receptors may contact must be estimated in order to determine the magnitude of potential exposure. Per the approved work plan, the exposure point concentration (EPC) was defined as the 95% upper confidence level (UCL) (USEPA, 2002b) for the RME scenario, and the mean for the CTE scenario<sup>18</sup>.

UCLs were calculated using USEPA's ProUCL software (ProUCL Version 5.0, USEPA, 2013b). Reporting limits for non-detected data were entered into ProUCL at the full reporting limit. ProUCL identifies the appropriate method with which to estimate the concentrations of the non-detect results rather than simply substituting a value such as the detection limit or one-half the detection limit. The UCL recommended by ProUCL was selected as the EPC, unless the recommended UCL was based on the H-statistic<sup>19</sup> or exceeded the maximum detected concentration, in which case an alternate UCL

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<sup>18</sup> The mean of detected concentrations was used where frequency of detection (FOD) is 100% and the Kaplan Meyer mean (which includes non-detects) was used where the FOD is less than 100%. This approach is consistent with the Baseline Ecological Risk Assessment (BERA).

<sup>19</sup> ProUCL computes and outputs UCLs based on the H-statistic for historical reasons only, and notes in the output that "the H-statistic often results in unstable (both high and low) values of UCL95" (USEPA, 2013c). Further, the guidance states that "it is therefore recommended to avoid the use of H-statistic based 95%



was selected (USEPA, 2002b). While ProUCL version 5.0 recommends a minimum of 10 samples with six detected values in order to calculate reliable UCLs, the guidance recognizes that this may not always be possible due to resource or other restraints, and allows the user best professional judgment when determining the validity of the calculations. The input to and the output from the ProUCL program are presented in Attachment B.

### 5.5.1 Nearshore Surface Sediment

Exposure areas are the discrete areas over which a specific exposure pattern is expected to occur over the duration of exposure. As described in Section 3.1.2 and depicted in **Figure 6**, surface sediment samples were collected throughout the waterside investigation area. Transects of three samples spanning the river channel were located along the length of the waterside investigation area. Some samples were collected from locations close to the shoreline adjacent to the Site, others were collected mid-channel and closer to the opposite shore and under deeper water. In general, water depths along the shoreline are shallower and channel slopes more gradual on the east side of the river adjacent to the Site. USEPA (2004a) provides the following guidance regarding sediment sample locations for a human health risk assessment:

“Sediment samples must be located in areas in which individuals are likely to come into direct contact with the sediments. For wading and swimming, this includes areas which are near shore and in which sediments are exposed at some time during the year. Sediments which are consistently covered by considerable amounts of water are likely to wash off before the individual reaches the shore”.

Because of the greater potential for contact with nearshore sediment under water depths of a few feet or less, only the samples collected from nearshore locations were included in the surface sediment data set for calculation of EPCs. The nearshore sediment data set consisted of the transect samples closest to the shoreline adjacent to the Site, samples from the cove adjacent to outfall 013, and two wetland sediment samples collected from a mudflat area. A total of 19 nearshore surface sediment samples and three field duplicate samples were identified (see Table 3-3 and **Figure 10**). Tables 5-13 and 5-14 present the RME and CTE nearshore surface sediment EPCs, respectively.

### 5.5.2 Surface Water

As described in Section 3.1.2 and depicted in **Figure 6**, ten surface water samples were collected along the length of the Site. Because water is continuously moving, all of the Site-adjacent samples

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UCLs,” and recommends use of non-parametric statistics. ProUCL did not recommend the use of the H-statistic for any of the UCLs calculated for the BHHRA.





were included in the calculation of the surface water EPCs. Tables 5-15 and 5-16 present the RME and CTE surface water EPCs, respectively.

### 5.5.3 Fish Tissue

Anglers' species preferences, abundance and feeding guilds were considered in developing tissue EPCs. Based on the angler surveys, the species that is most preferred for consumption is catfish (Gibson and McClafferty, 2005; OpinionWorks, 2012). Catfish have historically been abundant in the DC area waters (MDNR, 2014). Thus, the BHHRA evaluated a fish consumption scenario that assumes a diet comprised of 100% catfish.

In addition to catfish, other species have been reported to be consumed by local anglers including: largemouth bass, striped bass, bullhead, sunfish, and occasionally carp. Thus, the BHHRA also evaluated a mixed fish diet scenario that assumed consumption of multiple species representing various feeding guilds and habitats. Based on angler preferences and available tissue data, a mixed fish diet EPC consisting of 20% each of American eel, carp, catfish (channel and blue), largemouth bass, and sunfish was also evaluated. This species mix includes bottom feeders (carp, catfish, eel), predators (largemouth bass), as well as sunfish. Including 20% each of carp, catfish, and eel resulted in a conservative EPC due to higher concentrations of lipophilic constituents, such as PCBs, in the tissue of these bottom-dwelling species. Further, little consumption of carp and eel was reported by anglers (Gibson and McClafferty, 2005).

To provide perspective on the range of PCB tissue concentrations in the Anacostia River, EPCs were calculated for each of the three geographic areas identified in Section 3.1.3 and shown in **Figure 8**:

- Lower Anacostia River (from mouth to CSX railroad bridge)
- Upper Anacostia River (from CSX railroad bridge to Maryland state line)
- Upstream Maryland Anacostia River (main stem, northwest branch, and northeast branch in Maryland)

Tables 5-17 and 5-18 present the RME and CTE fish tissue EPCs, respectively. In the Upper and Lower Anacostia areas, there is one sample per species except for catfish, which has two samples. In the Upstream Maryland sampling area, there are six catfish samples. For catfish, the RME and CTE EPCs for each of the three areas are the maximum concentration and the average concentrations,

respectively.<sup>20</sup> For the mixed diet EPCs, the average of the species-specific RME and CTE concentrations was used.

Alternative fish diets are evaluated in the uncertainty analysis, as well as consumption of other biota. The available data suggest that crabbing and crab consumption is limited in the Anacostia River. As previously noted, only 6 of the 247 DC area anglers interviewed during the 2004 survey reported consuming crab (Gibson and McClafferty, 2005). In addition, blue crabs are not typically present in the Anacostia River (NOAA, 2012).

## 5.6 Groundwater-to-Surface Water Evaluation

Groundwater in the area of the Benning Road Facility discharges to the adjacent Anacostia River. The BHHRA included an evaluation of the potential impact of Site groundwater on the river by comparing estimated in-stream concentrations of groundwater constituents to applicable surface water screening levels. Six nearshore monitoring wells located at the downgradient edge of the Site (MW-01, MW-02, MW-03, MW-04, MW-08, and MW-11) were used to estimate potential Site-related constituents in groundwater that may be migrating to the river. The calculation of in-stream concentrations of groundwater constituents and comparison to surface water screening levels is described below.

### 5.6.1 Dilution Attenuation Factor Calculation

As discussed in the RI Report, the Patapsco Formation underlying the Site is divided by a semi-confining layer into an upper water-bearing zone (UWZ) and a lower water-bearing zone (LWZ). Groundwater discharges from the Site to the River were calculated for the UWZ and LWZ at the six pairs of nested waterfront wells, from which dilution attenuation factors were computed. Groundwater flux was computed using Darcy's Law:  $Q = KIA$ , where "Q" is discharge ( $\text{ft}^3/\text{sec}$ ), "K" is hydraulic conductivity ( $\text{ft}/\text{sec}$ ), "I" is hydraulic gradient (unitless), and "A" is the area through which the groundwater flows ( $\text{ft}^2$ ). For waterfront wells in which aquifer testing was conducted during the RI (MW-01, MW-03, and MW-11), the average calculated K value was used for the wells' hydraulic conductivity. For wells in which aquifer testing was not conducted, the geometric mean of hydraulic conductivities from the three nearest aquifer-tested wells was used. A local hydraulic gradient was calculated for each well using the slope of the plane formed by the low-tide groundwater level in the well and the groundwater levels in two up-gradient wells (three-point problem approach). A unique cross-sectional area was computed for each well based on water-bearing zone thickness at the well (upper or lower) and a length of boundary segment through which groundwater flows to the River.

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<sup>20</sup> For calculation of EPCs, similar species were grouped based on the premise that anglers are not likely to differentiate. This includes grouping channel and blue catfish into "catfish", and pumpkinseed sunfish and redbreast sunfish into "sunfish."



The dilution attenuation factors were calculated by dividing the groundwater discharges for each waterfront well by the 7-day, 10-year low streamflow (7Q10) of the River adjacent to the Site (13.9 ft<sup>3</sup>/sec), estimated using the US Geological Survey (USGS) Maryland StreamStats application, an online GIS tool for estimating streamflows at ungauged locations. The 7Q10 is the lowest 7-day average streamflow that occurs on average once every 10 years. The instream concentrations for each constituent detected in the waterfront wells was calculated by multiplying the groundwater concentrations by the corresponding dilution attenuation factor. Table 5-19 presents the groundwater concentrations and estimated instream concentrations for each of the waterfront wells. The dilution attenuation factor calculations are provided in Attachment E.

### **5.6.2 Comparison to Surface Water Screening Levels**

The same surface water screening levels used for COPC selection were also used in the groundwater-to-surface water evaluation (see Section 3.2.2). The DOEE water quality standards and USEPA national recommended water quality criteria are based on protection of fish and shellfish that may be consumed by humans. As previously noted, these criteria are typically derived by relating acceptable risk-based concentrations in fish tissue to concentrations in surface water via a bioaccumulation factor (BAF). Therefore, they are appropriate screening levels for evaluating the potential impact of Site groundwater on the Anacostia River.

As shown in Table 5-19, with the exception of TCDD-TEQ in MW-11, none of the estimated in-stream concentrations of constituents in either the UWZ or LWZ exceed their respective surface water screening levels. Concentrations of TCDD-TEQ observed in the upper and lower water bearing zones of MW-11 are orders of magnitude higher than in other perimeter wells, and likely reflect particulate-bound PCDDs/PCDFs due to elevated turbidity in this well. As shown in Table 5-19, the average flow-weighted concentration of TCDD-TEQ in surface water also exceeds the surface water screening level for dioxin, which is due to the contribution from MW-11.

It should be noted that while PCBs was not detected in on-Site downgradient groundwater, the analytical method that was used (Method 8082) achieves a reporting limit of approximately 0.01 ug/L, which is above the surface water screening level of 0.000064 ug/L for total PCBs. However, due to dilution and attenuation, even if PCBs were present in on-Site groundwater at concentrations at or below the reporting limit, the concentrations of PCBs that would discharge to the Anacostia River would be well below the screening level.

In summary, based on the results of this screening-level evaluation, Site groundwater is not adversely impacting the Anacostia River, with the possible exception of TCDD-TEQ in MW-11. However, it is important to note that the levels of PCDDs/PCDFs in groundwater in the vicinity of MW-11 are likely due to elevated turbidity, and thus not expected to be representative of dissolved groundwater



concentrations that are mobile and may migrate off-site. Pepco will re-develop and re-sample MW-11 to address the turbidity issues as part of the upcoming additional field investigation.

## 6 Risk Characterization

The potential risk to human health associated with potential exposure to COPCs in environmental media at the Site is evaluated in this step of the risk assessment process. Risk characterization is the process in which the dose-response information (Section 4.0) is integrated with quantitative estimates of human exposure derived in the Exposure Assessment (Section 5.0). The result is a quantitative estimate of the likelihood that humans will experience any adverse health effects given the exposure assumptions made. Two general types of health risk are characterized for each potential exposure pathway considered: potential carcinogenic risk and potential noncarcinogenic hazard. Potential carcinogenic risk is evaluated by averaging exposure over a normal human lifetime, which, based on USEPA guidance (1989a), is assumed to be 70 years.<sup>21</sup> Potential noncarcinogenic hazard is evaluated by averaging exposure over the total exposure period.

Characterization of the potential health effects of potential carcinogenic and noncarcinogenic chemicals is approached in very different ways. The difference in approaches arises from the conservative assumption that substances with possible carcinogenic action proceed by a no-threshold mechanism, whereas other toxic actions may have a threshold, i.e., a dose below which few individuals would be expected to respond. Thus, under the no-threshold assumption, it is necessary to calculate a risk, but for chemicals with a threshold, it is possible to simply characterize an exposure as above or below the threshold. In risk assessment, that threshold is termed a reference dose or reference concentration. Reference doses as well as cancer slope factors were discussed in Section 4.0. The approach to carcinogenic risk characterization is presented in Section 6.1, and the approach to noncarcinogenic risk characterization is presented in Section 6.2. The risk characterization results are presented in Section 6.3. Potential carcinogenic risks and noncarcinogenic hazard indices are presented in the text and tables using one significant figure.<sup>22</sup> Section 6.4 addresses background conditions in relation to risk. The risk calculations are presented in Attachment C.

### 6.1 Carcinogenic Risk Characterization

The purpose of carcinogenic risk characterization is to estimate the upper-bound likelihood, over and above the background cancer rate, that a receptor will develop cancer in his or her lifetime as a result

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<sup>21</sup> More up-to-date “lifetimes” of 75 years (males), 80 years (females), and 78 years (males and females) are provided in the USEPA’s updated Exposure Factors Handbook (2011), which would lower cancer risk estimates by approximately 7% (males only), 13% (females only), and 10% (males and females combined). However, USEPA (2014a) has retained the default of 70 years pending additional evaluation by NCEA.

<sup>22</sup> Based on standard practice for number rounding, risk estimates where the first digit after the decimal place is equal to or greater than 5 were rounded up (e.g.,  $1.5 \times 10^{-4}$  rounds to  $2 \times 10^{-4}$ ), and risk estimates where the digit after the decimal place is less than 5 were rounded down (e.g., a hazard index of 1.4 rounds to 1).



of exposure to a constituent in an environmental medium. This likelihood is a function of the dose of a constituent (described in the Exposure Assessment) and the CSF (described in the Dose-Response Assessment) for that constituent. The American Cancer Society (ACS) estimates that the lifetime probability of contracting cancer in the U.S. is 1 in 2 for men and 1 in 3 for women (ACS, 2014). The Excess Lifetime Cancer Risk (ELCR) associated with estimated exposures at a site is the likelihood, over and above the background cancer rate, that an individual will develop cancer in his or her lifetime due to those site exposures. The cancer risk is expressed as a probability (e.g.,  $10^{-6}$ , or one in one million). An ELCR of  $10^{-6}$  indicates that an individual would have a 1 in one million chance of developing cancer in addition to the 1 in 2 or 1 in 3 background chance estimated by the ACS. The relationship between the ELCR and the estimated LADD of a constituent may be expressed as:

$$\text{ELCR} = 1 - e^{-(\text{CSF} \times \text{LADD})}$$

If the product of the CSF and the LADD is much greater than 1, the ELCR approaches 1 (i.e., 100 percent probability). If the product is less than 0.01 (one chance in 100), the equation can be closely approximated by:

$$\text{ELCR} = \text{LADD (mg/kg-day)} \times \text{CSF (mg/kg-day)}^{-1}$$

The product of the CSF and the LADD is unitless, and provides an upper-bound estimate of the potential carcinogenic risk associated with a receptor's exposure to a constituent or an exposure pathway for each receptor. Current USEPA risk assessment guidelines assume that cancer risks are additive or cumulative. Pathway- and area-specific risks are summed to estimate the total potential cancer risk for each receptor.

USEPA has established target risk levels under the National Contingency Plan (NCP) (USEPA, 1990). Target risk levels refer to levels of cancer risk or hazard indices that are deemed acceptable by the USEPA or other regulatory agencies. These are levels below which the potential for adverse effects to humans are assumed to be negligible or inconsequential. The NCP establishes a target cancer risk range of  $10^{-6}$  to  $10^{-4}$  and a target hazard index of less than or equal to one (USEPA, 1990). The USEPA subsequently clarified that, "Where the cumulative carcinogenic site risk to an individual based on reasonable maximum exposure for both current and future land use is less than  $10^{-4}$ , and the non-carcinogenic hazard quotient is less than 1, action generally is not warranted, unless there are adverse environmental impacts" (USEPA, 1991). Potential chemicals of concern (COC) are identified in the BHHRA as those COPCs with individual cancer risks greater than  $1 \times 10^{-6}$ . The potential COCs are discussed and summarized in table format in Section 6.2.5.



## 6.2 Noncarcinogenic Risk Characterization

The potential for adverse noncarcinogenic health effects is estimated for each receptor by comparing the CADD for each COPC with the RfD for that COPC. The resulting ratio, which is unitless, is known as the Hazard Quotient (HQ) for that constituent. The HQ is calculated using the following equation:

$$\text{HQ} = \frac{\text{CADD (mg/kg-day)}}{\text{RfD (mg/kg-day)}}$$

The target HQ is defined as an HQ of less than or equal to one (USEPA, 1989a). When the HQ is less than or equal to one, the RfD has not been exceeded, and no adverse noncarcinogenic effects are expected. If the HQ is greater than one, there may be a potential for adverse noncarcinogenic health effects to occur; however, the magnitude of the HQ cannot be directly equated to a probability or effect level.

The total Hazard Index (HI) is calculated for each exposure pathway by summing the HQs for each individual constituent. The total HI is calculated for each potential receptor by summing the HIs for each pathway associated with the receptor. If the total HI is greater than one for any receptor, a more detailed evaluation of potential noncarcinogenic effects based on specific target organs/health endpoints will be performed (USEPA, 1989a).

A summary of all HIs for each receptor group is presented in this section and compared to the target HI of 1. The tables summarizing the HI show both the total HI and the HI by target endpoint. Each COPC that causes an exceedance of the HI of 1 for a particular receptor and for a particular target endpoint is designated a COC. Where the cumulative target endpoint HIs for a receptor are less than 1, then no further evaluation or action will be recommended based on potential noncarcinogenic risks (carcinogenic risks must also be considered as discussed above). Where the cumulative target endpoint HI for a receptor is greater than 1, COCs are identified as those COPCs with a HI greater than 1.

## 6.3 Risk Characterization Results

The results of the risk characterization are presented below by receptor. Tables presenting the COPC-specific risks calculated for each receptor, medium and exposure pathway are presented in Attachment C for both the RME and CTE scenarios.

### 6.3.1 Angler Receptor

The angler receptor is assumed to be exposed to COPCs in nearshore surface sediment and surface water via incidental ingestion and dermal contact (older child and adult) and to COPCs in fish from

the Anacostia River (all three age groups). As described in Section 5.5.2, the evaluation of fish consumption risk considered two diet scenarios based on species preferences: 1) a fish diet consisting of all catfish; and 2) a mixed fish diet. Consistent with the treatment of the fish tissue data, as discussed in Section 5.5.3, fish consumption risks were calculated for each of the three areas of the river.

The risk characterization results for the angler receptor are presented in Tables 6-1 through 6-4 for the 100% catfish diet, and Tables 6-5 through 6-8 for the mixed fish diet, as follows:

- Table 6-1 Total Potential Carcinogenic Risks for Angler Receptor, RME, Catfish Diet
- Table 6-2 Total Potential Hazard Index for Angler Receptor, RME, Catfish Diet
- Table 6-3 Total Potential Carcinogenic Risks for Angler Receptor, CTE, Catfish Diet
- Table 6-4 Total Potential Hazard Index for Angler Receptor, CTE, Catfish Diet
- Table 6-5 Total Potential Carcinogenic Risks for Angler Receptor, RME, Mixed Fish Diet
- Table 6-6 Total Potential Hazard Index for Angler Receptor, RME, Mixed Fish Diet
- Table 6-7 Total Potential Carcinogenic Risks for Angler Receptor, CTE, Mixed Fish Diet
- Table 6-8 Total Potential Hazard Index for Angler Receptor, CTE, Mixed Fish Diet

As shown in these tables, the total potential carcinogenic risks are within the USEPA target risk range of  $10^{-4}$  to  $10^{-6}$  for all of the recreational angler scenarios. There is little difference between the fish consumption cancer risks based on total PCBs or PCB-TEQ for the Upper and Lower Anacostia River (PCB-TEQ risks were not calculated for the Upstream Maryland area due to the limited fish tissue congener data set). The total potential HI for the RME angler that consumes either a diet of only catfish or a mixed fish diet exceeds the target noncancer HI of one (HIs range from 2 to 7). The exceedance of the noncancer target HI of 1 is due to total PCBs in fish tissue. Based on PCB-TEQ, the total noncancer HIs for both fish diets in the Upper and Lower Anacostia are at or below 1. The potential carcinogenic and noncarcinogenic risks posed by direct contact with nearshore surface sediment and surface water are within or below USEPA's target risk levels.

For the young child age group, which has the highest noncancer risks, the total potential HI associated with consumption of only catfish under the RME scenario ranges from an HI of 2 in the Upper Anacostia, to an HI of 4 in the Lower Anacostia, to an HI of 6 in the Upstream Maryland Area (based on total PCBs). For consumption of a mixed fish diet under the RME scenario, the total potential HI for the young child ranges from an HI of 1 in the Upper Anacostia, to an HI of 3 in the Lower Anacostia, to an HI of 7 in the Upstream Maryland Area (based on total PCBs). Using CTE assumptions, the noncancer HIs for all age groups and areas are at or below 1. The cumulative





RME and CTE cancer and noncancer risks for the recreational angler receptor are summarized in the following tables. The cumulative risks/hazards are presented separately by area for total PCBs and PCB-TEQ (only total PCBs were calculated for the Upstream Maryland area).

<b>Cumulative Risks/Hazards for Recreational Angler Receptor (RME)</b>					
<b>Receptor</b>	<b>Cancer</b>		<b>Noncancer</b>		
	<b>Adult/Young Child</b>	<b>Older Child</b>	<b>Adult</b>	<b>Young Child</b>	<b>Older Child</b>
<b><i>Angler (catfish diet)</i></b>					
Upper Anacostia (Total PCBs)	$3 \times 10^{-5}$	$1 \times 10^{-5}$	1	2	1
Upper Anacostia (PCB-TEQ)	$3 \times 10^{-5}$	$1 \times 10^{-5}$	0.9	1	0.9
Lower Anacostia (Total PCBs)	$4 \times 10^{-5}$	$2 \times 10^{-5}$	3	4	3
Lower Anacostia (PCB-TEQ)	$1 \times 10^{-5}$	$7 \times 10^{-6}$	0.4	0.5	0.4
Upstream Maryland (Total PCBs) <sup>(a)</sup>	$7 \times 10^{-5}$	$3 \times 10^{-5}$	4	6	4
<b><i>Angler (mixed fish diet)</i></b>					
Upper Anacostia (Total PCBs)	$1 \times 10^{-5}$	$7 \times 10^{-6}$	0.8	1	0.8
Upper Anacostia (PCB-TEQ)	$3 \times 10^{-5}$	$1 \times 10^{-5}$	0.8	1	0.8
Lower Anacostia (Total PCBs)	$4 \times 10^{-5}$	$2 \times 10^{-5}$	2	3	2
Lower Anacostia (PCB-TEQ)	$3 \times 10^{-5}$	$1 \times 10^{-5}$	0.8	1	0.8
Upstream Maryland (Total PCBs) <sup>(a)</sup>	$7 \times 10^{-5}$	$3 \times 10^{-5}$	4	7	4
<b>Cumulative Risks/Hazards for Recreational Angler Receptor (CTE)</b>					
<b>Receptor</b>	<b>Cancer</b>		<b>Noncancer</b>		
	<b>Adult/Young Child</b>	<b>Older Child</b>	<b>Adult</b>	<b>Young Child</b>	<b>Older Child</b>
<b><i>Angler (catfish diet)</i></b>					
Upper Anacostia (Total PCBs)	$1 \times 10^{-6}$	$7 \times 10^{-7}$	0.2	0.3	0.2
Upper Anacostia (PCB-TEQ)	$2 \times 10^{-6}$	$7 \times 10^{-7}$	0.1	0.2	0.1
Lower Anacostia (Total PCBs)	$1 \times 10^{-6}$	$8 \times 10^{-7}$	0.3	0.4	0.3
Lower Anacostia (PCB-TEQ)	$1 \times 10^{-6}$	$7 \times 10^{-7}$	0.06	0.08	0.07
Upstream Maryland (Total PCBs) <sup>(a)</sup>	$2 \times 10^{-6}$	$1 \times 10^{-6}$	0.6	0.8	0.6
<b><i>Angler (mixed fish diet)</i></b>					
Upper Anacostia (Total PCBs)	$7 \times 10^{-7}$	$5 \times 10^{-7}$	0.1	0.2	0.1
Upper Anacostia (PCB-TEQ)	$3 \times 10^{-6}$	$1 \times 10^{-6}$	0.2	0.2	0.2
Lower Anacostia (Total PCBs)	$2 \times 10^{-6}$	$9 \times 10^{-7}$	0.4	0.5	0.4

Cumulative Risks/Hazards for Recreational Angler Receptor (RME)					
Receptor	Cancer		Noncancer		
	Adult/Young Child	Older Child	Adult	Young Child	Older Child
Lower Anacostia (PCB-TEQ)	$3 \times 10^{-6}$	$1 \times 10^{-6}$	0.2	0.2	0.2
Upstream Maryland (Total PCBs) <sup>(a)</sup>	$3 \times 10^{-6}$	$2 \times 10^{-6}$	0.7	1	0.8
(a) PCB-TEQ not calculated for Upstream Maryland area due to limited dioxin-like congener data set.					

### 6.3.2 Swimmer Receptor

The swimmer receptor is assumed to be exposed to COPCs in nearshore surface sediment and surface water via incidental ingestion and dermal contact (all three age groups). The risk characterization results for the swimmer receptor are presented in Tables 6-9 through 6-12, as follows:

- Table 6-9 Total Potential Carcinogenic Risks for Swimmer Receptor, RME
- Table 6-10 Total Potential Hazard Index for Swimmer Receptor, RME
- Table 6-11 Total Potential Carcinogenic Risks for Swimmer Receptor, CTE
- Table 6-12 Total Potential Hazard Index for Swimmer Receptor, CTE

As shown in Tables 6-9 and 6-11, the total potential carcinogenic risks are within or below the USEPA target risk range of  $10^{-4}$  to  $10^{-6}$  for the RME and CTE scenarios. As shown in Tables 6-10 and 6-12, the total potential noncarcinogenic risks are below the USEPA target HI of 1 for the RME and CTE scenarios. The cumulative RME and CTE cancer and noncancer risks for the swimmer receptor are summarized in the following table.

Cumulative Risks/Hazards for Swimmer Receptor					
Receptor	Cancer		Noncancer		
	Adult/Young Child	Older Child	Adult	Young Child	Older Child
Swimmer (RME)	$6 \times 10^{-6}$	$4 \times 10^{-6}$	0.06	0.3	0.1
Swimmer (CTE)	$5 \times 10^{-7}$	$4 \times 10^{-7}$	0.01	0.03	0.02



### 6.3.3 Wader Receptor

The wader receptor is assumed to be exposed to COPCs in nearshore surface sediment and surface water via incidental ingestion and dermal contact (all three age groups). The risk characterization results for the wader receptor are presented in Tables 6-13 through 6-16, as follows:

- Table 6-13 Total Potential Carcinogenic Risks for Wader Receptor, RME
- Table 6-14 Total Potential Hazard Index for Wader Receptor, RME
- Table 6-15 Total Potential Carcinogenic Risks for Wader Receptor, CTE
- Table 6-16 Total Potential Hazard Index for Wader Receptor, CTE

As shown in Tables 6-13 and 6-15, the total potential carcinogenic risks are within or below the USEPA target risk range of  $10^{-4}$  to  $10^{-6}$  for the RME and CTE scenarios. As shown in Tables 6-14 and 6-16, the total potential noncarcinogenic risks are below the USEPA target HI of 1 for the RME and CTE scenarios. The cumulative RME and CTE cancer and noncancer risks for the wader receptor are summarized in the following table.

Cumulative Risks/Hazards for Wader Receptor					
Receptor	Cancer		Noncancer		
	Adult/Young Child	Older Child	Adult	Young Child	Older Child
<i>Wader (RME)</i>	$2 \times 10^{-5}$	$5 \times 10^{-6}$	0.1	0.6	0.2
<i>Wader (CTE)</i>	$1 \times 10^{-6}$	$3 \times 10^{-7}$	0.02	0.07	0.01

### 6.3.4 Worker Receptor

The worker receptor is assumed to be exposed to COPCs in nearshore surface sediment and surface water via incidental ingestion and dermal contact (adult age group). The risk characterization results for the wader receptor are presented in Tables 6-17 through 6-20, as follows:

- Table 6-17 Total Potential Carcinogenic Risks for Worker Receptor, RME
- Table 6-18 Total Potential Hazard Index for Worker Receptor, RME
- Table 6-19 Total Potential Carcinogenic Risks for Worker Receptor, CTE
- Table 6-20 Total Potential Hazard Index for Worker Receptor, CTE

As shown in Tables 6-17 and 6-19, the total potential carcinogenic risks are within or below the USEPA target risk range of  $10^{-4}$  to  $10^{-6}$  for the RME and CTE scenarios. As shown in Tables 6-18 and 6-20, the total potential noncarcinogenic risks are below the USEPA target HI of 1 for the RME

and CTE scenarios. The cumulative RME and CTE cancer and noncancer risks for the worker receptor are summarized in the following table.

Cumulative Risks/Hazards for Worker Receptor		
Receptor	Cancer	Noncancer
	Adult	Adult
Worker (RME)	$9 \times 10^{-6}$	0.2
Worker (CTE)	$4 \times 10^{-7}$	0.03

### 6.3.5 Potential COCs

As previously noted, potential chemicals of concern (COC) are identified as those COPCs with individual cancer risks greater than  $1 \times 10^{-6}$ . In addition, where the cumulative Site hazard index exceeds 1 on a target endpoint basis, potential COCs are identified as those COPCs with an HI above 1. The cumulative Site risk did not exceed  $10^{-4}$  for any of the receptors evaluated in the baseline risk characterization. However, at the request of DOEE, COPCs with potential risks above  $1 \times 10^{-6}$  have been identified and are summarized in the table below for informational purposes. The receptor scenario posing the highest estimated risk/hazard in the BHHRA is identified for each potential COC. The table also presents the single potential COC based on noncancer effects (the HI for total PCBs in fish tissue exceeds 1).

Surface Sediment		Fish Tissue	
Potential COC	Highest Estimated Risk/Hazard	Potential COC	Highest Estimated Risk/Hazard
TCDD-TEQ	$5 \times 10^{-6}$ (adult worker)	PCBs (total)	$5 \times 10^{-5}$ (adult angler) <sup>b</sup> 7 (child angler) <sup>b</sup>
Benzo(a)pyrene	$2 \times 10^{-6}$ (child wader)		
Chromium <sup>a</sup>	$5 \times 10^{-6}$ (child wader)		

<sup>a</sup> Form of chromium present in sediment conservatively assumed to be hexavalent.  
<sup>b</sup> Highest risk/hazard estimated for Upstream Maryland area.

### 6.4 Background Risk

USEPA (2002f) notes that a primary objective of CERCLA risk assessments is to provide information on risks that can be effectively addressed through remedial actions. USEPA (2002f) states, "Specifically, the COPCs with high background concentrations should be discussed in the risk characterization, and if data are available, the contribution of background to site concentrations should be distinguished."



Based on the risk characterization results, PCBs in fish tissue is the only COPC and medium that poses risks in excess of target risk levels. This exceedance is for noncarcinogenic effects only. None of the potential receptor carcinogenic risks exceed the upper end of USEPA's target risk range of  $10^{-6}$  to  $10^{-4}$ .

As discussed in Section 6.3.1, fish consumption risks exceed the target HI of 1 due to PCBs throughout the Anacostia River, including upstream of the Site in Maryland. These findings suggest that there are multiple sources of PCBs in the Anacostia River, including upstream of the tidal influence of the Benning Road Site. Appendix V of the RI Report presents a preliminary evaluation of background, including levels of select constituents in tissue samples collected throughout the Anacostia River.

#### **6.4.1 Other Sources of Background Risk**

Besides exposure to site-related chemicals present in the regional environment, people are exposed to a variety of chemical and non-chemical stressors as a part of their daily existence. Environmental factors, including behavioral choices, influence the incidence of cancer and other adverse health effects. These include tobacco use, poor nutrition, physical inactivity, obesity, infectious agents, medical treatments, excessive sun exposure, and exposures via drinking water and diet (ACS, 2013).

As a result of environmental and hereditary factors, the American Cancer Society (ACS) estimates that the background cancer rate in the US is 1 in 2 for men, and 1 in 3 for women (as a national average) (ACS, 2014). These incidence rates are over 10,000-fold higher than the excess lifetime cancer risks estimated in the BHHRA for the Site using the most conservative exposure assumptions, and are over a thousand fold higher than the upper end of the USEPA target risk range.

## 7 Uncertainty Analysis

Within any of the four steps of the human health risk assessment process, assumptions must be made due to a lack of absolute scientific knowledge. Some of the assumptions are supported by considerable scientific evidence, while others have less support. Every assumption introduces some degree of uncertainty into the risk assessment process. Regulatory risk assessment methodology requires that conservative assumptions be made throughout the risk assessment to ensure that risks are not underestimated. Therefore, when all of the conservative assumptions and approaches are combined, it is more likely that risk results are overestimated rather than underestimated.

The assumptions that introduce the greatest amount of uncertainty in this risk assessment are discussed in this section. The assumptions for which there is not enough information available to assign a numerical value to the uncertainty, and thus cannot be factored into the calculation of risk, are discussed in qualitative terms. In some cases, alternate assumptions are available that are as plausible as the assumptions used in the baseline HHRA. In some of these cases, the uncertainty is evaluated quantitatively. These uncertainties may also be incorporated into the risk management process during the development of remediation goals, as part of the Feasibility Study. Section 7.1 discusses uncertainty related to data evaluation and COPC selection. Section 7.2 discusses uncertainties related to the toxicity assessment. Section 7.3 discusses uncertainties related to the exposure assessment. Lastly, Section 7.4 discusses uncertainties related to the risk characterization.

### 7.1 Data Evaluation and COPC Selection

#### 7.1.1 Adequacy and Quality of Analytical Data

The data collected as part of the Benning Road Facility remedial investigation between 2012 and 2014, as well as biological tissue data from the Anacostia River collected under other agency programs, serve as the basis for the BHHRA. Multiple media were sampled using a sound conceptual understanding of Site conditions. As new information was generated, the Site conceptual model was refined and used to guide subsequent data gathering efforts. Thus, while it was not possible to sample every location at the Site, the extensive soil, groundwater, sediment, surface water, and tissue chemistry data collected, combined with the knowledge of source areas and potential migration pathways provide a high degree of confidence that the range of impacts and environmental conditions have been characterized.

Generally in the site characterization phase of the site assessment, knowledge of past and current use of the study area is used to guide investigations and determine which analytical parameters are analyzed and what analytical methods are employed for the detection of constituents in the relevant



environmental media at the site. While the suite of analytes has included multiple constituent groups, including metals, VOCs, SVOCs, PAHs, pesticides, PCBs, and dioxins and furans, it is possible that constituents not sampled for may be present at the Site. Should this be the case, Site risks may be incomplete depending on the nature of the constituents not included in the sample analyses. Given the high degree of historical knowledge of Site operations and the Site conceptual model, it is unlikely that significant concentrations of other constituents are present. Therefore, it is likely that the primary constituents of human health concern at the Site have been captured in the data set used for the BHHRA.

The fish tissue evaluation contained in this preliminary BHHRA focuses solely on PCBs and does not include other potential organic or inorganic COPCs. Therefore, there is uncertainty relative to the evaluation of total potential Site risks. For example, dioxins and furans detected in river sediment may bioaccumulate into biota, however, this group of chemicals was not included in the available fish tissue data used for the preliminary BHHRA. The uncertainty associated with the limited tissue data set will be reduced in the revised BHHRA, which will include evaluation of fish tissue residue data collected as part of the ongoing Anacostia River RI/FS.

As discussed in Section 3.1, laboratory results collected under the RI program were subjected to data validation prior use in the BHHRA. Where necessary, qualifiers were applied to the data due to quality control non-conformances. The vast majority of the data generated were found to be reliable and acceptable for use in risk assessment and remedial decision-making. A total of only 48 results out of 64,450 evaluated (0.074% of the total) were rejected and deemed not usable for project decisions. These rejected result values were removed from the database used for the risk assessments.

The use of laboratory J-qualified data adds some uncertainty to the risk assessment by definition, as the true concentration lies between the method detection limit and the sample quantitation limit. However, the estimated value given for each J qualified result is considered the best estimate of the true concentration, and is therefore used in risk calculations along with unqualified detections (USEPA, 1989a).

Given that the vast majority of the Site data were determined to be valid and acceptable for use in the risk assessments, there is a high degree of confidence in the data used in the BHHRA. This reduced uncertainty translates to a high degree of confidence in the use of the project data in risk-based decision-making.



### 7.1.2 Adequacy of the COPC Selection Process

Not all constituents detected in a study area are selected as COPCs for quantitative analysis for several reasons. Some constituents may be present at levels below conservative screening levels. Others may be present at concentrations below sample detection limits. A USEPA review of the results of many risk assessments demonstrates that in most cases risks are attributable to a select few constituents, and that many of the constituents quantitatively evaluated do not contribute significantly to total risk estimates (USEPA, 1993a).

COPCs for evaluation in the BHHRA were identified in Section 3.0. As discussed in Section 3.0, the goal of the COPC selection is to include in the quantitative portion of the risk assessment those constituents that are the most toxic, prevalent, and environmentally-persistent. The screening process used to identify COPCs is intended to: 1) identify with a high degree of certainty those constituents that can be safely eliminated from further evaluation because their contribution to total site risk is negligible; and 2) identify those constituents that merit further evaluation (either quantitatively or qualitatively) based on their potential to adversely affect humans depending on specific types of exposures.

The approved COPC screening process for the BHHRA followed a logical approach based on comparison to risk-based screening levels. The use of conservative screening levels, including risk-based concentrations deemed by USEPA to be acceptable for residential exposure to soil (as a surrogate for intermittent exposure to sediment), ensures that the constituents excluded from further evaluation would contribute negligibly to total risk. Therefore, not quantitatively evaluating the excluded constituents will not measurably affect the numerical estimates of hazard or risk and, thus, will not affect remedial decision-making.

In the COPC selection process, it was assumed that only those constituents detected are actually present. However, uncertainty can arise if the detection limits for constituents that were not detected exceed the applicable screening levels. For example, PCBs was identified as a COPC for sediment and fish tissue. PCBs were not detected in surface water using Method 8082, which has a nominal reporting limit of 0.010 ug/L. While this reporting limit is above the PCB national and DOEE water quality criterion for consumption of water and organisms (6.4E-05 ug/L), it is below the RSL for tap water consumption (0.19 ug/L). As previously discussed, use of the tap water RSLs to select COPCs for evaluating occasional surface water contact is highly conservative. However, as a conservative measure in this BHHRA, PCBs was identified as a surface water COPC and included in the risk calculations using the lowest reporting limit as a proxy EPC.





## 7.2 Toxicity Assessment

The purpose of the toxicity assessment is to identify the types of adverse health effects a constituent may potentially cause and to define the relationship between the dose of a constituent and the likelihood or magnitude of an adverse effect (response). Risk assessment methodologies typically divide potential health effects of concern into two general categories: effects with a threshold (noncarcinogenic) and effects assumed to be without a threshold (potentially carcinogenic), although there is increasing scientific evidence that many carcinogens also act via a threshold mechanism. Toxicity assessments for both of these types of effects share many of the same sources of uncertainty. To compensate for these uncertainties, USEPA has developed RfDs, CSFs, and radiological slope factors that are biased to overestimate rather than under-estimate human health risks. Several of the more important sources of uncertainty and the resulting biases are discussed below.

### 7.2.1 Animal-to-Human Extrapolation in Noncarcinogenic Dose-Response Evaluation

For many constituents, animal studies provide the only reliable information on which to base an estimate of adverse human health effects. Of the 16 COPCs evaluated in the BHHRA, 11 have oral reference doses, of which 7 are based on animal studies and 4 are based on human studies. Extrapolation from animals to humans introduces a great deal of uncertainty into the risk characterization; where human studies are available, uncertainty is reduced. In most instances, it is not known how differently a human may react to the constituent compared to the animal species used to test the constituent. If a constituent's fate and the mechanisms by which it causes adverse effects are known in both animals and humans, uncertainty is reduced. When the fate and mechanism for the constituent are unknown, uncertainty increases.

The procedures used to extrapolate from animals to humans involve conservative assumptions and incorporate uncertainty factors such that overestimation of effects in humans is more likely than underestimation. When data are available from several species, the lowest dose that elicits effects in the most sensitive species is used for the calculation of the RfD. To this dose are applied uncertainty factors, generally of 1 to 10 each, to account for intraspecies variability, interspecies variability, study duration, and/or extrapolation of a low effect level to a no effect level. Thus, most reference doses used in risk assessment are 100- to 10,000-fold lower than the lowest effect level found in laboratory animals. Uncertainty factors for chronic toxicity values included in this risk assessment range from 3 (arsenic and manganese RfDs) to 3,000 (cobalt and thallium RfDs), as shown in Table 4-1.

Nevertheless, because the fate of a constituent can differ in animals and humans, it is possible that animal experiments will not reveal an adverse effect that would manifest itself in humans. This can result in an underestimation of the effects in humans. The opposite may also be true: effects



observed in animals may not be observed in humans, resulting in an overestimation of potential adverse human health effects.

## **7.2.2 Evaluation of Carcinogenic Dose-Response**

Significant uncertainties exist in estimating dose-response relationships for potential carcinogens. These are due to experimental and epidemiologic variability, as well as uncertainty in extrapolating both from animals to humans and from high to low doses. Three major issues affect the validity of toxicity assessments used to estimate potential excess lifetime cancer risks: (1) the selection of a study (i.e., data set, animal species, matrix the constituent is administered in) upon which to base the calculations, (2) the conversion of the animal dose used to an equivalent human dose, and (3) the mathematical model used to extrapolate from experimental observations at high doses to the very low doses potentially encountered in the environment. Of the 16 COPCs included in the BHHRA, six are classified by USEPA as potentially carcinogenic via the oral route of exposure.

### **7.2.2.1 Study Selection**

Study selection involves the identification of a data set (experimental species and specific study) that provides sufficient, well-documented dose-response information to enable the derivation of a valid CSF. Human data (e.g., from epidemiological studies) are preferable to animal data, although adequate human data sets are relatively rare. Therefore, it is often necessary to develop dose-response information from a laboratory species, ideally one that biologically resembles humans (e.g., with respect to metabolism, physiology, and pharmacokinetics), and where the route of administration is similar to the expected mode of human exposure (e.g., inhalation and ingestion). It is also important to note that when multiple valid studies are available, the USEPA generally bases CSFs on the one study and site that show the most significant increase in tumor incidence with increasing dose. In some cases this selection is done in spite of significant decreases of tumor incidence in other organs and total tumor incidence with increasing dose. Consequently, the current study selection criteria are likely to lead to overestimation of potential cancer risks in humans.

For example, the oral cancer slope factors for PCBs are based on rat studies, and USEPA (2016) has classified PCBs as a "B2" carcinogen. Under the 1986 cancer classification scheme (USEPA, 1986), B2 carcinogens are defined as probably carcinogenic to humans based on evidence in animals, but with little or no human data. While PCBs have been demonstrated to produce tumors in animals, several studies have interpreted human epidemiological data as negative for carcinogenicity (Shields, 2006, Golden et al., 2003, Golden and Kimbrough, 2009). USEPA (2016) has classified human data on the carcinogenicity of PCBs as inadequate.



### **7.2.2.2 Interspecies Dose Conversion**

Only the CSF for inorganic arsenic is based on a human study. For CSFs based on animal studies, the USEPA derivation of human equivalent doses by conversion of doses administered to experimental animals requires the assumption that humans and animals are equally sensitive to the toxic effects of a substance, if the same dose per unit body surface area is absorbed by each species, and the mechanism of toxicity is the same. Although such an assumption may hold for direct-acting genotoxicants, it is not necessarily applicable to many indirect acting carcinogens and likely overestimates potential risk by a factor of 6 to 12 depending on the study species (USEPA, 1992d). Further assumptions for dose conversions involve standardized scaling factors to account for differences between humans and experimental animals with respect to life span, body size, breathing rates, and other physiological parameters. In addition, evaluation of risks associated with one route of administration (e.g., inhalation) when tests in animals involve a different route (e.g., ingestion) requires additional assumptions with corresponding additional uncertainties. Although USEPA has formally changed its default position for scaling animal data to humans from a per surface area basis to a per body weight basis (USEPA, 1992d), changes to existing CSF will only be made when the USEPA commits to a formal review of a constituent's dose-response profile, and as of this writing, few have been incorporated.

### **7.2.2.3 High-to-Low Dose Extrapolation**

The concentration of constituents to which humans are potentially exposed in the environment is usually much lower than the levels used in the studies from which dose-response relationships are developed. Estimating potential health effects, therefore, requires the use of models that allow extrapolation of health effects from high experimental doses in animals to low environmental doses. These models are generally statistical in character and have uncertain biological basis. Thus the use of a model for dose extrapolation introduces uncertainty in the dose-response estimate. In addition, these models contain assumptions that may also introduce a large amount of uncertainty. Generally the models have been developed to err on the side of overestimating rather than underestimating potential health risks.

Many of the USEPA CSFs listed in IRIS are derived using the upper 95% confidence limit of the slope predicted by the LMS model used to extrapolate low dose risk from high dose experimental data. USEPA recognizes that this method produces very conservative risk estimates, and that other mathematical models may exist. USEPA states that the upper-bound estimate generated by the LMS model leads to a plausible upper limit to the risk that is consistent with some of the proposed mechanisms of carcinogenesis. The true risk, however, is unknown and may be as low as zero. The LMS model is very conservative as it assumes strict linearity between the lowest dose that produced an effect and zero dose. According to USEPA (1989a), "Because the slope factor is often an upper

95th percentile confidence limit of the probability of response based on experimental animal data used in the multistage model, the carcinogenic risk estimate will generally be an upper-bound estimate. This means that USEPA is reasonably confident that the "true risk" will not exceed the risk estimate derived through use of this model and is likely to be less than that predicted." Moreover, the body has mechanisms to detoxify constituents, especially at low doses, and mechanisms to repair damages if they should occur. Therefore, many scientists believe a number of constituents cause cancer only above a "threshold" dose (as reviewed in Bradley 1996). Consequently, the assumption that there is some probability of harm to human health at any level of exposure is very conservative and is expected to result in overestimates of risk, especially when coupled with the use of an upper bound estimate of cancer potency.

USEPA's current carcinogen risk assessment guidelines (USEPA, 2005b) emphasizes mode of action data, and recognizes that some carcinogens may act in a nonlinear fashion. Therefore, it is recognized that some carcinogens may have a threshold dose below which effects would not be seen. For example, a threshold for carcinogenic activity has been demonstrated for chloroform and was used as the basis for USEPA's development of dose-response values for chloroform (USEPA, 2016).

### **7.2.3 Potential Contribution from Early-life Exposures to Lifetime Risk**

Two of the COPCs, hexavalent chromium and benzo(a)pyrene (and the six other potentially carcinogenic PAH COPCs), are assumed to act via a mutagenic mode of action. Potential cancer risks for these eight COPCs were adjusted upward using age-dependent adjustment factors to ensure that the potential contributions from early life exposures are not underestimated.

The BHHRA conservatively assumed that the form of chromium present in Site media is hexavalent. It should be noted that hexavalent chromium potentially acts via a mutagenic mode of action via the inhalation route of exposure (USEPA, 2016). As previously noted, a value developed by NJDEP (2009) was used in this BHHRA, consistent with the approach used in RSL derivation (USEPA, 2015a). While NJDEP's documentation indicates that there is no clear evidence of mutagenic mode of action via the oral route of exposure, hexavalent chromium has been evaluated for mutagenic mode of action for the oral route of exposure (Proctor et al., 2012). As noted in the user's guide for the RSLs (USEPA, 2015a), "EPA's Office of Pesticide Programs (OPP) has concluded that the weight-of evidence supports that hexavalent chromium may act through a mutagenic mode of action following administration via drinking water and has also recommended that ADAFs be applied when assessing cancer risks from early-life exposure (< 16 years of age)." However, it should be noted that USEPA's SAB recently provided comments on the draft USEPA derivation of the oral CSF for hexavalent chromium (which is similar in nature to that derived by the NJDEP) and indicated many reservations with the assumptions, including the presumed mutagenic mode of action, and in the



derivation itself. The SAB review can be accessed at [http://cfpub.epa.gov/ncea/iris\\_drafts/recordisplay.cfm?deid=221433](http://cfpub.epa.gov/ncea/iris_drafts/recordisplay.cfm?deid=221433).

PCBs are not assumed to exert carcinogenic effects via mutagenic activity. For pre-conception and in utero life stages, exposure to bioaccumulative COPCs, such as PCBs, would be primarily through the mother's diet, as would exposure of nursing infants. If women of childbearing age, pregnant, or breastfeeding mothers consume large amounts of Anacostia river fish, they could potentially expose the unborn child or nursing infant to lipophilic COPCs and/or bioaccumulative COPCs (e.g., PCBs).

#### **7.2.4 Dioxin-Like Toxicity**

Certain PCB congeners have been identified as having a mechanism of toxicity similar to that of TCDD (Van den Berg et al., 2006; USEPA, 2010). The designation as a "dioxin-like compound" is based on Ah receptor binding and similarities in biochemical activity and bioaccumulation potential. Twelve coplanar PCBs with four or more chlorines with one or no substitutions at ortho positions have been identified as having dioxin-like toxicity, and toxicity equivalency factors (TEFs) have been developed to equate the toxicity of each dioxin-like PCB congener to that of TCDD (USEPA, 2010). The "coplanar" PCBs lack ortho chlorines on both rings, allowing the rings to orient in the same plane, but this conformation is not rigid. USEPA's December 2010 guidance adopts the 2005 WHO mammalian TEFs for the 12 coplanar PCBs, but also notes that when exposures are to a single chemical or class of chemicals such as PCBs, the use of the PCB cancer slope factors is sufficient (USEPA, 2010). Therefore, the IRIS cancer slope factors were used in this BHHRA to evaluate the potential risks associated with PCBs in all media (sediment, surface water, and fish tissue).

However, there is the potential for dioxin-like PCB congeners to preferentially bioaccumulate due to their resistance to metabolism and biodegradation. Therefore, USEPA guidance (1996, 2010) identifies a supplemental approach for evaluating the potential risks posed by PCBs which focuses on the 12 coplanar PCBs that are structurally similar to TCDD and have the capacity to bind to the aryl hydrocarbon receptor (AhR). The evaluation of the 12 dioxin-like PCBs (referred to as PCB-TEQ) is most applicable to estimating exposure via dietary uptake, because the TEFs are primarily based on oral uptake studies often through the diet (Van den Berg et al., 2006). There is greater uncertainty in applying TEFs to other exposure pathways and abiotic media, due to differences in bioavailability and fate. For evaluation of the fish ingestion pathway, the potential cancer risks and noncancer hazards posed by PCBs were evaluated as PCB-TEQ, as well as total PCBs. This approach recognizes two potential mechanisms of toxicity and the potential for enrichment of certain presumed dioxin-like congeners in fish tissue.

#### 7.2.4.1 Uncertainty in Application of TEFs to PCBs

The TEFs for dioxin-like PCB were developed based on a database of laboratory studies in which the relative potency of a test compound was compared to a reference compound, usually 2,3,7,8-TCDD. There is uncertainty in the assumption that a subset of PCB congeners exerts toxicity in a manner similar to that of 2,3,7,8-TCDD. Dioxins and furans are rigidly planar molecules with centrally-located oxygen atom(s) while PCBs are never truly coplanar, and lack the central oxygen atoms. In addition, PCBs that are approximate stereoisomers of dioxin/furan Ah receptor agonists bind the receptor much more weakly than strong Ah receptor agonists such as dioxins and furans. Even with the most favorable chlorination pattern, the affinity of PCBs for the Ah receptor is not nearly that of potent dioxin/furans. Only a handful of Ah receptor agonists have been tested for human Ah receptor affinity even though marked species differences have been demonstrated. For example, TCDD's and other potent agonist's affinity for the human Ah receptor is 10-fold less than the receptor affinity in ultra-sensitive animal models (Ema et al., 1994; Fan et al., 2009; Flaveny et al., 2009; Zeiger et al., 2001; Westerink et al., 2008).

The National Research Council of the National Academy of Sciences (NRC, 2006) has stated that depending on the system examined, "the estimated affinity of binding of TCDD (and related compounds) to the human AhR is about 10-fold lower than that observed to the AhR from "responsive" rodent species and is comparable to that observed to the AhR from "nonresponsive" mouse strains." More recent studies have indicated that the difference may be even greater. Westerink et al. (2008) compared CYP1A activity (a cytochrome P450 enzyme) in rat H4IIE cells and human HepG2 cells for an extensive array of chemicals including TCDD and most dioxin-like PCBs. The investigators found that for PCB 126 (regarded as the most potent of the PCBs assigned TEFs), the rat was three orders of magnitude more sensitive to induction of liver enzyme activity than humans. Carlson et al. (2009) investigated whether the difference in relative potency of PCB 126 between rats and humans, as measured by induction of CYP1A1, was also true for other AhR regulated genes that could be important to toxic effects subsequent to AhR binding. They found that 47 human genes responding in a dose-response manner consistent with the TEF concept were more than 100 times less sensitive than 79 similarly responding rat genes.

It should also be recognized that the ReP database is now 10 years old; studies have been published since 2004 that may change the range and percentiles of RePs for many dioxin-like congeners (Peters et al., 2006, Sutter et al., 2010, Trnovec et al., 2013, van Ede, 2014, Larsson et al., 2015). Van Ede (2014) concluded that human in vitro derived RePs for PCB 126 are significantly lower than the present WHO-TEF, and recommended a re-analysis of the data for this congener.

Finally, summing TEF-based risks with risks posed by the non-dioxin-like congeners is in essence double-counting PCB risk. The Aroclor mixtures upon which the PCB high risk and persistence CSF



is based included dioxin-like PCBs (Cogliano, 1998; Mayes et al., 1998). Thus, the results of these whole animal studies represent the sum of the toxicities of all of the congeners present and their various mechanisms of actions and interactions, including both the dioxin-like and other toxicities. Several studies comparing these risk calculation methods have concluded that the evaluation of PCBs in fish tissue as total PCBs using the CSFs for PCB mixtures is sufficiently protective (Chaudhuri et al., 2003; Keenan and Samuelian, 2005; Bodishbaugh et al., 2003). The approach used in this BHHRA of calculating and presenting two separate sets of PCB risk and hazard estimates addresses the uncertainty associated with the different measures of toxicity while avoiding the problem of double-counting when dioxin-like and non-dioxin-like risk estimates are summed.

### **7.2.5 Tier 3 Toxicity Values**

There is somewhat more uncertainty associated with the toxicity values from Tier 3 sources, due to the variable nature of peer-review and consensus among scientists on the best estimate of toxicity. All of the COPCs except TCDD-TEQ, hexavalent chromium, and thallium, have Tier 1 or 2 toxicity values. The uncertainty associated with the use of Tier 3 toxicity values is on the high side for all three due to uncertainty in modes of action and adequacy of the toxicity data sets. Further, as previously noted, it is highly uncertain and overly conservative to assume that the form of chromium present in Site media is hexavalent. It is more likely that the form of chromium present is largely the relatively non-toxic trivalent form. Despite this conservatism, none of these COPCs are significant contributors to total Site risks. Thus, the impact of the uncertainty in the toxicity values used is not significant.

### **7.3 Exposure Assessment**

The exposure assessment process is inherently uncertain, as assumptions must be made about individuals' behaviors and choices that bring them into contact with site media. Human behaviors are inherently variable, and as such, the assumptions used to characterize exposure are often conservative to ensure that risks to individuals with potential high end exposures are not underestimated. Furthermore, it can be difficult to characterize exposures under future conditions. Because of uncertainty and variability in quantifying human behavior, the Superfund risk assessment process can lead to the use of less site-specific assumptions as a method to ensure conservatism.

Exposure assessment consists of three basic steps: 1) development of exposure scenario assumptions, (2) estimation of exposure point concentrations, and 3) estimation of human dose. The uncertainty associated with each of these steps is discussed below.



### 7.3.1 Exposure Scenario Assumptions

Exposure scenarios in a risk assessment are selected to be representative of potential exposures to COPCs in media that may be experienced by human receptors based on current and reasonably foreseeable land use. These exposure scenarios are developed for a hypothetical receptor, but one that would represent the RME scenario. Therefore, exposure levels are assumed for these receptors that are greater than expected to typically occur in an actual population. It has been noted that the use of multiple health protective factors to address uncertainty can result in overestimating risk through compounding conservatism (Cullen, 1994, Burmaster and Harris, 1993, Nichols and Zeckhauser, 1988). CTE scenarios are intended to provide an estimate of exposures more likely to represent average exposures and put RME risk estimates into context.

When estimating human doses (i.e., intakes and external exposures) from potential exposure to various media containing COPCs, several assumptions are made. Uncertainty may exist, for example, in assumptions concerning the range of typical rates of ingestion, frequency and duration of exposure, and bioavailability of the constituents in the medium. Typically, when limited information is available to establish these assumptions or there are uncertainties associated with projecting future exposures, a conservative estimate of potential exposure is employed to ensure that a potentially exposed individual's risk is not underestimated. USEPA's default exposure assumptions for the RME scenario are intended to be conservative and representative of an individual on the upper end of the range of possible exposures (e.g., someone who frequently contacts affected environmental media at an upper-bound intake rate for many years). Moreover, it is often assumed that contact is with environmental media containing some of the highest constituent concentrations for the entire exposure duration used in the risk assessment, due to both statistical handling of the data and the assumption that concentrations do not change over time, despite natural recovery processes that tend to reduce environmental concentrations. Depending on the number of upper-bound assumptions employed, the probability of the potential exposure scenario occurring can be very low, as discussed further in Section 7.4.2.

This section discusses uncertainty associated with some of the key exposure assumptions selected for the BHHRA, and potential impact on risk estimates.

#### 7.3.1.1 Sediment/Soil Ingestion Rate

There is considerable debate in the scientific community regarding incidental soil ingestion, and research to better characterize soil ingestion rates continues (USEPA, 2011). The soil ingestion rate represents the total daily intake of soil integrated over a variety of activities and sources, both indoors and outdoors. USEPA's default upper bound soil ingestion rates (USEPA, 2014) were used as the basis to evaluate incidental ingestion exposure to sediment (RME rates of 200 g/day for young children and 100 g/day for older children and adults). Mean ingestion rates from USEPA (2011) were





used as the basis of the CTE rates (100 g/day for young children and 50 mg/day for older children and adults). To account for the fact that these soil ingestion rates represent total daily intake, an adjustment for the fraction of the total daily intake derived from river sediment relative to the fraction derived from non-Site sources was made. As definitive source data are lacking, a simple assumption was made that half of the total daily intake is from river sediment and half is from non-Site related locations.

While there is uncertainty in the use of soil-based rates for evaluating sediment exposures, it is likely these rates represent high-end estimates of sediment intake. As noted above, other sources, such as home, work, school, etc., also contribute to the total daily intake. The rates are based on outdated studies of soil ingestion. The results of more recent studies have been published by the same investigators of the original studies upon which USEPA's default soil ingestion rates are based. The more recent studies incorporate improvements in study design and analysis and address some of the issues and uncertainties associated with the earlier studies (Stanek, et al. 1997, Stanek, et al. 1999, Stanek and Calabrese, 2000). These newer data suggest that upper bound estimates of long-term soil ingestion for children and adults are approximately half of the older estimates (or 100 and 50 g/day, respectively), and central tendency estimates are approximately one fifth of the older CTE values (or 20 and 10 g/day, respectively). In summary, the use of USEPA's default soil ingestion rates as a basis for Anacostia River sediment ingestion rates likely overestimates exposure sediment via incidental ingestion.

#### **7.3.1.2 Sediment/Soil on Skin Adherence Factor**

This factor represents the amount of sediment or soil that adheres to skin and is available for dermal exposure. There is uncertainty in the use of adherence data based on one activity to estimate dermal exposure for different activities, such as wading and swimming. For evaluating dermal contact with sediment, published adherence factors for adults gathering reeds and for children playing in wet soils were used for adults and children, respectively. While it is uncertain whether these scenarios are representative of dermal contact with river sediment, they appear to be reasonable based on the available data.

#### **7.3.1.3 Surface Water Ingestion Rate**

There is uncertainty in the amount of water incidentally ingested while swimming, recreating or working in surface water. For non-swimming exposure scenarios, the results from a study designed to estimate the amount of water ingested during activities like kayaking and fishing were used (Dorevitch et al., 2011). Due to the large sample size (2700 participants in the surface water study and 622 participants in the swimming pool study) and careful study design, as well as the comparability of the recreational activities evaluated in the study to those expected to occur at the



Anacostia River, there is confidence in using the results from Dorevitch et al. (2011) for estimating incidental water intake for the angler, wader, and worker in this BHHRA.

For swimming exposures, USEPA's (2011) mean incidental water ingestion rates during swimming were used for both the RME and CTE scenarios. These rates were taken from an empirical study of 41 children and 12 adult swimmers in a swimming pool (Dufour et al., 2006). Mean rates were used to evaluate RME exposures due to limited confidence in the upper-bound rates. The upper-bound rate is the 97<sup>th</sup> percentile for children and the maximum for adults (USEPA, 2011). However, even if the upper-bound rates were used, the RME risks from incidental ingestion of river water during swimming would still be well below the applicable risk thresholds, as the potential cancer risks and noncancer hazards from swimming are orders of magnitude below USEPA's target risk levels.

#### **7.3.1.4 Fish Consumption Exposures**

A number of parameters are used to estimate risk from consumption of fish, including: consumption rate, species, body parts consumed, fraction ingested from the site, preparation and cooking methods, and years of fishing at the site. In selecting appropriate fish consumption rates, USEPA guidance (USEPA, 1989b, 2011) discusses the importance of considering site-specific factors, including water quality, public access, abundance of desirable species, availability of other desirable water bodies, as well as characteristics of the angling population. Some of the major areas of uncertainty associated with key variables for assessing risk from consumption of fish, and implications for risk results, are discussed below.

##### Fish Consumption Rate

Site-specific data from angler surveys that included the Anacostia River were used to characterize fishing practices and consuming behaviors of anglers who fish at the river. The use of these data rather than default assumptions or studies of other water bodies reduces uncertainty in the estimated fish consumption rates. However, as these studies were not conducted for the purpose of estimating fish consumption rates for use in human health risk assessment, there is some uncertainty in the reliability of the data for estimating long-term population consumption rates.

Based on site-specific survey data, RME and CTE fish consumption rates of 20 and 10 g/day, respectively, were estimated for the adult angler who eats his catch from the Anacostia River. To provide perspective on these fish consumption rates, several alternate fish consumption rates are discussed below:

- **7.5 g/day**, which is equivalent to one half-pound fish meal per month. This rate has been used at other sediment sites to provide risk information to the public and decision-makers on potential risks associated with consumption of various types of recreationally caught



fish/crabs (e.g., Lower Duwamish Waterway). One meal per month is also a common target level of consumption used in setting consumption advisories.

- **17.5 g/day**, which is the fish/shellfish consumption rate used by USEPA to derive water quality criteria protective of the general public, as well as the average sport angler (USEPA, 2000). The 17.5 g/day rate is based on per capita intake of freshwater and estuarine finfish and shellfish by the general population and represents the 90th percentile of the 1994-96 USDA CSFII Survey (Continuing Survey of Food Intakes by Individuals).
- **32 g/day**, which is used by DOEE and MDE to set fish consumption advisory levels that allow for one half pound fish meal per week.
- **65 g/day**, which is the 98<sup>th</sup> percentile rate reported by DC area anglers (Gibson and McClafferty, 2005). This corresponds to eating two self-caught fish meals per week year-round.

The alternate rates are summarized in the following table, including the corresponding number of fish meals per year (assuming a fish meal equates to a conservative half-pound of fish) and the ratio of the alternate rate to the rate used in the Benning Road BHHRA for the RME adult angler.

Fish Ingestion Rates - Adult Angler			
Ingestion Rate (g/day)	Fish Meals per Year	Basis	Ratio of Alternate Rate to BHHRA RME Rate
7.5	12	One fish meal per month	0.4
10	16	<i>BHHRA CTE rate (Anacostia River)</i>	0.5
17.5	28	90 <sup>th</sup> percentile of US freshwater & estuarine finfish and shellfish consumption by general population	0.9
20	32	<i>BHHRA RME rate (Anacostia River)</i>	1
32	52	Advisory rate of one fish meal per week	1.6
65	104	98 <sup>th</sup> percentile of DC area consuming anglers	3.25

Using the alternative consumption rates, potential risks from fish consumption could be less than to as much as six-fold higher than the risks calculated in this BHHRA (taking into account the site-specific FI of 0.5 as discussed below). If the adult angler is feeding Anacostia River fish to a family of four (two adults and two children) at the RME consumption rates used in this BHHRA, he/she would need to catch approximately 160 pounds of whole fish per year assuming approximately 30% is edible (USEPA, 1989b). This amount of fish would require a high level of sustained fishing effort,



which is then assumed to be repeated each year for 26 years at the RME exposure duration. An analysis of the potential risks/hazards for a high-end consuming angler for whom a large fraction of his or her diet is Anacostia River fish is discussed in Section 7.3.1.7.

#### Fraction Ingested for Fish

There is uncertainty in the RME assumption that half of the angler's self-caught fish comes from the river in the vicinity of the Site and half comes from other locations. Similarly, there is uncertainty in the CTE assumption that 25% of the angler's catch comes from the river in the vicinity of the Site. However, given the relatively small portion of river shoreline adjacent to the Site relative to the length of the Anacostia River (less than 6%), as well as the presence of undergrowth limiting access in the vicinity of the Site, and the close proximity of other fishable water bodies, including the upstream reaches in Maryland, the Potomac River, and Chesapeake Bay, it is likely that even those anglers who live near the Benning Road Facility fish at multiple water bodies in the surrounding area. Thus, use of a FI of 50% for RME and 25% for CTE is reasonable.

#### Cooking Loss

Loss of hydrophobic COPCs upon cooking is a recognized phenomenon that can have a significant effect on the calculated COPC exposure dose from tissue consumption by humans. Losses vary with cooking method (e.g., broil, bake, pan fry), preparation method (e.g., trimmed/untrimmed, skin-on/skin-off), and species. Based on available guidance and literature on loss of PCBs from preparation and cooking of fish, PCB cooking loss factors of 13% and 30% were assumed for RME and CTE, respectively (USEPA, 2000; GLFATF, 1993; Sherer and Price, 1993; Wilson et al., 1998; Zabik and Zabik, 1999).

Studies on loss of PCBs from fish tissue due to preparation and cooking report range from little to no loss to as much as 74% loss (Bayen et al., 2005; Hori et al., 2005; Moya et al., 1998; Schechter et al., 1998; Zabik et al., 1994, 1995a, 1995b, 1996; Skea et al., 1979). However, most studies reported some loss, with a median of 30%. The amount of PCB mass loss was variable within and between studies, which is likely due to a variety of factors, such as cooking time, temperature, tissue preparation (skinning and trimming) and fillet geometry, lipid content, initial chemical concentration, analytical methodology, and extraction efficiency, which are not consistently controlled for across the various studies. Based on the available data, the assumption that 13% (RME) to 30% (CTE) of the PCBs present in the fish is lost during the cooking process is reasonable and conservative. As such, the cooking loss parameter is not expected to be a major source of uncertainty in the BHHRA.



### 7.3.1.5 Consumption of Other Fish Species

The BHHRA assumed that the angler consumes a diet consisting of all catfish, or a mixed diet comprised of equal parts of multiple species that reside in the Anacostia River (i.e., American eel, catfish, carp, largemouth bass and sunfish). The species consumed by anglers is variable, and depends on a variety of factors, such as:

- Season of the year,
- Water quality characteristics, including temperature, dissolved oxygen, and turbidity,
- Fishery characteristics, including habitat and species abundance, and
- Angler characteristics, including fishing method, bait, and species preferences.

Some anglers have preferences for particular species, and may limit their consumption to those species, and it is also possible that different ratios of the available species are consumed. This section addresses the potential risks from alternate consumption practices, such as single-species diets and alternate mixed fish diets. The table below presents the total cancer and noncancer risks (calculated in Attachment C) for the RME angler based on a range of potential consumption practices. For illustrative purposes, estimated risks/hazards are based on total PCBs and are shown for the Upper Anacostia River, which includes the stretch of the river adjacent to the Site. As shown, the risks posed by alternative diets fall within the same range (within a factor of two) as the risks posed by the two diet scenarios evaluated in the baseline risk calculations. This evaluation suggests that the uncertainty associated with species consumed is not significant. Further, the two diet scenarios evaluated in the baseline risk calculations (100% catfish and a mixed diet of multiple species) provide a representative range of the potential risks posed by fish consumption.

Fish Diet	RME Angler (Cancer) Upper Anacostia		RME Angler (Noncancer) Upper Anacostia	
	Child	Adult	Child	Adult
	<b>Baseline Diets</b>			
100% catfish	8E-06	2E-05	2	1
Mixed diet (20% each eel, catfish, carp, bass, and sunfish)	4E-06	1E-05	1	0.7
	<b>Alternative Diets</b>			
100% carp	3E-06	9E-06	0.9	0.6
100% largemouth bass	4E-06	1E-05	1	0.7



Fish Diet	RME Angler (Cancer) Upper Anacostia		RME Angler (Noncancer) Upper Anacostia	
	Child	Adult	Child	Adult
	Baseline Diets			
100% sunfish	1E-06	5E-06	0.4	0.3
50% catfish & 50% largemouth bass	6E-06	1E-05	2	1
Risks shown are rounded to one significant figure.				

#### Fish Tissue Type Consumed

The BHHRA assumed that only the fish fillet was consumed, as this is the body part typically consumed by most anglers (USEPA, 2000; Gibson and McClafferty, 2005). However, some anglers may consume the whole fish or additional parts besides just the fillet (e.g., use the head and carcass in soup or stock). Because whole body concentrations for lipophilic compounds are usually higher than fillet concentrations, risks may be underestimated for those who consume more than just the fillet. The ratio of whole body to fillet concentrations varies by species and lipid content, ranging from 1:1 to 1.5:1 for fish with high lipid content (e.g., lake trout, carp) to 3:1 to 5:1 or more for species with low lipid content (e.g., bass, pike, perch) (Skinner et al., 2009; Burman and Rygwelski, 2006; Amrhein et al., 1999). Thus, depending on species, estimated whole body fish consumption risks may be higher than the fillet-based risks estimated in the BHHRA. For the BERA, a fillet-to-whole body ratio of 0.5 was used to convert the available fillet data to whole body concentrations. Applying this same ratio, estimated fish consumption risk and hazard estimates would double if the angler is assumed to regularly consume the entire fish (a highly unlikely scenario). For the RME recreational angler receptor, the potential cancer risks for the adult/young child would exceed  $10^{-4}$  in the Upstream Maryland area due to PCBs if whole body fish were consumed instead of fillet. The RME noncancer hazard estimates, which exceed 1 in all three areas of the Anacostia River evaluated in the BHHRA (hazard indices of 2 to 7, with highest HI in the Upstream Maryland area), would also double.

#### **7.3.1.6 Consumption of Other Biota**

It is possible that other biota present in the Anacostia River besides fish, such as turtles, ducks, frogs, etc., are consumed<sup>23</sup>. However, due to the lack of data on consumption of other aquatic species or waterfowl, this potential exposure pathway was not evaluated quantitatively in the BHHRA. The angler surveys revealed little crabbing or crab consumption on the Anacostia River. Based on

<sup>23</sup> Due to low salinity levels in the river in the vicinity of the Site, crabs are not expected to be present (NOAA, 2012).



available data, fish are the primary target of Anacostia River anglers. Not evaluating consumption of other biota in the BHHRA is unlikely to have resulted in the omission of a significant route of exposure to this population.

### 7.3.1.7 High-End Consuming Angler Scenario

It is possible that some anglers supplement a sizeable fraction of their diet with river fish. Thus, to supplement the evaluation of the recreational angler, the BHHRA included an analysis of a high-end consuming angler who fishes year-round and consumes two fish meals per week of Anacostia River fish. It is conservatively assumed that all of the fish consumed comes from the portion of the river near the Site. The total PCB risks/hazards for the high-end consuming angler who consumes a diet of 100% catfish are summarized in the following table along with the results for the recreational angler for comparison. Cancer risks are shown for the young child/adult and noncancer hazards for the young child angler. [PCB-TEQ risk/hazard estimates and teen high-end consuming angler results are provided in Attachment C].

River Reach	Young Child/Adult Angler Cancer Risk – Catfish Consumption		Young Child Angler Noncancer Hazard – Catfish Consumption	
	High-End	Recreational	High-End	Recreational
Upper Anacostia	$1.5 \times 10^{-4}$	$2.4 \times 10^{-5}$	14	2
Lower Anacostia	$2.7 \times 10^{-4}$	$4.2 \times 10^{-5}$	24	4
Upstream Maryland	$4.2 \times 10^{-4}$	$6.6 \times 10^{-5}$	38	6

As shown, the estimated risks/hazards for the high-end consuming angler are six to seven-fold higher than for the recreational angler. Potential cancer risks and noncancer hazards for the high-end consuming angler exceed USEPA's risk thresholds in all three river reaches, with the highest risks/hazards in the Upstream Maryland area.

### 7.3.1.8 Exposure Duration

The BHHRA evaluated the combined adult/child receptor using the default exposure duration of 26 years, which is the 90<sup>th</sup> percentile on residence time in the same location (USEPA, 2014). Consistent with guidance (USEPA, 2014), six of the 26 years of exposure are assumed to occur during childhood and 20 years while an adult. However, it is possible that someone moves into the area as an adult, and therefore is exposed for the full 26 years as an adult. In this case, the estimated risks/hazards for the adult receptor would be 30% higher than estimated in the BHHRA. However, this would not change the overall findings, in that fish consumption is the only potential exposure

pathway posing noncancer hazards in excess of applicable thresholds; the risks/hazards from direct contact exposures with sediment and surface water would still be below target risk levels.

### 7.3.2 Estimation of Exposure Point Concentrations

The data used to calculate the EPCs are assumed to be representative of general area conditions. Sample locations were selected based on consideration of several factors, including prior knowledge of sources areas, potential migration patterns, and ensuring adequate spatial coverage. Nevertheless, due to spatial and temporal variability, as well as sampling and analytical limitations, there is uncertainty in the EPCs used to estimate current conditions in environmental media. Key uncertainties are discussed below.

Exposure to COPCs is best estimated by the use of the arithmetic mean concentration (USEPA 1989a, 2002b). Because of the uncertainty associated with estimating the true average concentration, USEPA's guidance states that "the 95 percent upper confidence limit of the arithmetic mean should be used for this [the average] variable" (USEPA, 2002b). This statistic provides a conservative upper-bound estimate of the average constituent concentration in an environmental medium. The EPCs used in the BHHRA represent the lower of either the maximum detected concentration or the 95% UCL of the arithmetic mean (USEPA, 2002b) for the RME scenario and the mean for the CTE scenario. The use of the UCL (or maximum detect) reduces uncertainty in the adequacy of the data set to represent the true average concentration. However, there is greater uncertainty in the tissue EPCs due to limited sample sizes (e.g., one or two samples per exposure area for some species). The use of maximum detects and composite tissue samples, which are comprised of multiple individual specimens, addresses some of the uncertainty associated with small sample sizes. However, the representativeness of the fish tissue EPCs remains uncertain due to the limited tissue data set. It is expected that the uncertainty will be reduced with the addition of fish tissue data collected in 2015 as part of the river-wide RI/FS.

There is uncertainty associated with the tissue EPCs used to estimate potential fish consumption risk. The fish tissue samples collected by DOEE (Pinkney, 2014) in the Upper Anacostia River Sampling Area (from CSX railroad bridge up to the Maryland state line) are not representative of the Site. The Upper Anacostia River Sampling Area extends approximately two miles downstream and upstream of the Waterside Investigation Area (**Figure 8**), and these data were not collected to evaluate Site attribution. Fish specimens caught throughout this area were combined to create one composite sample per species to represent the Upper Anacostia River Sampling Area. Fish species vary in how far they will travel for food and spawning: for example, sunfish typically have a small home range (e.g., 0.23-1.12 hectares; Fish and Savitz [1983]) whereas brown bullhead has been found to have a home range of up to 1.3 miles in the Anacostia River (Sakaris et al., 2005). Therefore, the total PCB concentrations detected in the fish tissue composite samples may represent





conditions throughout the approximately 4-mile Upper Anacostia River Sampling Area, but they are not representative of conditions in the Waterside Investigation Area.

There is uncertainty in the characterization of surface sediment data for the evaluation of direct contact exposures. Per the approved work plan, the top six inches of nearshore sediment were assumed to be the point of exposure for human contact with sediment. However, it is possible that sediment at depths greater than the top six inches or within the deeper part of the channel may be transported to nearshore surface sediment as a result of erosion, currents, and/or mixing processes. The concentrations of some COPCs in deeper sediment and further into the channel are not substantially different from or are generally lower than concentrations in nearshore surface sediment. For some other COPCs, concentrations in deeper sediments are generally higher than at the surface. For COPCs with concentrations that are greater at depth, the use of the nearshore surficial sediment data to estimate current and future EPCs may underestimate direct contact risks if the deeper sediments migrate to the nearshore surface sediment in the future. On the other hand, for COPCs with concentrations that change little or are lower at depth, the use of surficial sediment data has not underestimated potential direct contact risks.

It is assumed that the EPCs used in the risk assessment based on current Site conditions remain constant for the assumed exposure duration – for an industrial or residential scenario, this is typically a period of 25 to 30 years. However, it is well known that constituents in the environment are subject to natural attenuation and biodegradation processes. Organic constituents are naturally degraded in the environment by a variety of processes (i.e., photodegradation, microbial activity, hydrolysis, etc.). At sediment sites, deposition of cleaner sediment is an important process by which contaminant concentrations in surface sediment are reduced over time. USEPA has recognized the validity and utility of natural attenuation and biodegradation as a remedial option and has published guidance for its site-specific implementation (USEPA, 1997b; 2005a). Environmental half-lives vary for specific constituents based on environmental conditions (i.e., presence of bacteria, pH, exposures to sunlight and oxygen), and there are respected literature sources of such information. However, environmental degradation has not been accounted for in the calculation of Site risk. Current concentrations in Site media (sediment, surface water, and tissue) are assumed to remain unchanged into the future for the exposure durations evaluated in the BHHRA (i.e., up to 26 years).

### **7.3.3 Estimation of Exposure Dose**

As discussed in Section 5.4, absorption adjustment factors (AAFs) are used in risk assessment to account for absorption differences between humans exposed to substances in environmental situations and experimental animals in the laboratory studies used to derive dose response values. Support for use of AAFs is provided in USEPA guidance (USEPA, 1989a).



Bioavailability is the measure of the degree to which a constituent may be systemically absorbed following exposure. Oral bioavailability is a measure of the degree to which a constituent may be systemically absorbed following ingestion, and dermal bioavailability is a measure of the degree to which a constituent may absorb through the skin and into the blood stream. Some constituents are absorbed almost completely (100 percent bioavailability) when ingested in pure form. Other constituents may pass through the body largely unabsorbed. Thus, the amount of absorption that occurs is both uncertain and variable. As a result, USEPA's default assumptions regarding absorption are conservative, and intended to apply to most sites and exposure conditions. Key factors that influence bioavailability include:

- Physical characteristics of the constituent. In general, as the lipophilicity of a constituent increases, its absorption across the gastrointestinal tract increases.
- The rate at which constituents dissociate from the sediment in the gut. Sediment-bound constituents, particularly inorganics, are usually absorbed to a lesser degree than constituents in pure form. The reduced absorption is a result of hydrophobic attraction between the constituent and soil matrix.
- Sediment aging. Aging results in the migration of the constituent into the interior of the sediment particle so that less remains on the exterior surface. This sequestration or aging of the constituent that occurs over time results in reducing the "availability" of the constituent to be absorbed by living organisms. The process of aging reduces the accessibility of a constituent when ingested or dermally contacted by humans because the constituent is bound in the sediment matrix and not extracted by stomach acid or skin moisture. The specific mechanisms for sequestration of constituents in soil are thought to include:
  - Rapid partitioning of hydrophobic molecules to the external surface of particulate matter in the soil (adsorption). Constituents such as PCBs are very hydrophobic and will strongly bind to organic matter in the sediment.
  - Slow diffusion of molecules into micropores, remote from the surfaces of sediment particles (aging). A review of over 268 technical papers (Linz et al., 1997) concluded that constituents that are aged are less readily extracted by solvents, less available to plants and animals and less toxic to plants and animals.

Therefore, for constituents that have been immobilized in soil by the aging process, the total concentration of the constituent may be a very poor indicator of its current relative toxicity. Primary factors promoting aging of a constituent in soil include (1) hydrophobicity of the constituent, (2) the length of time that the constituent has been present in the soil, and (3) the fraction organic content ( $f_{oc}$ ) of the soil.



The BHHRA was conducted using USEPA default DAFs for dermal exposure to accessible surface sediment and surface soil (USEPA, 2004a) and an assumption of 100% relative oral absorption for all COPCs, except arsenic for which oral absorption was assumed to be 60% in accordance with USEPA guidance. The uncertainty associated with the default approach for evaluating exposures is discussed below.

### 7.3.3.1 Default Dermal Absorption Fractions

The default DAFs were developed by USEPA to be conservative for the majority of sites, but in many cases are overly-conservative on a site-specific basis. In particular, the default DAFs for PCBs and PAHs may be overestimated.

#### PCBs

The current USEPA recommended dermal absorption value for PCBs is 0.14 (USEPA, 2004a). The USEPA recommended DAF is based on a study of PCB absorption from soil to the skin of Rhesus monkeys (Wester et al. 1993). The absorption estimates obtained by Wester et al. (1993) are likely to be overestimated:

- The soil containing the PCBs was held against the skin of the test animal for 24 hours with a patch; it is highly unlikely that soil would remain adhered to a person's skin for such a long duration.
- As discussed above,  $f_{oc}$  can influence bioavailability; as  $f_{oc}$  increases, bioavailability decreases. The average river surface sediment  $f_{oc}$  is about 4.3%, while the  $f_{oc}$  of the sand used in the Wester et al. (1993) study was 0.9%.

Given the extremely low  $f_{oc}$  of the sand used in the Wester et al. (1993) study, the assumption of 14% absorption is likely to be overly conservative, resulting in an overestimation of potential risks from dermal contact with accessible sediments with higher  $f_{oc}$  values.

The Mayes et al. (2002) study was conducted in a similar manner as the Wester et al. (1993) study. However, in the Mayes et al. (2002) study, the soil used had more typical  $f_{oc}$ , and is more typical of a floodplain setting. The soil was obtained from the Housatonic River Floodplain and was classified as sandy silt with  $f_{oc}$  of 5-6%. The following absorption estimates were found:

- 12 hour exposure to aged soil – 3.43%
- 24 hour exposure to fresh soil – 4.07 %
- 24 hour exposure to aged soil – 4.26 %



The range of dermal absorption estimates from Mayes et al. (2002) of around 4% is considerably lower than the default estimate of 14%, and may be more relevant for the Anacostia River based on  $f_{oc}$ . A study conducted by Roy et al. (1990) also presents data indicating that absorption of tetrachlorobiphenyl through the skin (rat in-vivo, human skin in vitro) is less than 14%. Roy et al. (1990) determined absorption of 2.1% for low organic carbon soils and 0.63% absorbed from high organic content soils. Based on the information presented here, potential sediment dermal content exposures may be overestimated.

### PAHs

The current USEPA recommended dermal absorption value for PAHs is 0.13 (USEPA 2004b). Magee et al. (1996) presents support for the use of a slightly lower dermal DAF for noncarcinogenic PAHs of 0.1, and a lower dermal DAF of 0.02 for potentially carcinogenic PAHs. The use of the lower DAFs, particularly for potentially carcinogenic PAHs, would result in lower risk estimates from dermal exposure to LPRSA accessible surface sediments. Magee et al. (1996) derived the 0.02 DAF for potentially carcinogenic PAHs based on two studies (Yang et al., 1989; Wester et al., 1990). Yang et al. (1989) evaluated the percutaneous absorption of benzo(a)pyrene from petroleum crude-fortified soils in vivo in rats and in vitro using excised rat skin. Wester et al. (1990) evaluated the percutaneous absorption of benzo(a)pyrene added to soil (unaged) in vivo in Rhesus monkeys and in vitro using human cadaver skin. Based on the results of Magee et al. (1996) it is possible that potential sediment dermal contact risks have been overestimated.

#### **7.3.3.2 Oral Bioavailability**

As noted above, 100% oral bioavailability of constituents in aged sediment is unlikely and the use of this assumption has likely resulted in an overestimation of potential risks from incidental ingestion of sediments. COPCs where the default bioavailability assumption may be significantly overestimated include Total PCBs, as summarized below.

### TCDD-TEQ

USEPA's final dioxin report reviewed six studies in detail regarding the oral absorption of TCDD-TEQ (USEPA 2010e). Based on the six studies, the relative bioavailability of TCDD-TEQ in 15 test materials was less than 100%. The review indicated that there is strong evidence that the oral absorption is less than 100%. However, the USEPA did not make a recommendation regarding a default oral absorption factor. Given that the majority of the scientific literature supports an oral absorption of less than 100%, it is likely that the potential risk estimates for ingestion of TCDD-TEQ in accessible surface sediments in this BHHRA are overestimated.



### PCBs

Studies of the oral bioavailability of PCBs indicate that absorption is likely to be less than 100%. A rat study of PCBs in diet and soil determined the relative bioavailability to be 78% to 88% (Fries et al., 1989). An in-vitro digestion model was conducted by Oomen et al. (2000) to estimate the bioaccessible fraction of PCBs (and lindane) in soil. The bioaccessible fraction is the fraction at most available for absorption. Based on this experiment, about 40% of PCBs were found to be bioaccessible (34% PCB 52, 30% PCB 118, and 40% PCB 153 and 180), with an average of 36%. Therefore, potential sediment ingestion exposures to PCBs may be overestimated.

### Arsenic (inorganic)

The arsenic dose-response values are based on drinking water studies, and in the absence of site-specific data, it has typically been assumed that absorption of arsenic from soil or sediment is the same as absorption from drinking water. However, recent in-vivo bioavailability studies show that this is not the case for arsenic, and that the bioavailability of arsenic in soil is less than the bioavailability of arsenic dissolved in drinking water (USEPA, 2012c). Therefore, the assumption of 100% RBA will result in an overestimate of risk via the oral pathway. USEPA derived an RBA of 60% for soils based on a review of over 100 arsenic RBA estimates (USEPA, 2012c), which was used in the BHHRA. However, it is possible that the RBA is lower. An in-vivo study of five soil samples in *Cebus paella* monkeys conducted by the University of Florida (FDEP, 2003) identified a range of relative bioavailability between 10.7% and 24.7%. The Florida Department of Environmental Protection (FDEP) selected 25% as an upper-bound estimate of the RBA for arsenic in soils as it represents a conservative upper bound value for any particular soil type/site type concentration in the study. Furthermore, the overall 85<sup>th</sup> percentile value is 25%, highlighting the upper-bound nature of the 25% RBA. Therefore, potential sediment ingestion risks from inorganic arsenic may be overestimated.

### PAHs

Magee et al. (1996) derived an oral absorption factor for PAHs based on a review of six available in vivo studies, as summarized in Magee et al. (1996). Three studies that evaluated gastrointestinal (oral) absorption of PAHs from a soil matrix (Goon et al., 1991; Rozett et al., 1996; and Weyand et al., 1996) were deemed appropriate for use for developing an oral-sediment AAF. The Rozett et al. (1996) study evaluated the bioavailability of pyrene from aged soil from manufactured gas plant residue (coal tar). The oral AAFs based on this study range from 0.07 to 0.76, with an average of 0.26. Weyand et al. (1996) also evaluated the oral bioavailability of pyrene from manufactured gas plant residue. The oral AAFs based on this study range from 0.11 to 0.36, with an



average of 0.23. The last study, Goon et al. (1991) evaluated the bioavailability of BaP adsorbed to “aged” soil (clay-based and sand-based soils). These aged soils were treated with BaP and allowed to age 1 to 30 days, and 6 months to 1 year. The oral AAF for clay-based soil is 0.37 and that for sand-based soils is 0.57. A probabilistic (Monte Carlo) analysis, using 12 estimates of the AAF from all three studies, results in a 50th percentile oral-sediment AAF of 0.27, with an upper 90th percentile value of 0.57. The Magee et al. (1996) paper recommends the use of a point-estimate oral-sediment AAF of 0.29, which is the arithmetic mean of the point estimates used to develop the distribution. Based on the information presented by Magee et al. (1996), the default assumption of 100% absorption likely results in an overestimation of potential risks via oral exposure to PAHs in sediment.

### Summary

The BHHRA used default absorption values to estimate both ingestion and dermal contact exposures to surface sediment. However, the actual systemic absorption of chemicals may be lower than assumed, particularly for the chemicals summarized below:

Chemical	Oral - Sediment			Dermal – Sediment		
	AAF used in BHHRA	Other Potential AAFs	Basis	DAF Used in BHHRA	Other Potential DAFs	Basis
TCDD-TEQ	1 (a)	<1	USEPA 2010f	0.03 (b)	0.001 (d)	USEPA 2004b
Total PCBs	1 (a)	0.36	Oomen et al. 2000	0.14 (b)	0.04	Mayes et al. 2002
		0.78-0.88	Fries et al. 1989		0.02	Roy et al. 1990
Arsenic (inorganic)	0.6 (c)	0.25	FDEP, 2003	0.03 (b)	--	--
PAHs	1 (a)	0.29	Magee et al., 1996	0.13 (b)	0.1 (ncPAH) 0.02 (cPAH)	Magee et al. 1996

(a) Oral absorption is assumed to be 100%, consistent with USEPA (1989b, 2010f), and consistent with the approach used by USEPA (2015a) (RSL Table).

(b) USEPA, 2004b (RAGS Part E, Supplemental Guidance for Dermal Risk Assessment).

(c) Recommendations for Default Value for Relative Bioavailability of Arsenic in Soil (USEPA, 2012c).

(d) Where  $F_{oc}$  is greater than 10%.

These alternate factors suggest that absorption may be overestimated, and significantly in some cases (e.g., PAHs). Given the aged sediment matrix and high organic content in many parts of the river, it is likely that the use of the default absorption factors results in an overestimate of risk from direct contact exposure to COPCs in river sediment.



## 7.4 Risk Characterization

The potential risk of adverse human health effects is characterized based on estimated potential exposures and potential dose-response relationships. The following areas of uncertainty are introduced in this phase of the risk assessment: the evaluation of potential exposure to multiple constituents, the combination of upper-bound exposure estimates with upper-bound toxicity estimates, the risks to sensitive populations and residents, and the characterization of background risks.

### 7.4.1 Risk from Multiple Constituents

Once potential exposure to and potential risk from each COPC are estimated, the total upper-bound potential risk posed for each receptor is determined by combining the estimated potential health risk from each of the COPCs. Presently, potential carcinogenic effects are added unless evidence exists indicating that the COPCs interact synergistically (a combined effect that is greater than a simple addition of potential individual effects) or antagonistically (a combined effect that is less than a simple addition of potential individual effects) with each other.

For noncarcinogenic effects, the HI should only be summed for constituents that have the same or similar target endpoints (USEPA, 1989a). The target endpoint is defined as the most sensitive noncarcinogenic health effect used to derive the RfD, RfC or other suitable toxicity value (USEPA, 1989a). Again, there is little evidence to suggest whether those COPCs associated with a common target endpoint are additive, synergistic, antagonistic, or independent in terms of mechanism of action. Whether assuming additivity leads to an underestimation or overestimation of risk is unknown. In this risk assessment, it has been assumed that HQs from COPCs with the same target endpoint are additive (e.g., all the HQs from the COPCs with neurological effects are added together). As shown in Table 4-1, there is limited overlap in the target endpoints for the COPCs in this BHHRA, suggesting this is a minor area of uncertainty.

Further, PCBs is the dominant COPC driving the exceedance of the noncancer target HI of 1; PCBs contributes approximately 95 percent of the cumulative noncancer risk for the adult and teen anglers that consume fish and contact surface sediment and surface water in the Anacostia. The contributions from the other COPCs evaluated in the BHHRA are *de minimis*; the noncancer hazard indices for the other COPCs evaluated are all below 0.1 (i.e., over ten-fold below the target HI of 1).

### 7.4.2 Combination of Several Upper-Bound Assumptions

Generally, the goal of a risk assessment is to estimate an upper-bound potential exposure and risk. Most of the assumptions about exposure and toxicity used in this evaluation are representative of statistical upper-bounds or even maxima for each parameter. The result of combining several such



upper-bound assumptions is that the final estimate of potential exposure or potential risk is extremely conservative (health-protective).

This is best illustrated by a simple example. Assume that potential risk depends upon three variables (soil consumption rate, exposure duration, and CSF). The mean, upper 95% bound and maximum are available for each variable. One way to generate a conservative estimate of potential risk is to multiply the upper 95% bounds of the three parameters in this example. Doing so assumes that the 5% of the people who are most sensitive to the potential carcinogenic effects of a COPC will also ingest soil at a rate that exceeds the rate for 95% of the population, and will do so at the same residence for the number of years that represents only 5% of the population. The consequence of combining these assumptions is that the estimated potential risk is representative of 0.0125% of the population ( $0.05 \times 0.05 \times 0.05 = 0.000125 \times 100 = 0.0125\%$ ). Put another way, these serial assumptions overestimate risks for 99.99% of the population or 9,999 out 10,000 people. Thus, the majority of people will have a much lower level of potential risk. The very conservative nature of the potential risks estimated by the risk assessment process is not generally recognized. In reality, the estimates are more conservative than outlined above, because usually more than three upper 95% assumptions are used to estimate potential risk(s).

Alternatively, if the CTE estimate is considered, whereby a single upper 95% assumption of the cancer slope factor is combined with average (50th percentile) assumptions for exposure point concentration and soil ingestion rate, the resulting estimates of potential CTE risk still over predict the risk to nearly 99% of the potentially exposed population ( $0.05 \times 0.5 \times 0.5 = 0.0125 \times 100 = 1.25\%$ ). This is a conservative and health protective approach that substantially overestimates the “average” level and even the reasonable maximum level of potential risk.

The risk assessment approach used here employed upper 95% bounds or maxima for most RME exposure and toxicity assumptions. Thus, it produces estimates of potential risk two to three orders of magnitude greater than the risk experienced by the average member of the potentially exposed populations. The CTE scenarios have used average estimates of exposure and concentration where possible, but still use the conservative toxicity values; thus even the CTE risk estimates are likely to overestimate Site risk.

#### **7.4.3 Risks to Sensitive Populations**

The health risks estimated in the risk characterization apply to the receptors whose activities and locations were described in the exposure assessment. Some people will always be more sensitive than the average person and, therefore, will be at greater risk. Dose-response values used to calculate risk, however, are frequently derived to account for additional sensitivity of subpopulations (e.g., the uncertainty factor of 10 used to account for intraspecies differences). In addition, as





previously discussed, the selection of the study upon which a cancer slope factor is based often involves the most sensitive species and tumor site. Therefore, it is unlikely that this source of uncertainty contributes significantly to the overall uncertainty of the risk assessment.

#### **7.4.4 Characterization of Background**

As discussed in Section 6.4, fish consumption risks exceed the target HI of 1 due to PCBs throughout the Anacostia River, including upstream of the Site in Maryland. These findings suggest that there are multiple sources of PCBs in the Anacostia River, including upstream of the tidal influence of the Benning Road Site. As stated in guidance, “the presence of high background concentrations of hazardous substances, pollutants, and contaminants found at a site is a factor that should be considered in risk assessment and risk management” (USEPA, 2002e).

There is uncertainty in the characterization of background risks posed by PCBs in fish tissue. The data from the Upper and Lower Anacostia were collected more recently (2013) than the data for the Upstream Maryland sampling area (2003-2010). A general decline in PCB tissue concentrations over time has been observed in the reach of the Anacostia River within the District (Pinkney, 2014). Were contemporaneous (2013) tissue data for the Upstream Maryland reach also available, it is possible that lower concentrations would have been found than measured in 2003-2010. However, given that elevated PCB tissue levels are present throughout the system and have been for decades, it is unlikely that current PCB tissue levels in the Upstream Maryland reach of the Anacostia are significantly lower than observed in 2010. In summary, while there is some uncertainty in the extent to which background contributes to the Site risk, the inclusion of background conditions in the risk assessment results means that the calculated risk cannot be attributed solely, or even primarily, to Site-related contaminants.

#### **7.5 Summary of Uncertainty in BHHRA**

The assumptions made in the various steps of the BHHRA for the Site introduce uncertainty in the results. While the use of assumptions could potentially lead to underestimates of potential risk, the use of numerous conservative (i.e., protective of human health) assumptions, as was done here, more likely overestimates potential risks. Assumptions regarding media concentrations, exposures, and toxicity used in this BHHRA were generally representative of statistical upper-bounds. The result of combining several such upper-bound assumptions is that the final estimate of potential exposure and or potential risk is very conservative, and may lie at the extreme upper end, or even above, the distribution of risks in the actual exposed population. Elevated levels of PCBs are present in fish tissue throughout the Anacostia River, suggesting that a significant portion of the estimated risk is actually a reflection of background conditions, and not attributable to the Site. The results of the



BHHRA for the Benning Road Facility should be carefully interpreted considering the uncertainty and conservatism associated with the analysis, especially where risk management decisions are made.

## 8 Summary and Conclusions

A preliminary BHHRA was performed for the Benning Road Facility located in Washington, D.C. The preliminary BHHRA was performed in accordance with the approved Risk Assessment Work Plan and response to comments (AECOM, 2012a,b), and applicable guidance, utilizing available data, including the results of the RI activities conducted between January 2013 and December 2014. The potential human health risks associated with potential current and future exposures under baseline conditions (i.e., in the absence of controls or remedial actions) were evaluated. Health-protective assumptions and approaches were used to ensure that the results provide a conservative assessment of potential human health risks. The results of the preliminary BHHRA will be used to help inform the need for any additional evaluation and/or remedial action at the Site. As requested by DOEE, a round of additional field investigation will be performed to address remaining data gaps and uncertainties. The preliminary BHHRA will be revised, as needed, to incorporate the results of the additional Site investigation and river-wide RI.

### 8.1 Summary of Preliminary BHHRA for Benning Road Facility

This section summarizes the approach and results of the BHHRA, which was conducted in accordance with the four-step paradigm recommended by USEPA (1989a):

1. Data evaluation and hazard identification
2. Toxicity assessment
3. Exposure assessment
4. Risk characterization

A summary of each of the four steps is presented below.

#### 8.1.1 Data Evaluation and Hazard Identification

The soil, groundwater, sediment, and surface water data collected between 2012 and 2014 in accordance with the DOEE-approved RI/FS work plan were used in the BHHRA. The RI samples were analyzed for a broad range of constituents, including inorganics, PCBs, dioxins and furans, pesticides, TPH, VOCs, and SVOCs. The BHHRA data set was augmented with composite samples of fish tissue collected in the Anacostia River under separate DOEE and MDE programs. The combination of these field investigations provided a sound data set for the BHHRA, as summarized in the table below:

Matrix	Samples for BHHRA		
	Site	Background	
		Adjacent to Site	Regional
<b>Landside</b>			
<b>Surface Soil</b> (0-1 ft)	10 – 24	NA	84 (inorganics)
<b>Subsurface Soil</b> (1-16 ft)	9 – 114	NA	84 (inorganics)
<b>Groundwater</b> (downgradient)	8	NA	NA
<b>Waterside</b>			
<b>Surface Sediment</b> (0-6 inches)	14-46	10	NA
<b>Surface Water</b>	5	10	NA
<b>Tissue (fillet)</b>	<b>Upper Anacostia</b>	<b>Lower Anacostia</b>	<b>Upstream Maryland</b>
Bullhead	NA	NA	1
Catfish	2	2	6
American eel	NA	1	2
Common carp	1	1	1
Largemouth bass	1	1	NA
Sunfish	1	1	7
White sucker	NA	NA	1

The RI data underwent review and validation in accordance with the QAPP and USEPA guidance, and over 99% were found to be reliable and acceptable for use in risk assessment and remedial decision-making.

Based on a conservative screening process, 16 COPCs were identified for further evaluation in the BHHRA. For soil in the landside area of investigation, the COPCs included TCDD-TEQ (surface soil only), arsenic, chromium, cobalt, thallium, vanadium, PCBs and PAHs. As previously described, the COPCs identified for landside soil were not carried forward in the risk calculations for the preliminary BHHRA, but will be revisited pending the completion of a revised and expanded CSM and the additional field investigation.



For the waterside area of investigation, the COPCs included TCDD-TEQ, aluminum, arsenic, chromium, cobalt, manganese, nickel, thallium, vanadium, PCBs, PAHs, and one DDT isomer (surface water only). No pesticides, VOCs, or SVOCs (other than PAHs) were identified as COPCs in sediment. In addition, several of the constituents identified as COPCs are also present in upstream, lateral, and atmospheric sources that contribute to the Anacostia River. Based on available tissue data, knowledge of historical Site operations, as well as consideration of background conditions, PCBs (including PCB-TEQ) was the single COPC identified for fish tissue. Pending the availability of additional fish tissue data collected as part of the river-wide RI/FS, the inclusion of other bioaccumulative chemicals will be evaluated.

### **8.1.2 Toxicity Assessment**

The dose-response values used in the BHHRA were identified in accordance with USEPA guidance (USEPA, 2003a, 2013a). Both cancer and noncancer dose-response values were identified for oral exposures. USEPA's dermal absorption factors (USEPA, 2004a) were used to evaluate dermal exposures to COPCs in sediment and bank soil. Due to the lack of inhalation exposure pathways, inhalation dose-response values were not needed.

With a few exceptions, the dose-response values used in the BHHRA were obtained from the USEPA's primary source of toxicity values, which is the IRIS database (USEPA, 2016). The selection of dose-response values for COPC lacking Tier 1 toxicity values (aluminum, cobalt, thallium, hexavalent chromium, and TCDD-TEQ) followed USEPA's hierarchy of alternative sources of toxicity values (USEPA, 2003a, 2013a).

### **8.1.3 Exposure Assessment**

As discussed above, there are no completed exposure pathways for on-Site soil or groundwater under current or reasonably foreseeable future Site uses. Thus, no risk calculations were performed with respect to on-Site exposure scenarios. However, at the request of DOEE, the potential for future direct contact exposures to surface and subsurface soils will be evaluated in the revised BHHRA, pending collection of additional landside soil data and updates to the CSM.

For the Waterside Investigation Area, based on the human health CSM developed for the Site, the following potential receptors and exposure pathways were identified for quantitative evaluation:

- Anglers who may be exposed via incidental ingestion of and dermal contact with surface sediment and surface water, and via consumption of Anacostia River fish;
- Swimmers and waders who may be exposed via incidental ingestion of and/or dermal contact with surface sediment and surface water; and

- Workers who may be exposed via incidental ingestion of and/or dermal contact with surface sediment and surface water.

Consistent with the approved Risk Assessment Work Plan, the BHHRA evaluated both RME and CTE scenarios to provide information on a range of potential exposures and risks. Realistic but appropriately conservative exposure parameter values were selected to represent potential exposures under both current and future Site uses. Site-specific information on land uses, populations, and activities were considered in the identification of relevant exposure scenarios and representative parameter assumptions. This included review of available angler surveys to gather information on angler behaviors and consumption practices. Based on survey data, two fish diet scenarios were considered: 1) consumption of all catfish; and 2) consumption of a mixed fish diet consisting of various species present in the river, including eel, catfish, carp, largemouth bass, and sunfish.

The lower of the 95% UCL of the arithmetic mean and the maximum concentration was used as the exposure point concentration for the RME scenarios, and the mean was used in the evaluation of the CTE scenarios. While PCBs were not detected in surface water, PCBs were conservatively included in the risk calculations for potential surface water exposures using the lowest reporting limit achieved as a proxy EPC.

#### **8.1.4 Risk Characterization**

The only exposure scenario that was calculated to pose potential human health risk in excess of USEPA's target risk levels is consumption of Anacostia River fish. This exceedance is for the angler receptor and noncancer risk only. The total potential noncancer risks for the swimmer, wader, and worker receptors are all below the USEPA target hazard index (HI) of 1. Noncancer risks represent potential adverse health effects (e.g., neurological impacts, immune system effects) with a threshold for exposure, below which adverse health outcomes are not expected even for sensitive individuals, such as children. When the calculated noncancer risk exceeds the threshold, which is set by USEPA at a HI of 1, there is a potential for adverse health outcomes, although conservatism in the assumptions, methods, and the contribution from background should be considered as part of risk management.

The total potential carcinogenic risks for all receptor scenarios are within or below the USEPA target risk range of  $10^{-4}$  to  $10^{-6}$ . With the exception of fish consumption, all of the potential receptor carcinogenic risks are at or below  $10^{-5}$ . The potential cumulative carcinogenic risks for the RME adult/child recreational angler who is assumed to eat fish from the Anacostia River every year for 26 years range from  $1 \times 10^{-5}$  to  $7 \times 10^{-5}$ , with the higher risks for the Upstream Maryland area. There is little difference between the fish consumption cancer risks based on total PCBs and PCB-TEQ.



The total potential HI for the RME angler that consumes either a fish diet of only catfish or a mixed fish diet exceeds the target noncancer HI of one (HIs range from 2 to 7). The exceedance of the noncancer target HI of 1 is due to total PCBs in fish tissue. The total noncancer fish consumption HIs based on PCB-TEQ are all lower than the respective HIs based on total PCBs, and the PCB-TEQ HIs are all at or below 1. For the young child age group, which has the highest noncancer risks, the total potential HI associated with consumption of only catfish under the RME scenario ranges from an HI of 2 in the Upper Anacostia, to an HI of 4 in the Lower Anacostia, to an HI of 6 in the Upstream Maryland Area. For consumption of a mixed fish diet under the RME scenario, the total potential HI for the young child ranges from an HI of 1 in the Upper Anacostia, to an HI of 3 in the Lower Anacostia, to an HI of 7 in the Upstream Maryland Area. Using CTE assumptions, the noncancer HIs for all receptors and areas are below 1.

The RME and CTE cumulative carcinogenic and noncancer risks for each receptor are summarized in the tables below. The cumulative noncancer risks that exceed the target HI of 1 are shown in bold and italics font. For the angler, swimmer, and wader receptors, the cumulative potential carcinogenic risks for the combined adult and child age groups are shown; age-group specific carcinogenic risks were presented in the summary risk tables provided in Section 6.

Reasonable Maximum Exposure (RME)					
Receptor	Cancer		Noncancer		
	Adult/Young Child	Older Child	Adult	Young Child	Older Child
<b><i>Angler (catfish diet)</i></b>					
Upper Anacostia (tPCBs)	$3 \times 10^{-5}$	$1 \times 10^{-5}$	1	<b>2</b>	1
Upper Anacostia (PCB-TEQ)	$3 \times 10^{-5}$	$1 \times 10^{-5}$	0.9	1	0.9
Lower Anacostia (tPCBs)	$4 \times 10^{-5}$	$2 \times 10^{-5}$	<b>3</b>	<b>4</b>	<b>3</b>
Lower Anacostia (PCB-TEQ)	$1 \times 10^{-5}$	$7 \times 10^{-6}$	0.4	0.5	0.4
Upstream Maryland (tPCBs)	$7 \times 10^{-5}$	$3 \times 10^{-5}$	<b>4</b>	<b>6</b>	<b>4</b>
<b><i>Angler (mixed fish diet)</i></b>					
Upper Anacostia (tPCBs)	$1 \times 10^{-5}$	$7 \times 10^{-6}$	0.8	1	0.8
Upper Anacostia (PCB-TEQ)	$3 \times 10^{-5}$	$1 \times 10^{-5}$	0.8	1	0.8
Lower Anacostia (tPCBs)	$4 \times 10^{-5}$	$2 \times 10^{-5}$	<b>2</b>	<b>3</b>	<b>2</b>
Lower Anacostia (PCB-TEQ)	$3 \times 10^{-5}$	$1 \times 10^{-5}$	0.8	1	0.8
Upstream Maryland	$7 \times 10^{-5}$	$3 \times 10^{-5}$	<b>4</b>	<b>7</b>	<b>4</b>
<b><i>Swimmer</i></b>	$6 \times 10^{-6}$	$4 \times 10^{-6}$	0.06	0.3	0.1
<b><i>Wader</i></b>	$2 \times 10^{-5}$	$5 \times 10^{-6}$	0.1	0.6	0.2
<b><i>Worker (adult only)</i></b>	$9 \times 10^{-6}$	NA	0.2	NA	NA
tPCBs – total PCBs					
PCB-TEQ – PCB toxicity equivalence					

Central Tendency Exposure (CTE)					
Receptor	Cancer		Noncancer		
	Adult/Young Child	Older Child	Adult	Young Child	Older Child
<b>Angler (catfish diet)</b>					
Upper Anacostia (tPCBs)	$1 \times 10^{-6}$	$7 \times 10^{-7}$	0.2	0.3	0.2
Upper Anacostia (PCB-TEQ)	$2 \times 10^{-6}$	$7 \times 10^{-7}$	0.1	0.2	0.1
Lower Anacostia (tPCBs)	$1 \times 10^{-6}$	$8 \times 10^{-7}$	0.3	0.4	0.3
Lower Anacostia (PCB-TEQ)	$1 \times 10^{-6}$	$7 \times 10^{-7}$	0.06	0.08	0.07
Upstream Maryland	$2 \times 10^{-6}$	$1 \times 10^{-6}$	0.6	0.8	0.6
<b>Angler (mixed fish diet)</b>					
Upper Anacostia (tPCBs)	$7 \times 10^{-7}$	$5 \times 10^{-7}$	0.1	0.2	0.1
Upper Anacostia (PCB-TEQ)	$3 \times 10^{-6}$	$1 \times 10^{-6}$	0.2	0.2	0.2
Lower Anacostia (tPCBs)	$2 \times 10^{-6}$	$9 \times 10^{-7}$	0.4	0.5	0.4
Lower Anacostia (PCB-TEQ)	$3 \times 10^{-6}$	$1 \times 10^{-6}$	0.2	0.2	0.2
Upstream Maryland (tPCBs)	$3 \times 10^{-6}$	$2 \times 10^{-6}$	0.7	1	0.8
<b>Swimmer</b>	$5 \times 10^{-7}$	$4 \times 10^{-7}$	0.01	0.03	0.02
<b>Wader</b>	$1 \times 10^{-6}$	$3 \times 10^{-7}$	0.02	0.07	0.01
<b>Worker (adult)</b>	$4 \times 10^{-7}$	NA	0.03	NA	NA
tPCBs – total PCBs PCB-TEQ – PCB toxicity equivalence					

PCBs contribute over 90 percent of the cumulative noncancer risk for the angler receptor under both diet scenarios. The vast majority of noncancer risk is due to fish consumption; the potential risks posed by direct contact exposures with surface sediment and surface water are negligible. The contributions to cumulative noncancer risks from the other COPCs evaluated in the BHHRA are minor. For the river sediment and surface water contact exposures, the other COPCs do not pose individual HQs greater than 0.4 for the RME scenarios, and are below 0.1 for the CTE scenarios.

## 8.2 Conclusions

The conclusions of the preliminary BHHRA for the Benning Road Facility are as follows:

### Landside Investigation Area

- A screening-level evaluation was performed for on-Site soils that consisted of comparing site-wide maximum detected concentrations to conservative USEPA risk-based screening levels for industrial soil. Only a limited number of inorganics, PAHs, PCBs, TCDD-TEQ (surface soil only), and TPH (subsurface soil only) were found to exceed screening levels.



- Potential exposures to on-Site surface and subsurface soils are currently incomplete due to perimeter fencing, round-the-clock site security, and the presence of pavement or gravel across the vast majority of the Site. The current lack of access to soil is expected to continue into the foreseeable future. However, at the request of DOEE, the potential for future direct contact exposures to surface and subsurface soils will be evaluated pending collection of additional landside soil data and updates to the CSM.
- The only potentially complete exposure pathway for Site groundwater is migration to the Anacostia River. In-stream concentrations of constituents detected in groundwater at the downgradient edge of the property were modeled using a conservative dilution attenuation factor. With the exception of TCDD-TEQ in one well, no modeled in-stream concentrations exceeded state and federal surface water screening levels, which indicates that Site groundwater is not adversely impacting the Anacostia River. The single well with elevated TCDD-TEQ (MW-11) is likely due to elevated turbidity and is not expected to be representative of dissolved groundwater concentrations that are mobile and like to migrate off-site. MW-11 will be evaluated further as part of the additional field investigation.

#### Waterside Investigation Area

- Consumption of Anacostia River fish poses risks in excess of the USEPA's target risk level based on potential noncarcinogenic effects only. Potential noncancer risks for the young child, older child, and adult angler that consumes a diet of all catfish or a mixed fish diet comprised of multiple species from the Anacostia River exceed the target HI of 1.
- None of the potential cumulative receptor carcinogenic risks exceed the upper end of USEPA's target risk range of  $10^{-6}$  to  $10^{-4}$ .
- Potential human health risks posed by direct contact with nearshore surface sediment and surface water in the Anacostia River adjacent to the Site are within or below USEPA's target risk levels.
- PCBs in fish tissue is the dominant COPC and medium driving Site risk; other COPCs contribute negligibly to cumulative risk. PCBs in fish tissue were evaluated separately as total PCBs and as PCB-TEQ for the Upper and Lower Anacostia River (dioxin-like PCB data were incomplete for the upstream Maryland area). There was little difference between estimated fish consumption cancer risks based on total PCBs and PCB-TEQ. The potential noncancer hazards based on PCB-TEQ were generally lower than corresponding noncancer hazards based on total PCBs.
- Fish consumption risks estimated using data collected by DOEE and MDE at sampling locations throughout the Anacostia River exceed the noncancer target HI of 1 in all three



segments of the river evaluated in the BHHRA, including the Lower Anacostia, Upper Anacostia (which includes the stretch adjacent to the Site), and upstream of the Site in Maryland; these findings suggest multiple sources of PCBs in the River, including upstream of the tidal influence of the Benning Road Site.

As with all risk assessments, assumptions have been made about variables and processes that are not fully known, such as human behavior, constituent toxicity, or environmental concentrations. While the use of assumptions leads to uncertainty, it is important to note that the assumptions and approaches used in this BHHRA are conservative, such that risks are much more likely to be overestimated than underestimated. Because of the significant contribution of background to Site risks, background conditions need to be carefully considered in risk management decision-making for the Benning Road Site.

## 9 References

ACS. 2014. Cancer Facts & Figures – 2014. American Cancer Society. Available at: <http://www.cancer.org/research/cancerfactsstatistics/index>.

Adams, W.J., Blust, R., Borgmann, U., Brix, K.V., DeForest, D.K., Green, A.S., Meyer, J.S., McGeer, J.C., Paquin, P.R., Rainbow, P.S., Wood, C.M. 2011. Utility of Tissue Residues for Predicting Effects of Metals on Aquatic Organisms. *Integrated Environmental Assessment and Management* 7(1): 75-98.

AECOM. 2012a. Remedial Investigation and Feasibility Study Work Plan. Final. Benning Road Facility. Prepared for Pepco Holdings, Inc. December 28, 2012.

AECOM. 2012b. Benning Road RI/FS Work Plan. Responses to DOEE Comments dated October 4, 2012. November 21, 2012.

AECOM. 2013. Community Involvement Plan. Final. Benning Road Facility. Prepared for Pepco Holdings, Inc. February 2013.

AECOM. 2015. Remedial Investigation Report. Draft. Benning Road Facility. Prepared for Pepco Holdings, Inc. April 2015. In progress.

Amrhein, J.F., C.A. Stow, and J. Wible. 1999. Whole-Fish versus Filet Polychlorinated-Biphenyl Concentrations: An Analysis using Classification and Regression Tree Models. *Environmental Toxicology and Chemistry*, 18(8): 1817–1823.

ATSDR. 2012. Toxicological Profile for Chromium. U.S. Department of Health and Human Services. Public Health Service, Agency for Toxic Substances and Disease Registry, September.

Bayen, Stéphane, Barlow, Philip, Lee, Hian Kee and Obbard, Jeffrey Philip. 2005. "Effect of Cooking on the Loss of Persistent Organic Pollutants from Salmon". *Journal of Toxicology and Environmental Health, Part A*, 68:253-265.

Bierkens, J, M. V. Holderbeke, C. Cornelius, and R. Torfs. 2011. Exposure Through Soil and Dust Ingestion. In *Dealing With Contaminated Sites*. F.A. Swartjes, Ed. Springer Science and Business Media.

Bodishbaugh DF, ML Moore, and KL Godtfredsen. 2003. Congener composition of environmental PCB mixtures: An empirical analysis. SETAC Conference, November 11, 2003. Society of Environmental Toxicology and Chemistry, Pensacola, FL.



Bradley, L.J.N. 1996. New Toxicology Data for Chloroform: Implications for the Pulp and Paper Industry. Proceedings of the International Environmental Conference of the Technical Association of the Pulp and Paper Industry.

Burman, B and K.R. Rygwelski. 2006. Derivation of a Hypothetical Lake Michigan Lake Trout Fish Consumption Criteria for PCBs. Appendix 3.4.1, Results of the Lake Michigan Mass Balance Project: Polychlorinated Biphenyls Modeling Report. US Environmental Protection Agency, Office of Research and Development. EPA-600/R-04/167, December.

Burmaster, D.E. and R.H. Harris. 1993. The magnitude of compounding conservatism in Superfund risk assessments. Risk Analysis 13:131-134.

CalEPA. 2015. OEHHA Toxicity Criteria Database. California Environmental Protection Agency, Office of Environmental Health Hazard Assessment.

[URL: <http://www.oehha.ca.gov/risk/ChemicalDB/index.asp>] and [URL: <http://www.oehha.ca.gov/air/allrels.html>]

Carlson, E.A., C. McCulloch, A. Koganti, S. Goodwin, T. Sutter, and J. Silkworth. 2009. Divergent Transcriptomic Responses to Aryl Hydrocarbon Receptor Agonists Between Rat and Human Primary Hepatocytes. Toxicol Sciences 112(1):257-272.

CDM. 2003. Final (Revised) Baseline Human Health Risk Assessment – Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site (BHHRA). Prepared on behalf of the MDEQ Remediation and Redevelopment Division. May 2003.

Chaudhuri, IS, J Bleiler, P Hugh, and B Williams. 2003. Risk Assessment of PCBs Based on Dioxin Equivalency and Total Aroclors. Organohalogen Compounds, Volumes 60-65, Dioxin 2003. Boston, MA.

Cogliano, V.J. 1998. Assessing the Cancer Risk from Environmental PCBs. Environ. Health Perspectives 106(6):317-323.

Connelly, N.A., and T.L. Brown. 1995. Use of Angler Diaries to Examine Biases Associated with 12-Month Recall on Mail Questionnaires. Transactions of the American Fisheries Society 124:413-422.

Cullen, A.C. 1994. Measures of compounding conservatism in probabilistic risk assessment. Risk Anal. 14(4):389-93.

DOEE. 2008. Anacostia 2032: Plan for a Fishable and Swimmable Anacostia River. May 2008. <http://green.dc.gov/sites/default/files/dc/sites/ddoe/publication/attachments/Anacostia2032.pdf>



DOEE. 2013. Title 21 of the District of Columbia Municipal Regulations, Chapter 11, Water Quality Standards. Effective November 1, 2013

DOEE. 2014a. Fishing in the District. Public Health Advisory. <http://green.dc.gov/service/fishing-district>.

DOEE. 2014b. District of Columbia Water Quality Assessment. 2014 Integrated Report to the USEPA and Congress Pursuant to Sections 305(b) and 303(d) Clean Water Act. Water Quality Division.

Davis, S. and C. Mirick. 2006. Soil ingestion in children and adults in the same family. *Journal of Exposure Science and Environmental Epidemiology*. 16(1):63-75.

Dorevitch, S., *et al.* 2011. Water ingestion during water recreation. *Water Research* 45(5): 2020-8.

Dufour, A.P., O. Evans, T.D. Behymer, and R. Cantu. 2006. Water ingestion during swimming activities in a pool: a pilot study. *J. Water Health* 4:425-430.

Ema, M., N. Matsushita, K. Sogawa, T. Ariyama, J. Inazawa, T. Nemoto, M. Ota, M. Oshimura, and Y. Fuji-Kuriyama. 1994. Human aryl hydrocarbon receptor: functional expression and chromosomal assignment to 7p21. *J Biochem*. 116(4):845-851.

Fan, M.Q., A.R. Bell, D.R. Bell, S. Clode, A. Fernandes, P.M. Foster, J.R. Fry, T. Jiang, G. Loizou, A. MacNicoll, B.G. Miller, M. Rose, O. Shaikh-Omar, L. Tran, and S. White. 2009. Recombinant expression of aryl hydrocarbon receptor for quantitative ligand-binding analysis. *Anal Biochem*. 15;384(2):279-287.

Fish, P. and J. Savitz. 1983. Variations in Home Ranges of Largemouth Bass, Yellow Perch, Bluegills, and Pumpkinseeds in an Illinois Lake. *Transactions of the American Fisheries Society*, 112/2a: 147–153.

Fisher, W.L., A.E. Grambsch, D.L. Eisenhower, and D.R. Morganstein. 1991. Length of Recall Period and Accuracy of Estimates from the National Survey of Fishing, Hunting, and Wildlife-Associated Recreation. Pages 367-374 in D. Guthrie, J. M. Hoenig, M. Holliday, C. M. Jones, M. J. Mills, S. A. Moberly, K. H. Pollack, and D. R. Talhelm, editors. *Creel and angler surveys in fisheries management*. American Fisheries Society, Symposium 12, Bethesda, Maryland.

Flaveny, C.A. and G.H. Perdew. 2009. Transgenic Humanized AHR Mouse Reveals Differences between Human and Mouse AHR Ligand Selectivity. *Mol Cell Pharmacol*. 1(3):119-123.



- Fries, G.F. and G.S. Marrow, and C.J. Somich. 1989. Oral Bioavailability of Aged Polychlorinated Biphenyl Residues Contained in Soil. *Bull. Environ. Contam. Toxicol.* 43:683-690.
- Fritz, F. and C. Weiss. 2009. Anacostia River: Summary of Six Possible Sources of Sediment Contamination. Memorandum prepared by USEPA Region 3, Assistant Regional Counsels. October 21, 2009.
- Fryar, C.D., Q. Gu, and C.L. Ogden. 2012. Anthropometric reference data for children and adults: United States, 2007-2010. National Center for Health Statistics. *Vital Health Stat* 11(252).
- Gibson, J.C. 2005. Fish Consumption Advisories in Tributaries to the Chesapeake Bay: Improving the Communication of Risk to Washington, DC Anglers. Virginia State University, Blacksburg, VA.
- Gibson J.C., McClafferty J.A. 2005. Chesapeake Bay Angler Interviews: Identifying Populations at Risk for Consuming Contaminated Fish in Three Regions of Concern. Blacksburg, VA: Virginia Polytechnic Institute and State University. Final Report CMI-HDD-05-01.
- GLFATF. 1993. Protocol for a Uniform Great Lakes Sport Fish Consumption Advisory. Great Lakes Fish Advisory Task Force. September.
- Golden R and Kimbrough R. 2009. Weight of evidence evaluation of potential human cancer risks from exposure to polychlorinated biphenyls: an update based on studies published since 2003. *Crit. Rev. Toxicol.* 39:299-331.
- Golden R, Doull J, Waddell W, Mandel J. 2003. Potential human cancer risks from exposure to PCBs: a tale of two evaluations. *Crit. Rev. Toxicol.* 33:543–580.
- Harris, S.A., Urton, A, Turf, E., Monti, M.M. 2009. Fish and Shellfish Consumption Estimates and Perceptions of Risk in a Cohort of Occupational and Recreational Fishers of the Chesapeake Bay. *Environmental Research*, Volume 109, Issue 1, Pages 108-115.
- Hayward, H. C. and C. Buchanan. 2007. Total maximum daily loads of polychlorinated biphenyls (PCBs) for tidal portions of the Potomac and Anacostia rivers in the District of Columbia, Maryland, and Virginia. Interstate Commission on the Potomac River Basin. ICPRB Report 07-7. Rockville, MD. October 2007.
- Hori, Tsuguhide, Nakagawa, Reiko, Tobiishi, Kazuhiro, Iida, Takao, Tsutsumi, Tomoaki, Sasaki, Kumiko, and Toyoda, Masatake. 2005. "Effects of Cooking on Concentrations of Polychlorinated Dibenzo-P-Dioxins and Related Compounds in Fish and Meat". *Journal of Agricultural and Food Chemistry* 53:8820-8828.

Judd NL, Karr JR, Griffith WC, Faustman EM. 2003. Challenges in defining background levels for human and ecological risk assessments. *Human Ecol Risk Assess* 9:1623-1632.

Keenan, R. and Samuelian. JH. 2005. "Is TEQ Enrichment of PCBs in Fish Tissue a Common Phenomenon?" Conference Proceedings of Dioxin 2005. Toronto, Ontario. pp. 1763-1765.

Larsson, M., M. van den Berg, P. Brenerova, M. van Duursen, K. van Ede, C. Lohr, S. Luecke-Johansson, M. Machala, S. Naser, K. Pencikova, L. Poellinger, D. Schrenk, S. Strapakova, J. Vondracek, and P.L. Andersson. 2015. Consensus Toxicity Factors for Polychlorinated Dibenzo-p-dioxins, Dibenzofurans, and Biphenyls Combining in Silico Models and Extensive in Vitro Screening of AhR-Mediated Effects in Human and Rodent Cells. *Chem. Res. Toxicol.* 28 (4): 641–650.

Linz, DG, and D Nakles. eds. 1997. Environmentally Acceptable Endpoints in Soil. Risk-Based Approach to Contaminated Site Management Based on Availability of Chemicals in Soil. American Academy of Environmental Engineers. United Book Press Inc. (publ). U.S.

Mayes, B.A., E.E. McConnell, B.H. Nel, J.J. Brunner, S.B. Hamilton, T.M. Sullivan, A.C. Perters, M.J. Ryan, J.D. Toft, A.W. Singer, J.F. Brown, R.G. Menton, and J.A. Moore. 1998. Comparative carcinogenicity in Sprague-Dawley rats of the polychlorinated biphenyl mixture Aroclors 1016, 1242, 1254, and 1260. *Toxicol. Sci.* 41:62-76.

MDE. 2012. Database query for contaminant concentrations in fish tissue collected from the Anacostia River, 2002 to 2010. John Hill, Environmental Specialist, Maryland Department of Environment. May 21, 2012.

MDE. 2014. Maryland Fish Consumption Advisories. April.  
<http://www.mde.state.md.us/programs/marylander/citizensinfocenterhome/pages/citizensinfocenter/fishandshellfish/index.aspx>

MDNR. 2014. 2013 Maryland Fishery Management Plan Report. Section 9: Maryland Catfish Species. [http://dnr2.maryland.gov/fisheries/Documents/Section\\_9\\_Catfish.pdf](http://dnr2.maryland.gov/fisheries/Documents/Section_9_Catfish.pdf).

Mayes, B.A., G.L. Brown, F.J. Mondello, K.W. Holtzclaw, S.B. Hamilton, and A.A. Ramsey. 2002. Dermal absorption in rhesus monkeys of polychlorinated biphenyls from soil contaminated with Aroclor 1260. *Regul. Toxicol. Pharmacol.* 35(3):289-295.

Moya J, Garrahan G, Poston TM, and Durell GS. 1998. Effects of Cooking on Levels of PCBs in the Fillets of Winter Flounder. *Bull. Environ. Contam. Toxicol.* 60:845-851.



- Murray, D.M., and Burmaster, D.E. 1994. Estimated distributions for average daily consumption of total and self-caught fish for adults in Michigan angler households. *Risk Anal* 14(4): 513-519.
- Nichols, A.L. and R.J. Zeckhauser. 1988. The perils of prudence: how conservative risk assessment distort regulation. *Regul. Toxicol. Pharmacol.* 8:61-75.
- NOAA. 2012. Blue crab – fish facts. National Oceanic and Atmospheric Administration. Chesapeake Bay Office. Updated August 2012. <http://chesapeakebay.noaa.gov/fish-facts/blue-crab>
- Oomen, A.G., Sips, A.J.A.M, Groten, J.P., Sijm, D.T.H.M., Tolls, J. 2000. Mobilization of PCBs and Lindane from Soil during in-Vitro Digestion and their Distribution among bile salt micelles and proteins of human digestive fluid and the soil. *Environ. Sci. Technol.* 2000, 34, 297-303.
- OpinionWorks. 2012. Addressing the Risk: Understanding the Changing Anglers' Attitudes about the Dangers of Consuming Anacostia River Fish.
- Özkaynak, H; Xue, J; Zartarian, VG; Glen, G; Smith, L., 2010 Modeled estimates of soil and dust ingestion rates for children. *Risk Anal* 31(4):592–608.
- Peters, A.K., Leonards, P.E., Zhao, B., Bergman, A., Denison, M.S., Van den Berg, M. 2006. Determination of in vitro relative potency (REP) values for mono-ortho polychlorinated biphenyls after purification with active charcoal. *Toxicology Letters* 165, 230-241.
- Pinkney, AE, Dobony, CA, Brown, PD. 2001. Analysis of Contaminant Concentrations in Fish Tissue Collected from the Waters of the District of Columbia. Final Report. CBFO-C01-01. U.S. Fish and Wildlife Service, Chesapeake Bay Field Office, Annapolis, MD. August 2001.
- Pinkney, AE. 2009. Analysis of Contaminant Concentrations in Fish Tissue Collected from the Waters of the District of Columbia. Final Report. CBFO-C08-03. U.S. Fish and Wildlife Service, Chesapeake Bay Field Office, Annapolis, MD. March 2009.
- Pinkney, A.E. 2014. Analysis of contaminant concentrations in fish tissue collected from the waters of the District of Columbia. Final Report. CBFO-C14-03. U.S. Fish and Wildlife Service, Chesapeake Bay Field Office, Annapolis, MD. September 2014.
- RETEC, 2002. Final Baseline Human Health and Ecological Risk Assessment: Lower Fox River and Green Bay, Wisconsin Remedial Investigation and Feasibility Study. Prepared for Wisconsin Department of Natural Resources.





Roy, T.A., J.J. Yang, A.J. Krueger, C.R. Mackerer. 1990. Percutaneous Absorption of Neat 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) and TCDD Sorbed on Soils. *Toxicology* 10(1):308.

Sakaris, P.C., Jesien, R.V., Pinkney, A.E. 2005. Brown Bullhead as an Indicator Species: Seasonal Movement Patterns and Home Ranges within the Anacostia River, Washington, DC. *Transactions of the American Fisheries Society* 134: 1262-1270.

Schechter, Arnold, Dellarco, Michael, Papke, Olaf, Olson, James. 1998. "A Comparison of Dioxins, Dibenzofurans and Coplanar PCBs in Uncooked and Broiled Ground Beef, Catfish and Bacon". *Chemosphere* 37:1723-1730.

Shields, P.G. 2006. Understanding Population and Individual Risk Assessment: The Case of Polychlorinated Biphenyls. *Cancer Epidemiol Biomarkers Prev* 15(5):830-839. May 2006.

Shoaf MB, Shirai JH, Kedan G, Schaum J, Kissel JC. 2005. Child dermal sediment loads following play in a tide flat. *J Expos Anal Environ Epidemiol* 15:407-412.

Shor, LM, DS Kosson, KJ Rockne, LY Young, and GL Taghorn. 2004. Combined effects of contaminant desorption and toxicity on risk from PAH contaminated sediments. *Risk Analysis* 24(5): 1109-1120. Spalt, EW, JC Kissel, JH Shirai, and AL Bunge. 2009. Dermal absorption of environmental contaminants from soil and sediment: a critical review. *Journal of Exposure Science and Environmental Epidemiology* 19(2):119-48.

Skea JC, Simonin HA, Harris EJ, Jackling S, and Spagnoli JJ. 1979. Reducing levels of mirex, aroclor 1254, and DDE by trimming and cooking Lake Ontario brown trout (*Salmo trutta* L.) and smallmouth bass (*Micropterus dolomieu* lacepede). *J Great Lakes Res.* 5(2):153-159.

Skinner, L.C., B. Trometer, A. Gudlewski, B. Buanno, and J. Bourbon. 2009. Data Report for Residues of Organic Chemicals and Four Metals in Edible Tissues and Whole Fish for Fish Taken from the Buffalo River, New York. Prepared by NYSDEC, US Fish and Wildlife, and USEPA. October.

Stanek, EJ; Calabrese, EJ. 1995. Soil ingestion estimates for use in site evaluations based on the best tracer method. *Hum Ecol Risk Assess* 1(3):133-156.

Stanek, E.J., and E.J. Calabrese. 2000. Daily soil ingestion estimates for children at a Superfund Site. *Risk Analysis* 20(5):627-635.



Stanek, E.J., E.J. Calabrese, and R.M. Barnes. 1999. Soil ingestion estimates for children in Anaconda using trace element concentrations in different particle size fractions. *Human and Ecologic Risk Assessment* 5:547-558.

Stanek, E.J., E.J. Calabrese, R. Barnes and P. Pekow. 1997. Soil ingestion in adults – Results of a second pilot study. *Toxicol. Environ Safety* 36:249-257.

SRC and NOAA. 2000. Interpretive summary of existing data relevant to potential contaminants of concern within the Anacostia River watershed. Syracuse Research Corporation, North Syracuse, NY and National Oceanic and Atmospheric Administration, Seattle, WA. June.

Sullivan, M.P. and W.E. Brown, 1988. The Tidal Anacostia Model - Documentation of the hydrodynamics and water quality parameters. Prepared for the DC Dept. of Consumer and Reg. Affairs by the Metropolitan Washington Council of Governments, Washington, DC.

Sutter, C.H., Bodreddigari, S., Sutter, T.R., Carlson, E.A., Silkworth, J.B., 2010. Analysis of the CYP1a1 mRNA dose-response in human keratinocytes indicates that relative potencies of dioxins, furans, and PCBs are species and congener specific. *Toxicol. Sci.* 118, 704-715.

TetraTech. 2009. Final Site Inspection Report for the Benning Road Site, Washington, D.C. Prepared for U.S. Environmental Protection Agency, Region 3, Philadelphia, PA. Prepared by TetraTech, Boothwyn, PA. Document Tracking No. 0763. June 30, 2009.

TetraTech. 2014. Anacostia River Sediment Project Remedial Investigation Work Plan. Draft. Prepared for District of Columbia, Department of Energy and Environment. Prepared by TetraTech, Reston, VA.

January 29, 2014. Trnovec, T., Jusko, T.A., Šovčíková, E., Lancz, K., Chovancová, J., Patayová, H., Palkovicová, L., Drobná, B., Langer, P., Van den Berg, M., Dedik, L., Wimmerová, S. 2013. Relative effect potency estimates of dioxin-like activity for dioxins, furans, and dioxin-like PCBs in adults based on two thyroid outcomes. *Environ. Health Perspect.* 121, 886-892.

USEPA. 1986. Guidelines for Carcinogen Risk Assessment. Federal Register 51 (Federal Register 51(185):33992–34003. Available from: <http://www.epa.gov/ncea/raf/>.

USEPA. 1989a. Risk Assessment Guidance for Superfund: Volume I. Human Health Evaluation Manual (Part A). Interim Final. Office of Emergency and Remedial Response. U.S. Environmental Protection Agency, Washington, D.C. EPA 540/1-89/002.

USEPA. 1989b. Assessing Human Health Risks from Chemically Contaminated Fish and Shellfish: A Guidance Manual. EPA/503-8-89-002. US Environmental Protection Agency, Washington, DC.

USEPA. 1990. National Oil and Hazardous Substances Pollution Contingency Plan. Final Rule. 55FR8666. March 8.

USEPA. 1991. Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions. OSWER Directive #9355.0-30. April.

USEPA. 1992a. Guidance for data useability in risk assessments (Part A). PB92 - 963356. [online]. Office of Emergency and Remedial Response, US Environmental Protection Agency, Washington, DC. Available from: <http://www.epa.gov/oswer/riskassessment/datause/parta.htm>.

USEPA. 1992b. Guidelines for exposure assessment. Federal register notice, vol. 57, no. 104, pp. 22888-22938. US Environmental Protection Agency, Washington, DC.

USEPA. 1992c. Supplemental Guidance to RAGS: Calculating the Concentration Term. Publ. 9285.8-081. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC.

USEPA. 1992d. Draft report: a cross-species scaling factor for carcinogen risk assessment based on equivalence of mg/kg3/4/day. Federal Register 57(109):24152-24173.

USEPA. 1993a. Selecting exposure routes and contaminants of concern by risk-based screening. EPA/903/R-93-001. Hazardous Waste Management Division, US Environmental Protection Agency Region 3, Philadelphia, PA.

USEPA. 1993b. Reference Dose (RfD): Description and Use in Health Risk Assessments, Background Document 1A. March 15, 1993. [<http://www.epa.gov/iris/rfd.htm>]

USEPA. 1993c. An SAB Report: Superfund Site Health Risk Assessment Guidelines. EPA-SAB-EHC-93-007. Science Advisory Board, US Environmental Protection Agency, Washington, DC.

USEPA. 1993d. Superfund's Standard Default Exposure Factors for the Central Tendency and Reasonable Maximum Exposure. Preliminary Review Draft, May 5, 1993.

USEPA. 1994. Natural Attenuation of Hexavalent Chromium in Groundwater and Soil. C. Palmer and R. Puls. Office of Research and Development, Office of Solid Waste and Emergency Response. EPA/540/5-94/505. October.



USEPA. 1995. Land Use in the CERCLA Remedy Selection Process. Memorandum from Elliott P. Laws to regional EPA directors. OSWER directive no. 9355.8-04. US Environmental Protection Agency, Washington, DC.

USEPA. 1996. PCBs: Cancer dose-response assessment and application to environmental mixtures. EPA/600/P-96/001F. Office of Pollution Prevention and Toxics, US Environmental Protection Agency, Washington, DC.

USEPA. 1997a. Health effects assessment summary tables (HEAST). EPA 540-R-94-020. Office of Research and Development, US Environmental Protection Agency, Washington, DC.

USEPA. 1997b. Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action and Underground Storage Tank Sites. EPA OSWER Directive 9200.4-17. Interim Final. December 1, 1997.

USEPA. 1998. EPA guidance for conducting fish and wildlife consumption surveys. EPA 823-B-98-007. Office of Water, US Environmental Protection Agency, Washington, DC.

USEPA. 2000. Guidance for assessing chemical contaminant data for use in fish advisories. Volume 2: Risk assessment and fish consumption limits. Third ed. EPA 823-B-00-008. US Environmental Protection Agency, Washington, DC.

USEPA, 2001. Site Awaiting NPL Decision (SAND) Factsheet. Sprague Town Disposal Facility. [http://yosemite.epa.gov/r1/npl\\_pad.nsf/8b160ae5c647980585256bba0066f907/ec43e00f47e47e9885256b42006061c9!OpenDocument](http://yosemite.epa.gov/r1/npl_pad.nsf/8b160ae5c647980585256bba0066f907/ec43e00f47e47e9885256b42006061c9!OpenDocument)

USEPA. 2002a. Principles for managing contaminated sediment risks at hazardous waste sites. OSWER Directive 9285.6-08. Memorandum from M. Horinko dated February 12, 2002. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC.

USEPA. 2002b. Calculating upper confidence limits for exposure point concentrations at hazardous waste sites. Office of Emergency and Remedial Response, US Environmental Protection Agency, Washington, DC.

USEPA. 2002c. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC.



- USEPA. 2002d. Guidance for comparing background and chemical concentrations in soil for CERCLA sites. EPA 540-R-01-003. OSWER 9285.8-41. Office of Emergency and Remedial Response, US Environmental Protection Agency, Washington, DC.
- USEPA. 2002e. Role of background in the CERCLA cleanup program. OSWER 9285.6-07P. Office of Solid Waste and Emergency Response, Office of Emergency and Remedial Response, US Environmental Protection Agency, Washington, DC.
- USEPA. 2002f. A Review of the Reference Dose and Reference Concentration Processes. Prepared for the Risk Assessment Forum by Reference Dose/Reference Concentration Technical Panel. EPA/630/P-02/002F. Final Report. December.
- USEPA. 2003a. Human Health Toxicity Values in Superfund Risk Assessments. Office of Superfund Remediation and Technology Innovation. OSWER Directive 9285.8-53. December 5, 2003.
- USEPA. 2003b. Recommendations of the Technical Review Workgroup for Lead for an Approach to Assessing Risks Associated with Adult Exposures to Lead in Soil. Final. EPA-540-R-03-001. January.
- USEPA. 2004a. Risk assessment guidance for Superfund: volume 1—Human health evaluation manual (Part E, supplemental guidance for dermal risk assessment). Final, July 2004. EPA/540/R/99/005. Office of Emergency and Remedial Response, US Environmental Protection Agency, Washington, DC.
- USEPA. 2004b. Example Exposure Scenarios. EPA/600/R-03/036. Center for Environmental Assessment, US Environmental Protection Agency, Washington, DC.
- USEPA. 2005a. Contaminated Sediment Remediation Guidance for Hazardous Waste Sites. OSWER 9355.0-85. EPA-540-R-05-012. US Environmental Protection Agency, Office of Solid Waste and Emergency Response Washington, DC.
- USEPA. 2005b. Guidelines for carcinogen risk assessment. EPA/630/P-03/001F. Risk Assessment Forum, US Environmental Protection Agency, Washington, DC.
- USEPA. 2005c. Supplemental guidance for assessing susceptibility from early-life exposure to carcinogens. EPA/630/R/03/003F. Risk Assessment Forum, US Environmental Protection Agency, Washington, DC.



USEPA. 2005d. Memorandum: Response to Ecological Risk Assessment Forum Request for Information on the Benefits of PCB Congener-Specific Analysis, David Cleverly, NCEA-C-13 15. ERASC-002F. US Environmental Protection Agency. Office of Research and Development, Ecological Risk Assessment Support Center, Cincinnati, OH. March.

USEPA. 2006. Provisional Peer Reviewed Toxicity Values for Aluminum. Superfund Health Risk Technical Support Center. National Center for Environmental Assessment. Office of Research and Development. U.S. Environmental Protection Agency. Cincinnati, OH 45268. October 23, 2006.

USEPA. 2008. Provisional Peer Reviewed Toxicity Values for Cobalt. Superfund Health Risk Technical Support Center. National Center for Environmental Assessment. Office of Research and Development. U.S. Environmental Protection Agency. Cincinnati, OH 45268. August 25, 2008.

USEPA. 2009. National Recommended Water Quality Criteria. Human Health Criteria Table. Consumption of organisms only.

<http://water.epa.gov/scitech/swguidance/standards/criteria/current/index.cfm>

USEPA. 2010. Recommended Toxicity Equivalence Factors (TEFs) for Human Health Risk Assessments of 2,3,7,8-Tetrachlorodibenzo-p-dioxin and Dioxin-Like Compounds. Risk Assessment Forum, Washington, DC. EPA/600/R-10/005. December.

USEPA. 2011. Exposure Factors Handbook: 2011 edition. EPA/600/R-09-052F. National Center for Environmental Assessment, US Environmental Protection Agency, Washington, DC.

USEPA. 2012a. Provisional Peer Reviewed Toxicity Values for Thallium and Compounds. Superfund Health Risk Technical Support Center. National Center for Environmental Assessment. Office of Research and Development. U.S. Environmental Protection Agency. Cincinnati, OH 45268. October 25, 2012. <http://hhprrtv.onl.gov/>

USEPA. 2012b. Recommendations for Default Value for Relative Bioavailability of Arsenic in Soil. OSWER Directive 9200.1-113. USEPA, December 2012.

USEPA. 2013a. Tier 3 Toxicity Value White Paper. Regional Tier 3 Toxicity Value Workgroup, OSWER Human Health Regional Risk Assessors Forum. OSWER 9285.8-86. May 16, 2013.

USEPA. 2013b. ProUCL Version 5.0.00. Statistical software for environmental applications for data sets with and without nondetect observations [online]. Technical Support Center for Monitoring and Site Characterization, US Environmental Protection Agency. Updated September 19, 2013. Available from: [<http://www.epa.gov/osp/hstl/tsc/software.htm>].



- USEPA. 2013c. ProUCL Version 5.0.00. Technical Guide (draft). EPA/600/R-07/041. Office of Research and Development, US Environmental Protection Agency, Washington, DC. September 2013. Available from: <http://www.epa.gov/osp/hstl/tsc/software.htm>.
- USEPA. 2013d. ProUCL Version 5.0.00 User Guide). EPA/600/R-07/041. Office of Research and Development, US Environmental Protection Agency, Washington, DC. September 2013. Available from: <http://www.epa.gov/osp/hstl/tsc/software.htm>.
- USEPA. 2014. Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors. OSWER Directive 9200.1-120. Assessment and Remediation Division, Office of Superfund Remediation and Technology Innovation, US Environmental Protection Agency, Washington, DC. February 6, 2014.
- USEPA. 2015a. Regional Screening Level (RSL) Master Table, November 2015 [online]. US Environmental Protection Agency. Available from: [http://www.epa.gov/reg3hwmd/risk/human/rb-concentration\\_table/Generic\\_Tables/index.htm](http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/index.htm).
- USEPA. 2015b. Regional screening level (RSL) Calculator, November 2015 [online]. US Environmental Protection Agency. Available from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search).
- USEPA. 2015c. Provisional Peer Reviewed Toxicity Values (PPRTVs). Superfund Health Risk Technical Support Center, National Center for Environmental Assessment (NCEA), U.S. Environmental Protection Agency, Cincinnati, OH. [<http://hhpprtv.ornl.gov/>]
- USEPA. 2015d. Vapor Intrusion Screening Level (VISL) Calculator. Version 3.4, June 2015 RSLs. <http://www2.epa.gov/vaporintrusion>
- USEPA. 2016. Integrated Risk Information System (IRIS) database [online]. Environmental Criteria and Assessment Office, US Environmental Protection Agency, Washington, DC. Available from: <http://www.epa.gov/ngispgm3/iris>.
- USGS. 2015. U.S. Geological Survey. National Water Information System: Web Interface. Surface Water Monthly Statistics for Northeast Branch Anacostia River at Riverdale, Maryland. USGS 01649500. <http://waterdata.usgs.gov/nwis>. Site visited on: 3/12/2015.
- Van den Berg et al. 2006. The 2005 World Health Organization Reevaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-Like Compounds. Toxicological Sciences 2006 93(2):223-241; doi:10.1093/toxsci/kfl055.



- Van Ede, K. 2014. *Uncertainties in Risk Assessment of Dioxin-Like Compounds*. Gildeprint Drukkerij, Enschede, The Netherlands. ISBN: 978-90-393-6213-6.
- Velinsky, DJ, Cummins, JD. 1996. *Distribution of Chemical Contaminants in 1993-1995 Wild Fish Species in the District of Columbia*. ICPRB Report 96-1. Interstate Commission on the Potomac River Basin, Rockville, MD.
- Westerink W. M., J.C. Stevenson, and W.G. Schoonen. 2008. Pharmacologic profiling of human and rat cytochrome P450 1A1 and 1A2 induction and competition. *Arch Toxicol.* 2008;82(12):909-21.
- Weston. 2005. *Human Health Risk Assessment GE/Housatonic River Site. Rest of River*. Prepared for US Army Corps of Engineers and USEPA Region 1. Volume IV, Appendix C. *Consumption of Fish and Waterfowl Human Health Risk Assessment*. February.
- Zabik, M.E., M.J. Zabik, and H. Humphrey. 1994. *Assessment of Contaminants in Five Species of Great Lakes Fish at the Dinner Table*. Final Report to the Great Lakes Protection Fund, Chicago, Illinois. March.
- Zabik, M.E., M.J. Zabik, A.M. Booren, M. Nettles, J.H. Song, R. Welch and H. Humphrey. 1995a. Pesticides and total polychlorinated biphenyls in Chinook salmon and carp harvested from the Great Lakes: Effects of skin-on and skin off processing and selected cooking methods. *J. Agric.Food Chem.* 43:993-1001.
- Zabik, M.E., M.J. Zabik, A.M. Booren, S. Daubenmire, M.A. Pascall, R. Welch, and H. Humphrey. 1995b. Pesticides and total polychlorinated biphenyls residues in raw and cooked walleye and white bass harvested from the Great Lakes. *Bull. Environ. Contam. Toxicol.* 54: 396-402.
- Zabik, M.E., A.M. Booren, M.J. Zabik, R. Welch, and H. Humphrey. 1996. Pesticide residues, PCBs and PAHs in baked, charbroiled, salt boiled, and smoked Great Lakes lake trout. *Food Chem.* 55 (3): 231-239.
- Zeiger M., R. Haag, J. Höckel, D. Schrenk, and H.J. Schmitz. 2001. Inducing effects of dioxin-like polychlorinated biphenyls on CYP1A in the human hepatoblastoma cell line HepG2, the rat hepatoma cell line H4IIE, and rat primary hepatocytes: comparison of relative potencies. *Toxicol Sci.* 2001 63(1):65-73.





## Tables

**Table 3-1**  
**On-site Surface Soil Samples**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Sample Location	Sample ID	Sample Date	Sample Type	Task Code	Start Depth (feet)	End Depth (feet)
SUS01	SUS0100N	2/4/2013	N	Phase1-2013	0.33	1
SUS01	SUS0100R	2/4/2013	FD	Phase1-2013	0.33	1
SUS02	SUS0200N	2/4/2013	N	Phase1-2013	0.33	0.83
SUS03	SUS0300N	2/4/2013	N	Phase1-2013	0.5	1
SUS04	SUS0400N	2/4/2013	N	Phase1-2013	0	1
SUS05	SUS0500N	2/4/2013	N	Phase1-2013	0	1
SUS06	SUS0600N	2/5/2013	N	Phase1-2013	0	1
SUS07	SUS0700N	2/5/2013	N	Phase1-2013	0	1
SUS08	SUS0800N	2/5/2013	N	Phase1-2013	0	1
SUS09	SUS0900N	2/5/2013	N	Phase1-2013	0	1
SUS10	SUS1000N	2/5/2013	N	Phase1-2013	0.5	1
SUS11	SUS1100N	2/5/2013	N	Phase1-2013	0	1
SUS12	SUS1200N	2/6/2013	N	Phase1-2013	0	1
SUS13	SUS1300N	2/5/2013	N	Phase1-2013	0	1
SUS14	SUS1400N	2/6/2013	N	Phase1-2013	0.17	1
SUS15	SUS1500N	2/6/2013	N	Phase1-2013	0.17	1
SUS16	SUS1600N	2/6/2013	N	Phase1-2013	0.5	1
SUS17	SUS1700N	2/6/2013	N	Phase1-2013	0.5	1
SUS18	SUS1800N	2/6/2013	N	Phase1-2013	0	1
SUS19	SUS1900N	2/6/2013	N	Phase1-2013	0.83	1
SUS20	SUS2000N	2/7/2013	N	Phase1-2013	0.42	1
SUS22	SUS2200N	6/13/2013	N	Phase1-2013	0.5	1
SUS23	SUS2300N	2/7/2013	N	Phase1-2013	0.5	1
SUS24	SUS2400N	2/7/2013	N	Phase1-2013	0	1
SUS25	SUS2500N	2/7/2013	N	Phase1-2013	0.5	1

**Notes:**

N = Normal sample  
FD = Field duplicate

**Table 3-2**  
**On-site Subsurface Soil Samples**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Sample Location	Sample ID	Sample Date	Sample Type	Task Code	Start Depth (feet)	End Depth (feet)
DP01	DPS0103N	5/20/2013	N	Phase2-2013	2.5	3.5
DP01	DPS0110N	5/20/2013	N	Phase2-2013	9.5	10.5
DP01	DPS0110N2	6/13/2013	N	Phase2-2013	9.5	10.5
DP01	DPS0115N	5/20/2013	N	Phase2-2013	14	15
DP02	DPS0205N	5/14/2013	N	Phase2-2013	4.5	5.5
DP02	DPS0210N	5/20/2013	N	Phase2-2013	9.5	10.5
DP02	DPS0210N2	6/13/2013	N	Phase2-2013	9.5	10.5
DP02	DPS0215N	5/20/2013	N	Phase2-2013	14.5	15.5
DP02	DPS0215N2	6/13/2013	N	Phase2-2013	14.5	15.5
DP03	DPS0305N	5/14/2013	N	Phase2-2013	4.5	5.5
DP03	DPS0310N	5/21/2013	N	Phase2-2013	9.5	10.5
DP03	DPS0310N2	6/11/2013	N	Phase2-2013	9.5	10.5
DP03	DPS0310R	5/21/2013	FD	Phase2-2013	9.5	10.5
DP03	DPS0315N	5/21/2013	N	Phase2-2013	14.5	15.5
DP04	DPS0403N	5/15/2013	N	Phase2-2013	2.5	3.5
DP04	DPS0410N	5/20/2013	N	Phase2-2013	9.5	10.5
DP04	DPS0415N	5/20/2013	N	Phase2-2013	14.5	15.5
DP05	DPS0505N	5/15/2013	N	Phase2-2013	4.5	5.5
DP05	DPS0505N2	6/12/2013	N	Phase2-2013	4.5	5.5
DP05	DPS0510N	5/21/2013	N	Phase2-2013	9.5	10.5
DP05	DPS0515N	5/21/2013	N	Phase2-2013	14.5	15.5
DP06	DPS0605N	5/15/2013	N	Phase2-2013	4.5	5.5
DP06	DPS0610N	5/22/2013	N	Phase2-2013	9.5	10.5
DP06	DPS0615N	5/22/2013	N	Phase2-2013	14.5	15.5
DP07	DPS0705N	5/15/2013	N	Phase2-2013	4.5	5.5
DP07	DPS0710N	5/22/2013	N	Phase2-2013	9.5	10.5
DP07	DPS0715N	5/22/2013	N	Phase2-2013	14.5	15.5
DP07	DPS0715N2	6/12/2013	N	Phase2-2013	14.5	15.5
DP08	DPS0803N	5/15/2013	N	Phase2-2013	2.5	3.5
DP08	DPS0810N	5/23/2013	N	Phase2-2013	9.5	10.5
DP08	DPS0815N	5/23/2013	N	Phase2-2013	14.5	15.5
DP09	DPS0905N	5/17/2013	N	Phase2-2013	4.5	5.5
DP09	DPS0910N	6/11/2013	N	Phase2-2013	9.5	10.5
DP09	DPS0915N	6/11/2013	N	Phase2-2013	14.5	15.5
DP10	DPS1005N	5/15/2013	N	Phase2-2013	4.5	5.5
DP10	DPS1010N	6/10/2013	N	Phase2-2013	9.5	10.5
DP10	DPS1015N	6/10/2013	N	Phase2-2013	14.5	15.5
DP11	DPS1105N	5/14/2013	N	Phase2-2013	4.5	5.5
DP11	DPS1110N	5/28/2013	N	Phase2-2013	9.5	10.5
DP11	DPS1115N	5/28/2013	N	Phase2-2013	14.5	15.5
DP12	DPS1205N	6/13/2013	N	Phase2-2013	4.5	5.5
DP12	DPS1210N	6/13/2013	N	Phase2-2013	9.5	10.5
DP12	DPS1215N	6/13/2013	N	Phase2-2013	14.5	15.5
DP13	DPS1305N	5/20/2013	N	Phase2-2013	4.5	5.5
DP13	DPS1310N	5/29/2013	N	Phase2-2013	9.5	10.5
DP13	DPS1315N	5/29/2013	N	Phase2-2013	14.5	15.5
DP14	DPS1403N	5/22/2013	N	Phase2-2013	2.5	3.5
DP14	DPS1410N	6/6/2013	N	Phase2-2013	9.5	10.5
DP14	DPS1415N	6/6/2013	N	Phase2-2013	14.5	15.5
DP15	DPS1504N	5/21/2013	N	Phase2-2013	3.5	4.5
DP15	DPS1510N	6/6/2013	N	Phase2-2013	9.5	10.5
DP15	DPS1515N	6/10/2013	N	Phase2-2013	14.5	15.5
DP16	DPS1605N	5/15/2013	N	Phase2-2013	4.5	5.5
DP16	DPS1610N	6/10/2013	N	Phase2-2013	9.5	10.5
DP16	DPS1615N	6/10/2013	N	Phase2-2013	14.5	15.5
DP16	DPS1615R	6/10/2013	FD	Phase2-2013	14.5	15.5
DP17	DPS1705N	5/23/2013	N	Phase2-2013	4.5	5.5
DP17	DPS1710N	6/11/2013	N	Phase2-2013	9.5	10.5
DP17	DPS1715N	6/11/2013	N	Phase2-2013	14	15

**Table 3-2**  
**On-site Subsurface Soil Samples**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Sample Location	Sample ID	Sample Date	Sample Type	Task Code	Start Depth (feet)	End Depth (feet)
DP18	DPS1803N	5/23/2013	N	Phase2-2013	2.5	3.5
DP18	DPS1810N	6/4/2013	N	Phase2-2013	9.5	10.5
DP19	DPS1902N	5/23/2013	N	Phase2-2013	1.5	2.5
DP19	DPS1902R	5/23/2013	FD	Phase2-2013	1.5	2.5
DP19	DPS1910N	6/5/2013	N	Phase2-2013	9.5	10.5
DP19	DPS1915N	6/5/2013	N	Phase2-2013	14.5	15.5
DP19	DPS1915R	6/5/2013	FD	Phase2-2013	14.5	15.5
DP20	DPS2005N	5/30/2013	N	Phase2-2013	4.5	5.5
DP20	DPS2010N	6/12/2013	N	Phase2-2013	9.5	10.5
DP22	DPS2203N	5/22/2013	N	Phase2-2013	2.5	3.5
DP22	DPS2210N	6/12/2013	N	Phase2-2013	9.5	10.5
DP22	DPS2215N	6/12/2013	N	Phase2-2013	14.5	15.5
DP23	DPS2305N	5/28/2013	N	Phase2-2013	4.5	5.5
DP23	DPS2310N	6/12/2013	N	Phase2-2013	9.5	10.5
DP23	DPS2315N	6/12/2013	N	Phase2-2013	14.5	15.5
DP24	DPS2405N	5/20/2013	N	Phase2-2013	4.5	5.5
DP24	DPS2405R	5/20/2013	FD	Phase2-2013	4.5	5.5
DP24	DPS2410N	6/4/2013	N	Phase2-2013	9.5	10.5
DP24	DPS2410R	6/4/2013	FD	Phase2-2013	9.5	10.5
DP24	DPS2415N	6/4/2013	N	Phase2-2013	14.5	15.5
DP26	DPS2604N	3/28/2013	N	Phase2-2013	3.5	4.5
DP26	DPS2614N	3/29/2013	N	Phase2-2013	13.5	14.5
DP27	DPS2707N	3/26/2013	N	Phase2-2013	6.5	7.5
DP28	DPS2808N	4/2/2013	N	Phase2-2013	7.5	8.5
DP29	DPS2910N	4/2/2013	N	Phase2-2013	9	11
DP32	DPS3210N	4/1/2013	N	Phase2-2013	9.5	10.5
DP32	DPS3210R	4/1/2013	FD	Phase2-2013	9.5	10.5
DP33	DPS3315N	4/4/2013	N	Phase2-2013	14	16
DP34	DPS3405N	3/13/2013	N	Phase2-2013	4.5	5.5
DP35	DPS3515N	3/28/2013	N	Phase2-2013	14.5	15.5
DP36	DPS3605N	5/17/2013	N	Phase2-2013	4.5	5.5
DP36	DPS3610N	5/20/2013	N	Phase2-2013	9.5	10.5
DP36	DPS3610N2	6/13/2013	N	Phase2-2013	9.5	10.5
DP36	DPS3615N	5/20/2013	N	Phase2-2013	14.5	15.5
DP37	DPS3703N	5/16/2013	N	Phase2-2013	2.5	3.5
DP37	DPS3710N	5/23/2013	N	Phase2-2013	9.5	10.5
DP37	DPS3710N2	6/10/2013	N	Phase2-2013	9.5	10.5
DP37	DPS3715N	5/23/2013	N	Phase2-2013	14.5	15.5
DP38	DPS3805N	5/16/2013	N	Phase2-2013	4.5	5.5
DP38	DPS3810N	5/22/2013	N	Phase2-2013	9.5	10.5
DP38	DPS3815N	5/22/2013	N	Phase2-2013	14	15
DP39	DPS3903N	5/17/2013	N	Phase2-2013	2.5	3.5
DP39	DPS3910N	5/22/2013	N	Phase2-2013	9.5	10.5
DP39	DPS3915N	5/22/2013	N	Phase2-2013	14.5	15.5
DP40	DPS4003N	5/20/2013	N	Phase2-2013	2.5	3.5
DP40	DPS4010N	5/28/2013	N	Phase2-2013	9.5	10.5
DP40	DPS4010N2	6/10/2013	N	Phase2-2013	9.5	10.5
DP40	DPS4015N	5/28/2013	N	Phase2-2013	14.5	15.5
DP41	DPS41 10N	5/24/2013	N	Phase2-2013	9.5	10.5
DP41	DPS41 15N	5/24/2013	N	Phase2-2013	14.5	15.5
DP41	DPS4103N	5/22/2013	N	Phase2-2013	2.5	3.5
DP42	DPS4205N	5/21/2013	N	Phase2-2013	4.5	5.5
DP42	DPS4210N	5/29/2013	N	Phase2-2013	9.5	10.5
DP42	DPS4215N	5/29/2013	N	Phase2-2013	14.5	15.5
DP43	DPS4304N	5/17/2013	N	Phase2-2013	3.5	4.5
DP43	DPS4310N	6/7/2013	N	Phase2-2013	9.5	10.5
DP43	DPS4315N	6/7/2013	N	Phase2-2013	14.5	15.5
DP44	DPS4403N	5/21/2013	N	Phase2-2013	2.5	3.5
DP44	DPS4410N	6/10/2013	N	Phase2-2013	9.5	10.5

**Table 3-2  
On-site Subsurface Soil Samples  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019**

Sample Location	Sample ID	Sample Date	Sample Type	Task Code	Start Depth (feet)	End Depth (feet)
DP44	DPS4415N	6/10/2013	N	Phase2-2013	14.5	15.5
DP45	DPS4503N	5/23/2013	N	Phase2-2013	2.5	3.5
DP45	DPS4510N	6/4/2013	N	Phase2-2013	9.5	10.5
DP45	DPS4515N	6/4/2013	N	Phase2-2013	14.5	15.5
DP46	DPS4605N	5/22/2013	N	Phase2-2013	4.5	5.5
DP46	DPS4610N	6/5/2013	N	Phase2-2013	9.5	10.5
DP46	DPS4615N	6/5/2013	N	Phase2-2013	14.5	15.5
DP47	DPS4702N	5/28/2013	N	Phase2-2013	1.5	2.5
DP47	DPS4710N	6/5/2013	N	Phase2-2013	9.5	10.5
DP47	DPS4715N	6/5/2013	N	Phase2-2013	14	15
SB3	SBS0303N	3/13/2013	N	Phase2-2013	2.5	3.5
SUS21	SUS2100N	2/7/2013	N	Phase1-2013	1	1.75

**Notes:**

Soil samples collected at depths greater than 16 feet bgs were not included in the BHHRA data set.

N = Normal sample  
FD = Field duplicate

**Table 3-3**  
**Sediment Samples**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Sample Area	Selected to Represent Nearshore Conditions	Sample Location	Sample ID	Sample Date	Sample Type	Task Code	Start Depth (feet)	End Depth (feet)
Background		SEDBACK1	SEDBACK100N	12/3/2013	N	Phase2-2013	0	0.5
Background		SEDBACK11	SEDBACK1100N	11/15/2013	N	Phase2-2013	0	0.5
Background		SEDBACK12	SEDBACK1200N	11/14/2013	N	Phase2-2013	0	0.5
Background		SEDBACK12	SEDBACK1200R	11/14/2013	FD	Phase2-2013	0	0.5
Background		SEDBACK13	SEDBACK1300N	11/14/2013	N	Phase2-2013	0	0.5
Background		SEDBACK15	SEDBACK1500N	11/12/2013	N	Phase2-2013	0	0.5
Background		SEDBACK2	SEDBACK200N	12/3/2013	N	Phase2-2013	0	0.5
Background		SEDBACK2	SEDBACK200R	12/3/2013	FD	Phase2-2013	0	0.5
Background		SEDBACK3	SEDBACK300N	11/15/2013	N	Phase2-2013	0	0.5
Background		SEDBACK4	SEDBACK400N	11/14/2013	N	Phase2-2013	0	0.5
Background		SEDBACK5	SEDBACK500N	11/14/2013	N	Phase2-2013	0	0.5
Background		SEDBACK5	SEDBACK500R	11/14/2013	FD	Phase2-2013	0	0.5
Background		SEDBACK6	SEDBACK600N	11/15/2013	N	Phase2-2013	0	0.5
Waterside Area		SED1.5B	SED1.5B00N	11/6/2013	N	Phase2-2013	0	0.5
Waterside Area		SED10A	SED10A00N	11/11/2013	N	Phase2-2013	0	0.5
Waterside Area		SED10B	SED10B00N	11/11/2013	N	Phase2-2013	0	0.5
Waterside Area	Yes	SED10C	SED10C00N	11/11/2013	N	Phase2-2013	0	0.5
Waterside Area		SED1A	SED1A00N	11/6/2013	N	Phase2-2013	0	0.5
Waterside Area		SED1B	SED1B00N	11/6/2013	N	Phase2-2013	0	0.5
Waterside Area	Yes	SED1C	SED1C00N	11/7/2013	N	Phase2-2013	0	0.5
Waterside Area		SED2.5B	SED2.5B00N	11/7/2013	N	Phase2-2013	0	0.5
Waterside Area		SED2A	SED2A00N	11/6/2013	N	Phase2-2013	0	0.5
Waterside Area		SED2B	SED2B00N	11/5/2013	N	Phase2-2013	0	0.5
Waterside Area	Yes	SED2C	SED2C00N	11/6/2013	N	Phase2-2013	0	0.5
Waterside Area		SED3.5B	SED3.5B00N	11/12/2013	N	Phase2-2013	0	0.5
Waterside Area		SED3A	SED3A00N	11/7/2013	N	Phase2-2013	0	0.5
Waterside Area		SED3B	SED3B00N	11/8/2013	N	Phase2-2013	0	0.5
Waterside Area	Yes	SED3C	SED3C00N	11/7/2013	N	Phase2-2013	0	0.5
Waterside Area	Yes	SED3C	SED3C00R	11/7/2013	FD	Phase2-2013	0	0.5
Waterside Area		SED4.5B	SED4.5B00N	11/8/2013	N	Phase2-2013	0	0.5
Waterside Area		SED4A	SED4A00N	11/12/2013	N	Phase2-2013	0	0.5
Waterside Area		SED4B	SED4B00N	11/12/2013	N	Phase2-2013	0	0.5
Waterside Area		SED4B	SED4B00R	11/12/2013	FD	Phase2-2013	0	0.5
Waterside Area	Yes	SED4C	SED4C00N	11/12/2013	N	Phase2-2013	0	0.5
Waterside Area		SED5.5B	SED5.5B00N	11/12/2013	N	Phase2-2013	0	0.5
Waterside Area		SED5A	SED5A00N	11/8/2013	N	Phase2-2013	0	0.5
Waterside Area		SED5B	SED5B00N	11/8/2013	N	Phase2-2013	0	0.5
Waterside Area	Yes	SED5C	SED5C00N	11/11/2013	N	Phase2-2013	0	0.5
Waterside Area	Yes	SED6.5D	SED6.5D00N	11/25/2013	N	Phase2-2013	0	0.5
Waterside Area	Yes	SED6.5E	SED6.5E00N	11/25/2013	N	Phase2-2013	0	0.5
Waterside Area		SED6A	SED6A00N	11/13/2013	N	Phase2-2013	0	0.5
Waterside Area		SED6B	SED6B00N	11/13/2013	N	Phase2-2013	0	0.5
Waterside Area		SED6B	SED6B00R	11/13/2013	FD	Phase2-2013	0	0.5
Waterside Area	Yes	SED6C	SED6C00N	11/14/2013	N	Phase2-2013	0	0.5
Waterside Area	Yes	SED7.5D	SED7.5D00N	11/25/2013	N	Phase2-2013	0	0.5
Waterside Area	Yes	SED7.5E	SED7.5E00N	11/25/2013	N	Phase2-2013	0	0.5
Waterside Area		SED7A	SED7A00N	11/13/2013	N	Phase2-2013	0	0.5
Waterside Area		SED7B	SED7B00N	11/13/2013	N	Phase2-2013	0	0.5
Waterside Area		SED7B	SED7B00R	11/13/2013	FD	Phase2-2013	0	0.5
Waterside Area	Yes	SED7D	SED7D00N	11/25/2013	N	Phase2-2013	0	0.5
Waterside Area	Yes	SED7E	SED7E00N	11/25/2013	N	Phase2-2013	0	0.5
Waterside Area	Yes	SED7F	SED7F00N	11/25/2013	N	Phase2-2013	0	0.5
Waterside Area	Yes	SED7G	SED7G00N	1/30/2014	N	Phase2-2013	0	0.5
Waterside Area		SED8.5B	SED8.5B00N	11/13/2013	N	Phase2-2013	0	0.5
Waterside Area		SED8A	SED8A00N	11/13/2013	N	Phase2-2013	0	0.5
Waterside Area		SED8B	SED8B00N	11/13/2013	N	Phase2-2013	0	0.5
Waterside Area	Yes	SED8C	SED8C00N	11/14/2013	N	Phase2-2013	0	0.5
Waterside Area	Yes	SED8C	SED8C00R	11/14/2013	FD	Phase2-2013	0	0.5
Waterside Area		SED9.5B	SED9.5B00N	11/11/2013	N	Phase2-2013	0	0.5

**Table 3-3**  
**Sediment Samples**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Sample Area	Selected to Represent Nearshore Conditions	Sample Location	Sample ID	Sample Date	Sample Type	Task Code	Start Depth (feet)	End Depth (feet)
Waterside Area		SED9A	SED9A00N	11/11/2013	N	Phase2-2013	0	0.5
Waterside Area		SED9B	SED9B00N	11/11/2013	N	Phase2-2013	0	0.5
Waterside Area	Yes	SED9C	SED9C00N	11/11/2013	N	Phase2-2013	0	0.5
Waterside Area	Yes	WSED1	WSED100N	11/15/2013	N	Phase2-2013	0	0.5
Waterside Area	Yes	WSED1	WSED100R	11/15/2013	FD	Phase2-2013	0	0.5
Waterside Area	Yes	WSED2	WSED200N	11/15/2013	N	Phase2-2013	0	0.5

**Notes:**

N = Normal sample

FD = Field duplicate

**Table 3-4**  
**Surface Water Samples**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Sample Area	Sample Location	Sample ID	Sample Date	Sample Type	Task Code	Sample Depth (feet)
Background	SUWBACK1	SUWBACK1N	10/3/2013	N	Phase2-2013	0.5
Background	SUWBACK11	SUWBACK11N	9/25/2013	N	Phase2-2013	6.1
Background	SUWBACK12	SUWBACK12N	9/25/2013	N	Phase2-2013	1.8
Background	SUWBACK13	SUWBACK13N	9/25/2013	N	Phase2-2013	11.9
Background	SUWBACK15	SUWBACK15N	9/25/2013	N	Phase2-2013	5.15
Background	SUWBACK2	SUWBACK2N	10/3/2013	N	Phase2-2013	0.5
Background	SUWBACK3	SUWBACK3N	9/26/2013	N	Phase2-2013	1.5
Background	SUWBACK4	SUWBACK4N	9/26/2013	N	Phase2-2013	7.6
Background	SUWBACK5	SUWBACK5N	9/26/2013	N	Phase2-2013	5.1
Background	SUWBACK6	SUWBACK6N	9/26/2013	N	Phase2-2013	1.8
Waterside Area	SUW10B	SUW10BN	9/26/2013	N	Phase2-2013	7.3
Waterside Area	SUW1B	SUW1BN	9/23/2013	N	Phase2-2013	12.8
Waterside Area	SUW2B	SUW2BN	9/23/2013	N	Phase2-2013	5.3
Waterside Area	SUW3C	SUW3CN	9/23/2013	N	Phase2-2013	5.8
Waterside Area	SUW4B	SUW4BN	9/24/2013	N	Phase2-2013	5.7
Waterside Area	SUW5C	SUW5CN	9/24/2013	N	Phase2-2013	3.6
Waterside Area	SUW6B	SUW6BN	9/24/2013	N	Phase2-2013	9.8
Waterside Area	SUW6B	SUW6BR	9/24/2013	FD	Phase2-2013	9.8
Waterside Area	SUW7B	SUW7BN	9/24/2013	N	Phase2-2013	5.6
Waterside Area	SUW8B	SUW8BN	9/24/2013	N	Phase2-2013	7.9
Waterside Area	SUW9C	SUW9CN	9/25/2013	N	Phase2-2013	1.8

**Notes:**

N = Normal sample  
FD = Field duplicate



**Table 3-5**  
**Fish Tissue Samples**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Sample Collected By	Sample Area <sup>a</sup>	Collection Date	Species	Sample ID	Length Range (mm)	Number of Individuals Per Composite
DDOE	Lower Anacostia	2013	American eel	LAAE01O	227-286	4
DDOE	Lower Anacostia	2013	Blue catfish	LABC01O	476-503	4
DDOE	Lower Anacostia	2013	Carp	LACA01O	479-517	4
DDOE	Lower Anacostia	2013	Channel Catfish	LACC01O	432-440	4
DDOE	Lower Anacostia	2013	Largemouth Bass	LALB01O	326-335	4
DDOE	Lower Anacostia	2013	Sunfish	LASF01O	152-163	9
DDOE	Upper Anacostia	2013	Blue catfish	UABC01O	498-582	4
DDOE	Upper Anacostia	2013	Carp	LPCA01O	555-615	3
DDOE	Upper Anacostia	2013	Channel Catfish	UACC01O	394-436	4
DDOE	Upper Anacostia	2013	Largemouth Bass	UALB01O	362-372	3
DDOE	Upper Anacostia	2013	Sunfish	LASF01O	152-163	9
MDE	Upstream - Anacostia River - mainstem (ARBR location)	Sep-07	Pumpkinseed Sunfish	ANA_09112007_fish_pps	122	5
MDE	Upstream - Anacostia River - mainstem (ARBR location)	May-10	Blue catfish	2010FTC-ANAC-C	551	4
MDE	Upstream - Anacostia River - mainstem (ARBR location)	May-10	Blue catfish	2010FTC-ANAC-D	487	4
MDE	Upstream - Anacostia River - mainstem (ARBR location)	May-10	Channel Catfish	2010FTC-ANAC-B	402	5
MDE	Upstream - Anacostia River - mainstem (ARBR location)	May-10	Carp	2010FTC-ANAC-A	547	5
MDE	Upstream - Northeast Branch Anacostia River (NEBAR location)	Sep-03	Channel Catfish	NEBAR_09112003_fish_cc	408	4
MDE	Upstream - Northeast Branch Anacostia River (NEBAR location)	Sep-03	Channel Catfish	NEBAR_09112003_fish_cc1	436	5
MDE	Upstream - Northeast Branch Anacostia River (NEBAR location)	Sep-03	Channel Catfish	NEBAR_09112003_fish_cc2	499	5
MDE	Upstream - Northeast Branch Anacostia River (NEBAR location)	Sep-03	Redbreast Sunfish	NEBAR_09112003_fish_rbs	130	5
MDE	Upstream - Northeast Branch Anacostia River (NEBAR location)	Sep-03	Redbreast Sunfish	NEBAR_09112003_fish_rbs1	149	5
MDE	Upstream - Northeast Branch Anacostia River (NEBAR location)	Oct-08	American Eel	2008FTC_NEBR_C	495	3
MDE	Upstream - Northeast Branch Anacostia River (NEBAR location)	Oct-08	Redbreast Sunfish	2008FTC_NEBR_A	133	5
MDE	Upstream - Northwest Branch Anacostia River (NWBAR location)	Sep-03	American Eel	NWBAR_09112003_fish_ae	622	3
MDE	Upstream - Northwest Branch Anacostia River (NWBAR location)	Sep-03	Redbreast Sunfish	NWBAR_09112003_fish_rbs	150	5
MDE	Upstream - Northwest Branch Anacostia River (NWBAR location)	Sep-03	Redbreast Sunfish	NWBAR_09112003_fish_rbs1	132	5
MDE	Upstream - Northwest Branch Anacostia River (NWBAR location)	Sep-03	Redbreast Sunfish	NWBAR_09112003_fish_rbsrep	150	5

**Notes:**

a - Lower Anacostia fish sampling area is from the CSX bridge downstream to confluence with Potomac, and the Upper Anacostia fish sampling area is from the CSX bridge up to Maryland state line.

DDOE - District Department of Environment

MDE - Maryland Department of Environment

**Table 3-6**  
**Occurrence, Distribution and Selection of Chemicals of Potential Concern in Surface Soil**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Future
Medium: Surface Soil
Exposure Medium: Surface Soil

Exposure Point <sup>(7)</sup>	Cas Number	Chemical	Minimum <sup>(1)</sup> Concentration	Maximum <sup>(1)</sup> Concentration	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits <sup>(2)</sup>	Concentration Used for Screening <sup>(3)</sup>	Background Value <sup>(4)</sup>	Screening Toxicity Value <sup>(5)</sup>	COPC Flag (Y/N)	Rationale for Selection or Deletion <sup>(6)</sup>
Surface Soil		<b>Dioxins and Furans</b>											
	DFTEQ-HH	2,3,7,8-TCDD-TEQ	1.27E-06	5.87E-05	mg/kg	SUS11 (0 - 1 ft)	10 / 10		5.87E-05	NA	2.20E-05	Y	ASL
		<b>Metals</b>											
	7429-90-5	Aluminum	1.50E+03	1.60E+04	mg/kg	SUS08 (0 - 1 ft)	23 / 23		1.60E+04	NA	1.10E+05	N	BSL
	7440-36-0	Antimony	2.10E-01 J	4.90E-01 J	mg/kg	SUS05 (0 - 1 ft) SUS12 (0 - 1 ft)	10 / 23	0.21 - 0.26	4.90E-01	NA	4.70E+01	N	BSL
	7440-38-2	Arsenic	6.50E-01 J	3.30E+01 J	mg/kg	SUS20 (0.42 - 1 ft)	23 / 23		3.30E+01	NA	3.00E+00	Y	ASL
	7440-39-3	Barium	1.40E+01 J	1.30E+02 J	mg/kg	SUS01 (0.33 - 1 ft)	23 / 23		1.30E+02	NA	2.20E+04	N	BSL
	7440-41-7	Beryllium	1.10E-01	5.40E-01	mg/kg	SUS08 (0 - 1 ft)	23 / 23		5.40E-01	NA	2.30E+02	N	BSL
	7440-43-9	Cadmium	4.70E-02 J	5.90E+00 J	mg/kg	SUS01 (0.33 - 1 ft)	23 / 23		5.90E+00	NA	9.80E+01	N	BSL
	7440-70-2	Calcium	4.40E+02	1.50E+05	mg/kg	SUS23 (0.5 - 1 ft)	23 / 23		1.50E+05	NA	EN	N	EN
	7440-47-3	Chromium	3.70E+00	6.00E+01	mg/kg	SUS08 (0 - 1 ft)	23 / 23		6.00E+01	NA	6.30E+00	Y	ASL
	7440-48-4	Cobalt	3.10E+00 J	1.30E+02 J	mg/kg	SUS02 (0.33 - 0.83 ft)	23 / 23		1.30E+02	NA	3.50E+01	Y	ASL
	7440-50-8	Copper	3.80E+00 J	2.80E+02 J	mg/kg	SUS12 (0 - 1 ft)	23 / 23		2.80E+02	NA	4.70E+03	N	BSL
	7439-89-6	Iron	4.20E+03	1.80E+04	mg/kg	SUS08 (0 - 1 ft)	23 / 23		1.80E+04	NA	EN	N	EN
	7439-92-1	Lead	5.50E+00	1.20E+03	mg/kg	SUS01 (0.33 - 1 ft)	23 / 23		1.20E+02	NA	8.00E+02	N	BSL
	7439-95-4	Magnesium	3.60E+02	7.60E+04	mg/kg	SUS23 (0.5 - 1 ft)	23 / 23		7.60E+04	NA	EN	N	EN
	7439-96-5	Manganese	3.60E+01	6.90E+02	mg/kg	SUS08 (0 - 1 ft)	23 / 23		6.90E+02	NA	2.60E+03	N	BSL
	7440-02-0	Nickel	2.20E+00	6.10E+02	mg/kg	SUS08 (0 - 1 ft)	23 / 23		6.10E+02	NA	2.20E+03	N	BSL
	7440-09-7	Potassium	1.30E+02	1.00E+03	mg/kg	SUS07 (0 - 1 ft)	23 / 23		1.00E+03	NA	EN	N	EN
	7782-49-2	Selenium	8.70E-02 J	1.70E+00 J	mg/kg	SUS20 (0.42 - 1 ft)	23 / 23		1.70E+00	NA	5.80E+02	N	BSL
	7440-22-4	Silver	1.20E-01	2.50E-01	mg/kg	SUS08 (0 - 1 ft)	6 / 23	0.1 - 0.12	2.50E-01	NA	5.80E+02	N	BSL
	7440-23-5	Sodium	4.80E+01	9.20E+02	mg/kg	SUS03 (0.5 - 1 ft)	20 / 23	52 - 290	9.20E+02	NA	EN	N	EN
	7440-28-0	Thallium	1.30E-01	2.50E-01	mg/kg	SUS20 (0.42 - 1 ft)	7 / 23	0.1 - 0.13	2.50E-01	NA	1.20E+00	N	BSL
	7440-62-2	Vanadium	3.40E+00 J	1.70E+03 J	mg/kg	SUS08 (0 - 1 ft)	23 / 23		1.70E+03	NA	5.80E+02	Y	ASL
	7440-66-6	Zinc	9.90E+00 J	1.50E+03 J	mg/kg	SUS01 (0.33 - 1 ft)	23 / 23		1.50E+03	NA	3.50E+04	N	BSL
	7439-97-6	Mercury	2.00E-02 J	2.60E-01 J	mg/kg	SUS04 (0 - 1 ft)	22 / 23	0.033 - 0.033	2.60E-01	NA	4.60E+00	N	BSL
		<b>PCBs</b>											
	PCB	PCB, Total Congeners	1.24E+00	9.56E+00	mg/kg	SUS05 (0 - 1 ft)	6 / 6		9.56E+00	NA	9.70E-01	Y	ASL
	TOT-PCB-ARO-C	PCB, Total Aroclors	9.50E-04	5.70E+00	mg/kg	SUS05 (0 - 1 ft)	22 / 24	0.0095 - 0.0099	5.70E+00	NA	9.70E-01	Y	ASL

**Table 3-6**  
**Occurrence, Distribution and Selection of Chemicals of Potential Concern in Surface Soil**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Future
Medium: Surface Soil
Exposure Medium: Surface Soil

Exposure Point <sup>(7)</sup>	Cas Number	Chemical	Minimum <sup>(1)</sup> Concentration	Maximum <sup>(1)</sup> Concentration	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits <sup>(2)</sup>	Concentration Used for Screening <sup>(3)</sup>	Background Value <sup>(4)</sup>	Screening Toxicity Value <sup>(5)</sup>	COPC Flag (Y/N)	Rationale for Selection or Deletion <sup>(6)</sup>
		<b>Pesticides</b>											
	72-54-8	4,4'-DDD	2.00E-04	1.90E-03	J mg/kg	SUS19 (0.83 - 1 ft)	5 / 10	0.00089 - 0.0053	1.90E-03	NA	9.60E+00	N	BSL
	72-55-9	4,4'-DDE	3.30E-04	8.40E-03	J mg/kg	SUS08 (0 - 1 ft)	8 / 10	0.00095 - 0.0046	8.40E-03	NA	9.30E+00	N	BSL
	50-29-3	4,4'-DDT	7.90E-04	8.30E-02	J mg/kg	SUS18 (0 - 1 ft)	8 / 10	0.00095 - 0.0046	8.30E-02	NA	8.50E+00	N	BSL
	309-00-2	Aldrin	2.00E-04	5.00E-03	J mg/kg	SUS10 (0.5 - 1 ft)	3 / 10	0.00046 - 0.0053	5.00E-03	NA	1.80E-01	N	BSL
	319-85-7	beta-BHC	2.60E-04	2.30E-03	J mg/kg	SUS10 (0.5 - 1 ft)	2 / 10	0.00046 - 0.0053	2.30E-03	NA	1.30E+00	N	BSL
	5103-71-9	cis-Chlordane	2.10E-04	3.80E-03	J mg/kg	SUS08 (0 - 1 ft)	5 / 10	0.00095 - 0.0047	3.80E-03	NA	7.50E+00	N	BSL
	319-86-8	delta-BHC	6.50E-04	7.50E-03	J mg/kg	SUS10 (0.5 - 1 ft)	2 / 10	0.00046 - 0.0053	7.50E-03	NA	3.60E-01	N	BSL
	60-57-1	Dieldrin	4.90E-04	9.40E-03	J mg/kg	SUS18 (0 - 1 ft)	7 / 10	0.00095 - 0.0046	9.40E-03	NA	1.40E-01	N	BSL
	959-98-8	Endosulfan I	1.10E-03	1.40E-03	J mg/kg	SUS08 (0 - 1 ft)	2 / 10	0.00046 - 0.0047	1.40E-03	NA	7.00E+02	N	BSL
	33213-65-9	Endosulfan II	3.30E-04	1.50E-02	J mg/kg	SUS18 (0 - 1 ft)	5 / 10	0.00095 - 0.0053	1.50E-02	NA	7.00E+02	N	BSL
	1031-07-8	Endosulfan Sulfate	2.00E-04	7.20E-03	J mg/kg	SUS10 (0.5 - 1 ft)	9 / 10	0.0046 - 0.0046	7.20E-03	NA	7.00E+02	N	BSL
	72-20-8	Endrin	3.00E-04	2.60E-02	J mg/kg	SUS08 (0 - 1 ft)	7 / 10	0.0044 - 0.0047	2.60E-02	NA	2.50E+01	N	BSL
	7421-93-4	Endrin aldehyde	3.40E-04	3.40E-04	J mg/kg	SUS11 (0 - 1 ft)	1 / 10	0.00046 - 0.0053	3.40E-04	NA	2.50E+01	N	BSL
	53494-70-5	Endrin ketone	8.50E-04	1.20E-02	J mg/kg	SUS25 (0.5 - 1 ft)	3 / 10	0.00046 - 0.0053	1.20E-02	NA	2.50E+01	N	BSL
	58-89-9	gamma-BHC (Lindane)	2.30E-04	2.30E-04	J mg/kg	SUS10 (0.5 - 1 ft)	1 / 10	0.00046 - 0.0053	2.30E-04	NA	2.50E+00	N	BSL
	76-44-8	Heptachlor	2.90E-03	2.90E-03	J mg/kg	SUS10 (0.5 - 1 ft)	1 / 10	0.00046 - 0.0053	2.90E-03	NA	6.30E-01	N	BSL
	1024-57-3	Heptachlor Epoxide	3.00E-04	9.60E-03	J mg/kg	SUS18 (0 - 1 ft)	8 / 10	0.00095 - 0.0046	9.60E-03	NA	3.30E-01	N	BSL
	72-43-5	Methoxychlor	2.50E-04	2.30E-02	J mg/kg	SUS18 (0 - 1 ft)	9 / 10	0.0092 - 0.0092	2.30E-02	NA	4.10E+02	N	BSL
	5103-74-2	trans-Chlordane	3.60E-04	1.50E-02	J mg/kg	SUS11 (0 - 1 ft)	6 / 10	0.00095 - 0.0047	1.50E-02	NA	7.50E+00	N	BSL
		<b>Petroleum Compounds</b>											
	C10C20	Diesel Range Organics (C10-C20)	1.30E+01	1.80E+02	J mg/kg	SUS05 (0 - 1 ft)	9 / 24	18 - 110	1.80E+02	NA	4.40E+02	N	BSL
	C20C36	Oil Range Organics (C20-C36)	2.50E+01	1.80E+02	J mg/kg	SUS08 (0 - 1 ft) SUS05 (0 - 1 ft)	24 / 24		1.80E+03	NA	3.30E+04	N	BSL
	8006-61-9	Gasoline Range Organics (C6-C10)	2.50E-01	3.50E-01	J mg/kg	SUS02 (0.33 - 0.83 ft)	2 / 24	0.088 - 0.16	3.50E-01	NA	4.20E+02	N	BSL
		<b>SVOCs</b>											
	92-52-4	1,1'-Biphenyl	2.00E-02	3.00E-02	J mg/kg	SUS10 (0.5 - 1 ft)	3 / 10	0.037 - 0.19	3.00E-02	NA	2.00E+01	N	BSL
	95-94-3	1,2,4,5-Tetrachlorobenzene	9.60E-03	9.60E-03	J mg/kg	SUS18 (0 - 1 ft)	1 / 10	0.037 - 0.21	9.60E-03	NA	3.50E+01	N	BSL
	91-57-6	2-Methylnaphthalene	4.50E-03	8.50E-02	J mg/kg	SUS10 (0.5 - 1 ft)	9 / 10	0.039 - 0.039	8.50E-02	NA	3.00E+02	N	BSL
	95-48-7	2-Methylphenol	1.30E-02	1.30E-02	J mg/kg	SUS09 (0 - 1 ft)	1 / 10	0.037 - 0.21	1.30E-02	NA	4.10E+03	N	BSL
	106-44-5	4-Methylphenol	2.60E-02	2.60E-02	J mg/kg	SUS09 (0 - 1 ft)	1 / 10	0.037 - 0.21	2.60E-02	NA	8.20E+03	N	BSL
	83-32-9	Acenaphthene	1.40E-03	2.30E-01	J mg/kg	SUS19 (0.83 - 1 ft)	18 / 24	0.0075 - 0.04	2.30E-01	NA	4.50E+03	N	BSL
	208-96-8	Acenaphthylene	2.00E-03	8.70E-01	J mg/kg	SUS24 (0 - 1 ft)	20 / 24	0.0075 - 0.039	8.70E-01	NA	4.50E+03	N	BSL
	98-86-2	Acetophenone	3.50E-03	5.30E-02	J mg/kg	SUS02 (0.33 - 0.83 ft)	6 / 10	0.037 - 0.19	5.30E-02	NA	1.20E+04	N	BSL
	120-12-7	Anthracene	3.40E-03	1.00E+00	J mg/kg	SUS24 (0 - 1 ft)	23 / 24	0.036 - 0.036	1.00E+00	NA	2.30E+04	N	BSL
	100-52-7	Benzaldehyde	1.70E-02	1.70E-01	J mg/kg	SUS02 (0.33 - 0.83 ft)	5 / 10	0.073 - 0.19	1.70E-01	NA	1.20E+04	N	BSL
	56-55-3	Benzo(a)anthracene	1.20E-02	2.90E+00	J mg/kg	SUS19 (0.83 - 1 ft)	23 / 24	0.036 - 0.036	2.90E+00	NA	2.90E+00	Y	cPAH (8)

**Table 3-6**  
**Occurrence, Distribution and Selection of Chemicals of Potential Concern in Surface Soil**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Future  
Medium: Surface Soil  
Exposure Medium: Surface Soil

Exposure Point <sup>(7)</sup>	Cas Number	Chemical	Minimum <sup>(1)</sup> Concentration	Maximum <sup>(1)</sup> Concentration	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits <sup>(2)</sup>	Concentration Used for Screening <sup>(3)</sup>	Background Value <sup>(4)</sup>	Screening Toxicity Value <sup>(5)</sup>	COPC Flag (Y/N)	Rationale for Selection or Deletion <sup>(6)</sup>
	50-32-8	Benzo(a)pyrene	1.10E-02	2.80E+00	J mg/kg	SUS19 (0.83 - 1 ft)	23 / 24	0.036 - 0.036	2.80E+00	NA	2.90E-01	Y	ASL
	205-99-2	Benzo(b)fluoranthene	1.50E-02	3.30E+00	J mg/kg	SUS19 (0.83 - 1 ft)	23 / 24	0.036 - 0.036	3.30E+00	NA	2.90E+00	Y	ASL
	191-24-2	Benzo(g,h,i)perylene	1.30E-02	2.10E+00	J mg/kg	SUS19 (0.83 - 1 ft)	23 / 24	0.036 - 0.036	2.10E+00	NA	2.30E+03	N	BSL
	207-08-9	Benzo(k)fluoranthene	7.80E-03	1.70E+00	J mg/kg	SUS24 (0 - 1 ft)	23 / 24	0.036 - 0.036	1.70E+00	NA	2.90E+01	Y	cPAH (8)
	117-81-7	bis-(2-Ethylhexyl)phthalate	1.00E-02	2.30E-01	J mg/kg	SUS02 (0.33 - 0.83 ft)	9 / 10	0.37 - 0.37	2.30E-01	NA	1.60E+02	N	BSL
	85-68-7	Butylbenzylphthalate	6.40E-03	1.30E-01	J mg/kg	SUS01 (0.33 - 1 ft) SUS02 (0.33 - 0.83 ft)	4 / 10	0.073 - 0.21	1.30E-01	NA	1.20E+03	N	BSL
	86-74-8	Carbazole	8.20E-03	2.60E-01	mg/kg	SUS19 (0.83 - 1 ft)	8 / 10	0.0075 - 0.039	2.60E-01	NA	3.00E+03	N	BSL
	218-01-9	Chrysene	2.50E-02	3.20E+00	mg/kg	SUS24 (0 - 1 ft)	23 / 24	0.036 - 0.036	3.20E+00	NA	2.90E+02	Y	cPAH (8)
	84-74-2	Di-n-butylphthalate	5.60E-03	3.20E-01	mg/kg	SUS02 (0.33 - 0.83 ft)	2 / 10	0.037 - 0.21	3.20E-01	NA	8.20E+03	N	BSL
	53-70-3	Dibenzo(a,h)anthracene	2.90E-03	6.90E-01	J mg/kg	SUS19 (0.83 - 1 ft)	23 / 24	0.036 - 0.036	6.90E-01	NA	2.90E-01	Y	ASL
	132-64-9	Dibenzofuran	4.10E-03	1.20E-01	J mg/kg	SUS19 (0.83 - 1 ft)	5 / 10	0.037 - 0.19	1.20E-01	NA	1.00E+02	N	BSL
	84-66-2	Diethylphthalate	5.50E-03	1.90E-02	J mg/kg	SUS18 (0 - 1 ft)	3 / 10	0.18 - 0.21	1.90E-02	NA	6.60E+04	N	BSL
	131-11-3	Dimethylphthalate	1.30E-01	2.10E-01	mg/kg	SUS11 (0 - 1 ft)	2 / 10	0.037 - 0.19	2.10E-01	NA	6.60E+04	N	BSL
	206-44-0	Fluoranthene	8.20E-03	1.00E+01	mg/kg	SUS24 (0 - 1 ft)	24 / 24		1.00E+01	NA	3.00E+03	N	BSL
	86-73-7	Fluorene	1.50E-03	2.20E-01	mg/kg	SUS19 (0.83 - 1 ft)	20 / 24	0.0075 - 0.039	2.20E-01	NA	3.00E+03	N	BSL
	193-39-5	Indeno(1,2,3-cd)pyrene	9.80E-03	1.90E+00	J mg/kg	SUS19 (0.83 - 1 ft)	23 / 24	0.036 - 0.036	1.90E+00	NA	2.90E+00	Y	cPAH (8)
	91-20-3	Naphthalene	3.80E-03	2.30E-01	mg/kg	SUS12 (0 - 1 ft)	22 / 24	0.036 - 0.039	2.30E-01	NA	1.70E+01	N	BSL
	85-01-8	Phenanthrene	7.60E-03	2.70E+00	mg/kg	SUS24 (0 - 1 ft)	24 / 24		2.70E+00	NA	2.30E+03	N	BSL
	108-95-2	Phenol	8.70E-03	1.10E-01	mg/kg	SUS02 (0.33 - 0.83 ft)	4 / 10	0.0075 - 0.043	1.10E-01	NA	2.50E+04	N	BSL
	129-00-0	Pyrene	7.90E-03	4.90E+00	mg/kg	SUS24 (0 - 1 ft)	24 / 24		4.90E+00	NA	2.30E+03	N	BSL
		<b>VOCs</b>											
	79-00-5	1,1,2-Trichloroethane	6.30E-03	6.30E-03	mg/kg	SUS15 (0.17 - 1 ft)	1 / 24	0.0039 - 0.0075	6.30E-03	NA	6.30E-01	N	BSL
	87-61-6	1,2,3-Trichlorobenzene	2.10E-03	2.10E-03	J mg/kg	SUS04 (0 - 1 ft)	1 / 24	0.0039 - 0.0075	2.10E-03	NA	9.30E+01	N	BSL
	107-06-2	1,2-Dichloroethane	2.30E-03	2.30E-03	J mg/kg	SUS15 (0.17 - 1 ft)	1 / 24	0.0039 - 0.0075	2.30E-03	NA	2.00E+00	N	BSL
	108-10-1	4-Methyl-2-pentanone	2.10E-03	2.10E-03	J mg/kg	SUS15 (0.17 - 1 ft)	1 / 24	0.0039 - 0.0075	2.10E-03	NA	1.40E+04	N	BSL
	67-64-1	Acetone	5.10E-03	3.50E-02	J mg/kg	SUS02 (0.33 - 0.83 ft)	5 / 24	0.016 - 0.03	3.50E-02	NA	6.70E+04	N	BSL
	100-41-4	Ethylbenzene	1.30E-03	3.10E-03	J mg/kg	SUS02 (0.33 - 0.83 ft)	2 / 24	0.0039 - 0.0075	3.10E-03	NA	2.50E+01	N	BSL
	XYLMP	m, p-Xylene	1.30E-03	2.00E-02	mg/kg	SUS02 (0.33 - 0.83 ft)	3 / 24	0.0078 - 0.015	2.00E-02	NA	2.40E+02	N	BSL
	95-47-6	o-Xylene	9.60E-04	1.30E-02	mg/kg	SUS02 (0.33 - 0.83 ft)	3 / 24	0.0039 - 0.0075	1.30E-02	NA	2.80E+02	N	BSL
	108-88-3	Toluene	1.30E-03	1.40E-03	J mg/kg	SUS02 (0.33 - 0.83 ft)	2 / 24	0.0039 - 0.0075	1.40E-03	NA	4.70E+03	N	BSL
	1330-20-7	Xylenes (total)	2.30E-03	3.30E-02	mg/kg	SUS02 (0.33 - 0.83 ft)	3 / 24	0.0078 - 0.015	3.30E-02	NA	2.50E+02	N	BSL

**Table 3-6  
Occurrence, Distribution and Selection of Chemicals of Potential Concern in Surface Soil  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Future Medium: Surface Soil Exposure Medium: Surface Soil
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Exposure Point <sup>(7)</sup>	Cas Number	Chemical	Minimum <sup>(1)</sup> Concentration	Maximum <sup>(1)</sup> Concentration	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits <sup>(2)</sup>	Concentration Used for Screening <sup>(3)</sup>	Background Value <sup>(4)</sup>	Screening Toxicity Value <sup>(5)</sup>	COPC Flag (Y/N)	Rationale for Selection or Deletion <sup>(6)</sup>
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**Notes:**

- (1) Minimum/maximum detected concentration and associated data flags.  
J = The chemical was positively identified; however, the associated numerical value is an estimated concentration only.
- (2) Lab Reporting Detection Limits (RDLs) are shown where the frequency of detection is less than 100%.
- (3) Maximum detected concentration used for screening, except for lead for which the mean detected concentration is used.
- (4) Background values were not used for COPC screening purposes, although applicable background values may be considered in the risk characterization portion of the risk assessment, if available.
- (5) Screening levels are equal to the USEPA Regional Screening Level (RSL) for industrial soil based on a target risk level of  $1 \times 10^{-6}$  for carcinogens and a target hazard quotient of 0.1 for noncarcinogens (November 2015), except TPH fractions; To account for doublecounting of TPH constituents that are also reported in PAH and VOC analyses, the RSLs for TPH fractions corresponding to a HI of 1 were used. The following surrogates were used for chemicals without available screening levels or with multiple forms:  
  - The value for hexavalent chromium was used for chromium.
  - The value for endrin was used for endrin aldehyde and endrin ketone due to structural similarities.
  - The value for chlordane was used for cis and trans chlordane due to structural similarities.
  - The value for endosulfan was used for endosulfan I, endosulfan II and endosulfan sulfate due to structural similarities.
  - The value for alpha-BHC was used for delta-BHC due to structural similarities.
  - The value for Aroclor 1254 PCBs was used for Total PCBs.
  - The value for acenaphthene was used for acenaphthylene due to structural similarities.
  - The value for pyrene was used for benzo(g,h,i)perylene and phenanthrene due to structural similarities.
  - The value for fluorene was used for carbazole due to structural similarities.
  - The value for diethylphthalate was used for dimethylphthalate due to structural similarities.
  - The value for m-xylene and p-xylene was used for o-xylene.
 Although iron has a USEPA RSL for soil, iron is considered an essential nutrient and is not further evaluated.
- (6) Rationale Codes:  
  - Selection Reason: Above Screening Level (ASL)
  - Deletion Reason: Below Screening Level (BSL); Essential Nutrient (EN)
- (7) Surface soil data represent the 0 to 0.5 foot depth interval.
- (8) All seven potentially carcinogenic PAH compounds were retained as COPCs if one or more was identified as a COPC.

**Definitions:**

- CAS - Chemical Abstracts Service
- COPC - Chemical of Potential Concern
- cPAH - Carcinogenic Polynuclear Aromatic Hydrocarbon
- mg/kg - milligrams per kilogram
- NA - Not Available
- PCB - Polychlorinated biphenyl
- SVOC - Semivolatile organic compound
- TCDD-TEQ - Dioxin Toxic Equivalence
- TPH - Total Petroleum Hydrocarbons.
- VOC - Volatile organic compound

**Table 3-7**  
**Occurrence, Distribution and Selection of Chemicals of Potential Concern in Subsurface Soil**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Future
Medium: Subsurface Soil
Exposure Medium: Subsurface Soil

Exposure Point <sup>(7)</sup>	Cas Number	Chemical	Minimum <sup>(1)</sup> Concentration	Maximum <sup>(1)</sup> Concentration	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits <sup>(2)</sup>	Concentration Used for Screening <sup>(3)</sup>	Background Value <sup>(4)</sup>	Screening Toxicity Value <sup>(5)</sup>	COPC Flag (Y/N)	Rationale for Selection or Deletion <sup>(6)</sup>
Subsurface Soil		<b>Dioxins and Furans</b>											
	DFTEQ-HH	2,3,7,8-TCDD-TEQ	3.67E-08	6.14E-06	mg/kg	DP19 (1.5 - 2.5 ft)	10 / 10		6.14E-06	NA	2.20E-05	N	BSL
		<b>Metals</b>											
	7429-90-5	Aluminum	8.50E+02 J+	1.00E+04	mg/kg	DP39 (9.5 - 10.5 ft) DP08 (9.5 - 10.5 ft)	45 / 45		1.00E+04	NA	1.10E+05	N	BSL
	7440-36-0	Antimony	7.00E-03 J	1.60E+00	mg/kg	DP19 (9.5 - 10.5 ft)	25 / 44	0.22 - 0.25	1.60E+00	NA	4.70E+01	N	BSL
	7440-38-2	Arsenic	3.90E-01 J-	7.10E+01 J-	mg/kg	DP42 (9.5 - 10.5 ft)	45 / 45		7.10E+01	NA	3.00E+00	Y	ASL
	7440-39-3	Barium	5.10E+00	2.40E+03	mg/kg	DP42 (9.5 - 10.5 ft)	45 / 45		2.40E+03	NA	2.20E+04	N	BSL
	7440-41-7	Beryllium	3.40E-02 J	1.90E+00 J-	mg/kg	DP43 (3.5 - 4.5 ft)	45 / 45		1.90E+00	NA	2.30E+02	N	BSL
	7440-43-9	Cadmium	2.10E-02 J	1.10E+00	mg/kg	DP42 (9.5 - 10.5 ft)	43 / 45	0.12 - 0.12	1.10E+00	NA	9.80E+01	N	BSL
	7440-70-2	Calcium	1.10E+02	1.10E+05	mg/kg	SUS21 (1 - 1.75 ft)	45 / 45		1.10E+05	NA	EN	N	EN
	7440-47-3	Chromium	2.40E+00	3.70E+01	mg/kg	DP40 (2.5 - 3.5 ft)	45 / 45		3.70E+01	NA	6.30E+00	Y	ASL
	7440-48-4	Cobalt	1.00E+00	1.30E+01	mg/kg	DP19 (1.5 - 2.5 ft)	45 / 45		1.30E+01	NA	3.50E+01	N	BSL
	7440-50-8	Copper	2.00E+00	2.90E+02	mg/kg	DP40 (2.5 - 3.5 ft)	45 / 45		2.90E+02	NA	4.70E+03	N	BSL
	7439-89-6	Iron	1.90E+03 J	4.10E+04	mg/kg	DP33 (14 - 16 ft)	45 / 45		4.10E+04	NA	EN	N	EN
	7439-92-1	Lead	1.50E+00 J+	5.40E+03	mg/kg	DP19 (9.5 - 10.5 ft)	45 / 45		1.60E+02	NA	8.00E+02	N	BSL
	7439-95-4	Magnesium	7.10E+01	5.30E+04	mg/kg	SUS21 (1 - 1.75 ft)	45 / 45		5.30E+04	NA	EN	N	EN
	7439-96-5	Manganese	9.90E+00	8.10E+02	mg/kg	DP42 (9.5 - 10.5 ft)	45 / 45		8.10E+02	NA	2.60E+03	N	BSL
	7440-02-0	Nickel	7.80E-01	1.20E+02	mg/kg	DP42 (9.5 - 10.5 ft)	45 / 45		1.20E+02	NA	2.20E+03	N	BSL
	7440-09-7	Potassium	7.30E+01	2.20E+03	mg/kg	DP41 (9.5 - 10.5 ft)	45 / 45		2.20E+03	NA	EN	N	EN
	7782-49-2	Selenium	8.50E-02 J	2.60E+00 J-	mg/kg	DP42 (9.5 - 10.5 ft)	32 / 45	0.52 - 0.61	2.60E+00	NA	5.80E+02	N	BSL
	7440-22-4	Silver	4.70E-03 J	4.20E-01	mg/kg	DP19 (9.5 - 10.5 ft)	38 / 45	0.1 - 0.11	4.20E-01	NA	5.80E+02	N	BSL
	7440-23-5	Sodium	1.40E+01	3.80E+02	mg/kg	DP42 (9.5 - 10.5 ft)	43 / 45	19 - 390	3.80E+02	NA	EN	N	EN
	7440-28-0	Thallium	2.00E-02 J	1.60E+00	mg/kg	DP42 (9.5 - 10.5 ft)	41 / 45	0.11 - 0.12	1.60E+00	NA	1.20E+00	Y	ASL
	7440-62-2	Vanadium	2.90E+00	1.30E+02	mg/kg	DP41 (2.5 - 3.5 ft)	45 / 45		1.30E+02	NA	5.80E+02	N	BSL
	7440-66-6	Zinc	7.40E+00	6.90E+02	mg/kg	DP42 (9.5 - 10.5 ft)	45 / 45		6.90E+02	NA	3.50E+04	N	BSL
	7439-97-6	Mercury	1.40E-02 J	2.20E+00	mg/kg	DP42 (14.5 - 15.5 ft)	33 / 45	0.035 - 0.043	2.20E+00	NA	4.60E+00	N	BSL
		<b>PCBs</b>											
	TOT-PCB-ARO-C	PCB, Total Aroclors	9.10E-04	7.20E+00	mg/kg	SUS21 (1 - 1.75 ft)	49 / 113	0.0009 - 0.0095	7.20E+00	NA	9.70E-01	Y	ASL
	PCB	PCB, Total Congeners	1.10E-01	4.84E+00	mg/kg	SUS21 (1 - 1.75 ft)	4 / 4		4.84E+00	NA	9.70E-01	Y	ASL

**Table 3-7**  
**Occurrence, Distribution and Selection of Chemicals of Potential Concern in Subsurface Soil**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Future
Medium: Subsurface Soil
Exposure Medium: Subsurface Soil

Exposure Point <sup>(7)</sup>	Cas Number	Chemical	Minimum <sup>(1)</sup> Concentration	Maximum <sup>(1)</sup> Concentration	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits <sup>(2)</sup>	Concentration Used for Screening <sup>(3)</sup>	Background Value <sup>(4)</sup>	Screening Toxicity Value <sup>(5)</sup>	COPC Flag (Y/N)	Rationale for Selection or Deletion <sup>(6)</sup>
		<b>Pesticides</b>											
	72-54-8	4,4'-DDD	1.70E-05 J	2.00E-03 J	mg/kg	DP19 (1.5 - 2.5 ft)	4 / 10	0.000089 - 0.00091	2.00E-03	NA	9.60E+00	N	BSL
	72-55-9	4,4'-DDE	1.80E-05 J	5.80E-02	mg/kg	DP08 (2.5 - 3.5 ft)	4 / 10	0.000089 - 0.00094	5.80E-02	NA	9.30E+00	N	BSL
	50-29-3	4,4'-DDT	2.00E-05 J	1.00E-02 J	mg/kg	DP08 (2.5 - 3.5 ft)	7 / 10	0.00047 - 0.00091	1.00E-02	NA	8.50E+00	N	BSL
	309-00-2	Aldrin	3.40E-05 J	1.60E-03	mg/kg	DP08 (2.5 - 3.5 ft)	3 / 10	0.000089 - 0.00091	1.60E-03	NA	1.80E-01	N	BSL
	319-85-7	beta-BHC	1.20E-03 J	1.20E-03 J	mg/kg	DP19 (1.5 - 2.5 ft)	1 / 10	0.000089 - 0.001	1.20E-03	NA	1.30E+00	N	BSL
	5103-71-9	cis-Chlordane	6.50E-03	6.50E-03	mg/kg	DP08 (2.5 - 3.5 ft)	1 / 10	0.000089 - 0.00094	6.50E-03	NA	7.50E+00	N	BSL
	319-86-8	delta-BHC	6.30E-04 J	1.20E-03 J	mg/kg	DP19 (1.5 - 2.5 ft)	2 / 10	0.000089 - 0.00091	1.20E-03	NA	3.60E-01	N	BSL
	60-57-1	Dieldrin	2.80E-05 J	2.90E-03 J	mg/kg	DP19 (1.5 - 2.5 ft)	3 / 10	0.000091 - 0.001	2.90E-03	NA	1.40E-01	N	BSL
	959-98-8	Endosulfan I	2.30E-05 J	2.30E-05 J	mg/kg	DP24 (4.5 - 5.5 ft)	1 / 10	0.000089 - 0.001	2.30E-05	NA	7.00E+02	N	BSL
	33213-65-9	Endosulfan II	2.00E-05 J	1.70E-03 J	mg/kg	DP19 (1.5 - 2.5 ft)	3 / 10	0.000091 - 0.00091	1.70E-03	NA	7.00E+02	N	BSL
	1031-07-8	Endosulfan Sulfate	1.80E-05 J	2.10E-03 J	mg/kg	DP08 (2.5 - 3.5 ft)	8 / 10	0.000091 - 0.00091	2.10E-03	NA	7.00E+02	N	BSL
	72-20-8	Endrin	3.40E-05 J	1.50E-02	mg/kg	DP08 (2.5 - 3.5 ft)	7 / 10	0.000089 - 0.00091	1.50E-02	NA	2.50E+01	N	BSL
	7421-93-4	Endrin aldehyde	3.10E-05 J	1.60E-03	mg/kg	DP08 (2.5 - 3.5 ft)	4 / 10	0.000089 - 0.00091	1.60E-03	NA	2.50E+01	N	BSL
	53494-70-5	Endrin ketone	2.40E-05 J	5.00E-05 J	mg/kg	DP17 (4.5 - 5.5 ft)	2 / 10	0.000089 - 0.001	5.00E-05	NA	2.50E+01	N	BSL
	58-89-9	gamma-BHC (Lindane)	2.30E-05 J	2.20E-03 J	mg/kg	DP19 (1.5 - 2.5 ft)	6 / 10	0.000092 - 0.00091	2.20E-03	NA	2.50E+00	N	BSL
	76-44-8	Heptachlor	5.20E-04 J	1.20E-03 J	mg/kg	DP19 (1.5 - 2.5 ft)	2 / 10	0.000089 - 0.00091	1.20E-03	NA	6.30E-01	N	BSL
	1024-57-3	Heptachlor Epoxide	2.50E-05 J	1.50E-03 J	mg/kg	DP08 (2.5 - 3.5 ft)	3 / 10	0.000091 - 0.00091	1.50E-03	NA	3.30E-01	N	BSL
	72-43-5	Methoxychlor	4.60E-05 J	2.90E-02 J	mg/kg	DP19 (1.5 - 2.5 ft)	3 / 10	0.00018 - 0.0018	2.90E-02	NA	4.10E+02	N	BSL
	5103-74-2	trans-Chlordane	2.00E-05 J	1.50E-02	mg/kg	DP08 (2.5 - 3.5 ft)	4 / 10	0.000091 - 0.00091	1.50E-02	NA	7.50E+00	N	BSL
		<b>Petroleum Compounds</b>											
	C10C20	Diesel Range Organics (C10-C20)	1.00E+01 J	4.70E+03	mg/kg	SB3 (2.5 - 3.5 ft)	25 / 114	18 - 380	4.70E+03	NA	4.40E+02	Y	ASL
	C20C36	Oil Range Organics (C20-C36)	1.10E+01 J	1.70E+04	mg/kg	SB3 (2.5 - 3.5 ft)	57 / 114	18 - 22	1.70E+04	NA	3.30E+04	N	BSL
	8006-61-9	Gasoline Range Organics (C6-C10)	6.00E-02 J	3.80E+01	mg/kg	SB3 (2.5 - 3.5 ft)	6 / 114	0.077 - 0.15	3.80E+01	NA	4.20E+02	N	BSL
		<b>SVOCS</b>											
	92-52-4	1,1'-Biphenyl	3.00E-02 J	3.20E-02 J	mg/kg	DP26 (3.5 - 4.5 ft)	2 / 9	0.036 - 0.042	3.20E-02	NA	2.00E+01	N	BSL
	91-57-6	2-Methylnaphthalene	2.00E-03 J	1.20E-01	mg/kg	DP27 (6.5 - 7.5 ft)	3 / 9	0.0073 - 0.008	1.20E-01	NA	3.00E+02	N	BSL
	106-44-5	4-Methylphenol	2.30E-02 J	2.30E-02 J	mg/kg	DP27 (6.5 - 7.5 ft)	1 / 9	0.036 - 0.19	2.30E-02	NA	8.20E+03	N	BSL
	83-32-9	Acenaphthene	1.40E-03 J	3.30E+00	mg/kg	DP19 (9.5 - 10.5 ft) DP04 (2.5 - 3.5 ft)	29 / 53	0.007 - 0.15	3.30E+00	NA	4.50E+03	N	BSL
	208-96-8	Acenaphthylene	2.30E-03 J	2.20E-01	mg/kg	DP39 (9.5 - 10.5 ft)	24 / 53	0.007 - 1.5	2.20E-01	NA	4.50E+03	N	BSL
	120-12-7	Anthracene	1.00E-03 J	6.10E+00	mg/kg	DP19 (9.5 - 10.5 ft)	31 / 53	0.007 - 0.15	6.10E+00	NA	2.30E+04	N	BSL
	100-52-7	Benzaldehyde	1.80E-02 J	3.30E-02 J	mg/kg	DP29 (9 - 11 ft)	5 / 9	0.039 - 0.19	3.30E-02	NA	1.20E+04	N	BSL
	56-55-3	Benzo(a)anthracene	1.10E-03 J	1.50E+01	mg/kg	DP19 (9.5 - 10.5 ft)	34 / 53	0.007 - 0.016	1.50E+01	NA	2.90E+00	Y	ASL

**Table 3-7**  
**Occurrence, Distribution and Selection of Chemicals of Potential Concern in Subsurface Soil**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Future
Medium: Subsurface Soil
Exposure Medium: Subsurface Soil

Exposure Point <sup>(7)</sup>	Cas Number	Chemical	Minimum <sup>(1)</sup> Concentration	Maximum <sup>(1)</sup> Concentration	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits <sup>(2)</sup>	Concentration Used for Screening <sup>(3)</sup>	Background Value <sup>(4)</sup>	Screening Toxicity Value <sup>(5)</sup>	COPC Flag (Y/N)	Rationale for Selection or Deletion <sup>(6)</sup>
	50-32-8	Benzo(a)pyrene	9.90E-03	1.40E+01	mg/kg	DP19 (9.5 - 10.5 ft)	29 / 53	0.007 - 0.15	1.40E+01	NA	2.90E-01	Y	ASL
	205-99-2	Benzo(b)fluoranthene	1.70E-03 J	1.60E+01	mg/kg	DP19 (9.5 - 10.5 ft)	33 / 53	0.007 - 0.15	1.60E+01	NA	2.90E+00	Y	ASL
	191-24-2	Benzo(g,h,i)perylene	7.20E-03 J	1.10E+01	mg/kg	DP19 (9.5 - 10.5 ft)	29 / 53	0.007 - 0.15	1.10E+01	NA	2.30E+03	N	BSL
	207-08-9	Benzo(k)fluoranthene	1.90E-03 J	6.30E+00	mg/kg	DP19 (9.5 - 10.5 ft)	31 / 53	0.007 - 0.15	6.30E+00	NA	2.90E+01	Y	cPAH (8)
	117-81-7	bis-(2-Ethylhexyl)phthalate	7.30E-03 J	1.20E-01 J	mg/kg	DP27 (6.5 - 7.5 ft)	6 / 9	0.076 - 0.38	1.20E-01	NA	1.60E+02	N	BSL
	85-68-7	Butylbenzylphthalate	8.00E-03 J	2.60E-02 J	mg/kg	DP29 (9 - 11 ft)	7 / 9	0.078 - 0.19	2.60E-02	NA	1.20E+03	N	BSL
	86-74-8	Carbazole	4.40E-03 J	5.70E-02	mg/kg	DP26 (3.5 - 4.5 ft)	3 / 9	0.0073 - 0.008	5.70E-02	NA	3.00E+03	N	BSL
	218-01-9	Chrysene	1.30E-03 J	1.50E+01	mg/kg	DP19 (9.5 - 10.5 ft)	34 / 53	0.007 - 0.016	1.50E+01	NA	2.90E+02	Y	cPAH (8)
	53-70-3	Dibenzo(a,h)anthracene	2.90E-03 J	2.40E+00	mg/kg	DP19 (9.5 - 10.5 ft)	27 / 53	0.007 - 0.15	2.40E+00	NA	2.90E-01	Y	ASL
	132-64-9	Dibenzofuran	5.00E-03 J	9.80E-02 J	mg/kg	DP26 (3.5 - 4.5 ft)	3 / 9	0.036 - 0.039	9.80E-02	NA	1.00E+02	N	BSL
	84-66-2	Diethylphthalate	9.40E-03 J	2.80E-02 J	mg/kg	DP32 (9.5 - 10.5 ft)	4 / 9	0.037 - 0.19	2.80E-02	NA	6.60E+04	N	BSL
	206-44-0	Fluoranthene	1.20E-03 J	3.00E+01	mg/kg	DP19 (9.5 - 10.5 ft)	36 / 53	0.007 - 0.15	3.00E+01	NA	3.00E+03	N	BSL
	86-73-7	Fluorene	1.50E-03 J	3.20E+00	mg/kg	DP19 (9.5 - 10.5 ft)	30 / 53	0.007 - 0.016	3.20E+00	NA	3.00E+03	N	BSL
	193-39-5	Indeno(1,2,3-cd)pyrene	6.60E-03 J	8.90E+00	mg/kg	DP19 (9.5 - 10.5 ft)	29 / 53	0.007 - 0.15	8.90E+00	NA	2.90E+00	Y	ASL
	91-20-3	Naphthalene	2.60E-03 J	1.10E+00 J	mg/kg	DP19 (9.5 - 10.5 ft)	27 / 53	0.007 - 0.038	1.10E+00	NA	1.70E+01	N	BSL
	85-01-8	Phenanthrene	1.40E-03 J	2.30E+01	mg/kg	DP19 (9.5 - 10.5 ft)	37 / 53	0.007 - 0.016	2.30E+01	NA	2.30E+03	N	BSL
	129-00-0	Pyrene	8.70E-04 J	2.80E+01	mg/kg	DP19 (9.5 - 10.5 ft)	37 / 53	0.007 - 0.016	2.80E+01	NA	2.30E+03	N	BSL
		<b>VOCs</b>											
	78-93-3	2-Butanone	1.20E-02	1.20E-02	mg/kg	DP12 (14.5 - 15.5 ft)	1 / 45	0.004 - 0.0064	1.20E-02	NA	1.90E+04	N	BSL
	67-64-1	Acetone	7.50E-03 J	5.80E-02	mg/kg	DP12 (14.5 - 15.5 ft)	8 / 45	0.016 - 0.025	5.80E-02	NA	6.70E+04	N	BSL
	110-82-7	Cyclohexane	2.30E-03 J	2.30E-03 J	mg/kg	DP12 (14.5 - 15.5 ft)	1 / 45	0.004 - 0.0064	2.30E-03	NA	2.70E+03	N	BSL
	98-82-8	Isopropylbenzene	7.70E-04 J	7.70E-04 J	mg/kg	DP39 (2.5 - 3.5 ft)	1 / 45	0.004 - 0.0064	7.70E-04	NA	9.90E+02	N	BSL
	XYLMP	m, p-Xylene	4.80E-03 J	4.80E-03 J	mg/kg	DP39 (2.5 - 3.5 ft)	1 / 45	0.0081 - 0.013	4.80E-03	NA	2.40E+02	N	BSL
	108-87-2	Methylcyclohexane	6.10E-03	6.10E-03	mg/kg	DP12 (14.5 - 15.5 ft)	1 / 45	0.004 - 0.0064	6.10E-03	NA	2.70E+03	N	BSL
	75-09-2	Methylene Chloride	1.20E-03 J	1.20E-03 J	mg/kg	DP10 (14.5 - 15.5 ft)	1 / 45	0.004 - 0.0088	1.20E-03	NA	3.20E+02	N	BSL
	95-47-6	o-Xylene	3.50E-03 J	3.50E-03 J	mg/kg	DP39 (2.5 - 3.5 ft)	1 / 45	0.004 - 0.0064	3.50E-03	NA	2.80E+02	N	BSL
	127-18-4	Tetrachloroethylene	7.50E-04 J	4.20E-03 J	mg/kg	DP39 (2.5 - 3.5 ft)	2 / 45	0.004 - 0.0064	4.20E-03	NA	3.90E+01	N	BSL
	1330-20-7	Xylenes (total)	8.30E-03	8.30E-03	mg/kg	DP39 (2.5 - 3.5 ft)	1 / 45	0.0081 - 0.013	8.30E-03	NA	2.50E+02	N	BSL



**Table 3-7  
Occurrence, Distribution and Selection of Chemicals of Potential Concern in Subsurface Soil  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Future
Medium: Subsurface Soil
Exposure Medium: Subsurface Soil

Exposure Point <sup>(7)</sup>	Cas Number	Chemical	Minimum <sup>(1)</sup> Concentration	Maximum <sup>(1)</sup> Concentration	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits <sup>(2)</sup>	Concentration Used for Screening <sup>(3)</sup>	Background Value <sup>(4)</sup>	Screening Toxicity Value <sup>(5)</sup>	COPC Flag (Y/N)	Rationale for Selection or Deletion <sup>(6)</sup>
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**Notes:**

- (1) Minimum/maximum detected concentration and associated data flags.  
J = The chemical was positively identified; however, the associated numerical value is an estimated concentration only.  
+/- = Indicates the result may be biased high/low.
- (2) Lab Reporting Detection Limits (RDLs) are shown where the frequency of detection is less than 100%.
- (3) Maximum detected concentration used for screening, except for lead for which the mean detected concentration is used.
- (4) Background values were not used for COPC screening purposes, although applicable background values may be considered in the risk characterization portion of the risk assessment, if available.
- (5) Screening levels are equal to the USEPA Regional Screening Level (RSL) for industrial soil based on a target risk level of  $1 \times 10^{-6}$  for carcinogens and a target hazard quotient of 0.1 for noncarcinogens (November 2015), except TPH fractions; To account for doublecounting of TPH constituents that are also reported in PAH and VOC analyses, the RSLs for TPH fractions corresponding to a HI of 1 were used.  
The following surrogates were used for chemicals without available screening levels or with multiple forms:  
The value for hexavalent chromium was used for chromium.  
The value for endrin was used for endrin aldehyde and endrin ketone due to structural similarities.  
The value for chlordane was used for cis and trans chlordane due to structural similarities.  
The value for endosulfan was used for endosulfan I, endosulfan II and endosulfan sulfate due to structural similarities.  
The value for alpha-BHC was used for delta-BHC due to structural similarities.  
The value for Aroclor 1254/high risk PCBs was used for Total PCBs.  
The value for acenaphthene was used for acenaphthylene due to structural similarities.  
The value for cyclohexane was used for methylcyclohexane due to structural similarities.  
The value for pyrene was used for benzo(g,h,i)perylene and phenanthrene due to structural similarities.  
The value for fluorene was used for carbazole due to structural similarities.  
The value for m-xylene and p-xylene was used for o-xylene.  
Although iron has a USEPA RSL for soil, iron is considered an essential nutrient and is not further evaluated in the risk assessment.
- (6) Rationale Codes:  
Selection Reason: Above Screening Level (ASL)  
Deletion Reason: Below Screening Level (BSL); Essential Nutrient (EN)
- (7) Subsurface soil data represent the 1 to 16 foot depth interval.
- (8) All seven potentially carcinogenic PAH compounds were retained as COPCs if one or more was identified as a COPC.

**Definitions:**

- |  |                                      |
|--|--------------------------------------|
| CAS - Chemical Abstracts Service                     | PCB - Polychlorinated biphenyl       |
| COPC - Chemical of Potential Concern                 | SVOC - Semivolatile organic compound |
| cPAH - Carcinogenic Polynuclear Aromatic Hydrocarbon | TCDD-TEQ - Dioxin Toxic Equivalence  |
| mg/kg - milligrams per kilogram                      | TPH - Total Petroleum Hydrocarbons.  |
| NA - Not Available                                   | VOC - Volatile organic compound      |

**Table 3-8**  
**Summary of Chemicals of Potential Concern - Landside**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Chemical	CAS Number	Media	
		Surface Soil	Subsurface Soil
<b>Dioxins and Furans</b>			
2,3,7,8-TCDD-TEQ	DFTEQ-HH	X	
<b>Metals</b>			
Arsenic	7440-38-2	X	X
Chromium	7440-47-3	X	X
Cobalt	7440-48-4	X	
Thallium	7440-28-0		X
Vanadium	7440-62-2	X	
<b>PCBs</b>			
Total PCBs (a)	1336-36-3	X	X
<b>Petroleum Compounds</b>			
Diesel Range Organics (C10-C20)	C10C20		X
<b>SVOCs (b)</b>			
Benzo(a)anthracene	56-55-3	X	X
Benzo(a)pyrene	50-32-8	X	X
Benzo(b)fluoranthene	205-99-2	X	X
Benzo(k)fluoranthene	207-08-9	X	X
Chrysene	218-01-9	X	X
Dibenzo(a,h)anthracene	53-70-3	X	X
Indeno(1,2,3-cd)pyrene	193-39-5	X	X

**Notes:**

CAS - Chemical Abstracts Service

PCB - Polychlorinated biphenyl

SVOC - Semivolatile organic compound

TCDD-TEQ - Dioxin Toxicity Equivalence.

X - Indicates chemical was identified as a chemical of potential concern in the associated media.

(a) Total PCBs for soil are evaluated as Total PCB Aroclors.

(b) All seven potentially carcinogenic PAH compounds were conservatively retained as COPCs if one or more was identified as a COPC.

**Table 3-9  
Occurrence, Distribution and Selection of Chemicals of Potential Concern in Surface Sediment  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
Medium: Sediment  
Exposure Medium: Surface Sediment

Exposure Point <sup>(7)</sup>	Cas Number	Chemical	Minimum <sup>(1)</sup> Concentration	Maximum <sup>(1)</sup> Concentration	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits <sup>(2)</sup>	Concentration Used for Screening <sup>(3)</sup>	Background Value <sup>(4)</sup>	Screening Toxicity Value <sup>(5)</sup>	COPC Flag (Y/N)	Rationale for Selection or Deletion <sup>(6)</sup>
Sediment		<b>Dioxins and Furans</b>											
	DFTEQ-HH	2,3,7,8-TCDD-TEQ	3.23E-07	7.07E-04	mg/kg	SED7F (0 - 0.5 ft)	14 / 14	-	7.07E-04	3.14E-06	4.80E-06	Y	ASL
		<b>Metals</b>											
	7429-90-5	Aluminum	1.90E+03	1.80E+04	mg/kg	SED1B (0 - 0.5 ft)	46 / 46	-	1.80E+04	1.40E+04	7.70E+03	Y	ASL
	7440-36-0	Antimony	5.00E-02 J-	2.80E+00 J-	mg/kg	SED7F (0 - 0.5 ft)	45 / 46	0.2 - 0.2	2.80E+00	8.80E-01	3.10E+00	N	BSL
	7440-38-2	Arsenic	7.90E-01	1.70E+01 J-	mg/kg	SED7.5E (0 - 0.5 ft)	46 / 46	-	1.70E+01	5.30E+00	6.70E-01	Y	ASL
	7440-39-3	Barium	1.70E+01	1.80E+02	mg/kg	SED3A (0 - 0.5 ft)	46 / 46	-	1.80E+02	1.50E+02	1.50E+03	N	BSL
	7440-41-7	Beryllium	1.50E-01	2.20E+00	mg/kg	SED7.5E (0 - 0.5 ft)	46 / 46	-	2.20E+00	2.00E+00	1.60E+01	N	BSL
	7440-43-9	Cadmium	2.40E-01	5.20E+00 J-	mg/kg	SED7.5E (0 - 0.5 ft)	46 / 46	-	5.20E+00	1.50E+00	7.10E+00	N	BSL
	7440-70-2	Calcium	8.70E+02	1.70E+04	mg/kg	SED7G (0 - 0.5 ft)	46 / 46	-	1.70E+04	6.30E+04	EN	N	EN
	7440-47-3	Chromium	1.10E+01 J+	1.40E+02	mg/kg	SED5.5B (0 - 0.5 ft)	46 / 46	-	1.40E+02	6.20E+01	3.00E-01	Y	ASL
	7440-48-4	Cobalt	4.80E+00	3.20E+01 J-	mg/kg	SED7.5E (0 - 0.5 ft)	46 / 46	-	3.20E+01	2.70E+01	2.30E+00	Y	ASL
	7440-50-8	Copper	9.60E+00	2.40E+02	mg/kg	SED7.5E (0 - 0.5 ft)	46 / 46	-	2.40E+02	1.60E+02	3.10E+02	N	BSL
	7439-89-6	Iron	8.20E+03	3.30E+04	mg/kg	SED5B (0 - 0.5 ft)	46 / 46	-	3.30E+04	3.90E+04	EN	N	EN
	7439-92-1	Lead	1.10E+01 J	3.20E+02	mg/kg	SED7F (0 - 0.5 ft)	46 / 46	-	7.80E+01	1.70E+02	4.00E+02	N	BSL
	7439-95-4	Magnesium	6.40E+02	1.20E+04	mg/kg	SED7G (0 - 0.5 ft)	46 / 46	-	1.20E+04	6.10E+03	EN	N	EN
	7439-96-5	Manganese	1.00E+02	5.70E+02 J+	mg/kg	SED4A (0 - 0.5 ft)	46 / 46	-	5.70E+02	6.80E+02	1.80E+02	Y	ASL
	7439-97-6	Mercury	3.30E-02	6.90E-01 J	mg/kg	SED7.5E (0 - 0.5 ft)	46 / 46	-	6.90E-01	3.60E-01	2.30E+00	N	BSL
	7440-02-0	Nickel	7.70E+00	1.60E+02 J-	mg/kg	SED7F (0 - 0.5 ft)	46 / 46	-	1.60E+02	5.00E+01	1.50E+02	Y	ASL
	7440-09-7	Potassium	2.30E+02	1.50E+03	mg/kg	SED4.5B (0 - 0.5 ft) SED5B (0 - 0.5 ft)	46 / 46	-	1.50E+03	1.40E+03	EN	N	EN
	7782-49-2	Selenium	3.40E-02 J	1.80E+00 J-	mg/kg	SED7.5E (0 - 0.5 ft)	46 / 46	-	1.80E+00	1.80E+00	3.90E+01	N	BSL
	7440-22-4	Silver	4.40E-02 J	3.50E+00 J-	mg/kg	SED7F (0 - 0.5 ft)	46 / 46	-	3.50E+00	8.30E-01	3.90E+01	N	BSL
	7440-23-5	Sodium	2.50E+01	4.20E+02	mg/kg	SED7G (0 - 0.5 ft)	46 / 46	-	4.20E+02	1.90E+02	EN	N	EN
7440-28-0	Thallium	3.70E-02 J	6.30E-01	mg/kg	SED7.5E (0 - 0.5 ft)	46 / 46	-	6.30E-01	3.20E-01	7.80E-02	Y	ASL	
7440-62-2	Vanadium	8.50E+00 J+	4.40E+02	mg/kg	SED7F (0 - 0.5 ft)	46 / 46	-	4.40E+02	5.20E+01	3.90E+01	Y	ASL	
7440-66-6	Zinc	4.60E+01 J+	6.30E+02	mg/kg	SED7F (0 - 0.5 ft)	46 / 46	-	6.30E+02	3.40E+02	2.30E+03	N	BSL	

**Table 3-9  
Occurrence, Distribution and Selection of Chemicals of Potential Concern in Surface Sediment  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
Medium: Sediment  
Exposure Medium: Surface Sediment

Exposure Point <sup>(7)</sup>	Cas Number	Chemical	Minimum <sup>(1)</sup> Concentration	Maximum <sup>(1)</sup> Concentration	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits <sup>(2)</sup>	Concentration Used for Screening <sup>(3)</sup>	Background Value <sup>(4)</sup>	Screening Toxicity Value <sup>(5)</sup>	COPC Flag (Y/N)	Rationale for Selection or Deletion <sup>(6)</sup>
		<b>Pesticides</b>											
	72-54-8	4,4'-DDD	7.60E-04 J	5.20E-02 J	mg/kg	SED4B (0 - 0.5 ft)	14 / 14	-	5.20E-02	6.80E-03	2.30E+00	N	BSL
	72-55-9	4,4'-DDE	1.40E-03	4.60E-02	mg/kg	SED7B (0 - 0.5 ft)	13 / 14	0.0013 - 0.0013	4.60E-02	1.20E-02	2.00E+00	N	BSL
	50-29-3	4,4'-DDT	3.70E-04 J	7.50E-01 J	mg/kg	SED4B (0 - 0.5 ft)	14 / 14	-	7.50E-01	6.10E-03	1.90E+00	N	BSL
	309-00-2	Aldrin	7.40E-05 J	1.90E-03 J	mg/kg	WSED1 (0 - 0.5 ft)	13 / 14	0.0013 - 0.0013	1.90E-03	1.80E-03	3.90E-02	N	BSL
	319-84-6	alpha-BHC	2.40E-04 J	2.40E-04 J	mg/kg	SED4B (0 - 0.5 ft)	1 / 14	0.00038 - 0.0019	2.40E-04	NA	8.60E-02	N	BSL
	319-85-7	beta-BHC	2.90E-04 J	2.00E-03 J	mg/kg	SED7F (0 - 0.5 ft)	7 / 14	0.0004 - 0.0013	2.00E-03	8.70E-04	3.00E-01	N	BSL
	5103-71-9	cis-Chlordane	1.40E-03 J	1.50E-02 J	mg/kg	WSED2 (0 - 0.5 ft)	14 / 14	-	1.50E-02	1.20E-02	1.70E+00	N	BSL
	319-86-8	delta-BHC	5.20E-04 J	5.50E-03 J	mg/kg	SED7F (0 - 0.5 ft)	9 / 14	0.00038 - 0.00083	5.50E-03	8.80E-04	8.60E-02	N	BSL
	60-57-1	Dieldrin	2.60E-04 J	4.90E-03 J	mg/kg	SED7F (0 - 0.5 ft)	14 / 14	-	4.90E-03	2.20E-03	3.40E-02	N	BSL
	959-98-8	Endosulfan I	6.40E-04	1.50E-03 J	mg/kg	SED7G (0 - 0.5 ft)	3 / 14	0.00038 - 0.0016	1.50E-03	NA	4.70E+01	N	BSL
	33213-65-9	Endosulfan II	1.90E-04 J	5.00E-03 J	mg/kg	SED7F (0 - 0.5 ft)	13 / 14	0.0013 - 0.0013	5.00E-03	7.90E-04	4.70E+01	N	BSL
	1031-07-8	Endosulfan Sulfate	1.70E-04 J	1.00E-02	mg/kg	SED7F (0 - 0.5 ft)	14 / 14	-	1.00E-02	1.40E-03	4.70E+01	N	BSL
	72-20-8	Endrin	3.10E-04 J	2.20E-02 J	mg/kg	SED7F (0 - 0.5 ft)	14 / 14	-	2.20E-02	3.50E-03	1.90E+00	N	BSL
	7421-93-4	Endrin aldehyde	1.60E-04 J	1.60E-03 J	mg/kg	SED7B (0 - 0.5 ft) WSED1 (0 - 0.5 ft)	13 / 14	0.0004 - 0.0004	1.60E-03	1.30E-03	1.90E+00	N	BSL
	53494-70-5	Endrin ketone	5.20E-04	8.00E-03 J	mg/kg	SED7F (0 - 0.5 ft)	12 / 14	0.00071 - 0.0013	8.00E-03	5.90E-03	1.90E+00	N	BSL
	58-89-9	gamma-BHC (Lindane)	7.70E-05 J	1.60E-03 J	mg/kg	SED7G (0 - 0.5 ft)	14 / 14	-	1.60E-03	9.70E-04	5.70E-01	N	BSL
	76-44-8	Heptachlor	2.20E-04 J	4.40E-03 J	mg/kg	WSED1 (0 - 0.5 ft)	14 / 14	-	4.40E-03	1.70E-03	1.30E-01	N	BSL
	1024-57-3	Heptachlor Epoxide	1.20E-04 J	6.20E-03 J	mg/kg	SED7F (0 - 0.5 ft)	14 / 14	-	6.20E-03	1.10E-03	7.00E-02	N	BSL
	72-43-5	Methoxychlor	1.70E-03 J	2.70E-02 J	mg/kg	WSED2 (0 - 0.5 ft)	14 / 14	-	2.70E-02	1.90E-02	3.20E+01	N	BSL
	5103-74-2	trans-Chlordane	1.90E-03	2.40E-02 J	mg/kg	WSED2 (0 - 0.5 ft)	14 / 14	-	2.40E-02	1.80E-02	1.70E+00	N	BSL
		<b>PCBs</b>											
	1336-36-3	Total PCBs	3.10E-03	1.90E+00	mg/kg	SED7.5E (0 - 0.5 ft)	45 / 46	0.0084 - 0.0084	1.90E+00	2.50E-01	1.20E-01	Y	ASL

**Table 3-9  
Occurrence, Distribution and Selection of Chemicals of Potential Concern in Surface Sediment  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
Medium: Sediment  
Exposure Medium: Surface Sediment

Exposure Point <sup>(7)</sup>	Cas Number	Chemical	Minimum <sup>(1)</sup> Concentration	Maximum <sup>(1)</sup> Concentration	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits <sup>(2)</sup>	Concentration Used for Screening <sup>(3)</sup>	Background Value <sup>(4)</sup>	Screening Toxicity Value <sup>(5)</sup>	COPC Flag (Y/N)	Rationale for Selection or Deletion <sup>(6)</sup>
		<b>SVOCs</b>											
	92-52-4	1,1'-Biphenyl	1.80E-02 J	1.80E-02 J	mg/kg	SED4B (0 - 0.5 ft)	1 / 14	0.16 - 1.3	1.80E-02	NA	4.70E+00	N	BSL
	105-67-9	2,4-Dimethylphenol	2.70E-02 J	2.70E-02 J	mg/kg	SED4B (0 - 0.5 ft) SED7B (0 - 0.5 ft)	2 / 14	0.16 - 1.3	2.70E-02	NA	1.30E+02	N	BSL
	91-57-6	2-Methylnaphthalene	9.20E-03 J	7.40E-02	mg/kg	SED6.5E (0 - 0.5 ft)	13 / 14	0.27 - 0.27	7.40E-02	1.80E-01	2.40E+01	N	BSL
	106-47-8	4-Chloroaniline	5.70E-02 J	8.20E-02 J	mg/kg	SED7B (0 - 0.5 ft)	2 / 14	0.12 - 1.3	8.20E-02	NA	2.70E+00	N	BSL
	106-44-5	4-Methylphenol	2.10E-02 J	1.10E-01 J	mg/kg	WSED1 (0 - 0.5 ft) SED7G (0 - 0.5 ft)	6 / 14	0.16 - 1.3	1.10E-01	4.30E-02	6.30E+02	N	BSL
	83-32-9	Acenaphthene	7.70E-03 J	1.40E-01	mg/kg	SED7G (0 - 0.5 ft)	36 / 46	0.0067 - 0.27	1.40E-01	3.20E-01	3.60E+02	N	BSL
	208-96-8	Acenaphthylene	1.60E-02 J	1.70E-01	mg/kg	SED5C (0 - 0.5 ft)	36 / 46	0.0067 - 0.27	1.70E-01	9.90E-02	3.60E+02	N	BSL
	98-86-2	Acetophenone	1.50E-02 J	4.40E-02 J	mg/kg	SED6.5E (0 - 0.5 ft)	6 / 14	0.12 - 1.3	4.40E-02	4.40E-02	7.80E+02	N	BSL
	120-12-7	Anthracene	1.60E-02 J	2.20E-01 J	mg/kg	SED1.5B (0 - 0.5 ft) SED4B (0 - 0.5 ft)	44 / 46	0.0067 - 0.042	2.20E-01	9.30E-01	1.80E+03	N	BSL
	100-52-7	Benzaldehyde	2.40E-02 J	3.20E-01 J	mg/kg	SED3C (0 - 0.5 ft)	11 / 13	0.3 - 1.3	3.20E-01	1.50E-01	7.80E+02	N	BSL
	56-55-3	Benzo(a)anthracene	2.10E-02 J	1.00E+00	mg/kg	SED1.5B (0 - 0.5 ft)	45 / 46	0.0067 - 0.0067	1.00E+00	2.70E+00	1.60E-01	Y	ASL
	50-32-8	Benzo(a)pyrene	2.80E-02 J	1.10E+00	mg/kg	SED1.5B (0 - 0.5 ft)	45 / 46	0.0067 - 0.0067	1.10E+00	2.60E+00	1.60E-02	Y	ASL
	205-99-2	Benzo(b)fluoranthene	4.30E-02	1.70E+00	mg/kg	SED1.5B (0 - 0.5 ft)	45 / 46	0.0067 - 0.0067	1.70E+00	2.80E+00	1.60E-01	Y	ASL
	191-24-2	Benzo(g,h,i)perylene	2.90E-02 J	1.20E+00	mg/kg	SED1.5B (0 - 0.5 ft)	45 / 46	0.0067 - 0.0067	1.20E+00	1.80E+00	1.80E+02	N	BSL
	207-08-9	Benzo(k)fluoranthene	6.60E-02	5.60E-01	mg/kg	SED2C (0 - 0.5 ft)	44 / 46	0.0067 - 0.042	5.60E-01	1.40E+00	1.60E+00	Y	cPAH (8)
	117-81-7	bis-(2-Ethylhexyl)phthalate	2.00E-01 J	1.60E+00	mg/kg	SED8C (0 - 0.5 ft)	14 / 14	-	1.60E+00	3.00E+00	3.90E+01	N	BSL
	85-68-7	Butylbenzylphthalate	6.30E-02 J	1.80E-01 J	mg/kg	SED7G (0 - 0.5 ft)	7 / 14	0.12 - 1.3	1.80E-01	4.20E-01	2.90E+02	N	BSL
	105-60-2	Caprolactam	3.90E-01 J	3.90E-01 J	mg/kg	SED8C (0 - 0.5 ft)	1 / 14	0.62 - 6.8	3.90E-01	NA	3.10E+03	N	BSL
	86-74-8	Carbazole	2.30E-02 J	2.50E-01	mg/kg	SED7G (0 - 0.5 ft)	14 / 14	-	2.50E-01	4.60E-01	2.40E+02	N	BSL
	218-01-9	Chrysene	3.10E-02 J	1.50E+00	mg/kg	SED1.5B (0 - 0.5 ft)	45 / 46	0.0067 - 0.0067	1.50E+00	3.30E+00	1.60E+01	Y	cPAH (8)
	53-70-3	Dibenzo(a,h)anthracene	2.40E-02 J	2.10E-01	mg/kg	SED1.5B (0 - 0.5 ft)	44 / 46	0.0067 - 0.042	2.10E-01	4.00E-01	1.60E-02	Y	ASL
	132-64-9	Dibenzofuran	2.70E-02 J	1.10E-01 J	mg/kg	SED7G (0 - 0.5 ft)	4 / 14	0.21 - 1.3	1.10E-01	8.30E-02	7.30E+00	N	BSL
	84-66-2	Diethylphthalate	7.80E-02 J	7.80E-02 J	mg/kg	SED8C (0 - 0.5 ft)	1 / 14	0.12 - 1.3	7.80E-02	7.70E-02	5.10E+03	N	BSL
	84-74-2	Di-n-butylphthalate	2.30E-02 J	2.00E-01 J	mg/kg	SED6B (0 - 0.5 ft)	4 / 14	0.12 - 1.3	2.00E-01	NA	6.30E+02	N	BSL
	117-84-0	Di-n-octylphthalate	4.20E-02 J	2.40E-01 J	mg/kg	WSED1 (0 - 0.5 ft)	4 / 14	0.12 - 1.3	2.40E-01	NA	6.30E+01	N	BSL
	206-44-0	Fluoranthene	3.70E-02 J	2.80E+00	mg/kg	SED1.5B (0 - 0.5 ft)	45 / 46	0.0067 - 0.0067	2.80E+00	6.20E+00	2.40E+02	N	BSL
	86-73-7	Fluorene	1.20E-02 J	1.20E-01 J	mg/kg	SED4B (0 - 0.5 ft)	38 / 46	0.0067 - 0.27	1.20E-01	2.80E-01	2.40E+02	N	BSL
	193-39-5	Indeno(1,2,3-cd)pyrene	2.20E-02 J	1.20E+00	mg/kg	SED1.5B (0 - 0.5 ft)	45 / 46	0.0067 - 0.0067	1.20E+00	1.50E+00	1.60E-01	Y	ASL
	91-20-3	Naphthalene	4.90E-03 J	9.50E-02	mg/kg	SED7G (0 - 0.5 ft)	24 / 46	0.0067 - 0.27	9.50E-02	7.60E-02	3.80E+00	N	BSL
	85-01-8	Phenanthrene	9.20E-02	2.00E+00	mg/kg	SED7G (0 - 0.5 ft)	44 / 46	0.0067 - 0.042	2.00E+00	5.60E+00	1.80E+02	N	BSL
	129-00-0	Pyrene	3.60E-02 J	2.10E+00	mg/kg	SED7G (0 - 0.5 ft)	45 / 46	0.0067 - 0.0067	2.10E+00	5.20E+00	1.80E+02	N	BSL

**Table 3-9  
Occurrence, Distribution and Selection of Chemicals of Potential Concern in Surface Sediment  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Surface Sediment

Exposure Point <sup>(7)</sup>	Cas Number	Chemical	Minimum <sup>(1)</sup> Concentration	Maximum <sup>(1)</sup> Concentration	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits <sup>(2)</sup>	Concentration Used for Screening <sup>(3)</sup>	Background Value <sup>(4)</sup>	Screening Toxicity Value <sup>(5)</sup>	COPC Flag (Y/N)	Rationale for Selection or Deletion <sup>(6)</sup>
		<b>VOCs</b>											
	78-93-3	2-Butanone	1.20E-02	1.20E-02	mg/kg	SED2C (0 - 0.5 ft)	1 / 14	0.0058 - 0.019	1.20E-02	NA	2.70E+03	N	BSL
	67-64-1	Acetone	2.00E-02 J	5.50E-02	mg/kg	SED2C (0 - 0.5 ft)	2 / 14	0.023 - 0.076	5.50E-02	NA	6.10E+03	N	BSL
	67-66-3	Chloroform	1.10E-03 J	1.30E-03 J	mg/kg	SED7B (0 - 0.5 ft)	2 / 14	0.0058 - 0.019	1.30E-03	NA	3.20E-01	N	BSL

**Notes:**

- (1) Minimum/maximum detected concentration and associated data flags.  
J = The chemical was positively identified; however, the associated numerical value is an estimated concentration only.  
+/- = Indicates the result may be biased high/low.
- (2) Lab Reporting Detection Limits (RDLs) are shown where the frequency of detection is less than 100%.
- (3) Maximum detected concentration used for screening, except for lead for which the mean detected concentration is used.
- (4) Background values, equal to the maximum detected concentration in site-specific background samples, were not used for COPC screening purposes, although they may be considered in the risk characterization portion of the risk assessment.
- (5) Sediment screening levels are equal to the USEPA Regional Screening Levels (RSLs) for residential soil based on a target risk level of  $1 \times 10^{-6}$  for carcinogens and a target hazard quotient of 0.1 for noncarcinogens (November 2015).  
The following surrogates were used for chemicals without available screening levels:  
Although iron has a USEPA RSL for residential soil, iron is considered an essential nutrient and is not further evaluated in the risk assessment.  
The value for hexavalent chromium was used for chromium.  
The value for endrin was used for endrin aldehyde and endrin ketone due to structural similarities.  
The value for chlordane was used for cis and trans chlordane due to structural similarities.  
The value for endosulfan was used for endosulfan I, endosulfan II and endosulfan sulfate due to structural similarities.  
The value for alpha-BHC was used for delta-BHC due to structural similarities.  
The value for Aroclor 1254 was used for Total PCBs.  
The value for acenaphthene was used for acenaphthylene due to structural similarities.  
The value for pyrene was used for benzo(g,h,i)perylene and phenanthrene due to structural similarities.  
The value for fluorene was used for carbazole due to structural similarities.  
The value for mercuric chloride was used for mercury.
- (6) Rationale Codes:  
Selection Reason: Above Screening Level (ASL)  
Deletion Reason: Below Screening Level (BSL); Essential Nutrient (EN)
- (7) Sediment data represent sediment from the 0 to 0.5 foot below ground surface depth interval.
- (8) All seven potentially carcinogenic PAH compounds were retained as COPCs if one or more was identified as a COPC.

**Definitions:**

- |  |                                      |
|--|--------------------------------------|
| CAS - Chemical Abstracts Service                     | NA - Not Available                   |
| COPC - Chemical of Potential Concern                 | PCB - Polychlorinated biphenyl       |
| cPAH - Carcinogenic Polynuclear Aromatic Hydrocarbon | SVOC - Semivolatile organic compound |
| EN - Essential Nutrient                              | TCDD-TEQ - Dioxin Toxic Equivalence  |
| mg/kg - milligrams per kilogram                      | VOC - Volatile organic compound      |

**Table 3-10**  
**Summary of Screening Levels for Chemicals Detected in Surface Water and Near-Shore Groundwater Monitoring Wells**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Chemical	CAS	Units	DDOE Surface Water (a)	USEPA AWQC (b)	USEPA Tapwater RSL (c)	Selected Surface Water Screening Level (d)
					(TR=1x10 <sup>-6</sup> ; THQ=0.1)	
<b>Metals</b>						
Aluminum	7429-90-5	ug/L	NA	NA	2000	2000
Antimony	7440-36-0	ug/L	640	640	0.78	640
Arsenic	7440-38-2	ug/L	0.14	0.14	0.052	0.14
Barium	7440-39-3	ug/L	NA	NA	380	380
Beryllium	7440-41-7	ug/L	NA	NA	2.5	2.5
Calcium	7440-70-2	ug/L	EN	EN	EN	EN
Chromium	7440-47-3	ug/L	NA	NA	0.035	0.035
Cobalt	7440-48-4	ug/L	NA	NA	0.6	0.6
Copper	7440-50-8	ug/L	NA	NA	80	80
Iron	7439-89-6	ug/L	EN	EN	1400	EN
Lead	7439-92-1	ug/L	NA	NA	15	15
Magnesium	7439-95-4	ug/L	EN	EN	EN	EN
Manganese	7439-96-5	ug/L	100	100	43	100
Nickel	7440-02-0	ug/L	4600	4600	39	4600
Potassium	7440-09-7	ug/L	EN	EN	EN	EN
Selenium	7782-49-2	ug/L	4200	4200	10	4200
Sodium	7440-23-5	ug/L	EN	EN	EN	EN
Thallium	7440-28-0	ug/L	0.47	0.47	0.02	0.47
Vanadium	7440-62-2	ug/L	NA	NA	8.6	8.6
Zinc	7440-66-6	ug/L	26000	26000	600	26000
<b>Pesticides</b>						
4,4'-DDT	50-29-3	ug/L	0.00022	0.00003	0.23	0.00022
beta-BHC	319-85-7	ug/L	0.017	0.014	0.025	0.017
delta-BHC	319-86-8	ug/L	0.0049	0.00039	0.0072	0.0049
Endosulfan Sulfate	1031-07-8	ug/L	89	40	10	89
Heptachlor Epoxide	1024-57-3	ug/L	0.000039	0.000032	0.0014	0.000039
trans-Chlordane	5103-74-2	ug/L	0.00081	0.00032	0.045	0.00081
<b>SVOCs</b>						
1,1'-Biphenyl	92-52-4	ug/L	NA	NA	0.083	0.083
2-Methylnaphthalene	91-57-6	ug/L	NA	NA	3.6	3.6
4-Methylphenol	106-44-5	ug/L	NA	NA	190	190
Acenaphthene	83-32-9	ug/L	990	90	53	990
Acenaphthylene	208-96-8	ug/L	990	90	53	990
Anthracene	120-12-7	ug/L	40000	400	180	40000
bis-(2-Ethylhexyl)phthalate	117-81-7	ug/L	2.2	0.37	5.6	2.2
Butylbenzylphthalate	85-68-7	ug/L	1900	0.1	16	1900
Carbazole	86-74-8	ug/L	5300	70	29	5300
Dibenzofuran	132-64-9	ug/L	NA	NA	0.79	0.79
Di-n-butylphthalate	84-74-2	ug/L	4500	30	90	4500
Fluoranthene	206-44-0	ug/L	140	20	80	140
Fluorene	86-73-7	ug/L	5300	70	29	5300
Naphthalene	91-20-3	ug/L	NA	NA	0.17	0.17
Pentachlorophenol	87-86-5	ug/L	3	0.04	0.04	3
Phenanthrene	85-01-8	ug/L	40000	400	180	40000
Phenol	108-95-2	ug/L	860000	300000	580	860000
Pyrene	129-00-0	ug/L	4000	30	12	4000

**Table 3-10**  
**Summary of Screening Levels for Chemicals Detected in Surface Water and Near-Shore Groundwater Monitoring Wells**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Chemical	CAS	Units	DDOE Surface Water (a)	USEPA AWQC (b)	USEPA Tapwater RSL (c)	Selected Surface Water Screening Level (d)
					(TR=1x10 <sup>-6</sup> ; THQ=0.1)	
<b>VOCs</b>						
2-Butanone	78-93-3	ug/L	NA	NA	560	560
Acetone	67-64-1	ug/L	NA	NA	1400	1400
Bromodichloromethane	75-27-4	ug/L	17	27	0.13	17
Carbon Disulfide	75-15-0	ug/L	NA	NA	81	81
Chloroform	67-66-3	ug/L	470	2000	0.22	470
cis-1,2-Dichloroethylene	156-59-2	ug/L	10000	4000	3.6	10000
Dibromochloromethane	124-48-1	ug/L	13	21	0.87	13
Methyl tert-Butyl Ether (MTBE)	1634-04-4	ug/L	NA	NA	14	14
Tetrachloroethylene	127-18-4	ug/L	3.3	29	4.1	3.3
Toluene	108-88-3	ug/L	15000	520	110	15000
Trichloroethene	79-01-6	ug/L	30	7	0.28	30
<b>Dioxin</b>						
2,3,7,8-TCDD-TEQ	DFTEQ-HH	ug/L	5.10E-08	5.10E-09	1.20E-07	5.10E-08

Notes:

CAS - Chemical Abstracts Service.

EN - Essential Nutrient.

NA - Not available.

PCB - Polychlorinated biphenyl.

RSL - Regional Screening Level.

SVOC - Semivolatile organic compound.

TCDD-TEQ - Dioxin Toxicity Equivalence.

THQ - Target Hazard Quotient.

TR - Target Risk.

USEPA - United States Environmental Protection Agency.

VOC - Volatile organic compound.

(a) DDOE: District Department of the Energy and Environment. Title 21 of the District of Columbia Municipal Regulations,

Chapter 11, Water Quality Standards. Effective November 1, 2013. <http://dcregs.dc.gov/Gateway/FinalAdoptionHome.aspx?RuleVersionID=4162093>

(b) USEPA National Recommended Water Quality Criteria for Priority Pollutants (Ambient Water Quality Criteria (AWQC)).

Value for Human Health for the consumption of organisms.

<http://www.epa.gov/wqc/national-recommended-water-quality-criteria-human-health-criteria-table>

(c) USEPA RSL: USEPA Regional Screening Level for Tapwater. November 2015.

(d) The selected surface water screening level was chosen from the following hierarchy:

1. DDOE surface water levels
2. USEPA AWQCs (for organisms)
3. USEPA RSLs for tapwater

The value for hexavalent chromium was used for chromium.

The value for alpha-BHC was used for delta-BHC due to structural similarities.

The RSL for endosulfan was used for endosulfan sulfate due to structural similarities.

The value for chlordane was used for trans-chlordane due to structural similarities.

The value for acenaphthene was used for acenaphthylene due to structural similarities.

The value for fluorene was used for carbazole due to structural similarities.

The value for anthracene was used for phenanthrene due to structural similarities.

The DDOE surface water and USEPA AWQC value for 1,2-trans-dichloroethylene was used for cis-1,2-dichloroethylene due to structural similarities.



**Table 3-11**  
**Occurrence, Distribution and Selection of Chemicals of Potential Concern in Surface Water**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Medium: Surface Water
Exposure Medium: Surface Water

Exposure Point	Cas Number	Chemical	Minimum <sup>(1)</sup> Concentration	Maximum <sup>(1)</sup> Concentration	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits <sup>(2)</sup>	Concentration Used for Screening <sup>(3)</sup>	Background Value <sup>(4)</sup>	Screening Toxicity Value <sup>(5)</sup>	COPC Flag (Y/N)	Rationale for Selection or Deletion <sup>(6)</sup>
Surface Water		<b>Dioxins and Furans</b>											
	DFTEQ-HH	2,3,7,8-TCDD-TEQ	2.40E-07	6.12E-07	ug/L	SUW3C	5 / 5	-	6.12E-07	5.09E-07	5.10E-08	Y	ASL
		<b>Metals</b>											
	7429-90-5	Aluminum	2.30E+02	5.70E+02	ug/L	SUW3C	10 / 10	-	5.70E+02	6.10E+02	2.00E+03	N	BSL
	7440-36-0	Antimony	5.40E-01 J	7.00E-01 J	ug/L	SUW6B	10 / 10	-	7.00E-01	5.60E-01	6.40E+02	N	BSL
	7440-38-2	Arsenic	4.80E-01 J	1.20E+00 J	ug/L	SUW4B	10 / 10	-	1.20E+00	2.40E+00	1.40E-01	Y	ASL
	7440-39-3	Barium	3.30E+01	4.10E+01	ug/L	SUW1B	10 / 10	-	4.10E+01	6.00E+01	3.80E+02	N	BSL
	7440-41-7	Beryllium	3.80E-02 J	1.00E-01 J	ug/L	SUW3C	10 / 10	-	1.00E-01	2.10E-01	2.50E+00	N	BSL
	7440-70-2	Calcium	1.40E+04	1.90E+04	ug/L	SUW1B	10 / 10	-	1.90E+04	3.60E+04	EN	N	EN
	7440-47-3	Chromium	2.30E+00	3.50E+00	ug/L	SUW3C	10 / 10	-	3.50E+00	3.30E+00	3.50E-02	Y	ASL
	7440-48-4	Cobalt	8.00E-01	1.10E+00	ug/L	SUW10B SUW3C SUW6B	10 / 10	-	1.10E+00	1.40E+00	6.00E-01	Y	ASL
	7440-50-8	Copper	2.90E+00	5.80E+00	ug/L	SUW4B	10 / 10	-	5.80E+00	5.00E+00	8.00E+01	N	BSL
	7439-89-6	Iron	7.40E+02	1.40E+03	ug/L	SUW3C	10 / 10	-	1.40E+03	1.60E+03	EN	N	EN
	7439-92-1	Lead	2.10E+00	3.20E+00	ug/L	SUW4B	10 / 10	-	3.20E+00	3.80E+00	1.50E+01	N	BSL
	7439-95-4	Magnesium	3.80E+03	5.70E+03	ug/L	SUW1B	10 / 10	-	5.70E+03	9.20E+03	EN	N	EN
	7439-96-5	Manganese	1.20E+02	1.70E+02	ug/L	SUW10B	10 / 10	-	1.70E+02	2.60E+02	1.00E+02	Y	ASL
	7440-02-0	Nickel	2.40E+00	3.20E+00	ug/L	SUW3C SUW4B	10 / 10	-	3.20E+00	3.20E+00	4.60E+03	N	BSL
	7440-09-7	Potassium	3.10E+03	3.80E+03	ug/L	SUW1B	10 / 10	-	3.80E+03	4.90E+03	EN	N	EN
	7782-49-2	Selenium	5.00E-01 J	8.60E-01 J	ug/L	SUW2B	2 / 10	5 - 5	8.60E-01	8.60E-01	4.20E+03	N	BSL
	7440-23-5	Sodium	1.50E+04	1.90E+04	ug/L	SUW1B SUW7B	10 / 10	-	1.90E+04	3.90E+04	EN	N	EN
7440-28-0	Thallium	1.50E-02 J	1.00E-01 J	ug/L	SUW1B	10 / 10	-	1.00E-01	3.40E-02	4.70E-01	N	BSL	
7440-62-2	Vanadium	1.40E+00	2.70E+00	ug/L	SUW6B	10 / 10	-	2.70E+00	2.50E+00	8.60E+00	N	BSL	
7440-66-6	Zinc	6.90E+00	3.10E+01	ug/L	SUW1B	10 / 10	-	3.10E+01	1.20E+01	2.60E+04	N	BSL	

**Table 3-11  
Occurrence, Distribution and Selection of Chemicals of Potential Concern in Surface Water  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Medium: Surface Water
Exposure Medium: Surface Water

Exposure Point	Cas Number	Chemical	Minimum <sup>(1)</sup> Concentration	Maximum <sup>(1)</sup> Concentration	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits <sup>(2)</sup>	Concentration Used for Screening <sup>(3)</sup>	Background Value <sup>(4)</sup>	Screening Toxicity Value <sup>(5)</sup>	COPC Flag (Y/N)	Rationale for Selection or Deletion <sup>(6)</sup>
		<b>Pesticides</b>											
	50-29-3	4,4'-DDT	1.10E-03	J 1.60E-03	ug/L	SUW1B	5 / 5	-	1.60E-03	1.20E-03	2.20E-04	Y	ASL
		<b>SVOCs</b>											
	91-57-6	2-Methylnaphthalene	1.60E-02	J 1.60E-02	J ug/L	SUW3C	1 / 5	0.19 - 0.22	1.60E-02	NA	3.60E+00	N	BSL
	120-12-7	Anthracene	1.80E-02	J 1.80E-02	J ug/L	SUW4B	1 / 10	0.19 - 0.27	1.80E-02	NA	4.00E+04	N	BSL
	117-81-7	bis-(2-Ethylhexyl)phthalate	1.40E+00	J 2.20E+00	ug/L	SUW10B SUW6B	3 / 5	1.9 - 1.9	2.20E+00	3.60E+00	2.20E+00	N	BSL
	85-68-7	Butylbenzylphthalate	8.60E-01	J 8.60E-01	J ug/L	SUW6B	1 / 5	0.96 - 1.1	8.60E-01	1.60E-01	1.90E+03	N	BSL
	86-74-8	Carbazole	3.70E-02	J 3.70E-02	J ug/L	SUW3C	1 / 5	0.19 - 0.22	3.70E-02	NA	5.30E+03	N	BSL
	84-74-2	Di-n-butylphthalate	4.90E-01	J 4.90E-01	J ug/L	SUW6B	1 / 5	0.96 - 1.1	4.90E-01	1.20E-01	4.50E+03	N	BSL
	206-44-0	Fluoranthene	1.90E-02	J 3.60E-02	J ug/L	SUW3C	6 / 10	0.19 - 0.21	3.60E-02	3.10E-02	1.40E+02	N	BSL
	129-00-0	Pyrene	2.10E-02	J 3.80E-02	J ug/L	SUW1B	4 / 10	0.19 - 0.21	3.80E-02	2.30E-02	4.00E+03	N	BSL
		<b>VOCs</b>											
	75-15-0	Carbon Disulfide	4.00E-01	J 4.00E-01	J ug/L	SUW6B	1 / 5	1 - 1	4.00E-01	NA	8.10E+01	N	BSL
	108-88-3	Toluene	1.50E-01	J 1.50E-01	J ug/L	SUW10B	1 / 5	1 - 1	1.50E-01	3.00E-01	1.50E+04	N	BSL
		<b>PCBs</b>											
	1336-36-3	Total PCBs <sup>(7)</sup>	Not detected	Not detected	ug/L	NA	0/10	-	9.40E-03	Not detected	6.40E-05	Y	ASL

**Notes:**

- (1) Minimum/maximum detected concentration and associated data flags.  
J = The chemical was positively identified; however, the associated numerical value is an estimated concentration only.
- (2) Lab Reporting Detection Limits (RDLs) are shown where the frequency of detection is less than 100%.
- (3) Maximum detected concentration used for screening.
- (4) Background values, equal to the maximum detected concentration in site-specific background samples, were not used for COPC screening purposes, although they may be considered in the risk characterization portion of the risk assessment.
- (5) Surface water screening levels were selected based on the following hierarchy:
  1. District Department of the Environment. Title 21 of the District of Columbia Municipal Regulations, Chapter 11, Water Quality Standards. Effective November 1, 2013.
  2. USEPA National Recommended Water Quality Criteria for Priority Pollutants. Value for Human Health for the consumption of organisms. 2009.
  3. USEPA Regional Screening Level (RSL) for Tapwater based on a target risk level of 1x10<sup>6</sup> for carcinogens and target hazard quotient of 0.1 for noncarcinogens (November 2015).  
See Table 3-10 for surface water screening levels and surrogates used.
- (6) Rationale Codes:  
Selection Reason: Above Screening Level (ASL)  
Deletion Reason: Below Screening Level (BSL); Essential Nutrient (EN)
- (7) PCBs was not detected in surface water via Method 8082; the lowest reporting limit of 0.0094 ug/L was used for screening.

**Definitions:**

- CAS - Chemical Abstracts Service
- COPC - Chemical of Potential Concern
- EN - Essential Nutrient.
- ug/L - microgram per liter
- NA - Not Available
- PCB - Polychlorinated biphenyl
- SVOC - Semivolatile organic compound
- TCDD-TEQ - Dioxin Toxic Equivalence
- VOC - Volatile organic compound

**Table 3-12**  
**Occurrence, Distribution and Selection of Chemicals of Potential Concern in Fish Tissue <sup>(7)</sup>**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Medium: Fish Tissue
Exposure Medium: Fish Tissue (fillet)

Exposure Point	Fish Tissue Type	CAS Number	Chemical	Minimum <sup>(1)</sup> Concentration	Maximum <sup>(1)</sup> Concentration	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits <sup>(2)</sup>	Concentration Used for Screening <sup>(3)</sup>	Background Value <sup>(4)</sup>	Screening Toxicity Value <sup>(5)</sup>	COPC Flag (Y/N)	Rationale for Selection or Deletion <sup>(6)</sup>
Main Branch Upper Anacostia River	Brown Bullhead	1336-36-3	PCB, Total Congeners	3.40E-02	3.40E-02	mg/kg	-	1 / 1	-	3.40E-02	-	2.08E-03	Y	ASL
Main Branch Upper Anacostia River	Blue Catfish	1336-36-3	PCB, Total Congeners	5.05E-01	7.11E-01	mg/kg	-	2 / 2	-	7.11E-01	-	2.08E-03	Y	ASL
Main Branch Upper Anacostia River	Carp	1336-36-3	PCB, Total Congeners	1.83E+00	1.83E+00	mg/kg	-	1 / 1	-	1.83E+00	-	2.08E-03	Y	ASL
Main Branch Upper Anacostia River	Channel Catfish	1336-36-3	PCB, Total Congeners	5.38E-01	5.38E-01	mg/kg	-	1 / 1	-	5.38E-01	-	2.08E-03	Y	ASL
Main Branch Upper Anacostia River	Pumpkinseed Sunfish	1336-36-3	PCB, Total Congeners	1.77E-02	1.77E-02	mg/kg	-	1 / 1	-	1.77E-02	-	2.08E-03	Y	ASL
Lower Anacostia	American Eel	1336-36-3	PCB, Total Congeners	6.45E-01	6.45E-01	mg/kg	-	1 / 1	-	6.45E-01	-	2.08E-03	Y	ASL
Lower Anacostia	Blue Catfish	1336-36-3	PCB, Total Congeners	4.52E-01	4.52E-01	mg/kg	-	1 / 1	-	4.52E-01	-	2.08E-03	Y	ASL
Lower Anacostia	Carp	1336-36-3	PCB, Total Congeners	5.42E-01	5.42E-01	mg/kg	-	1 / 1	-	5.42E-01	-	2.08E-03	Y	ASL
Lower Anacostia	Channel Catfish	1336-36-3	PCB, Total Congeners	1.20E-01	1.20E-01	mg/kg	-	1 / 1	-	1.20E-01	-	2.08E-03	Y	ASL
Lower Anacostia	Largemouth Bass	1336-36-3	PCB, Total Congeners	1.14E-01	1.14E-01	mg/kg	-	1 / 1	-	1.14E-01	-	2.08E-03	Y	ASL
Lower Anacostia	Sunfish	1336-36-3	PCB, Total Congeners	4.11E-02	4.11E-02	mg/kg	-	1 / 1	-	4.11E-02	-	2.08E-03	Y	ASL
Northeast Branch Anacostia River	American Eel	1336-36-3	PCB, Total Congeners	2.01E-01	2.01E-01	mg/kg	-	1 / 1	-	2.01E-01	-	2.08E-03	Y	ASL
Northeast Branch Anacostia River	Channel Catfish	1336-36-3	PCB, Total Congeners	2.90E-01	5.01E-01	mg/kg	-	3 / 3	-	5.01E-01	-	2.08E-03	Y	ASL
Northeast Branch Anacostia River	Redbreast Sunfish	1336-36-3	PCB, Total Congeners	2.40E-02	2.41E-01	mg/kg	-	3 / 3	-	2.41E-01	-	2.08E-03	Y	ASL
Northeast Branch Anacostia River	White Sucker	1336-36-3	PCB, Total Congeners	8.21E-02	8.21E-02	mg/kg	-	1 / 1	-	8.21E-02	-	2.08E-03	Y	ASL
Northwest Branch Anacostia River	American Eel	1336-36-3	PCB, Total Congeners	2.76E-01	2.76E-01	mg/kg	-	1 / 1	-	2.76E-01	-	2.08E-03	Y	ASL
Northwest Branch Anacostia River	Redbreast Sunfish	1336-36-3	PCB, Total Congeners	6.43E-02	9.89E-02	mg/kg	-	3 / 3	-	9.89E-02	-	2.08E-03	Y	ASL
Upper Anacostia	American Eel	1336-36-3	PCB, Total Congeners	-	-	mg/kg	-	-	-	-	-	-	-	-
Upper Anacostia	Blue Catfish	1336-36-3	PCB, Total Congeners	1.41E-01	1.41E-01	mg/kg	-	1 / 1	-	1.41E-01	-	2.08E-03	Y	ASL
Upper Anacostia	Carp	1336-36-3	PCB, Total Congeners	1.01E-01	1.01E-01	mg/kg	-	1 / 1	-	1.01E-01	-	2.08E-03	Y	ASL
Upper Anacostia	Channel Catfish	1336-36-3	PCB, Total Congeners	2.54E-01	2.54E-01	mg/kg	-	1 / 1	-	2.54E-01	-	2.08E-03	Y	ASL
Upper Anacostia	Largemouth Bass	1336-36-3	PCB, Total Congeners	1.20E-01	1.20E-01	mg/kg	-	1 / 1	-	1.20E-01	-	2.08E-03	Y	ASL
Upper Anacostia	Sunfish	1336-36-3	PCB, Total Congeners	4.19E-02	4.19E-02	mg/kg	-	1 / 1	-	4.19E-02	-	2.08E-03	Y	ASL

**Notes:**

- (1) Minimum/maximum detected concentration and associated data flags.
- (2) Lab Reporting Detection Limits (RDLs) are shown where the frequency of detection is less than 100%.
- (3) Maximum detected concentration used for screening.
- (4) Background values were not used for COPC screening purposes, although applicable background values may be considered in the risk characterization portion of the risk assessment as available.
- (5) Fish tissue screening levels are equal to the USEPA Regional Screening Levels (RSLs) for fish tissue, calculated using USEPA's RSL calculator (November 2015) based on a target risk level of 1x10<sup>-6</sup> for carcinogens and a target hazard quotient of 0.1 for noncarcinogens. The RSL for PCBs (High Risk) and Aroclor-1254 was used for comparison with Total PCB Congeners concentrations.
- (6) Rationale Codes:  
 Selection Reason: Above Screening Level (ASL)  
 Deletion Reason: Below Screening Level (BSL); Essential Nutrient (EN)
- (7) Sources of fish tissue data are as follows (see text for details):

**Definitions:**

CAS - Chemical Abstracts Service  
 COPC - Chemical of Potential Concern  
 mg/kg - milligrams per kilogram  
 NA - Not Available  
 PCB - Polychlorinated biphenyl

**Table 3-13**  
**Summary of Chemicals of Potential Concern - Waterside**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Chemical	CAS Number	Media		
		Sediment	Surface Water	Fish Tissue
<b>Dioxins and Furans</b>				
2,3,7,8-TCDD-TEQ	DFTEQ-HH	X	X	
<b>Metals</b>				
Aluminum	7429-90-5	X		
Arsenic	7440-38-2	X	X	
Chromium	7440-47-3	X	X	
Cobalt	7440-48-4	X	X	
Manganese	7439-96-5	X	X	
Nickel	7440-02-0	X		
Thallium	7440-28-0	X		
Vanadium	7440-62-2	X		
<b>Pesticides</b>				
4,4'-DDT	50-29-3		X	
<b>PCBs</b>				
Total PCBs (a)	1336-36-3	X	X (b)	X
<b>SVOCs (c)</b>				
Benzo(a)anthracene	56-55-3	X		
Benzo(a)pyrene	50-32-8	X		
Benzo(b)fluoranthene	205-99-2	X		
Benzo(k)fluoranthene	207-08-9	X		
Chrysene	218-01-9	X		
Dibenzo(a,h)anthracene	53-70-3	X		
Indeno(1,2,3-cd)pyrene	193-39-5	X		

**Notes:**

CAS - Chemical Abstracts Service

PCB - Polychlorinated biphenyl

SVOC - Semivolatle organic compound

TCDD-TEQ - Dioxin Toxic Equivalence.

X - Indicates chemical was identified as a chemical of potential concern in the associated media.

(a) Total PCBs for sediment are evaluated as Total PCB Aroclors. PCBs for fish tissue are evaluated as Total PCB (sum of congeners) and PCB-TEQ. (See 3.2.2.2 text for further discussion).

(b) PCBs was not detected in the RI surface water samples, however, the detection limit for the analytical method used (approximately 0.01 ug/L for Method 8082) exceeds the applicable surface water screening level of 0.000064 ug/L for PCBs. Therefore, PCBs was conservatively identified as a surface water COPC using the lowest reporting limit that was achieved (0.0094 ug/L).

(c) All seven potentially carcinogenic PAH compounds were conservatively retained as COPCs if one or more was identified as a COPC.

Table 4-1  
Non-Cancer Toxicity Data for COPCs - Oral/Dermal  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

Chemical of Potential Concern	CAS Number	Chronic/Subchronic	Chronic Oral Reference Dose (mg/kg-day)	Oral Absorption Efficiency for Dermal (a)	Absorbed Chronic RfD for Dermal (b) (mg/kg-day)	Study Animal	Study Method	Primary Target Organ/System	Critical Endpoint	Combined Uncertainty/Modifying Factors	Confidence Level	RfD/Target Organ(s)		RfD Tier (h)
												Source	Date	
<b>Dioxin and Dioxin-Like PCBs</b>														
2,3,7,8-TCDD-TEQ	DFTEQ-HH	Chronic	7.00E-10 (j)	--	7.00E-10	Human	Epidemiological	Reproductive, Developmental	Decreased sperm count and motility in men / Increased TSH in neonates	30	High	IRIS	1/2016	Tier 1
<b>Metals</b>														
Aluminum	7429-90-5	Chronic	1.00E+00	--	1.00E+00	Mouse	Oral:Diet	Neurological	Neurological Toxicity	100	Low	PPRTV	10/2006	Tier 2
Arsenic, inorganic	7440-38-2	Chronic	3.00E-04	--	3.00E-04	Human	Oral: Drinking water	Skin, Vascular	Hyperpigmentation, keratosis and possible vascular complications	3	Medium	IRIS	1/2016	Tier 1
Chromium	7440-47-3	Chronic	3.00E-03 (d)	0.025	7.50E-05	Rat	Oral:Drinking Water	None reported	None reported	900	Low	IRIS	1/2016	Tier 1
Cobalt	7440-48-4	Chronic	3.00E-04	--	3.00E-04	Human	Oral	Thyroid	Decreased iodine uptake	3,000	Low/Medium	PPRTV	8/2008	Tier 2
Manganese, nondiet	7439-96-5	Chronic	2.40E-02 (f)	0.04	9.60E-04	Human	Oral: dietary supplements	Neurological	CNS effects (other effect: Impairment of neurobehavioral function)	3	High	IRIS	1/2016	Tier 1
Nickel	7440-02-0	Chronic	2.00E-02	0.04	8.00E-04	Rat	Oral: Diet	Decreased body and organ weights	Decreased body and organ weights	300	Medium	IRIS	1/2016	Tier 1
Thallium	7440-28-0	Chronic	1.00E-05 (g)	--	1.00E-05	Rat	Oral: Subchronic	Hair	Hair follicle atrophy	3,000	--	PPRTV screening value (g)	10/2012	Tier 3
Vanadium	7440-62-2	Chronic	5.04E-03 (i)	0.026	1.31E-04	Rat	Oral	Hair	Decreased hair cystine	100	Low	IRIS	1/2016	Tier 1
<b>Pesticides</b>														
4,4'-DDT	50-29-3	Chronic	5.00E-04	--	5.00E-04	Rat	Oral: diet	Liver	Liver lesions	100	Medium	IRIS	1/2016	Tier 1
<b>PCBs</b>														
Total PCBs	1336-36-3	Chronic	7.00E-05 (c)	--	7.00E-05	Monkey	Oral: Bioassay	Developmental	Reduced birth weights	100	Medium	IRIS	1/2016	Tier 1
	1336-36-3	Chronic	2.00E-05 (c)	--	2.00E-05	Monkey	Oral: Capsule	Eye, Nails, Immune	Ocular exudate, inflamed and prominent Meibomian glands, distorted growth of finger and toe nails; decreased antibody response to sheep erythrocytes	300	Medium	IRIS	1/2016	Tier 1
<b>SVOCs</b>														
Benzo(a)anthracene	56-55-3	Chronic	NA	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	50-32-8	Chronic	NA	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	205-99-2	Chronic	NA	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	207-08-9	Chronic	NA	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	218-01-9	Chronic	NA	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	53-70-3	Chronic	NA	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	193-39-5	Chronic	NA	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

**Table 4-1**  
**Non-Cancer Toxicity Data For COPCs - Oral/Dermal**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	CAS Number	Chronic/Subchronic	Chronic Oral Reference Dose (mg/kg-day)	Oral Absorption Efficiency for Dermal (a)	Absorbed Chronic RfD for Dermal (b) (mg/kg-day)	Study Animal	Study Method	Primary Target Organ/System	Critical Endpoint	Combined Uncertainty/Modifying Factors	Confidence Level	RfD/Target Organ(s)		RfD Tier (h)
												Source	Date	

**Notes:**

"-" - No adjustment necessary.

ABS<sub>GI</sub> - Fraction of contaminant absorbed in gastrointestinal tract (dimensionless).

ATSDR - Agency for Toxic Substances and Disease Registry.

CalEPA - California Environmental Protection Agency.

CAS - Chemical Abstracts Service.

CNS - Central Nervous System.

HEAST - Health Effects Assessment Summary Tables (USEPA, 1997).

IRIS - Integrated Risk Information System, an online computer database of toxicological information (USEPA, 2016).

mg/kg-day - Milligrams per Kilogram per day.

NA - Not available/Not Applicable.

PCB - Polychlorinated Biphenyls.

PPRTV - Provisional Peer Reviewed Toxicity Value.

RfD - Reference Dose.

TCDD - 2,3,7,8-Tetrachlorodibenzo-p-dioxin.

TEQ - Toxicity Equivalence.

TSH - Thyroid Stimulating Hormone.

USEPA - United States Environmental Protection Agency.

(a) USEPA, 2004. Risk Assessment Guidance for Superfund. Volume 1, Part E, Supplemental Guidance for Dermal Risk Assessment. Exhibit 4-1. Where USEPA, 2004 does not recommend adjustments, no value is listed.

(b) Oral RfD multiplied by ABS<sub>GI</sub>. Where no adjustment is recommended, Dermal RfD = Oral RfD.

(c) Value for Aroclor 1254 (2E-05 mg/kg-day) or Aroclor 1016 (7E-05 mg/kg-day) may be used to evaluate the noncarcinogenic hazards of total PCBs, and the Aroclor selected depends on the chlorine content of the PCB congeners in the medium of interest. For this HHRA, the RfD for Aroclor 1254 is used.

(d) The value for chromium, hexavalent is used.

(f) When assessing exposure to manganese for non-dietary pathways, IRIS recommends applying a modifying factor of 3 to the oral RfD of 0.14 mg/kg-day. The USEPA Regional Screening Level User's Guide also indicates that the average dietary manganese content of the US diet (5 mg/day) be subtracted from the critical dose of 10 mg/day when assessing exposure to non-dietary manganese. Therefore, the RfD is (10 mg/day - 5 mg/day)/Modifying Factor (3) = 1.67 mg/day / 70 kg = 0.024 mg/kg-day.

(g) No PPRTVs were developed for thallium in the PPRTV document (USEPA, 2012) due to database deficiencies. According to USEPA (2012) an RfD for thallium was not derived because the available toxicity database contains studies that are generally of poor quality. Appendix A of the PPRTV document indicates that it is inappropriate to derive provisional chronic or subchronic RfDs for thallium, but that information is available which, although insufficient to support derivation of a provisional toxicity value, under current guidelines, may be of limited use to risk assessors as a screening value. The use of this screening provisional value is highly uncertain but is the value used in the USEPA Regional Screening Tables (January, 2015).

(h) USEPA, 2003. Human Health Toxicity Values in Superfund Risk Assessments. OSWER Directive 9285.7-53. December 5, 2003. IRIS values are considered Tier 1, PPRTVs are considered Tier 2, and other values, including ATSDR, CalEPA, HEAST, and other non-USEPA values are considered Tier 3 values. Selection of Tier 3 values followed the hierarchy put forth in USEPA's Tier 3 Toxicity Value White Paper, OSWER 9285.7-86, May 16, 2013.

(i) The oral RfD for Vanadium is derived from the IRIS oral RfD for Vanadium Pentoxide by factoring out the molecular weight (MW) of the oxide ion. Vanadium Pentoxide (V2O5) has a molecular weight of 181.88. The two atoms of Vanadium contribute 56% of the MW. Vanadium Pentoxide's oral RfD of 9E-03 mg/kg-day multiplied by 56% gives a Vanadium oral RfD of 5.04E-03 mg/kg-day.

(j) The IRIS reference dose for 2,3,7,8-TCDD is used to evaluate TCDD-TEQ and PCB-TEQ.

Table 4-2  
Cancer Toxicity Data for COPCs - Oral/Dermal  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

Chemical of Potential Concern	CAS Number	Oral Cancer Slope Factor (mg/kg-day) <sup>-1</sup>	Oral Absorption Efficiency for Dermal (a)	Absorbed Dermal Cancer Slope Factor (b) (mg/kg-day) <sup>-1</sup>	Study Animal	Study Method	Weight of Evidence/ Cancer Guideline Description (c)	Classification System	Oral CSF/WOE		CSF Tier (g)
									Source(s)	Date	
<b>Dioxin and Dioxin-Like PCBs</b>											
2,3,7,8-TCDD-TEQ	DFTEQ-HH	1.30E+05 (d)	--	1.30E+05 (d)	Mouse	Oral: Gavage	(j)	(j)	CalEPA	1/2016	Tier 3
<b>Metals</b>											
Aluminum	7429-90-5	NA	--	NA	NA	NA	Inadequate Information	2005	PPRTV	2/2007	NA
Arsenic, inorganic	7440-38-2	1.50E+00	--	1.50E+00	Human	Oral: Drinking Water	A	1986	IRIS	1/2016	Tier 1
Chromium	7440-47-3	5.00E-01 (e,f,h)	0.025	2.00E+01 (e,f,h)	Mouse	Oral: Drinking Water	D [oral (k)]: A [inhalation]	1986	NJDEP	4/2009	Tier 3
Cobalt	7440-48-4	NA	--	NA	NA	NA	Likely Carcinogenic (inhalation)	2005	PPRTV	8/2008	NA
Manganese, diet	7439-96-5	NA	NA	NA	NA	NA	D	1986	IRIS	1/2016	NA
Manganese, nondiet	7439-96-5	NA	0.04	NA	NA	NA	D	1986	IRIS	1/2016	NA
Nickel	7440-02-0	NA	0.04	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	7440-28-0	NA	--	NA	NA	NA	Inadequate Information	2005	PPRTV	10/2012	NA
Vanadium	7440-62-2	NA	0.026	NA	NA	NA	NA	NA	NA	NA	NA
<b>Pesticides</b>											
4,4'-DDT	50-29-3	3.40E-01	--	3.40E-01	Mouse	Oral: diet	B2	1986	IRIS	1/2016	Tier 1
<b>PCBs</b>											
PCBs, total (high risk & persistence/upper bound)	1336-36-3	2.00E+00	--	2.00E+00	Rat	Oral: Diet	B2	1986	IRIS	1/2016	Tier 1
PCBs, total (high risk & persistence/central estimate)	1336-36-3	1.00E+00	--	1.00E+00	Rat	Oral: Diet	B2	1986	IRIS	1/2016	Tier 1
PCBs, total (low risk & persistence/upper bound)	1336-36-3	4.00E-01	--	4.00E-01	Rat	Oral: Diet	B2	1986	IRIS	1/2016	Tier 1
PCBs, total (low risk & persistence/central estimate)	1336-36-3	3.00E-01	--	3.00E-01	Rat	Oral: Diet	B2	1986	IRIS	1/2016	Tier 1
PCBs, total (lowest risk & persistence/upper bound)	1336-36-3	7.00E-02	--	7.00E-02	Rat	Oral: Diet	B2	1986	IRIS	1/2016	Tier 1
PCBs, total (lowest risk & persistence/central estimate)	1336-36-3	4.00E-02	--	4.00E-02	Rat	Oral: Diet	B2	1986	IRIS	1/2016	Tier 1
<b>SVOCs</b>											
Benzo(a)anthracene	56-55-3	7.30E-01 (i,h)	--	7.30E-01 (i,h)	Mouse	Oral: diet	B2	1986	IRIS	1/2016	Tier 1
Benzo(a)pyrene	50-32-8	7.30E+00 (h)	--	7.30E+00 (h)	Mouse	Oral: diet	B2	1986	IRIS	1/2016	Tier 1
Benzo(b)fluoranthene	205-99-2	7.30E-01 (i,h)	--	7.30E-01 (i,h)	Mouse	Oral: diet	B2	1986	IRIS	1/2016	Tier 1
Benzo(k)fluoranthene	207-08-9	7.30E-02 (i,h)	--	7.30E-02 (i,h)	Mouse	Oral: diet	B2	1986	IRIS	1/2016	Tier 1
Chrysene	218-01-9	7.30E-03 (i,h)	--	7.30E-03 (i,h)	Mouse	Oral: diet	B2	1986	IRIS	1/2016	Tier 1
Dibenz(a,h)anthracene	53-70-3	7.30E+00 (i,h)	--	7.30E+00 (i,h)	Mouse	Oral: diet	B2	1986	IRIS	1/2016	Tier 1
Indeno(1,2,3-cd)pyrene	193-39-5	7.30E-01 (i,h)	--	7.30E-01 (i,h)	Mouse	Oral: diet	B2	1986	IRIS	1/2016	Tier 1

**Table 4-2  
Cancer Toxicity Data For COPCs - Oral/Dermal  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	CAS Number	Oral Cancer Slope	Oral Absorption Efficiency	Absorbed Dermal Cancer Slope	Study Animal	Study Method	Weight of Evidence/ Cancer Guideline Description (c)	Classification System	Oral CSF/WOE		CSF Tier (g)
		Factor (mg/kg-day) <sup>-1</sup>	for Dermal (a)	Factor (b) (mg/kg-day) <sup>-1</sup>					Source(s)	Date	

**Notes:**

- "-" - No adjustment necessary.
- ABS<sub>(G)</sub> - Fraction of contaminant absorbed in gastrointestinal tract (dimensionless).
- ATSDR - Agency for Toxic Substances and Disease Registry.
- CalEPA - California Environmental Protection Agency. Toxicity Criteria Database. <http://www.oehha.ca.gov/risk/ChemicalDB/index.asp>.
- CAS - Chemical Abstracts Service.
- COPC - Chemical of Potential Concern.
- CSF - Cancer Slope Factor.
- IRIS - Integrated Risk Information System, an online computer database of toxicological information (USEPA, 2016).
- mg/kg-day - Milligrams per Kilogram per day.
- NA - Not available.
- NJDEP - New Jersey Department of Environmental Protection.
- NTP - National Toxicology Program.
- PCB - Polychlorinated Biphenyls.
- PPRTV - Provisional Peer Reviewed Toxicity Value.
- RSL - Regional Screening Level, derived by USEPA for chemicals in soil, water, air, & fish (November 2015).
- TCDD - 2,3,7,8-Tetrachlorodibenzo-p-dioxin.
- TEQ - Toxicity Equivalence.
- USEPA - United States Environmental Protection Agency.
- WOE - Weight-of-Evidence.

- (a) USEPA, 2004. Risk Assessment Guidance for Superfund. Volume 1, Part E, Supplemental Guidance for Dermal Risk Assessment. Exhibit 4-1. Where USEPA, 2004 does not recommend adjustments, no value is listed.
- (b) Oral CSF divided by ABSG. Where no adjustment is recommended, Dermal CSF = Oral CSF.
- (c) Some chemicals are classified under the 1986 system, while others have been classified under the 2005 system:

1986 Classifications

- Group A Carcinogenic to Humans.
- Group B Probably Carcinogenic to Humans:
  - B1 Based on limited human evidence.
  - B2 Based on animal evidence.
- Group C Possibly Carcinogenic to Humans
- Group D Not Classifiable as to Human Carcinogenicity.
- Group E Evidence of Non-carcinogenicity for Humans

2005 Classifications

- Carcinogenic Carcinogenic to Humans
- Likely Carcinogenic Likely to be Carcinogenic to Humans
- Suggestive Evidence Suggestive Evidence of Carcinogenic Potential
- Inadequate Information Inadequate Information to Assess Carcinogenic Potential
- Not Likely Carcinogenic Not Likely to be Carcinogenic to Humans

- (d) Consistent with the hierarchy used in USEPA's development of Regional Screening Levels (November 2015), the CalEPA cancer slope factor for 2,3,7,8-TCDD is used to evaluate TCDD-TEQ and PCB-TEQ.
- (e) The value for chromium, hexavalent was used.
- (f) IRIS indicates that there is no evidence that hexavalent chromium is carcinogenic via the oral route and does not provide a CSF. However, because USEPA has used the NJDEP CSF in its RSL tables, the NJDEP value is used here (Derivation of Ingestion-Based Soil Remediation Criterion for Cr+6 Based on the NTP Chronic Bioassay Data for Chromium (NJDEP, 2009)).
- (g) USEPA, 2003. Human Health Toxicity Values in Superfund Risk Assessments. OSWER Directive 9285.7-53. December 5, 2003. IRIS values are considered Tier 1, PPRTVs are considered Tier 2, and other values, including ATSDR, CalEPA, PPRTV Appendix Screening Toxicity Values, HEAST and other non-USEPA values are considered Tier 3 values. Selection of Tier 3 values followed the hierarchy put forth in USEPA's Tier 3 Toxicity Value White Paper, OSWER 9285.7-86, May 16, 2013.
- (h) Assumed to act via a mutagenic mode of carcinogenic action; therefore, age-dependent adjustment factors are applied to the risk estimates.
- (i) Calculated using Relative Potency Factors (RPFs) as per USEPA Guidance for Quantitative Risk Assessment of Polycyclic Aromatic Hydrocarbons (USEPA, 1993).
- (j) The cancer assessment for 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) is currently underway (USEPA IRIS, 2016).
- (k) The cancer assessment for oral exposure to hexavalent chromium is currently underway (USEPA IRIS, 2016).



**Table 5-1**  
**Selection of Exposure Pathways**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Type of Analysis	Rationale for Selection or Exclusion of Exposure Pathway
Current/Future	Biota Tissue	Fish Tissue	Fish from Anacostia River	Recreational Angler	Young Child (1 to <7 year)	Ingestion	Quantitative	Despite the presence of an advisory warning against the consumption of certain species of fish from the Anacostia and Potomac Rivers, it is assumed that a recreational angler visits the Anacostia River to fish and consumes his/her catch. Assumes receptor will consume fish caught from Anacostia River and share it with family members.
					Older Child/Teen (7 to <19 years)	Ingestion	Quantitative	
					Adult	Ingestion	Quantitative	
		Fish Tissue	Fish from Anacostia River	High-end Consuming Angler	Young Child (1 to <7 year)	Ingestion	Quantitative	Some anglers may fish on a frequent basis to supplement their diet. While the available survey data indicate there is no evidence of year-round subsistence fishing, a high-end consuming angler who supplements a significant fraction of his/her diet and that of a family with Anacostia River fish is evaluated in the uncertainty analysis.
					Older Child/Teen (7 to <19 years)	Ingestion	Quantitative	
					Adult	Ingestion	Quantitative	
		Shellfish Tissue	Shellfish from Anacostia River	Angler	Young Child (1 to <7 year)	Ingestion	Qualitative	Anglers and their families may consume shellfish from the Anacostia River; due to limited data on shellfish consumption practices and shellfish tissue chemistry, this pathway is evaluated qualitatively.
					Older Child/Teen (7 to <19 years)	Ingestion	Qualitative	
					Adult	Ingestion	Qualitative	
	Sediment	Surface Sediment	Segment of the Anacostia River adjacent to the Site	Recreational Angler	Older Child/Teen (7 to <19 years)	Incidental Ingestion Dermal Contact	Quantitative Quantitative	Anglers may contact sediment while fishing from the river bank. Assumes that young children under 6 years of age would not typically accompany adult anglers due to safety concerns.
					Adult	Incidental Ingestion Dermal Contact	Quantitative Quantitative	
				Swimmer	Young Child (1 to <7 year)	Incidental Ingestion Dermal Contact	Quantitative Quantitative	Swimmers may contact sediment while entering and leaving the river and while swimming.
					Older Child/Teen (7 to <19 years)	Incidental Ingestion Dermal Contact	Quantitative Quantitative	
					Adult	Incidental Ingestion Dermal Contact	Quantitative Quantitative	
				Wader	Young Child (1 to <7 year)	Incidental Ingestion Dermal Contact	Quantitative Quantitative	Families visiting the river may contact nearshore surface sediment while wading or playing along the shoreline.
					Older Child/Teen (7 to <19 years)	Incidental Ingestion Dermal Contact	Quantitative Quantitative	
					Adult	Incidental Ingestion Dermal Contact	Quantitative Quantitative	
				Worker	Adult	Incidental Ingestion Dermal Contact	Quantitative Quantitative	Workers may be tasked with collecting trash or performing other shoreline maintenance activities with the potential for contact with nearshore surface sediment.

**Table 5-1**  
**Selection of Exposure Pathways**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Type of Analysis	Rationale for Selection or Exclusion of Exposure Pathway
Current/Future (continued)	Surface Water	Surface Water	Segment of the Anacostia River adjacent to the Site	Recreational Angler	Older Child/Teen (7 to <19 years)	Incidental Ingestion Dermal Contact	Quantitative Quantitative	Angler may contact surface water while fishing from the river bank. Assumes that young children under 6 years of age would not typically accompany adult anglers due to safety concerns.
					Adult	Incidental Ingestion Dermal Contact	Quantitative Quantitative	
				Swimmer	Young Child (1 to <7 year)	Incidental Ingestion Dermal Contact	Quantitative Quantitative	Swimmers may contact surface water while swimming.
					Older Child/Teen (7 to <19 years)	Incidental Ingestion Dermal Contact	Quantitative Quantitative	
					Adult	Incidental Ingestion Dermal Contact	Quantitative Quantitative	
				Wader	Young Child (1 to <7 year)	Incidental Ingestion Dermal Contact	Quantitative Quantitative	Families visiting the river may contact surface water while wading or playing along the shoreline.
					Older Child/Teen (7 to <19 years)	Incidental Ingestion Dermal Contact	Quantitative Quantitative	
					Adult	Incidental Ingestion Dermal Contact	Quantitative Quantitative	
				Worker	Adult	Incidental Ingestion Dermal Contact	Quantitative Quantitative	Workers may be tasked with collecting trash or performing other shoreline maintenance activities with the potential for contact with surface water.

**Table 5-2**  
**Values Used for Daily Intake Calculations - Sediment**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe:	Current/Future
Medium:	Sediment
Exposure Medium/Point:	Surface Sediment

Exposure Route	Receptor Population	Receptor Age	Parameter Code	Parameter Definition	Unit	RME		CTE		Chronic Daily Intake (CDI) Equation
						Value	Rationale/ Reference	Value	Rationale/ Reference	
Incidental Ingestion	Recreational Angler	Older Child/Teen (7 to <19 years)	CS	Concentration in Sediment	mg/kg	--	--	--	--	$CDI \text{ (mg/kg-day)} = \frac{CS \times SIR \times FI \times ABS \times EF \times ED \times CF}{BW \times AT}$
			SIR	Ingestion Rate of Sediment	mg/day	100	USEPA, 2014	50	USEPA, 2011 (Table 5-1, central)	
			FI	Fraction Ingested	dimensionless	0.5	(a)	0.5	(a)	
			ABS	Absorption Factor	dimensionless	--	--	--	--	
			EF	Exposure Frequency	days/year	26	6 months (26 weeks)/year, 1 day/week	13	6 months (26 weeks)/year, 1 day every other week	
			ED	Exposure Duration	years	12	receptor age range	6	1/2 RME	
			CF	Conversion Factor	kg/mg	1.00E-06	1 kg = 1E6 mg	1.00E-06	1 kg = 1E6 mg	
			BW	Body Weight	kg	53	Fryar et al. 2012	53	Fryar et al. 2012	
			AT-C	Averaging Time (Cancer)	days	25,550	70 years times 365 days per year (USEPA, 2014)	25,550	70 years times 365 days per year (USEPA, 2014)	
		AT-N	Averaging Time (Noncancer)	days	4,380	ED (years) x 365 days/year (USEPA, 2014)	2,190	ED (years) x 365 days/year (USEPA, 2014)		
		IF-C	Intake factor, cancer	(kg-sed)/(kg-bw/d)	1.15E-08	IF-C x CS x ABS = CDI-C	1.44E-09	IF-C x CS x ABS = CDI-C		
		IF-NC	Intake factor, noncancer	(kg-sed)/(kg-bw/d)	6.71E-08	IF-NC x CS x ABS = CDI-NC	1.68E-08	IF-NC x CS x ABS = CDI-NC		
		CS	Concentration in Sediment	mg/kg	--	--	--	--		
		SIR	Ingestion Rate of Sediment	mg/day	100	USEPA, 2014	50	USEPA, 2011 (Table 5-1, central)		
		FI	Fraction Ingested	dimensionless	0.5	(a)	0.5	(a)		
		ABS	Absorption Factor	dimensionless	--	--	--	--		
		EF	Exposure Frequency	days/year	26	6 months (26 weeks)/year, 1 day/week	13	6 months (26 weeks)/year, 1 day every other week		
		ED	Exposure Duration	years	20	USEPA, 2014. 26 years total (20 adult/6 child)	10	USEPA, 2011 (Table ES-1). Average 12 yrs (10 adult/2 child)		
	CF	Conversion Factor	kg/mg	1.00E-06	1 kg = 1E6 mg	1.00E-06	1 kg = 1E6 mg			
	BW	Body Weight	kg	80	USEPA, 2014	80	USEPA, 2014			
	AT-C	Averaging Time (Cancer)	days	25,550	70 years times 365 days per year (USEPA, 2014)	25,550	70 years times 365 days per year (USEPA, 2014)			
	AT-N	Averaging Time (Noncancer)	days	7,300	ED (years) x 365 days/year (USEPA, 2014)	3,650	ED (years) x 365 days/year (USEPA, 2014)			
	IF-C	Intake factor, cancer	(kg-sed)/(kg-bw/d)	1.27E-08	IF-C x CS x ABS = CDI-C	1.59E-09	IF-C x CS x ABS = CDI-C			
	IF-NC	Intake factor, noncancer	(kg-sed)/(kg-bw/d)	4.45E-08	IF-NC x CS x ABS = CDI-NC	1.11E-08	IF-NC x CS x ABS = CDI-NC			

**Table 5-2**  
**Values Used for Daily Intake Calculations - Sediment**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe:	Current/Future
Medium:	Sediment
Exposure Medium/Point:	Surface Sediment

Exposure Route	Receptor Population	Receptor Age	Parameter Code	Parameter Definition	Unit	RME		CTE		Chronic Daily Intake (CDI) Equation
						Value	Rationale/ Reference	Value	Rationale/ Reference	
Incidental Ingestion continued	Swimmer	Young Child (1 to <7 year)	CS	Concentration in Sediment	mg/kg	--	--	--	--	$CDI \text{ (mg/kg-day)} = \frac{CS \times SIR \times FI \times ABS \times EF \times ED \times CF}{BW \times AT}$
			SIR	Ingestion Rate of Sediment	mg/day	200	USEPA, 2014	100	USEPA, 2011 (Table 5-1, central)	
			FI	Fraction Ingested	dimensionless	0.5	(a)	0.5	(a)	
			ABS	Absorption Factor	dimensionless	--	--	--	--	
			EF	Exposure Frequency	days/year	13	3 months (13 weeks)/year, 1 day/week	6	3 months (13 weeks)/year, 1 day every other week	
			ED	Exposure Duration	years	6	USEPA, 2014, 26 years total (20 adult/6 child)	2	USEPA, 2011 (Table ES-1). Average 12 yrs (10 adult/2 child)	
			CF	Conversion Factor	kg/mg	1.00E-06	1 kg = 1E6 mg	1.00E-06	1 kg = 1E6 mg	
			BW	Body Weight	kg	17	Fryar et al. 2012	17	Fryar et al. 2012	
			AT-C	Averaging Time (Cancer)	days	25,550	70 years times 365 days per year (USEPA, 2014)	25,550	70 years times 365 days per year (USEPA, 2014)	
		AT-N	Averaging Time (Noncancer)	days	2,190	ED (years) x 365 days/year (USEPA, 2014)	730	ED (years) x 365 days/year (USEPA, 2014)		
		IF-C	Intake factor, cancer	(kg-sed)/(kg-bw/d)	1.79E-08	IF-C x CS x ABS = CDI-C	1.50E-09	IF-C x CS x ABS = CDI-C		
		IF-NC	Intake factor, noncancer	(kg-sed)/(kg-bw/d)	2.09E-07	IF-NC x CS x ABS = CDI-NC	5.23E-08	IF-NC x CS x ABS = CDI-NC		
		CS	Concentration in Sediment	mg/kg	--	--	--	--		
		SIR	Ingestion Rate of Sediment	mg/day	100	USEPA, 2014	50	USEPA, 2011 (Table 5-1, central)		
		FI	Fraction Ingested	dimensionless	0.5	(a)	0.5	(a)		
		ABS	Absorption Factor	dimensionless	--	--	--	--		
		EF	Exposure Frequency	days/year	26	3 months (13 weeks)/year, 2 days/week	13	3 months (13 weeks)/year, 1 day/week		
		ED	Exposure Duration	years	12	receptor age range	6	1/2 RME		
	CF	Conversion Factor	kg/mg	1.00E-06	1 kg = 1E6 mg	1.00E-06	1 kg = 1E6 mg			
	BW	Body Weight	kg	53	Fryar et al. 2012	53	Fryar et al. 2012			
	AT-C	Averaging Time (Cancer)	days	25,550	70 years times 365 days per year (USEPA, 2014)	25,550	70 years times 365 days per year (USEPA, 2014)			
	AT-N	Averaging Time (Noncancer)	days	4,380	ED (years) x 365 days/year (USEPA, 2014)	2,190	ED (years) x 365 days/year (USEPA, 2014)			
	IF-C	Intake factor, cancer	(kg-sed)/(kg-bw/d)	1.15E-08	IF-C x CS x ABS = CDI-C	1.44E-09	IF-C x CS x ABS = CDI-C			
	IF-NC	Intake factor, noncancer	(kg-sed)/(kg-bw/d)	6.71E-08	IF-NC x CS x ABS = CDI-NC	1.68E-08	IF-NC x CS x ABS = CDI-NC			
	CS	Concentration in Sediment	mg/kg	--	--	--	--			
	SIR	Ingestion Rate of Sediment	mg/day	100	USEPA, 2014	50	USEPA, 2011 (Table 5-1, central)			
	FI	Fraction Ingested	dimensionless	0.5	(a)	0.5	(a)			
	ABS	Absorption Factor	dimensionless	--	--	--	--			
	EF	Exposure Frequency	days/year	13	3 months (13 weeks)/year, 1 day/week	6	3 months (13 weeks)/year, 1 day every other week			
	ED	Exposure Duration	years	20	USEPA, 2014, 26 years total (20 adult/6 child)	10	USEPA, 2011 (Table ES-1). Average 12 yrs (10 adult/2 child)			
CF	Conversion Factor	kg/mg	1.00E-06	1 kg = 1E6 mg	1.00E-06	1 kg = 1E6 mg				
BW	Body Weight	kg	80	USEPA, 2014	80	USEPA, 2014				
AT-C	Averaging Time (Cancer)	days	25,550	70 years times 365 days per year (USEPA, 2014)	25,550	70 years times 365 days per year (USEPA, 2014)				
AT-N	Averaging Time (Noncancer)	days	7,300	ED (years) x 365 days/year (USEPA, 2014)	3,650	ED (years) x 365 days/year (USEPA, 2014)				
IF-C	Intake factor, cancer	(kg-sed)/(kg-bw/d)	6.36E-09	IF-C x CS x ABS = CDI-C	7.94E-10	IF-C x CS x ABS = CDI-C				
IF-NC	Intake factor, noncancer	(kg-sed)/(kg-bw/d)	2.22E-08	IF-NC x CS x ABS = CDI-NC	5.56E-09	IF-NC x CS x ABS = CDI-NC				

**Table 5-2**  
**Values Used for Daily Intake Calculations - Sediment**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe:	Current/Future
Medium:	Sediment
Exposure Medium/Point:	Surface Sediment

Exposure Route	Receptor Population	Receptor Age	Parameter Code	Parameter Definition	Unit	RME		CTE		Chronic Daily Intake (CDI) Equation
						Value	Rationale/ Reference	Value	Rationale/ Reference	
Incidental Ingestion continued	Wader	Young Child (1 to <7 years)	CS	Concentration in Sediment	mg/kg	--	--	--	--	$CDI (mg/kg-day) = CS \times SIR \times FI \times ABS \times EF \times ED \times CF \times BW \times AT$
			SIR	Ingestion Rate of Sediment	mg/day	200	USEPA, 2014	100	USEPA, 2011 (Table 5-1, central)	
			FI	Fraction Ingested	dimensionless	0.5	(a)	0.5	(a)	
			ABS	Absorption Factor	dimensionless	--	--	--	--	
			EF	Exposure Frequency	days/year	35	5 months (22 weeks)/year, 2 day/week during 3 summer months, 1 day/week in May & Sept	17	5 months (22 weeks)/year, 1 day/week during 3 summer months, 1 day every other week in May & Sept	
			ED	Exposure Duration	years	6	USEPA, 2014. 26 years total (20 adult/6 child)	2	USEPA, 2011 (Table ES-1). Average 12 yrs (10 adult/2 child)	
			CF	Conversion Factor	kg/mg	1.00E-06	1 kg = 1E6 mg	1.00E-06	1 kg = 1E6 mg	
			BW	Body Weight	kg	17	Fryar et al. 2012	17	Fryar et al. 2012	
			AT-C	Averaging Time (Cancer)	days	25,550	70 years times 365 days per year (USEPA, 2014)	25,550	70 years times 365 days per year (USEPA, 2014)	
		AT-N	Averaging Time (Noncancer)	days	2,190	ED (years) x 365 days/year (USEPA, 2014)	730	ED (years) x 365 days/year (USEPA, 2014)		
		IF-C	Intake factor, cancer	(kg-sed)/(kg-bw/d)	4.78E-08	IF-C x CS x ABS = CDI-C	3.98E-09	IF-C x CS x ABS = CDI-C		
		IF-NC	Intake factor, noncancer	(kg-sed)/(kg-bw/d)	5.57E-07	IF-NC x CS x ABS = CDI-NC	1.39E-07	IF-NC x CS x ABS = CDI-NC		
		CS	Concentration in Sediment	mg/kg	--	--	--	--	$CDI (mg/kg-day) = CS \times SIR \times FI \times ABS \times EF \times ED \times CF \times BW \times AT$	
		SIR	Ingestion Rate of Sediment	mg/day	100	USEPA, 2014	50	USEPA, 2011 (Table 5-1, central)		
		FI	Fraction Ingested	dimensionless	0.5	(a)	0.5	(a)		
		ABS	Absorption Factor	dimensionless	--	--	--	--		
		EF	Exposure Frequency	days/year	43	5 months (22 weeks)/year, 2 days/week	13	5 months (22 weeks)/year, 1 day/week		
		ED	Exposure Duration	years	12	receptor age range	6	1/2 RME		
		CF	Conversion Factor	kg/mg	1.00E-06	1 kg = 1E6 mg	1.00E-06	1 kg = 1E6 mg		
		BW	Body Weight	kg	53	Fryar et al. 2012	53	Fryar et al. 2012		
		AT-C	Averaging Time (Cancer)	days	25,550	70 years times 365 days per year (USEPA, 2014)	25,550	70 years times 365 days per year (USEPA, 2014)		
		AT-N	Averaging Time (Noncancer)	days	4,380	ED (years) x 365 days/year (USEPA, 2014)	2,190	ED (years) x 365 days/year (USEPA, 2014)		
		IF-C	Intake factor, cancer	(kg-sed)/(kg-bw/d)	1.91E-08	IF-C x CS x ABS = CDI-C	1.44E-09	IF-C x CS x ABS = CDI-C		
		IF-NC	Intake factor, noncancer	(kg-sed)/(kg-bw/d)	1.12E-07	IF-NC x CS x ABS = CDI-NC	1.68E-08	IF-NC x CS x ABS = CDI-NC		
		CS	Concentration in Sediment	mg/kg	--	--	--	--	$CDI (mg/kg-day) = CS \times SIR \times FI \times ABS \times EF \times ED \times CF \times BW \times AT$	
		SIR	Ingestion Rate of Sediment	mg/day	100	USEPA, 2014	50	USEPA, 2011 (Table 5-1, central)		
		FI	Fraction Ingested	dimensionless	0.5	(a)	0.5	(a)		
		ABS	Absorption Factor	dimensionless	--	--	--	--		
		EF	Exposure Frequency	days/year	35	5 months (22 weeks)/year, 2 day/week during 3 summer months, 1 day/week in May & Sept	17	5 months (22 weeks)/year, 1 day/week during 3 summer months, 1 day every other week in May & Sept		
		ED	Exposure Duration	years	20	USEPA, 2014. 26 years total (20 adult/6 child)	10	USEPA, 2011 (Table ES-1). Average 12 yrs (10 adult/2 child)		
		CF	Conversion Factor	kg/mg	1.00E-06	1 kg = 1E6 mg	1.00E-06	1 kg = 1E6 mg		
		BW	Body Weight	kg	80	USEPA, 2014	80	USEPA, 2014		
		AT-C	Averaging Time (Cancer)	days	25,550	70 years times 365 days per year (USEPA, 2014)	25,550	70 years times 365 days per year (USEPA, 2014)		
		AT-N	Averaging Time (Noncancer)	days	7,300	ED (years) x 365 days/year (USEPA, 2014)	3,650	ED (years) x 365 days/year (USEPA, 2014)		
		IF-C	Intake factor, cancer	(kg-sed)/(kg-bw/d)	1.68E-08	IF-C x CS x ABS = CDI-C	2.11E-09	IF-C x CS x ABS = CDI-C		
		IF-NC	Intake factor, noncancer	(kg-sed)/(kg-bw/d)	5.92E-08	IF-NC x CS x ABS = CDI-NC	1.48E-08	IF-NC x CS x ABS = CDI-NC		

**Table 5-2**  
**Values Used for Daily Intake Calculations - Sediment**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe:	Current/Future
Medium:	Sediment
Exposure Medium/Point:	Surface Sediment

Exposure Route	Receptor Population	Receptor Age	Parameter Code	Parameter Definition	Unit	RME		CTE		Chronic Daily Intake (CDI) Equation
						Value	Rationale/ Reference	Value	Rationale/ Reference	
Incidental Ingestion continued	Shoreline Worker	Adult	CS	Concentration in Sediment	mg/kg	--	--	--	--	$CDI \text{ (mg/kg-day)} = \frac{CS \times SIR \times FI \times ABS \times EF \times ED \times CF}{BW \times AT}$
			SIR	Ingestion Rate of Sediment	mg/day	100	USEPA, 2014	50	USEPA, 2011 (Table 5-1, central)	
			FI	Fraction Ingested	dimensionless	1	--	1	--	
			ABS	Absorption Factor	dimensionless	--	--	--	--	
			EF	Exposure Frequency	days/year	50	50 weeks/year, 1 day/week	25	50 weeks/year, 1 day every other week	
			ED	Exposure Duration	years	25	USEPA, 2014	6.6	USEPA, 2011 (Table 16-82, median tenure at same job, all workers)	
			CF	Conversion Factor	kg/mg	1.00E-06	1 kg = 1E6 mg	1.00E-06	1 kg = 1E6 mg	
			BW	Body Weight	kg	80	USEPA, 2014	80	USEPA, 2014	
			AT-C	Averaging Time (Cancer)	days	25,550	70 years times 365 days per year (USEPA, 2014)	25,550	70 years times 365 days per year (USEPA, 2014)	
			AT-N	Averaging Time (Noncancer)	days	9,125	ED (years) x 365 days/year (USEPA, 2014)	2,409	ED (years) x 365 days/year (USEPA, 2014)	
			IF-C	Intake factor, cancer	(kg-sed)/(kg-bw/d)	6.12E-08	IF-C x CS x ABS = CDI-C	4.04E-09	IF-C x CS x ABS = CDI-C	
			IF-NC	Intake factor, noncancer	(kg-sed)/(kg-bw/d)	1.71E-07	IF-NC x CS x ABS = CDI-NC	4.28E-08	IF-NC x CS x ABS = CDI-NC	
			Dermal Contact	Shoreline Worker	Adult	CS	Concentration in Sediment	mg/kg	--	
SA	Skin Surface Area Available for Contact	cm <sup>2</sup> /day				3,527	See Table 5-7. Head, hands, forearms.	3,527	See Table 5-7. Head, hands, forearms.	
FC	Fraction of Skin Contacted	dimensionless				1	full SA assumed/day	1	full SA assumed/day	
AF	Adherence Factor	mg/cm <sup>2</sup>				0.3	See Table 5-7.	0.3	See Table 5-7.	
DAF	Dermal Absorption Factor	dimensionless				--	--	--	--	
EF	Exposure Frequency	days/year				50	50 weeks/year, 1 day/week	25	50 weeks/year, 1 day every other week	
ED	Exposure Duration	years				25	USEPA, 2014	6.6	USEPA, 2011 (Table 16-82, median tenure at same job, all workers)	
CF	Conversion Factor	kg/mg				1.00E-06	1 kg = 1E6 mg	1.00E-06	1 kg = 1E6 mg	
BW	Body Weight	kg				80	USEPA, 2014	80	USEPA, 2014	
AT-C	Averaging Time (Cancer)	days				25,550	70 years times 365 days per year (USEPA, 2014)	25,550	70 years times 365 days per year (USEPA, 2014)	
AT-N	Averaging Time (Noncancer)	days				9,125	ED (years) x 365 days/year (USEPA, 2014)	2,409	ED (years) x 365 days/year (USEPA, 2014)	
IF-C	Intake factor, cancer	(kg-sed)/(kg-bw/d)				6.47E-07	IF-C x CS x ABS = CDI-C	8.54E-08	IF-C x CS x ABS = CDI-C	
IF-NC	Intake factor, noncancer	(kg-sed)/(kg-bw/d)				1.81E-06	IF-NC x CS x ABS = CDI-NC	9.06E-07	IF-NC x CS x ABS = CDI-NC	

**Table 5-2**  
**Values Used for Daily Intake Calculations - Sediment**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe:	Current/Future
Medium:	Sediment
Exposure Medium/Point:	Surface Sediment

Exposure Route	Receptor Population	Receptor Age	Parameter Code	Parameter Definition	Unit	RME		CTE		Chronic Daily Intake (CDI) Equation
						Value	Rationale/ Reference	Value	Rationale/ Reference	
Dermal Contact continued	Angler	Older Child/Teen (7 to <19 years)	CS	Concentration in Sediment	mg/kg	--	--	--	--	$CDI \text{ (mg/kg-day)} = \frac{CS \times FC \times SA \times AF \times DAF \times EF \times ED \times CF}{BW \times AT}$
			SA	Skin Surface Area Available for Contact	cm <sup>2</sup> /day	2,710	See Table 5-8. Lower legs and feet	2,710	See Table 5-8. Lower legs and feet	
			FC	Fraction of Skin Contacted	dimensionless	1	full SA assumed/day	1	full SA assumed/day	
			AF	Adherence Factor	mg/cm <sup>2</sup>	0.25	See Table 5-8. Lower legs and feet	0.25	See Table 5-8. Lower legs and feet	
			DAF	Dermal Absorption Factor	dimensionless	--	--	--	--	
			EF	Exposure Frequency	days/year	26	6 months (26 weeks)/year, 1 day/week	13	6 months (26 weeks)/year, 1 day every other week	
			ED	Exposure Duration	years	12	receptor age range	6	1/2 RME	
			CF	Conversion Factor	kg/mg	1.00E-06	1 kg = 1E6 mg	1.00E-06	1 kg = 1E6 mg	
			BW	Body Weight	kg	53	Fryar et al. 2012	53	Fryar et al. 2012	
			AT-C	Averaging Time (Cancer)	days	25,550	70 years times 365 days per year (USEPA, 2014)	25,550	70 years times 365 days per year (USEPA, 2014)	
			AT-N	Averaging Time (Noncancer)	days	4,380	ED (years) x 365 days/year (USEPA, 2014)	2,190	ED (years) x 365 days/year (USEPA, 2014)	
			IF-C	Intake factor, cancer	(kg-sed)/(kg-bw/d)	1.56E-07	IF-C x CS x ABS = CDI-C	3.90E-08	IF-C x CS x ABS = CDI-C	
			IF-NC	Intake factor, noncancer	(kg-sed)/(kg-bw/d)	9.10E-07	IF-NC x CS x ABS = CDI-NC	4.55E-07	IF-NC x CS x ABS = CDI-NC	
			Adult	CS	Concentration in Sediment	mg/kg	--	--	--	
		SA		Skin Surface Area Available for Contact	cm <sup>2</sup> /day	3,800	See Table 5-7. Lower legs and feet	3,800	See Table 5-7. Lower legs and feet	
		FC		Fraction of Skin Contacted	dimensionless	1	full SA assumed/day	1	full SA assumed/day	
		AF		Adherence Factor	mg/cm <sup>2</sup>	0.3	See Table 5-7.	0.3	See Table 5-7.	
		DAF		Dermal Absorption Factor	dimensionless	--	--	--	--	
		EF		Exposure Frequency	days/year	26	6 months (26 weeks)/year, 1 day/week	13	6 months (26 weeks)/year, 1 day every other week	
		ED		Exposure Duration	years	20	USEPA, 2014. 26 years total (20 adult/6 child)	10	USEPA, 2011 (Table ES-1). Average 12 yrs (10 adult/2 child)	
		CF		Conversion Factor	kg/mg	1.00E-06	1 kg = 1E6 mg	1.00E-06	1 kg = 1E6 mg	
		BW		Body Weight	kg	80	USEPA, 2014	80	USEPA, 2014	
		AT-C		Averaging Time (Cancer)	days	25,550	70 years times 365 days per year (USEPA, 2014)	25,550	70 years times 365 days per year (USEPA, 2014)	
		AT-N		Averaging Time (Noncancer)	days	7,300	ED (years) x 365 days/year (USEPA, 2014)	3,650	ED (years) x 365 days/year (USEPA, 2014)	
		IF-C		Intake factor, cancer	(kg-sed)/(kg-bw/d)	2.90E-07	IF-C x CS x ABS = CDI-C	7.24E-08	IF-C x CS x ABS = CDI-C	
		IF-NC		Intake factor, noncancer	(kg-sed)/(kg-bw/d)	1.01E-06	IF-NC x CS x ABS = CDI-NC	5.07E-07	IF-NC x CS x ABS = CDI-NC	

**Table 5-2**  
**Values Used for Daily Intake Calculations - Sediment**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe:	Current/Future
Medium:	Sediment
Exposure Medium/Point:	Surface Sediment

Exposure Route	Receptor Population	Receptor Age	Parameter Code	Parameter Definition	Unit	RME		CTE		Chronic Daily Intake (CDI) Equation
						Value	Rationale/ Reference	Value	Rationale/ Reference	
Dermal Contact continued	Swimmer	Young Child (1 to <7 year)	CS	Concentration in Sediment	mg/kg	--	--	--	--	$CDI (mg/kg-day) = CS \times FC \times SA \times AF \times DAF \times EF \times ED \times CF$ BW x AT
			SA	Skin Surface Area Available for Contact	cm <sup>2</sup> /day	2,057	See Table 5-9. Hands, forearms, lower legs, feet	2,057	See Table 5-9. Hands, forearms, lower legs, feet	
			FC	Fraction of Skin Contacted	dimensionless	1	full SA assumed/day	1	full SA assumed/day	
			AF	Adherence Factor	mg/cm <sup>2</sup>	0.28	See Table 5-9. Hands, forearms, lower legs, feet	0.28	See Table 5-9. Hands, forearms, lower legs, feet	
			DAF	Dermal Absorption Factor	dimensionless	--	--	--	--	
			EF	Exposure Frequency	days/year	13	3 months (13 weeks)/year, 1 day/week	6	3 months (13 weeks)/year, 1 day every other week	
			ED	Exposure Duration	years	6	USEPA, 2014. 26 years total (20 adult/6 child)	2	USEPA, 2011 (Table ES-1). Average 12 yrs (10 adult/2 child)	
			CF	Conversion Factor	kg/mg	1.00E-06	1 kg = 1E6 mg	1.00E-06	1 kg = 1E6 mg	
			BW	Body Weight	kg	17	Fryar et al. 2012	17	Fryar et al. 2012	
			AT-C	Averaging Time (Cancer)	days	25,550	70 years times 365 days per year (USEPA, 2014)	25,550	70 years times 365 days per year (USEPA, 2014)	
			AT-N	Averaging Time (Noncancer)	days	2,190	ED (years) x 365 days/year (USEPA, 2014)	730	ED (years) x 365 days/year (USEPA, 2014)	
			IF-C	Intake factor, cancer	(kg-sed)/(kg-bw/d)	1.03E-07	IF-C x CS x ABS = CDI-C	1.72E-08	IF-C x CS x ABS = CDI-C	
		IF-NC	Intake factor, noncancer	(kg-sed)/(kg-bw/d)	1.21E-06	IF-NC x CS x ABS = CDI-NC	6.03E-07	IF-NC x CS x ABS = CDI-NC		
		Older Child/Teen (7 to <19 years)	CS	Concentration in Sediment	mg/kg	--	--	--	--	$CDI (mg/kg-day) = CS \times FC \times SA \times AF \times DAF \times EF \times ED \times CF$ BW x AT
			SA	Skin Surface Area Available for Contact	cm <sup>2</sup> /day	2,710	See Table 5-8. Lower legs and feet	2,710	See Table 5-8. Lower legs and feet	
			FC	Fraction of Skin Contacted	dimensionless	1	full SA assumed/day	1	full SA assumed/day	
			AF	Adherence Factor	mg/cm <sup>2</sup>	0.25	See Table 5-8. Lower legs and feet	0.25	See Table 5-8. Lower legs and feet	
			DAF	Dermal Absorption Factor	dimensionless	--	--	--	--	
			EF	Exposure Frequency	days/year	26	3 months (13 weeks)/year, 2 days/week	13	3 months (13 weeks)/year, 1 day/week	
			ED	Exposure Duration	years	12	receptor age range	6	1/2 RME	
			CF	Conversion Factor	kg/mg	1.00E-06	1 kg = 1E6 mg	1.00E-06	1 kg = 1E6 mg	
			BW	Body Weight	kg	53	Fryar et al. 2012	53	Fryar et al. 2012	
			AT-C	Averaging Time (Cancer)	days	25,550	70 years times 365 days per year (USEPA, 2014)	25,550	70 years times 365 days per year (USEPA, 2014)	
			AT-N	Averaging Time (Noncancer)	days	4,380	ED (years) x 365 days/year (USEPA, 2014)	2,190	ED (years) x 365 days/year (USEPA, 2014)	
			IF-C	Intake factor, cancer	(kg-sed)/(kg-bw/d)	1.56E-07	IF-C x CS x ABS = CDI-C	3.90E-08	IF-C x CS x ABS = CDI-C	
		IF-NC	Intake factor, noncancer	(kg-sed)/(kg-bw/d)	9.10E-07	IF-NC x CS x ABS = CDI-NC	4.55E-07	IF-NC x CS x ABS = CDI-NC		
		Adult	CS	Concentration in Sediment	mg/kg	--	--	--	--	$CDI (mg/kg-day) = CS \times FC \times SA \times AF \times DAF \times EF \times ED \times CF$ BW x AT
			SA	Skin Surface Area Available for Contact	cm <sup>2</sup> /day	3,800	See Table 5-7. Lower legs and feet	3,800	See Table 5-7. Lower legs and feet	
			FC	Fraction of Skin Contacted	dimensionless	1	full SA assumed/day	1	full SA assumed/day	
			AF	Adherence Factor	mg/cm <sup>2</sup>	0.3	See Table 5-7.	0.3	See Table 5-7.	
			DAF	Dermal Absorption Factor	dimensionless	--	--	--	--	
			EF	Exposure Frequency	days/year	13	3 months (13 weeks)/year, 1 day/week	6	3 months (13 weeks)/year, 1 day every other week	
			ED	Exposure Duration	years	20	USEPA, 2014. 26 years total (20 adult/6 child)	10	USEPA, 2011 (Table ES-1). Average 12 yrs (10 adult/2 child)	
			CF	Conversion Factor	kg/mg	1.00E-06	1 kg = 1E6 mg	1.00E-06	1 kg = 1E6 mg	
			BW	Body Weight	kg	80	USEPA, 2014	80	USEPA, 2014	
			AT-C	Averaging Time (Cancer)	days	25,550	70 years times 365 days per year (USEPA, 2014)	25,550	70 years times 365 days per year (USEPA, 2014)	
AT-N	Averaging Time (Noncancer)		days	7,300	ED (years) x 365 days/year (USEPA, 2014)	3,650	ED (years) x 365 days/year (USEPA, 2014)			
IF-C	Intake factor, cancer		(kg-sed)/(kg-bw/d)	1.45E-07	IF-C x CS x ABS = CDI-C	3.62E-08	IF-C x CS x ABS = CDI-C			
IF-NC	Intake factor, noncancer	(kg-sed)/(kg-bw/d)	5.07E-07	IF-NC x CS x ABS = CDI-NC	2.54E-07	IF-NC x CS x ABS = CDI-NC				



**Table 5-2**  
**Values Used for Daily Intake Calculations - Sediment**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe:	Current/Future
Medium:	Sediment
Exposure Medium/Point:	Surface Sediment

Exposure Route	Receptor Population	Receptor Age	Parameter Code	Parameter Definition	Unit	RME		CTE		Chronic Daily Intake (CDI) Equation
						Value	Rationale/ Reference	Value	Rationale/ Reference	
Dermal Contact continued	Wader	Young Child (1 to <7 year)	CS	Concentration in Sediment	mg/kg	--	--	--	--	$CDI \text{ (mg/kg-day)} = \frac{CS \times FC \times SA \times AF \times DAF \times EF \times ED \times CF}{BW \times AT}$
			SA	Skin Surface Area Available for Contact	cm <sup>2</sup> /day	2,057	See Table 5-9. Hands, forearms, lower legs, feet	2,057	See Table 5-9. Hands, forearms, lower legs, feet	
			FC	Fraction of Skin Contacted	dimensionless	1	full SA assumed/day	1	full SA assumed/day	
			AF	Adherence Factor	mg/cm <sup>2</sup>	0.28	See Table 5-9. Hands, forearms, lower legs, feet	0.28	See Table 5-9. Hands, forearms, lower legs, feet	
			DAF	Dermal Absorption Factor	dimensionless	--	--	--	--	
			EF	Exposure Frequency	days/year	35	5 months (22 weeks)/year, 2 day/week during 3 summer months, 1 day/week in May & Sept	17	5 months (22 weeks)/year, 1 day/week during 3 summer months, 1 day every other week in May & Sept	
			ED	Exposure Duration	years	6	USEPA, 2014. 26 years total (20 adult/6 child)	2	USEPA, 2011 (Table ES-1). Average 12 yrs (10 adult/2 child)	
			CF	Conversion Factor	kg/mg	1.00E-06	1 kg = 1E6 mg	1.00E-06	1 kg = 1E6 mg	
			BW	Body Weight	kg	17	Fryar et al. 2012	17	Fryar et al. 2012	
			AT-C	Averaging Time (Cancer)	days	25,550	70 years times 365 days per year (USEPA, 2014)	25,550	70 years times 365 days per year (USEPA, 2014)	
			AT-N	Averaging Time (Noncancer)	days	2,190	ED (years) x 365 days/year (USEPA, 2014)	730	ED (years) x 365 days/year (USEPA, 2014)	
			IF-C	Intake factor, cancer	(kg-sed)/(kg-bw/d)	2.75E-07	IF-C x CS x ABS = CDI-C	4.59E-08	IF-C x CS x ABS = CDI-C	
		IF-NC	Intake factor, noncancer	(kg-sed)/(kg-bw/d)	3.21E-06	IF-NC x CS x ABS = CDI-NC	1.60E-06	IF-NC x CS x ABS = CDI-NC		
		Older Child/Teen (7 to <19 years)	CS	Concentration in Sediment	mg/kg	--	--	--	--	$CDI \text{ (mg/kg-day)} = \frac{CS \times FC \times SA \times AF \times DAF \times EF \times ED \times CF}{BW \times AT}$
			SA	Skin Surface Area Available for Contact	cm <sup>2</sup> /day	2,710	See Table 5-8. Lower legs and feet	2,710	See Table 5-8. Lower legs and feet	
			FC	Fraction of Skin Contacted	dimensionless	1	full SA assumed/day	1	full SA assumed/day	
			AF	Adherence Factor	mg/cm <sup>2</sup>	0.25	See Table 5-8. Lower legs and feet	0.25	See Table 5-8. Lower legs and feet	
			DAF	Dermal Absorption Factor	dimensionless	--	--	--	--	
			EF	Exposure Frequency	days/year	43	5 months (22 weeks)/year, 2 days/week	13	5 months (22 weeks)/year, 1 day/week	
			ED	Exposure Duration	years	12	receptor age range	6	1/2 RME	
			CF	Conversion Factor	kg/mg	1.00E-06	1 kg = 1E6 mg	1.00E-06	1 kg = 1E6 mg	
			BW	Body Weight	kg	53	Fryar et al. 2012	53	Fryar et al. 2012	
			AT-C	Averaging Time (Cancer)	days	25,550	70 years times 365 days per year (USEPA, 2014)	25,550	70 years times 365 days per year (USEPA, 2014)	
			AT-N	Averaging Time (Noncancer)	days	4,380	ED (years) x 365 days/year (USEPA, 2014)	2,190	ED (years) x 365 days/year (USEPA, 2014)	
			IF-C	Intake factor, cancer	(kg-sed)/(kg-bw/d)	2.59E-07	IF-C x CS x ABS = CDI-C	3.90E-08	IF-C x CS x ABS = CDI-C	
		IF-NC	Intake factor, noncancer	(kg-sed)/(kg-bw/d)	1.51E-06	IF-NC x CS x ABS = CDI-NC	4.55E-07	IF-NC x CS x ABS = CDI-NC		
		Adult	CS	Concentration in Sediment	mg/kg	--	--	--	--	$CDI \text{ (mg/kg-day)} = \frac{CS \times FC \times SA \times AF \times DAF \times EF \times ED \times CF}{BW \times AT}$
			SA	Skin Surface Area Available for Contact	cm <sup>2</sup> /day	3,800	See Table 5-7. Lower legs and feet	3,800	See Table 5-7. Lower legs and feet	
			FC	Fraction of Skin Contacted	dimensionless	1	full SA assumed/day	1	full SA assumed/day	
			AF	Adherence Factor	mg/cm <sup>2</sup>	0.3	See Table 5-7.	0.3	See Table 5-7.	
			DAF	Dermal Absorption Factor	dimensionless	--	--	--	--	
			EF	Exposure Frequency	days/year	35	5 months (22 weeks)/year, 2 day/week during 3 summer months, 1 day/week in May & Sept	17	5 months (22 weeks)/year, 1 day/week during 3 summer months, 1 day every other week in May & Sept	
			ED	Exposure Duration	years	20	USEPA, 2014. 26 years total (20 adult/6 child)	10	USEPA, 2011 (Table ES-1). Average 12 yrs (10 adult/2 child)	
			CF	Conversion Factor	kg/mg	1.00E-06	1 kg = 1E6 mg	1.00E-06	1 kg = 1E6 mg	
			BW	Body Weight	kg	80	USEPA, 2014	80	USEPA, 2014	
			AT-C	Averaging Time (Cancer)	days	25,550	70 years times 365 days per year (USEPA, 2014)	25,550	70 years times 365 days per year (USEPA, 2014)	
AT-N	Averaging Time (Noncancer)		days	7,300	ED (years) x 365 days/year (USEPA, 2014)	3,650	ED (years) x 365 days/year (USEPA, 2014)			
IF-C	Intake factor, cancer		(kg-sed)/(kg-bw/d)	3.86E-07	IF-C x CS x ABS = CDI-C	9.64E-08	IF-C x CS x ABS = CDI-C			
IF-NC	Intake factor, noncancer	(kg-sed)/(kg-bw/d)	1.35E-06	IF-NC x CS x ABS = CDI-NC	6.75E-07	IF-NC x CS x ABS = CDI-NC				

**Table 5-2**  
**Values Used for Daily Intake Calculations - Sediment**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe:	Current/Future
Medium:	Sediment
Exposure Medium/Point:	Surface Sediment

Exposure Route	Receptor Population	Receptor Age	Parameter Code	Parameter Definition	Unit	RME		CTE		Chronic Daily Intake (CDI) Equation
						Value	Rationale/ Reference	Value	Rationale/ Reference	

**Notes:**

RME = Reasonable Maximum Exposure; CTE = Central Tendency Exposure  
 -- Constituent-specific value.

(a) On days when the receptor is assumed to have direct contact with Anocostia River sediment, one-half of the receptor's total daily ingestion exposure to outdoor soil/sediment is assumed to come from the River, and the other half while away from the River (i.e., at home, work, school).

**Sources:**

Fryar, C.D., Q. Gu, and C.L. Ogden. 2012. Anthropometric reference data for children and adults: United States, 2007-2010. National Center for Health Statistics. Vital Health Stat 11(252).  
 USEPA, 1989. Risk Assessment Guidance for Superfund. Vol. 1: Human Health Evaluation Manual, Part A. OERR. EPA/540/1-89/002.  
 USEPA, 2004. Risk Assessment Guidance for Superfund. Vol. 1: Human Health Evaluation Manual, Part E, Supplemental Guidance for Dermal Risk Assessment Final. EPA/540/R/99/005.  
 USEPA, 2011. Exposure Factors Handbook: 2011 Edition. EPA/600/R-09/052F. Office of Research and Development, Washington, DC. September.  
 USEPA, 2014. Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors. OSWER Directive 9200.1-120. Assessment and Remediation Division, Office of Superfund Remediation and Technology Innovation, US Environmental Protection Agency, Washington, DC. February 6, 2014

**Table 5-3**  
**Values Used for Daily Intake Calculations - Surface Water**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe:	Current/Future
Medium:	Surface Water
Exposure Medium/Point:	Surface Water

Exposure Route	Receptor Population	Receptor Age	Parameter Code	Parameter Definition	Unit	RME		CTE		Chronic Daily Intake (CDI) (Ingestion) Dermal Absorbed Dose (DAD) Equations
						Value	Rationale/ Reference	Value	Rationale/ Reference	
Incidental Ingestion	Recreational Angler	Older Child/Teen (7 to <19 years)	CW	Concentration in Water	ug/L	--	--	--	--	$CDI (mg/kg\text{-}day) = \frac{CW \times WIR\text{-}E \times EV \times EF \times ED \times CF}{BW \times AT}$
			WIR-H	Ingestion Rate of Water, hourly	L/hour	see daily rate	see daily rate	see daily rate	see daily rate	
			t <sub>event</sub>	Event Duration	hours/event	see daily rate	see daily rate	see daily rate	see daily rate	
			WIR-E	Ingestion Rate of Water, per event	L/event	0.013	Dorevitch, S. et al. 2011	0.004	Dorevitch, S. et al. 2011	
			EV	Event Frequency	events/day	1	1 event/day	1	1 event/day	
			EF	Exposure Frequency	days/year	26	6 months (26 weeks)/year, 1 day/week	13	6 months (26 weeks)/year, 1 day every other week	
			ED	Exposure Duration	years	12	receptor age range	6	1/2 RME	
		CF	Conversion Factor	mg/ug	0.001	1 mg = 1000 ug	0.001	1 mg = 1000 ug		
		BW	Body Weight	kg	53	Fryar et al. 2012	53	Fryar et al. 2012		
		AT-C	Averaging Time (Cancer)	days	25,550	70-year lifetime x 365 days/year	25,550	70-year lifetime x 365 days/year		
		AT-N	Averaging Time (Noncancer)	days	4,380	ED (year) x 365 days/year	2,190	ED (year) x 365 days/year		
		IF-C	Intake factor, cancer	mg/(ug/L*kg/day)	2.99E-09	IF-C x CW = CDI-C	2.30E-10	IF-C x CW = CDI-C		
		IF-NC	Intake factor, noncancer	mg/(ug/L*kg/day)	1.75E-08	IF-NC x CW = CDI-NC	2.69E-09	IF-NC x CW = CDI-NC		
		CW	Concentration in Water	ug/L	--	--	--	--		
	Recreational Angler	Adult	WIR-H	Ingestion Rate of Water, hourly	L/hour	see daily rate	see daily rate	see daily rate	see daily rate	$CDI (mg/kg\text{-}day) = \frac{CW \times WIR\text{-}E \times EV \times EF \times ED \times CF}{BW \times AT}$
			t <sub>event</sub>	Event Duration	hours/event	see daily rate	see daily rate	see daily rate	see daily rate	
			WIR-E	Ingestion Rate of Water, per event	L/event	0.013	Dorevitch, S. et al. 2011	0.004	Dorevitch, S. et al. 2011	
			EV	Event Frequency	events/day	1	1 event/day	1	1 event/day	
			EF	Exposure Frequency	days/year	26	6 months (26 weeks)/year, 1 day/week	13	6 months (26 weeks)/year, 1 day every other week	
			ED	Exposure Duration	years	20	USEPA, 2014. 26 years total (20 adult/6 child)	10	USEPA, 2011 (Table ES-1). Average 12 yrs (10 adult/2 child)	
			CF	Conversion Factor	mg/ug	0.001	1 mg = 1000 ug	0.001	1 mg = 1000 ug	
		BW	Body Weight	kg	80	USEPA, 2014	80	USEPA, 2014		
		AT-C	Averaging Time (Cancer)	days	25,550	70-year lifetime x 365 days/year	25,550	70-year lifetime x 365 days/year		
		AT-N	Averaging Time (Noncancer)	days	7,300	ED (year) x 365 days/year	3,650	ED (year) x 365 days/year		
		IF-C	Intake factor, cancer	mg/(ug/L*kg/day)	3.30E-09	IF-C x CW = CDI-C	2.54E-10	IF-C x CW = CDI-C		
		IF-NC	Intake factor, noncancer	mg/(ug/L*kg/day)	1.16E-08	IF-NC x CW = CDI-NC	1.78E-09	IF-NC x CW = CDI-NC		

**Table 5-3**  
**Values Used for Daily Intake Calculations - Surface Water**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe:	Current/Future
Medium:	Surface Water
Exposure Medium/Point:	Surface Water

Exposure Route	Receptor Population	Receptor Age	Parameter Code	Parameter Definition	Unit	RME		CTE		Chronic Daily Intake (CDI) (Ingestion) Dermal Absorbed Dose (DAD) Equations
						Value	Rationale/ Reference	Value	Rationale/ Reference	
Incidental Ingestion	Swimmer	Young Child (1 to <7 year)	CW	Concentration in Water	ug/L	--	--	--	--	$CDI \text{ (mg/kg-day)} =$ $\frac{CW \times WIR-E \times EV \times EF \times ED \times CF}{BW \times AT}$
			WIR-H	Ingestion Rate of Water, hourly	L/hour	0.049	USEPA (2011, Table 3-5, mean rate for child (ages 0-18 yr) in swimming pool)	0.049	USEPA (2011, Table 3-5, mean rate for child (ages 0-18 yr) in swimming pool)	
			t <sub>event</sub>	Event Duration	hours/event	0.5	(a)	0.25	(a)	
			WIR-E	Ingestion Rate of Water, per event	L/event	0.025	WIR-H x ET	0.012	WIR-H x ET	
			EV	Event Frequency	events/day	1	1 event/day	1	1 event/day	
			EF	Exposure Frequency	days/year	13	3 months (13 weeks)/year, 1 day/week	6	3 months (13 weeks)/year, 1 day every other week	
			ED	Exposure Duration	years	6	USEPA, 2014. 26 years total (20 adult/6 child)	2	USEPA, 2011 (Table ES-1). Average 12 yrs (10 adult/2 child)	
			CF	Conversion Factor	mg/ug	0.001	1 mg = 1000 ug	0.001	1 mg = 1000 ug	
			BW	Body Weight	kg	17	Fryar et al. 2012	17	Fryar et al. 2012	
		AT-C	Averaging Time (Cancer)	days	25,550	70-year lifetime x 365 days/year	25,550	70-year lifetime x 365 days/year		
		AT-N	Averaging Time (Noncancer)	days	2,190	ED (year) x 365 days/year	730	ED (year) x 365 days/year		
		IF-C	Intake factor, cancer	mg/(ug/L*kg/day)	4.40E-09	IF-C x CW = CDI-C	3.66E-10	IF-C x CW = CDI-C		
		IF-NC	Intake factor, noncancer	mg/(ug/L*kg/day)	5.13E-08	IF-NC x CW = CDI-NC	1.28E-08	IF-NC x CW = CDI-NC		
		CW	Concentration in Water	ug/L	--	--	--	--		
		WIR-H	Ingestion Rate of Water, hourly	L/hour	0.049	USEPA (2011, Table 3-5, mean rate for child (ages 0-18 yr) in swimming pool)	0.049	USEPA (2011, Table 3-5, mean rate for child (ages 0-18 yr) in swimming pool)		
		t <sub>event</sub>	Event Duration	hours/event	0.5	(a)	0.25	(a)		
		WIR-E	Ingestion Rate of Water, per event	L/event	0.025	WIR-H x ET	0.012	WIR-H x ET		
		EV	Event Frequency	events/day	1	1 event/day	1	1 event/day		
	EF	Exposure Frequency	days/year	26	3 months (13 weeks)/year, 2 days/week	13	3 months (13 weeks)/year, 1 day/week			
	ED	Exposure Duration	years	12	receptor age range	6	1/2 RME			
	CF	Conversion Factor	mg/ug	0.001	1 mg = 1000 ug	0.001	1 mg = 1000 ug			
	BW	Body Weight	kg	53	Fryar et al. 2012	53	Fryar et al. 2012			
	AT-C	Averaging Time (Cancer)	days	25,550	70-year lifetime x 365 days/year	25,550	70-year lifetime x 365 days/year			
	AT-N	Averaging Time (Noncancer)	days	4,380	ED (year) x 365 days/year	2,190	ED (year) x 365 days/year			
	IF-C	Intake factor, cancer	mg/(ug/L*kg/day)	5.64E-09	IF-C x CW = CDI-C	7.05E-10	IF-C x CW = CDI-C			
	IF-NC	Intake factor, noncancer	mg/(ug/L*kg/day)	3.29E-08	IF-NC x CW = CDI-NC	8.23E-09	IF-NC x CW = CDI-NC			
	CW	Concentration in Water	ug/L	--	--	--	--			
	WIR-H	Ingestion Rate of Water, hourly	L/hour	0.021	USEPA (2011, Table 3-5, mean rate for adult in swimming pool)	0.021	USEPA (2011, Table 3-5, mean rate for adult in swimming pool)			
	t <sub>event</sub>	Event Duration	hours/event	0.5	(a)	0.25	(a)			
	WIR-E	Ingestion Rate of Water, per event	L/event	0.011	WIR-H x ET	0.005	WIR-H x ET			
	EV	Event Frequency	events/day	1	1 event/day	1	1 event/day			
	EF	Exposure Frequency	days/year	13	3 months (13 weeks)/year, 1 day/week	6	3 months (13 weeks)/year, 1 day every other week			
	ED	Exposure Duration	years	20	USEPA, 2014. 26 years total (20 adult/6 child)	10	USEPA, 2011 (Table ES-1). Average 12 yrs (10 adult/2 child)			
	CF	Conversion Factor	mg/ug	0.001	1 mg = 1000 ug	0.001	1 mg = 1000 ug			
	BW	Body Weight	kg	80	USEPA, 2014	80	USEPA, 2014			
	AT-C	Averaging Time (Cancer)	days	25,550	70-year lifetime x 365 days/year	25,550	70-year lifetime x 365 days/year			
AT-N	Averaging Time (Noncancer)	days	7,300	ED (year) x 365 days/year	3,650	ED (year) x 365 days/year				
IF-C	Intake factor, cancer	mg/(ug/L*kg/day)	1.33E-09	IF-C x CW = CDI-C	1.67E-10	IF-C x CW = CDI-C				
IF-NC	Intake factor, noncancer	mg/(ug/L*kg/day)	4.67E-09	IF-NC x CW = CDI-NC	1.17E-09	IF-NC x CW = CDI-NC				

**Table 5-3**  
**Values Used for Daily Intake Calculations - Surface Water**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe:	Current/Future
Medium:	Surface Water
Exposure Medium/Point:	Surface Water

Exposure Route	Receptor Population	Receptor Age	Parameter Code	Parameter Definition	Unit	RME		CTE		Chronic Daily Intake (CDI) (Ingestion) Dermal Absorbed Dose (DAD) Equations
						Value	Rationale/ Reference	Value	Rationale/ Reference	
Incidental Ingestion	Wader	Young Child (1 to <7 year)	CW	Concentration in Water	ug/L	--	--	--	--	$CDI \text{ (mg/kg-day)} = \frac{CW \times WIR-E \times EV \times EF \times ED \times CF}{BW \times AT}$
			WIR-H	Ingestion Rate of Water, hourly	L/hour	see daily rate	see daily rate	see daily rate	see daily rate	
			t <sub>event</sub>	Event Duration	hours/event	see daily rate	see daily rate	see daily rate	see daily rate	
			WIR-E	Ingestion Rate of Water, per event	L/event	0.013	Dorevitch, S. et al. 2011	0.004	Dorevitch, S. et al. 2011	
			EV	Event Frequency	events/day	1	1 event/day	1	1 event/day	
			EF	Exposure Frequency	days/year	35	5 months (22 weeks)/year, 2 day/week during 3 summer months, 1 day/week in May & Sept	17	5 months (22 weeks)/year, 1 day/week during 3 summer months, 1 day every other week in May & Sept	
			ED	Exposure Duration	years	6	USEPA, 2014. 26 years total (20 adult/6 child)	2	USEPA, 2011 (Table ES-1). Average 12 yrs (10 adult/2 child)	
			CF	Conversion Factor	mg/ug	0.001	1 mg = 1000 ug	0.001	1 mg = 1000 ug	
			BW	Body Weight	kg	17	Fryar et al. 2012	17	Fryar et al. 2012	
			AT-C	Averaging Time (Cancer)	days	25,550	70-year lifetime x 365 days/year	25,550	70-year lifetime x 365 days/year	
			AT-N	Averaging Time (Noncancer)	days	2,190	ED (year) x 365 days/year	730	ED (year) x 365 days/year	
			IF-C	Intake factor, cancer	mg/(ug/L*kg/day)	6.21E-09	IF-C x CW = CDI-C	3.18E-10	IF-C x CW = CDI-C	
		IF-NC	Intake factor, noncancer	mg/(ug/L*kg/day)	7.24E-08	IF-NC x CW = CDI-NC	1.11E-08	IF-NC x CW = CDI-NC		
		Older Child/Teen (7 to <19 years)	CW	Concentration in Water	ug/L	--	--	--	--	$CDI \text{ (mg/kg-day)} = \frac{CW \times WIR-E \times EV \times EF \times ED \times CF}{BW \times AT}$
			WIR-H	Ingestion Rate of Water, hourly	L/hour	see daily rate	see daily rate	see daily rate	see daily rate	
			t <sub>event</sub>	Event Duration	hours/event	see daily rate	see daily rate	see daily rate	see daily rate	
			WIR-E	Ingestion Rate of Water, per event	L/event	0.013	Dorevitch, S. et al. 2011	0.004	Dorevitch, S. et al. 2011	
			EV	Event Frequency	events/day	1	1 event/day	1	1 event/day	
			EF	Exposure Frequency	days/year	43	5 months (22 weeks)/year, 2 days/week	13	5 months (22 weeks)/year, 1 day/week	
			ED	Exposure Duration	years	12	receptor age range	6	1/2 RME	
			CF	Conversion Factor	mg/ug	0.001	1 mg = 1000 ug	0.001	1 mg = 1000 ug	
			BW	Body Weight	kg	53	Fryar et al. 2012	53	Fryar et al. 2012	
			AT-C	Averaging Time (Cancer)	days	25,550	70-year lifetime x 365 days/year	25,550	70-year lifetime x 365 days/year	
			AT-N	Averaging Time (Noncancer)	days	4,380	ED (year) x 365 days/year	2,190	ED (year) x 365 days/year	
			IF-C	Intake factor, cancer	mg/(ug/L*kg/day)	4.97E-09	IF-C x CW = CDI-C	2.30E-10	IF-C x CW = CDI-C	
		IF-NC	Intake factor, noncancer	mg/(ug/L*kg/day)	2.90E-08	IF-NC x CW = CDI-NC	2.69E-09	IF-NC x CW = CDI-NC		
		Adult	CW	Concentration in Water	ug/L	--	--	--	--	$CDI \text{ (mg/kg-day)} = \frac{CW \times WIR-E \times EV \times EF \times ED \times CF}{BW \times AT}$
			WIR-H	Ingestion Rate of Water, hourly	L/hour	see daily rate	see daily rate	see daily rate	see daily rate	
			t <sub>event</sub>	Event Duration	hours/event	see daily rate	see daily rate	see daily rate	see daily rate	
			WIR-E	Ingestion Rate of Water, per event	L/event	0.013	Dorevitch, S. et al. 2011	0.004	Dorevitch, S. et al. 2011	
			EV	Event Frequency	events/day	1	1 event/day	1	1 event/day	
			EF	Exposure Frequency	days/year	35	5 months (22 weeks)/year, 2 day/week during 3 summer months, 1 day/week in May & Sept	17	5 months (22 weeks)/year, 1 day/week during 3 summer months, 1 day every other week in May & Sept	
			ED	Exposure Duration	years	20	USEPA, 2014. 26 years total (20 adult/6 child)	10	USEPA, 2011 (Table ES-1). Average 12 yrs (10 adult/2 child)	
			CF	Conversion Factor	mg/ug	0.001	1 mg = 1000 ug	0.001	1 mg = 1000 ug	
			BW	Body Weight	kg	80	USEPA, 2014	80	USEPA, 2014	
			AT-C	Averaging Time (Cancer)	days	25,550	70-year lifetime x 365 days/year	25,550	70-year lifetime x 365 days/year	
AT-N	Averaging Time (Noncancer)		days	7,300	ED (year) x 365 days/year	3,650	ED (year) x 365 days/year			
IF-C	Intake factor, cancer		mg/(ug/L*kg/day)	4.40E-09	IF-C x CW = CDI-C	3.38E-10	IF-C x CW = CDI-C			
IF-NC	Intake factor, noncancer	mg/(ug/L*kg/day)	1.54E-08	IF-NC x CW = CDI-NC	2.37E-09	IF-NC x CW = CDI-NC				

**Table 5-3**  
**Values Used for Daily Intake Calculations - Surface Water**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe:	Current/Future
Medium:	Surface Water
Exposure Medium/Point:	Surface Water

Exposure Route	Receptor Population	Receptor Age	Parameter Code	Parameter Definition	Unit	RME		CTE		Chronic Daily Intake (CDI) (Ingestion) Dermal Absorbed Dose (DAD) Equations
						Value	Rationale/ Reference	Value	Rationale/ Reference	
Incidental Ingestion	Shoreline Worker	Adult	CW	Concentration in Water	ug/L	--	--	--	--	$CDI \text{ (mg/kg-day)} = \frac{CW \times WIR-E \times EV \times EF \times ED \times CF}{BW \times AT}$
			WIR-H	Ingestion Rate of Water, hourly	L/hour	see daily rate	see daily rate	see daily rate	see daily rate	
			t <sub>event</sub>	Event Duration	hours/event	see daily rate	see daily rate	see daily rate	see daily rate	
			WIR-E	Ingestion Rate of Water, per event	L/event	0.013	Dorevitch, S. et al. 2011	0.004	Dorevitch, S. et al. 2011	
			EV	Event Frequency	events/day	1	1 event/day	1	1 event/day	
			EF	Exposure Frequency	days/year	50	50 weeks/year, 1 day/week	25	50 weeks/year, 1 day every other week	
			ED	Exposure Duration	years	25	USEPA, 2014	6.6	USEPA, 2011 (Table 16-82, median tenure at same job, all workers)	
			CF	Conversion Factor	mg/ug	0.001	1 mg = 1000 ug	0.001	1 mg = 1000 ug	
			BW	Body Weight	kg	80	USEPA, 2014	80	USEPA, 2014	
			AT-C	Averaging Time (Cancer)	days	25,550	70-year lifetime x 365 days/year	25,550	70-year lifetime x 365 days/year	
			AT-N	Averaging Time (Noncancer)	days	9,125	ED (year) x 365 days/year	2,409	ED (year) x 365 days/year	
			IF-C	Intake factor, cancer	mg/(ug/L*kg/day)	7.95E-09	IF-C x CW = CDI-C	3.23E-10	IF-C x CW = CDI-C	
IF-NC	Intake factor, noncancer	mg/(ug/L*kg/day)	2.23E-08	IF-NC x CW = CDI-NC	3.42E-09	IF-NC x CW = CDI-NC				
Dermal	Shoreline Worker	Adult	CW	Concentration in Water	ug/L	--	--	--	--	$DAD \text{ (mg/kg-day)} = \frac{DA_{event} \times SA \times EV \times EF \times ED \times CF1 \times CF2}{BW \times AT}$ <p>Daevent = Z x CW</p> <p>tevent is incorporated into Daevent. See text for equations.</p>
			DA <sub>event</sub>	Absorbed dose per event	mg/cm <sup>2</sup> -event	--	--	--	--	
			Z	Dermal Factor	cm/event	--	--	--	--	
			SA	Skin Surface Area Available for Contact	cm <sup>2</sup>	3,527	See Table 5-7. Head, hands, forearms.	3,527	See Table 5-7. Head, hands, forearms.	
			t <sub>event</sub>	Event Duration	hours/event	2	1/4 of work day	1	1/8 of work day	
			EV	Event Frequency	events/day	1	1 event/day	1	1 event/day	
			EF	Exposure Frequency	days/year	50	50 weeks/year, 1 day/week	25	50 weeks/year, 1 day every other week	
			ED	Exposure Duration	years	25	USEPA, 2014	6.6	USEPA, 2011 (Table 16-82, median tenure at same job, all workers)	
			CF1	Conversion Factor 1	mg/ug	0.001	1 mg = 1000 ug	0.001	1 mg = 1000 ug	
			CF2	Conversion Factor 2	L/cm <sup>3</sup>	0.001	1 L = 1000 cm <sup>3</sup>	0.001	1 L = 1000 cm <sup>3</sup>	
			BW	Body Weight	kg	80	USEPA, 2014	80	USEPA, 2014	
			AT-C	Averaging Time (Cancer)	days	25,550	70-year lifetime x 365 days/year	25,550	70-year lifetime x 365 days/year	
			AT-N	Averaging Time (Noncancer)	days	9,125	ED (year) x 365 days/year	2,409	ED (year) x 365 days/year	
			IF-C	Intake factor, cancer	mg/(ug/L*kg/day)	2.16E-06	IF-C x Z x CW = DAD	2.85E-07	IF-C x Z x CW = DAD	
IF-NC	Intake factor, noncancer	mg/(ug/L*kg/day)	6.04E-06	IF-NC x Z x CW = DAD	3.02E-06	IF-NC x Z x CW = DAD				

**Table 5-3**  
**Values Used for Daily Intake Calculations - Surface Water**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe:	Current/Future
Medium:	Surface Water
Exposure Medium/Point:	Surface Water

Exposure Route	Receptor Population	Receptor Age	Parameter Code	Parameter Definition	Unit	RME		CTE		Chronic Daily Intake (CDI) (Ingestion) Dermal Absorbed Dose (DAD) Equations
						Value	Rationale/ Reference	Value	Rationale/ Reference	
Dermal	Recreational Angler	Older Child/Teen (7 to <19 years)	CW	Concentration in Water	ug/L	--	--	--	--	$DAD (mg/kg\text{-}day) = DA_{event} \times SA \times EV \times EF \times ED \times CF1 \times CF2$ $BW \times AT$  $Da_{event} = Z \times CW$ tevent is incorporated into Daevent. See text for equations.
			DA <sub>event</sub>	Absorbed dose per event	mg/cm <sup>2</sup> -event	--	--	--	--	
			Z	Dermal Factor	cm/event	--	--	--	--	
			SA	Skin Surface Area Available for Contact	cm <sup>2</sup>	2,710	See Table 5-8. Lower legs and feet	2,710	See Table 5-8. Lower legs and feet	
			t <sub>event</sub>	Event Duration	hours/event	1	(b)	0.5	(b)	
			EV	Event Frequency	events/day	1	1 event/day	1	1 event/day	
			EF	Exposure Frequency	days/year	26	6 months (26 weeks)/year, 1 day/week	13	6 months (26 weeks)/year, 1 day every other week	
			ED	Exposure Duration	years	12	receptor age range	6	1/2 RME	
			CF1	Conversion Factor 1	mg/ug	0.001	1 mg = 1000 ug	0.001	1 mg = 1000 ug	
			CF2	Conversion Factor 2	L/cm <sup>3</sup>	0.001	1 L = 1000 cm <sup>3</sup>	0.001	1 L = 1000 cm <sup>3</sup>	
			BW	Body Weight	kg	53	Fryar et al. 2012	53	Fryar et al. 2012	
			AT-C	Averaging Time (Cancer)	days	25,550	70-year lifetime x 365 days/year	25,550	70-year lifetime x 365 days/year	
			AT-N	Averaging Time (Noncancer)	days	4,380	ED (year) x 365 days/year	2,190	ED (year) x 365 days/year	
			IF-C	Intake factor, cancer	mg/(ug/L*kg/day)	6.24E-07	IF-C x Z x CW = CDI	1.56E-07	IF-C x Z x CW = CDI	
	IF-NC	Intake factor, noncancer	mg/(ug/L*kg/day)	3.64E-06	IF-C x Z x CW = CDI	1.82E-06	IF-C x Z x CW = CDI			
	Recreational Angler	Adult	CW	Concentration in Water	ug/L	--	--	--	--	$DAD (mg/kg\text{-}day) = DA_{event} \times SA \times EV \times EF \times ED \times CF1 \times CF2$ $BW \times AT$  $Da_{event} = Z \times CW$ tevent is incorporated into Daevent. See text for equations.
			DA <sub>event</sub>	Absorbed dose per event	mg/cm <sup>2</sup> -event	--	--	--	--	
			Z	Dermal Factor	cm/event	--	--	--	--	
			SA	Skin Surface Area Available for Contact	cm <sup>2</sup>	3,800	See Table 5-7. Lower legs and feet	3,800	See Table 5-7. Lower legs and feet	
			t <sub>event</sub>	Event Duration	hours/event	1	(b)	0.5	(b)	
			EV	Event Frequency	events/day	1	1 event/day	1	1 event/day	
			EF	Exposure Frequency	days/year	26	6 months (26 weeks)/year, 1 day/week	13	6 months (26 weeks)/year, 1 day every other week	
			ED	Exposure Duration	years	20	USEPA, 2014. 26 years total (20 adult/6 child)	10	USEPA, 2011 (Table ES-1). Average 12 yrs (10 adult/2 child)	
			CF1	Conversion Factor 1	mg/ug	0.001	1 mg = 1000 ug	0.001	1 mg = 1000 ug	
			CF2	Conversion Factor 2	L/cm <sup>3</sup>	0.001	1 L = 1000 cm <sup>3</sup>	0.001	1 L = 1000 cm <sup>3</sup>	
			BW	Body Weight	kg	80	USEPA, 2014	80	USEPA, 2014	
			AT-C	Averaging Time (Cancer)	days	25,550	70-year lifetime x 365 days/year	25,550	70-year lifetime x 365 days/year	
			AT-N	Averaging Time (Noncancer)	days	7,300	ED (year) x 365 days/year	3,650	ED (year) x 365 days/year	
IF-C			Intake factor, cancer	mg/(ug/L*kg/day)	9.66E-07	IF-C x Z x CW = CDI	2.41E-07	IF-C x Z x CW = CDI		
IF-NC	Intake factor, noncancer	mg/(ug/L*kg/day)	3.38E-06	IF-C x Z x CW = CDI	1.69E-06	IF-C x Z x CW = CDI				

**Table 5-3**  
**Values Used for Daily Intake Calculations - Surface Water**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe:	Current/Future
Medium:	Surface Water
Exposure Medium/Point:	Surface Water

Exposure Route	Receptor Population	Receptor Age	Parameter Code	Parameter Definition	Unit	RME		CTE		Chronic Daily Intake (CDI) (Ingestion) Dermal Absorbed Dose (DAD) Equations
						Value	Rationale/ Reference	Value	Rationale/ Reference	
Dermal	Swimmer	Young Child (1 to <7 year)	CW	Concentration in Water	ug/L	--	--	--	--	$DAD (mg/kg\text{-}day) = \frac{DA_{event} \times SA \times EV \times EF \times ED \times CF1 \times CF2}{BW \times AT}$ Daevent = Z x CW tevent is incorporated into Daevent. See text for equations.
			DA <sub>event</sub>	Absorbed dose per event	mg/cm <sup>2</sup> -event	--	--	--	--	
			Z	Dermal Factor	cm/event	--	--	--	--	
			SA	Skin Surface Area Available for Contact	cm <sup>2</sup>	7,500	See Table 5-6. Full body SA	7,500	See Table 5-6. Full body SA	
			t <sub>event</sub>	Event Duration	hours/event	0.5	(a)	0.25	(a)	
			EV	Event Frequency	events/day	1	1 event/day	1	1 event/day	
			EF	Exposure Frequency	days/year	13	3 months (13 weeks)/year, 1 day/week	6	3 months (13 weeks)/year, 1 day every other week	
			ED	Exposure Duration	years	6	USEPA, 2014. 26 years total (20 adult/6 child)	2	USEPA, 2011 (Table ES-1). Average 12 yrs (10 adult/2 child)	
			CF1	Conversion Factor 1	mg/ug	0.001	1 mg = 1000 ug	0.001	1 mg = 1000 ug	
			CF2	Conversion Factor 2	L/cm <sup>3</sup>	0.001	1 L = 1000 cm <sup>3</sup>	0.001	1 L = 1000 cm <sup>3</sup>	
			BW	Body Weight	kg	17	Fryar et al. 2012	17	Fryar et al. 2012	
			AT-C	Averaging Time (Cancer)	days	25,550	70-year lifetime x 365 days/year	25,550	70-year lifetime x 365 days/year	
		AT-N	Averaging Time (Noncancer)	days	2,190	ED (year) x 365 days/year	730	ED (year) x 365 days/year		
		IF-C	Intake factor, cancer	mg/(ug/L*kg/day)	1.35E-06	IF-C x Z x CW = CDI	2.24E-07	IF-C x Z x CW = CDI		
		IF-NC	Intake factor, noncancer	mg/(ug/L*kg/day)	1.57E-05	IF-C x Z x CW = CDI	7.85E-06	IF-C x Z x CW = CDI		
		Older Child/Teen (7 to <19 years)	CW	Concentration in Water	ug/L	--	--	--	--	$DAD (mg/kg\text{-}day) = \frac{DA_{event} \times SA \times EV \times EF \times ED \times CF1 \times CF2}{BW \times AT}$ Daevent = Z x CW tevent is incorporated into Daevent. See text for equations.
			DA <sub>event</sub>	Absorbed dose per event	mg/cm <sup>2</sup> -event	--	--	--	--	
			Z	Dermal Factor	cm/event	--	--	--	--	
			SA	Skin Surface Area Available for Contact	cm <sup>2</sup>	14,825	See Table 5-6. Full body SA	14,825	See Table 5-6. Full body SA	
			t <sub>event</sub>	Event Duration	hours/event	0.5	(a)	0.25	(a)	
			EV	Event Frequency	events/day	1	1 event/day	1	1 event/day	
			EF	Exposure Frequency	days/year	26	3 months (13 weeks)/year, 2 days/week	13	3 months (13 weeks)/year, 1 day/week	
			ED	Exposure Duration	years	12	receptor age range	6	1/2 RME	
			CF1	Conversion Factor 1	mg/ug	0.001	1 mg = 1000 ug	0.001	1 mg = 1000 ug	
			CF2	Conversion Factor 2	L/cm <sup>3</sup>	0.001	1 L = 1000 cm <sup>3</sup>	0.001	1 L = 1000 cm <sup>3</sup>	
			BW	Body Weight	kg	53	Fryar et al. 2012	53	Fryar et al. 2012	
			AT-C	Averaging Time (Cancer)	days	25,550	70-year lifetime x 365 days/year	25,550	70-year lifetime x 365 days/year	
		AT-N	Averaging Time (Noncancer)	days	4,380	ED (year) x 365 days/year	2,190	ED (year) x 365 days/year		
		IF-C	Intake factor, cancer	mg/(ug/L*kg/day)	3.41E-06	IF-C x Z x CW = CDI	8.53E-07	IF-C x Z x CW = CDI		
		IF-NC	Intake factor, noncancer	mg/(ug/L*kg/day)	1.99E-05	IF-C x Z x CW = CDI	9.95E-06	IF-C x Z x CW = CDI		
		Adult	CW	Concentration in Water	ug/L	--	--	--	--	$DAD (mg/kg\text{-}day) = \frac{DA_{event} \times SA \times EV \times EF \times ED \times CF1 \times CF2}{BW \times AT}$ Daevent = Z x CW tevent is incorporated into Daevent. See text for equations.
			DA <sub>event</sub>	Absorbed dose per event	mg/cm <sup>2</sup> -event	--	--	--	--	
			Z	Dermal Factor	cm/event	--	--	--	--	
			SA	Skin Surface Area Available for Contact	cm <sup>2</sup>	20,900	USEPA, 2014	20,900	USEPA, 2014	
			t <sub>event</sub>	Event Duration	hours/event	0.5	(a)	0.25	(a)	
			EV	Event Frequency	events/day	1	1 event/day	1	1 event/day	
EF	Exposure Frequency		days/year	13	3 months (13 weeks)/year, 1 day/week	6	3 months (13 weeks)/year, 1 day every other week			
ED	Exposure Duration		years	20	USEPA, 2014. 26 years total (20 adult/6 child)	10	USEPA, 2011 (Table ES-1). Average 12 yrs (10 adult/2 child)			
CF1	Conversion Factor 1		mg/ug	0.001	1 mg = 1000 ug	0.001	1 mg = 1000 ug			
CF2	Conversion Factor 2		L/cm <sup>3</sup>	0.001	1 L = 1000 cm <sup>3</sup>	0.001	1 L = 1000 cm <sup>3</sup>			
BW	Body Weight		kg	80	USEPA, 2014	80	USEPA, 2014			
AT-C	Averaging Time (Cancer)		days	25,550	70-year lifetime x 365 days/year	25,550	70-year lifetime x 365 days/year			
AT-N	Averaging Time (Noncancer)	days	7,300	ED (year) x 365 days/year	3,650	ED (year) x 365 days/year				
IF-C	Intake factor, cancer	mg/(ug/L*kg/day)	2.66E-06	IF-C x Z x CW = CDI	6.64E-07	IF-C x Z x CW = CDI				
IF-NC	Intake factor, noncancer	mg/(ug/L*kg/day)	9.30E-06	IF-C x Z x CW = CDI	4.65E-06	IF-C x Z x CW = CDI				



**Table 5-3**  
**Values Used for Daily Intake Calculations - Surface Water**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe:	Current/Future
Medium:	Surface Water
Exposure Medium/Point:	Surface Water

Exposure Route	Receptor Population	Receptor Age	Parameter Code	Parameter Definition	Unit	RME		CTE		Chronic Daily Intake (CDI) (Ingestion) Dermal Absorbed Dose (DAD) Equations
						Value	Rationale/ Reference	Value	Rationale/ Reference	
Dermal	Wader	Young Child (1 to <7 year)	CW	Concentration in Water	ug/L	--	--	--	--	$DAD (mg/kg-day) = \frac{DA_{event} \times SA \times EV \times EF \times ED \times CF1 \times CF2}{BW \times AT}$  $Da_{event} = Z \times CW$  tevent is incorporated into Daevent. See text for equations.
			DA <sub>event</sub>	Absorbed dose per event	mg/cm <sup>2</sup> -event	--	--	--	--	
			Z	Dermal Factor	cm/event	--	--	--	--	
			SA	Skin Surface Area Available for Contact	cm <sup>2</sup>	2,057	See Table 5-9. Hands, forearms, lower legs, feet	2,057	See Table 5-9. Hands, forearms, lower legs, feet	
			t <sub>event</sub>	Event Duration	hours/event	1	(c)	0.5	(c)	
			EV	Event Frequency	events/day	1	1 event/day	1	1 event/day	
			EF	Exposure Frequency	days/year	35	5 months (22 weeks)/year, 2 day/week during 3 summer months, 1 day/week in May & Sept	17	5 months (22 weeks)/year, 1 day/week during 3 summer months, 1 day every other week in May & Sept	
			ED	Exposure Duration	years	6	USEPA, 2014. 26 years total (20 adult/6 child)	2	USEPA, 2011 (Table ES-1). Average 12 yrs (10 adult/2 child)	
			CF1	Conversion Factor 1	mg/ug	0.001	1 mg = 1000 ug	0.001	1 mg = 1000 ug	
			CF2	Conversion Factor 2	L/cm <sup>3</sup>	0.001	1 L = 1000 cm <sup>3</sup>	0.001	1 L = 1000 cm <sup>3</sup>	
			BW	Body Weight	kg	17	Fryar et al. 2012	17	Fryar et al. 2012	
			AT-C	Averaging Time (Cancer)	days	25,550	70-year lifetime x 365 days/year	25,550	70-year lifetime x 365 days/year	
		AT-N	Averaging Time (Noncancer)	days	2,190	ED (year) x 365 days/year	730	ED (year) x 365 days/year		
		IF-C	Intake factor, cancer	mg/(ug/L*kg/day)	9.83E-07	IF-C x Z x CW = CDI	1.64E-07	IF-C x Z x CW = CDI		
		IF-NC	Intake factor, noncancer	mg/(ug/L*kg/day)	1.15E-05	IF-C x Z x CW = CDI	5.73E-06	IF-C x Z x CW = CDI		
		Older Child/Teen (7 to <19 years)	CW	Concentration in Water	ug/L	--	--	--	--	$DAD (mg/kg-day) = \frac{DA_{event} \times SA \times EV \times EF \times ED \times CF1 \times CF2}{BW \times AT}$  $Da_{event} = Z \times CW$  tevent is incorporated into Daevent. See text for equations.
			DA <sub>event</sub>	Absorbed dose per event	mg/cm <sup>2</sup> -event	--	--	--	--	
			Z	Dermal Factor	cm/event	--	--	--	--	
			SA	Skin Surface Area Available for Contact	cm <sup>2</sup>	2,710	See Table 5-8. Lower legs and feet	2,710	See Table 5-8. Lower legs and feet	
			t <sub>event</sub>	Event Duration	hours/event	1	(c)	0.5	(c)	
			EV	Event Frequency	events/day	1	1 event/day	1	1 event/day	
			EF	Exposure Frequency	days/year	43	5 months (22 weeks)/year, 2 days/week	13	5 months (22 weeks)/year, 1 day/week	
			ED	Exposure Duration	years	12	receptor age range	6	1/2 RME	
			CF1	Conversion Factor 1	mg/ug	0.001	1 mg = 1000 ug	0.001	1 mg = 1000 ug	
			CF2	Conversion Factor 2	L/cm <sup>3</sup>	0.001	1 L = 1000 cm <sup>3</sup>	0.001	1 L = 1000 cm <sup>3</sup>	
			BW	Body Weight	kg	53	Fryar et al. 2012	53	Fryar et al. 2012	
			AT-C	Averaging Time (Cancer)	days	25,550	70-year lifetime x 365 days/year	25,550	70-year lifetime x 365 days/year	
		AT-N	Averaging Time (Noncancer)	days	4,380	ED (year) x 365 days/year	2,190	ED (year) x 365 days/year		
		IF-C	Intake factor, cancer	mg/(ug/L*kg/day)	1.04E-06	IF-C x Z x CW = CDI	1.56E-07	IF-C x Z x CW = CDI		
		IF-NC	Intake factor, noncancer	mg/(ug/L*kg/day)	6.05E-06	IF-C x Z x CW = CDI	1.82E-06	IF-C x Z x CW = CDI		
		Adult	CW	Concentration in Water	ug/L	--	--	--	--	$DAD (mg/kg-day) = \frac{DA_{event} \times SA \times EV \times EF \times ED \times CF1 \times CF2}{BW \times AT}$  $Da_{event} = Z \times CW$  tevent is incorporated into Daevent. See text for equations.
			DA <sub>event</sub>	Absorbed dose per event	mg/cm <sup>2</sup> -event	--	--	--	--	
			Z	Dermal Factor	cm/event	--	--	--	--	
			SA	Skin Surface Area Available for Contact	cm <sup>2</sup>	3,800	See Table 5-7. Lower legs and feet	3,800	See Table 5-7. Lower legs and feet	
			t <sub>event</sub>	Event Duration	hours/event	1	(c)	0.5	(c)	
			EV	Event Frequency	events/day	1	1 event/day	1	1 event/day	
EF	Exposure Frequency		days/year	35	5 months (22 weeks)/year, 2 day/week during 3 summer months, 1 day/week in May & Sept	17	5 months (22 weeks)/year, 1 day/week during 3 summer months, 1 day every other week in May & Sept			
ED	Exposure Duration		years	20	USEPA, 2014. 26 years total (20 adult/6 child)	10	USEPA, 2011 (Table ES-1). Average 12 yrs (10 adult/2 child)			
CF1	Conversion Factor 1		mg/ug	0.001	1 mg = 1000 ug	0.001	1 mg = 1000 ug			
CF2	Conversion Factor 2		L/cm <sup>3</sup>	0.001	1 L = 1000 cm <sup>3</sup>	0.001	1 L = 1000 cm <sup>3</sup>			
BW	Body Weight		kg	80	USEPA, 2014	80	USEPA, 2014			
AT-C	Averaging Time (Cancer)		days	25,550	70-year lifetime x 365 days/year	25,550	70-year lifetime x 365 days/year			
AT-N	Averaging Time (Noncancer)	days	7,300	ED (year) x 365 days/year	3,650	ED (year) x 365 days/year				
IF-C	Intake factor, cancer	mg/(ug/L*kg/day)	1.29E-06	IF-C x Z x CW = CDI	3.21E-07	IF-C x Z x CW = CDI				
IF-NC	Intake factor, noncancer	mg/(ug/L*kg/day)	4.50E-06	IF-C x Z x CW = CDI	2.25E-06	IF-C x Z x CW = CDI				

**Table 5-3**  
**Values Used for Daily Intake Calculations - Surface Water**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe:	Current/Future
Medium:	Surface Water
Exposure Medium/Point:	Surface Water

Exposure Route	Receptor Population	Receptor Age	Parameter Code	Parameter Definition	Unit	RME		CTE		Chronic Daily Intake (CDI) (Ingestion) Dermal Absorbed Dose (DAD) Equations
						Value	Rationale/ Reference	Value	Rationale/ Reference	

**Notes:**  
RME = Reasonable Maximum Exposure; CTE = Central Tendency Exposure  
-- Constituent-specific value.  
(a) Extended periods of swimming in the Anacostia River are unlikely (see text). An upper-bound estimate of swimming event duration is estimated to be 30 minutes; the central tendency estimate is one-half of RME or 15 minutes.  
(b) Anglers may occasionally wade in the river while fishing. An upper-bound estimate of wading duration while fishing is estimated to be 1 hour; the central tendency estimate is one-half of RME or 30 minutes.  
(c) Visitors to the river may occasionally wade along the shoreline. An upper-bound estimate of wading while visiting/recreating is estimated to be 1 hour; the central tendency estimate is one-half of RME or 30 minutes.

**Sources:**  
Dorevitch, S. et al. 2011. Water ingestion during water recreation. *Water Research* 45(5):2020-8.  
Authors cite mean of 3-4 mL and upper confidence level estimate of 10-15 mL for limited contact recreational exposures to surface water (e.g., canoeing, kayaking, fishing, motor boating and rowing).  
The midpoint of the upper confidence level rate (13 mL) is selected as the RME rate and the mean is selected as the CTE rate. As this is a per event rate, an hourly rate is not provided.  
Fryar, C.D., Q. Gu, and C.L. Ogden. 2012. Anthropometric reference data for children and adults: United States, 2007-2010. National Center for Health Statistics. *Vital Health Stat* 11(252).  
USEPA, 1989. Risk Assessment Guidance for Superfund. Vol. 1: Human Health Evaluation Manual, Part A. OERR. EPA/540/1-89/002.  
USEPA, 2004. Risk Assessment Guidance for Superfund. Vol. 1: Human Health Evaluation Manual, Part E, Supplemental Guidance for Dermal Risk Assessment Final. EPA/540/R/99/005.  
USEPA, 2011. Exposure Factors Handbook: 2011 Edition. EPA/600/R-09/052F. Office of Research and Development, Washington, DC. September.  
USEPA, 2014. Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors. OSWER Directive 9200.1-120. Assessment and Remediation Division, Office of Superfund Remediation and Technology Innovation, US Environmental Protection Agency, Washington, DC. February 6, 2014

**Table 5-4**  
**Values Used for Daily Intake Calculations - Fish Tissue**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe:	Current/Future
Medium:	Fish tissue
Exposure Medium/Point:	Fish tissue (fillet)

Exposure Route	Receptor Population	Receptor Age	Parameter Code	Parameter Definition	Unit	RME		CTE		Chronic Daily Intake (CDI) Equation
						Value	Rationale/ Reference	Value	Rationale/ Reference	
Ingestion	Recreational Angler	Young Child (1 to <7 year)	CFF	Concentration in Fish Tissue	mg/kg wet weight	--	--	--	--	$CDI \text{ (mg/kg-day)} = \frac{CFF \times FIR \times FI \times (1-Loss) \times EF \times ED \times CF}{BW \times AT}$
			FIR	Ingestion Rate of Fish	g/day	7	1/3 of adult rate (USEPA, 2011)	3	1/3 of adult rate (USEPA, 2011)	
			FI	Fraction from source	unitless	0.5	Assumes half of consumed catch is from Anacostia River in vicinity of site	0.25	1/2 of RME (assumes anglers eat catch from various locations throughout the Wash DC area)	
			Loss	Cooking Loss	g/g	--	--	--	--	
			EF	Exposure Frequency	days/year	365	FIR rate prorated over one year	365	FIR rate prorated over one year	
			ED	Exposure Duration	years	6	USEPA, 2014. 26 years total (20 adult/6 child)	2	USEPA, 2011 (Table ES-1). Average 12 yrs (10 adult/2 child)	
			CF	Conversion Factor	kg/g	0.001	1 kg = 0.001 mg	0.001	1 kg = 0.001 mg	
			BW	Body Weight	kg	17	Fryar et al. 2012	17	Fryar et al. 2012	
			AT-C	Averaging Time (Cancer)	days	25,550	70-year lifetime x 365 days/year	25,550	70-year lifetime x 365 days/year	
			AT-N	Averaging Time (Noncancer)	days	2,190	ED (years) x 365 days/year	730	ED (years) x 365 days/year	
		IF-C	Intake factor, cancer	(kg-fish)/(kg-bw/d)	1.76E-05	IF-C x CFF x (1-Loss) = CDI-C	1.26E-06	IF-C x CFF x (1-Loss) = CDI-C		
		IF-NC	Intake factor, noncancer	(kg-fish)/(kg-bw/d)	2.06E-04	IF-NC x CFF x (1-Loss) = CDI-NC	4.41E-05	IF-NC x CFF x (1-Loss) = CDI-NC		
		Older Child/Teen (7 to <19 years)	CFF	Concentration in Fish Tissue	mg/kg wet weight	--	--	--	--	$CDI \text{ (mg/kg-day)} = \frac{CFF \times FIR \times FI \times (1-Loss) \times EF \times ED \times CF}{BW \times AT}$
			FIR	Ingestion Rate of Fish	g/day	13	2/3 of adult rate (USEPA, 2011)	7	2/3 of adult rate (USEPA, 2011)	
			FI	Fraction from source	unitless	0.5	Assumes half of consumed catch is from Anacostia River in vicinity of site	0.25	1/2 of RME (assumes anglers eat catch from various locations throughout the Wash DC area)	
			Loss	Cooking Loss	g/g	--	--	--	--	
			EF	Exposure Frequency	days/year	365	FIR rate prorated over one year	365	FIR rate prorated over one year	
			ED	Exposure Duration	years	12	receptor age range	6	1/2 RME	
			CF	Conversion Factor	kg/g	0.001	1 kg = 0.001 mg	0.001	1 kg = 0.001 mg	
			BW	Body Weight	kg	53	Fryar et al. 2012	53	Fryar et al. 2012	
			AT-C	Averaging Time (Cancer)	days	25,550	70-year lifetime x 365 days/year	25,550	70-year lifetime x 365 days/year	
			AT-N	Averaging Time (Noncancer)	days	4,380	ED (years) x 365 days/year	2,190	ED (years) x 365 days/year	
		IF-C	Intake factor, cancer	(kg-fish)/(kg-bw/d)	2.10E-05	IF-C x CFF x (1-Loss) = CDI-C	2.83E-06	IF-C x CFF x (1-Loss) = CDI-C		
		IF-NC	Intake factor, noncancer	(kg-fish)/(kg-bw/d)	1.23E-04	IF-NC x CFF x (1-Loss) = CDI-NC	3.30E-05	IF-NC x CFF x (1-Loss) = CDI-NC		
		Adult	CFF	Concentration in Fish Tissue	mg/kg wet weight	--	--	--	--	$CDI \text{ (mg/kg-day)} = \frac{CFF \times FIR \times FI \times (1-Loss) \times EF \times ED \times CF}{BW \times AT}$
			FIR	Ingestion Rate of Fish	g/day	20	Gibson & McClafferty, 2005. (Washington DC area anglers) See Table 5-5 for details on ingestion rate derivation.	10	Gibson & McClafferty, 2005. (Washington DC area anglers) See Table 5-5 for details on ingestion rate derivation.	
			FI	Fraction from source	unitless	0.5	Assumes half of consumed catch is from Anacostia River in vicinity of site	0.25	1/2 of RME (assumes anglers eat catch from various locations throughout the Wash DC area)	
			Loss	Cooking Loss	g/g	--	--	--	--	
			EF	Exposure Frequency	days/year	365	FIR rate prorated over one year	365	FIR rate prorated over one year	
			ED	Exposure Duration	years	20	USEPA, 2014. 26 years total (20 adult/6 child)	10	USEPA, 2011 (Table ES-1). Average 12 yrs (10 adult/2 child)	
CF	Conversion Factor		kg/g	0.001	1 kg = 0.001 mg	0.001	1 kg = 0.001 mg			
BW	Body Weight		kg	80	USEPA, 2014	80	USEPA, 2014			
AT-C	Averaging Time (Cancer)		days	25,550	70-year lifetime x 365 days/year	25,550	70-year lifetime x 365 days/year			
AT-N	Averaging Time (Noncancer)		days	7,300	ED (years) x 365 days/year	3,650	ED (years) x 365 days/year			
IF-C	Intake factor, cancer	(kg-fish)/(kg-bw/d)	3.57E-05	IF-C x CFF x (1-Loss) = CDI-C	4.46E-06	IF-C x CFF x (1-Loss) = CDI-C				
IF-NC	Intake factor, noncancer	(kg-fish)/(kg-bw/d)	1.25E-04	IF-NC x CFF x (1-Loss) = CDI-NC	3.13E-05	IF-NC x CFF x (1-Loss) = CDI-NC				

**Table 5-4  
Values Used for Daily Intake Calculations - Fish Tissue  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe:	Current/Future
Medium:	Fish tissue
Exposure Medium/Point:	Fish tissue (fillet)

Exposure Route	Receptor Population	Receptor Age	Parameter Code	Parameter Definition	Unit	RME		CTE		Chronic Daily Intake (CDI) Equation
						Value	Rationale/ Reference	Value	Rationale/ Reference	

**Notes:**

RME = Reasonable Maximum Exposure; CTE = Central Tendency Exposure  
 -- Constituent-specific value; CFF (concentration in fish tissue) is also species-specific.

**Sources:**

Fryar, C.D., Q. Gu, and C.L. Ogden. 2012. Anthropometric reference data for children and adults: United States, 2007-2010. National Center for Health Statistics. Vital Health Stat 11(252).  
 Gibson & McClafferty, 2005. Chesapeake Bay Angler Survey, Identifying Populations at Risk from Consuming Contaminated Fish in Three Regions of Concern. Virginia Polytechnic Institute and State University. CMI-HDD-05-01. March.  
 USEPA, 2011. Exposure Factors Handbook: 2011 Edition. EPA/600/R-09/052F. Office of Research and Development, Washington, DC. September.  
 USEPA, 2014. Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors. OSWER Directive 9200.1-120. Assessment and Remediation Division, Office of Superfund Remediation and Technology Innovation, US Environmental Protection Agency, Washington, DC. February 6, 2014.

**Table 5-5**  
**Calculation of Fish Consumption Rates for Recreational Angler Receptor (a)**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Reasonable Maximum Exposure (RME)		Central Tendency Exposure (CTE)	
<b>Time period</b>	<b>Apr-Sept</b>	<b>Time period</b>	<b>Apr-Sept</b>
number months	6	number months	6
weeks/month	4.3	weeks/month	4.3
total weeks	26	total weeks	26
meals/week	1.0	meals/week	0.5
<i>total meals (Apr-Sept)</i>	26	<i>total meals (Apr-Sept)</i>	13
<b>Time period</b>	<b>Oct-Mar</b>	<b>Time period</b>	<b>Oct-Mar</b>
number months	6	number months	6
meals/month	1.0	meals/month	0.5
<i>total meals (Oct-Mar)</i>	6	<i>total meals (Oct-Mar)</i>	3
<b>Total year-round meals</b>	<b>32</b>	<b>Total year-round meals</b>	<b>16</b>
<b>Meal size (grams)</b>	<b>227</b> (b)	<b>Meal size (grams)</b>	<b>227</b> (b)
<b>Grams/day (annualized)</b>	<b>20</b> (c)	<b>Grams/day (annualized)</b>	<b>10</b> (d)
<b>RME Adult Angler (g/day)</b>	20	<b>CTE Adult Angler (g/day)</b>	10
<b>RME Older Child/Teen Angler (g/day)</b>	13 (e)	<b>CTE Older Child/Teen Angler (g/day)</b>	7 (e)
<b>RME Young Child (g/day)</b>	7 (e)	<b>CTE Young Child (g/day)</b>	3 (e)

Notes:

- (a) Rates are based on responses of Washington DC area anglers that participated in 2004 Chesapeake Bay Angler Survey (Gibson & McClafferty, 2005). During warmer weather months (Apr-Sept), 53% of consuming anglers reported eating their catch 1 to 3 times/month, and 20% reported eating their catch 1-2 times/week. On average throughout the year, anglers ate their catch less than once per month (44%) or between one and three times per month (29%). Additional support obtained from Anacostia River Angler Survey (OpinionWorks, 2012).
- (b) Meal size assumed to be 8 ounces (227 grams). Most anglers (78%) reported eating 8 ounces or less at a meal. In addition, an 8-ounce serving size is used to set fish consumption advisories.
- (c) RME adult rate assumes one meal/week during 6 warmer months of the year (Apr-Sept) and 1 meal/month during 6 cooler months of the year (Oct-Mar) for a total of 32 meals/year (expressed in grams/day averaged over 365 days/year). RME rate equates to catching ~53 pounds of whole fish per year assuming ~30% is edible (USEPA, 1989).
- (d) CTE adult rate assumes one meal every other week during 6 warmer months of the year (Apr-Sept) and 1 meal every other month during 6 cooler months of the year (Oct-Mar) for a total of 16 meals/year (expressed in grams/day averaged over 365 days). CTE rate equates to catching ~27 pounds of whole fish per year assuming ~30% is edible (USEPA, 1989).
- (e) Consumption rates for older child and young child are assumed to be two thirds and one third of adult rate, respectively (USEPA, 2011). Rates are rounded to integers.

**Table 5-6**  
**Calculation of Body Surface Area Exposed to Surface Water While Swimming for Young Child and Older Child/Teen**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

<b>Young Child (1 to &lt;7 years, from 1st birthday to the day before 7th birthday)</b>	
<b>Age</b>	<b>Mean Surface Area (m<sup>2</sup>) (EFH, Table 7-9)</b>
1<2	0.53
2<3	0.61
3<4 (data 3<6)	0.76
4<5 (data 3<6)	0.76
5<6 (data 3<6)	0.76
6<7 (data 6<11)	1.08
<b>Average (cm<sup>2</sup>)</b>	<b>7,500</b>

<b>Older Child/Teenager (7 to &lt;19 years, from 7th birthday to the day before 19th birthday)</b>	
<b>Age</b>	<b>Mean Surface Area (m<sup>2</sup>) (EFH, Table 7-9)</b>
7<8 (data 6<11)	1.08
8<9 (data 6<11)	1.08
9<10 (data 6<11)	1.08
10<11 (data 6<11)	1.08
11<12 (data 11<16)	1.59
12<13 (data 11<16)	1.59
13<14 (data 11<16)	1.59
14<15 (data 11<16)	1.59
15<16 (data 11<16)	1.59
16<17 (data 16<21)	1.84
17<18 (data 16<21)	1.84
18<19 (data 16<21)	1.84
<b>Average (cm<sup>2</sup>)</b>	<b>14,825</b>

**Notes:**

EFH - 2011 Edition of the Exposure Factors Handbook (USEPA, 2011).

**Source:**

USEPA, 2011. Exposure Factors Handbook: 2011 Edition. EPA/600/R-09/052F.

**Table 5-7**  
**Calculation of Body Surface Area Exposed to Sediment and Adherence Factor for Adults**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Body Part	Mean Body Surface Area for Adult EFH Tables 7-12 and 7-13 (USEPA 2011)		Average of Males and Females cm <sup>2</sup>
	Male m <sup>2</sup>	Female m <sup>2</sup>	
Head	0.136	0.114	1,250
<b>Upper extremities</b>			
Arms	0.314	0.237	2,755
Upper arms	0.172	0.13035 (a)	1,512
Forearms	0.148	0.11139 (a)	1,297
Hands	0.107	0.089	980
<b>Lower extremities</b>			
Legs	0.682	0.598	6,400
Lower legs	0.268	0.233	2,505
Feet	0.137	0.122	1,295
<b>Adult Body Surface Area Exposed to Sediment (cm<sup>2</sup>)</b>			
	<b>swimmer, wader, angler</b>	<b>lower legs, feet</b>	<b>= 3,800</b>
	<b>worker</b>	<b>hands, forearms, head</b>	<b>= 3,527</b>

Body Part	Adult (>18 yrs) swimmer, wader, angler		
	Body Surface Area Exposed to Sediment (cm <sup>2</sup> )	Soil Loading Rate Reed Gatherer (b) (mg/cm <sup>2</sup> )	Total Soil Mass (mg)
Lower Legs	2,505	0.16	401
Feet	1,295	0.63	816
Total	3,800	–	1,217
<b>Area-Weighted Sediment Adherence Factor (mg/cm<sup>2</sup>) = Soil mass/Surface area =</b>			<b>0.3</b>

Body Part	Adult (>18 yrs) worker		
	Body Surface Area Exposed to Sediment and Bank Soil (cm <sup>2</sup> )	Soil Loading Rate Reed Gatherer (b) (mg/cm <sup>2</sup> )	Total Soil Mass (mg)
Head	1,250	0.197 (c)	246
Hands	980	0.66	647
Forearms	1,297	0.036	47
Total	3,527	–	893
<b>Area-Weighted Sediment Adherence Factor (mg/cm<sup>2</sup>) = Soil mass/Surface area =</b>			<b>0.3</b>

**Notes:**

EFH - 2011 Edition of the Exposure Factors Handbook (USEPA, 2011).

(a) In accordance with USEPA 2014 OSWER Directive on Recommended Default Exposure Factors (USEPA, 2014), the female forearms and upper arms surface areas were calculated as follows:

Female arms [0.237] x (Male forearm/Male arms) [0.47]

Female arms [0.237] x (Male upper arms/Male arms) [0.55]

(b) - Data from USEPA (2011) Table 7-20. Geometric mean of values for reed gatherers.

(c) - Adherence factor for face based on gardeners due to lack of face adherence data for reed gatherers.

**Sources:**

USEPA, 2011. Exposure Factors Handbook: 2011 Edition. EPA/600/R-09/052F.

USEPA, 2014. Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors.

OSWER Directive 9200.1-120.

**Table 5-8**  
**Calculation of Body Surface Area Exposed to Sediment and Adherence Factor for Older Child/Teen**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Older Child/Teenager (7 to <19 years, from 7th birthday to the day before 19th birthday)			
Mean Surface Area by Body Part, m <sup>2</sup> (EFH, Table 7-2, USEPA, 2011)			
Age	legs	lower legs (a)	feet
7<8 (data 6<11)	0.311	0.124 (b)	0.073
8<9 (data 6<11)	0.311	0.124 (b)	0.073
9<10 (data 6<11)	0.311	0.124 (b)	0.073
10<11 (data 6<11)	0.311	0.124 (b)	0.073
11<12 (data 11<16)	0.483	0.193 (c)	0.105
12<13 (data 11<16)	0.483	0.193 (c)	0.105
13<14 (data 11<16)	0.483	0.193 (c)	0.105
14<15 (data 11<16)	0.483	0.193 (c)	0.105
15<16 (data 11<16)	0.483	0.193 (c)	0.105
16<17 (data 16<21)	0.543	0.212 (d)	0.112
17<18 (data 16<21)	0.543	0.212 (d)	0.112
18<19 (data 16<21)	0.543	0.212 (d)	0.112
<b>Average (cm<sup>2</sup>)</b>	<b>4,407</b>	<b>1,749</b>	<b>961</b>
<b>Lower legs and feet (cm<sup>2</sup>)</b>	<b>2,710</b>	<b>Older Child/Teen</b>	

Body Part	Older Child/Teenager (7 to <19 years)		
	Body Surface Area (see above) (cm <sup>2</sup> )	Soil Loading Rate (e) (mg/cm <sup>2</sup> )	Total Soil Mass (mg)
Lower Legs	1,749	0.026	45
Feet	961	0.656 (f)	630
Total	2,710	-	676
<b>Area-Weighted Adherence Factor (mg/cm<sup>2</sup>) = Soil mass/Surface area =</b>			<b>0.25</b>

**Notes:**

- EFH - 2011 Edition of the Exposure Factors Handbook (USEPA, 2011).
- (a) Lower leg surface area = leg surface area x average of the ratios of the lower leg to the leg (EFH Table 7-8), average of male and female, consistent with methods used in USEPA, 2014.
- (b) Ratios of the lower leg to the leg for the 6, 8 and 10 year-olds (0.4) (Table 7-8).
- (c) Ratio of the lower leg to the leg for the 12 and 14 year-olds (0.4) (Table 7-8).
- (d) Ratios of the lower leg to the leg for the 16 and 18 year-olds (0.39) (Table 7-8).
- (e) Data from USEPA (2004). Geometric mean value, children playing in wet soil.
- (f) Data for feet are not available. Therefore, hand data are used as a proxy.

**Sources:**

- USEPA, 2004. Risk Assessment Guidance for Superfund. Vol. 1: Human Health Evaluation Manual, Part E, Supplemental Guidance for Dermal Risk Assessment Final. EPA/540/R/99/005.
- USEPA, 2011. Exposure Factors Handbook: 2011 Edition. EPA/600/R-09/052F.
- USEPA, 2014. Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors. OSWER Directive 9200.1-120.



**Table 5-9**  
**Calculation of Body Surface Area Exposed to Sediment and Adherence Factor for Young Child**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Young Child (1 to <7 years, from 1st birthday to the day before 7th birthday)							
Mean Surface Area by Body Part, m <sup>2</sup> (EFH, Table 7-2)							
Age	hands	arms	forearms	legs	lower legs	feet	
1<2	0.030	0.069	0.028 (b)	0.122	0.051 (e)	0.033	
2<3	0.028	0.088	0.035 (b)	0.154	0.065 (e)	0.038	
3<4 (data 3<6)	0.037	0.106	0.042 (c)	0.195	0.078 (f)	0.049	
4<5 (data 3<6)	0.037	0.106	0.042 (c)	0.195	0.078 (f)	0.049	
5<6 (data 3<6)	0.037	0.106	0.042 (c)	0.195	0.078 (g)	0.049	
6<7 (data 6<11)	0.051	0.151	0.059 (d)	0.311	0.124 (g)	0.073	
<b>Average (cm<sup>2</sup>)</b>	<b>367</b>	<b>1,043</b>	<b>415</b>	<b>1,953</b>	<b>791</b>	<b>485</b>	
<b>hands, forearms, lower legs, feet (cm<sup>2</sup>) =</b>	<b>2,057</b>	<b>Young Child</b>					

Body Part	Young Child (Age 1 to <7 Years)		
	Body Surface Area (see above) (cm <sup>2</sup> )	Soil Loading Rate (h) (mg/cm <sup>2</sup> )	Total Soil Mass (mg)
Hands	367	0.66	241
Forearms	415	0.02	6
Lower Legs	791	0.03	21
Feet	485	0.66 (i)	318
Total	2,057	–	585
<b>Area-Weighted Adherence Factor (mg/cm<sup>2</sup>) = Soil mass/Surface area =</b>			<b>0.28</b>

**Notes:**

EFH - 2011 Edition of the Exposure Factors Handbook (USEPA, 2011).

(a) Lower leg surface area = leg surface area x average of the ratios of the lower leg to the leg

Forearm surface area = arm surface area x ratio of the forearm to the arm

(EFH Table 7-8), average of male and female, consistent with methods used in USEPA, 2014.

(b) Ratio of the forearm to the arm for the 2-year old, average of male and female (0.4) (EFH Table 7-8).

(c) Ratio of the forearm to the arm for the 4-year old, average of male and female (0.4) (EFH Table 7-8).

(d) Ratio of the forearm to the arm for 6, 8 and 10 year-olds (0.39) (EFH Table 7-8).

(e) Ratio of the lower leg to the leg for the 2-year old, average of male and female (0.42) (EFH Table 7-8).

(f) Ratio of the lower leg to the leg for the 4-year old, average of male and female (0.4) (EFH Table 7-8).

(g) Ratio of the lower leg to the leg for the 6, 8 and 10 year-olds (0.4) (EFH Table 7-8).

(h) Data from USEPA (2004). Geometric mean value, children playing in wet soil.

(i) Data for feet are not available. Therefore, hand data are used as a proxy.

**Sources:**

USEPA, 2004. Risk Assessment Guidance for Superfund. Vol. 1: Human Health Evaluation Manual,

Part E, Supplemental Guidance for Dermal Risk Assessment Final. EPA/540/R/99/005.

USEPA, 2011. Exposure Factors Handbook: 2011 Edition. EPA/600/R-09/052F.

USEPA, 2014. Human Health Evaluation Manual, Supplemental Guidance: Update of Standard

Default Exposure Factors. OSWER Directive 9200.1-120.

**Table 5-10**  
**Default Absorption Factors for COPCs in Sediment**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Chemicals of Potential Concern in Sediment	CAS Number	Oral - Sediment Absorption Adjustment Factor		Dermal - Sediment Absorption Fraction	
		Default		Default	
<b>Dioxin</b>					
2,3,7,8-TCDD-TEQ	DFTEQ-HH	1	(a)	0.03	(c)
<b>Metals</b>					
Aluminum	7429-90-5	1	(a)	NA	(c)
Arsenic	7440-38-2	0.6	(b)	0.03	(c)
Chromium	7440-47-3	1	(a)	NA	(c)
Cobalt	7440-48-4	1	(a)	NA	(c)
Manganese	7439-96-5	1	(a)	NA	(c)
Nickel	7440-02-0	1	(a)	NA	(c)
Thallium	7440-28-0	1	(a)	NA	(c)
Vanadium	7440-62-2	1	(a)	NA	(c)
<b>SVOCs</b>					
Benzo(a)anthracene	56-55-3	1	(a)	0.13	(c)
Benzo(a)pyrene	50-32-8	1	(a)	0.13	(c)
Benzo(b)fluoranthene	205-99-2	1	(a)	0.13	(c)
Benzo(k)fluoranthene	207-08-9	1	(a)	0.13	(c)
Chrysene	218-01-9	1	(a)	0.13	(c)
Dibenz(a,h)anthracene	53-70-3	1	(a)	0.13	(c)
Indeno(1,2,3-cd)pyrene	193-39-5	1	(a)	0.13	(c)
<b>PCBs</b>					
Total PCBs	1336-36-3	1	(a)	0.14	(c)

**Notes:**

CAS - Chemical Abstracts Service.

NA - Not Applicable. Chemical is not assessed via this pathway.

PCB - Polychlorinated Biphenyls.

SVOC - Semi-Volatile Organic Compounds.

TCDD - 2,3,7,8-Tetrachlorodibenzo-p-dioxin.

TEQ - Toxicity Equivalence.

USEPA - United States Environmental Protection Agency.

(a) Absorption is assumed to be 100% (absorption factor = 1) (USEPA Risk Assessment Guidance for Superfund (RAGS), Part A, 1989; USEPA Regional Screening Level (RSL) Table, November 2015).

(b) Recommendations for Default Value for Relative Bioavailability of Arsenic in Soil. OSWER Directive 9200.1-113. USEPA, December 2012. Consistent with the approach used by the USEPA Regional Screening Level (RSL) table (November 2015).

(c) USEPA, 2004. Risk Assessment Guidance for Superfund. Vol. 1, Part E. July, 2004. Exhibit 3-4.

**Table 5-11**  
**Cooking Loss Factors for Fish Tissue**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Chemical	CAS Number	Cooking Loss Factor			
		RME		CTE	
Total PCBs	1336-36-3	0.13	(a)	0.30	(b)
PCB-TEQ	PCB-TEQ	0.13	(c)	0.30	(c)

**Notes:**

PCBs - Polychlorinated biphenyls.

TCDD - 2,3,7,8-Tetrachlorodibenzo-p-dioxin.

TEQ - Toxicity Equivalence.

(a) 10th percentile of PCB and Aroclor mass loss values reported in 17 studies for various species and cooking methods (see Section 5.4.3 and Attachment D).

(b) Median of PCB and Aroclor mass loss values reported in 17 studies for various species and cooking methods (see Section 5.4.3 and Attachment D).

**Table 5-12**  
**Dermal Water Parameters**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern in Surface Water	CAS Number	Chemical Properties		Dermal Water Parameters											
		MW (f) g/mol	log Kow (f) unitless	Kp (cm/hr)	B unitless	Lag Time $\tau$ hr/event	t* hr	FA unitless	lsc (e) cm	log (Dsc/lsc) unitless	Dsc/lsc unitless	Dsc unitless	b (a) unitless	c (a) unitless	
<b>Dioxin</b>															
2,3,7,8-TCDD-TEQ	DFTEQ-HH	3.22E+02	6.80E+00	8.07E-01 (a)	5.57E+00 (a)	6.82E+00 (a)	3.01E+01 (a)	5.00E-01 (a)	1.00E-03	-4.61E+00	2.44E-05	2.44E-08	2.19E+01	5.62E+00	
<b>Metals</b>															
Arsenic	7440-38-2	--	--	1.00E-03 (b,c)	--	--	--	--	--	--	--	--	--	--	
Chromium	7440-47-3	--	--	2.00E-03 (b,d)	--	--	--	--	--	--	--	--	--	--	
Cobalt	7440-48-4	--	--	4.00E-04 (b)	--	--	--	--	--	--	--	--	--	--	
Manganese	7439-96-5	--	--	1.00E-03 (b,c)	--	--	--	--	--	--	--	--	--	--	
<b>Pesticides</b>															
4,4'-DDT	50-29-3	3.55E+02	6.36E+00	2.69E-01 (a)	1.95E+00 (a)	1.04E+01 (a)	4.25E+01 (a)	7.00E-01 (a)	1.00E-03	-4.80E+00	1.59E-05	1.59E-08	3.47E+00	2.06E+00	
<b>PCBs</b>															
Total PCBs	TOT-PCB-ARO-C	3.61E+02	6.72E+00	4.32E-01 (a,e)	3.15E+00 (a,f)	1.13E+01 (a,f)	4.79E+01 (a,f)	5.00E-01 (a,f)	1.00E-03	-4.83E+00	1.48E-05	1.48E-08	7.75E+00	3.23E+00	

**Notes:**

CAS - Chemical Abstracts Service.

TCDD - 2,3,7,8-Tetrachlorodibenzo-p-dioxin.

TEQ - Toxicity Equivalence.

(a) USEPA, 2004. Exhibit B-3 (Organics). Values calculated based the equations below may have rounding different from that presented in Exhibit B-3.

(b) USEPA, 2004. Exhibit 3-1. (Inorganics)

(c) Default for all other inorganics.

(d) Value for hexavalent chromium used.

(e) USEPA, 2004. Equation A-4. Default value.

(f) USEPA, 2004. Exhibit B-2. Value for hexachlorobiphenyl used for PCBs.

**Equations:**

USEPA, 2004. Risk Assessment Guidance for Superfund. Volume 1, Part E, Supplemental Guidance for Dermal Risk Assessment

Equation 3.8:  $\log Kp = -2.80 + 0.66 \log Kow - 0.0056 MW$

Equation A.1:  $B = Kp \times MW^{0.5} / 2.6$

Equation A.2:  $\log Dsc/lsc = -2.8 - 0.0056 MW$ , where  $lsc = 1E-3$  cm. Solving for Dsc:  $Dsc = 10^{-2.8-0.0056 MW} \times lsc$ .

Equation A.4:  $\tau = lsc^2 / (6 \times Dsc)$

Equation A.5: If  $B \leq 0.6$ , Equation A.5:  $t^* = 2.4 \times \tau$

Equation A.6: If  $B > 0.6$ :  $t^* = (b - (b^2 - c^2)^{0.5}) \times lsc / Dsc$

Equation A-7:  $b = (2 \times (1+B)^2 / \pi) - c$

Equation A-8:  $c = (1+3B+3B^2) / (3 \times (1+B))$

**Definitions:**

B - Relative Contribution of Permeability Coefficient.

Dsc - Effective diffusion coefficient through stratum corneum.

FA - Fraction Absorbed.

Kow - Octanol-Water Partition Coefficient.

Kp - Dermal Permeability Coefficient.

lsc - Apparent thickness of stratum corneum.

MW - Molecular Weight.

$\tau$  - lag time (hr/event).

t\* - Time to reach steady state.

**Table 5-13**  
**Exposure Point Concentration Summary — Nearshore Sediment (RME) <sup>(4)</sup>**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Surface Sediment

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean <sup>(1)</sup>	95% UCL <sup>(2)</sup>	Distribution	Maximum Concentration (Qualifier)	Exposure Point Concentration (RME)				
							Value	Units	Statistic <sup>(3)</sup>	Rationale	
Sediment	<b>Dioxin</b>										
	2,3,7,8-TCDD-TEQ	mg/kg	1.11E-04	4.49E-04	95% Chebyshev(Mean, Sd) UCL (5)	7.07E-04	4.49E-04	mg/kg	95% UCL	Footnote (2)	
	<b>Metals</b>										
	Aluminum	mg/kg	7.78E+03	9.05E+03	95% Student's-t UCL	1.50E+04	9.05E+03	mg/kg	95% UCL	Footnote (2)	
	Arsenic	mg/kg	5.49E+00	7.54E+00	95% Adjusted Gamma UCL	1.70E+01 J-	7.54E+00	mg/kg	95% UCL	Footnote (2)	
	Chromium	mg/kg	4.02E+01	4.67E+01	95% Student's-t UCL	8.00E+01 J-	4.67E+01	mg/kg	95% UCL	Footnote (2)	
	Cobalt	mg/kg	1.59E+01	1.79E+01	95% Student's-t UCL	3.20E+01 J-	1.79E+01	mg/kg	95% UCL	Footnote (2)	
	Manganese	mg/kg	2.24E+02	2.57E+02	95% Student's-t UCL	3.90E+02	2.57E+02	mg/kg	95% UCL	Footnote (2)	
	Nickel	mg/kg	5.71E+01	7.90E+01	95% Adjusted Gamma UCL	1.60E+02 J-	7.90E+01	mg/kg	95% UCL	Footnote (2)	
	Thallium	mg/kg	2.34E-01	3.02E-01	95% Adjusted Gamma UCL	6.30E-01	3.02E-01	mg/kg	95% UCL	Footnote (2)	
	Vanadium	mg/kg	1.07E+02	2.29E+02	95% Chebyshev (Mean, Sd) UCL	4.40E+02	2.29E+02	mg/kg	95% UCL	Footnote (2)	
	<b>PCBs</b>										
	Total PCBs	mg/kg	5.58E-01	7.68E-01	95% Student's-t UCL	1.90E+00	7.68E-01	mg/kg	95% UCL	Footnote (2)	
	<b>SVOCs</b>										
	Benzo(a)anthracene	mg/kg	4.95E-01	5.65E-01	95% Student's-t UCL	9.50E-01	5.65E-01	mg/kg	95% UCL	Footnote (2)	
	Benzo(a)pyrene	mg/kg	5.54E-01	6.28E-01	95% Student's-t UCL	8.90E-01	6.28E-01	mg/kg	95% UCL	Footnote (2)	
	Benzo(b)fluoranthene	mg/kg	8.35E-01	9.51E-01	95% Student's-t UCL	1.50E+00	9.51E-01	mg/kg	95% UCL	Footnote (2)	
Benzo(k)fluoranthene	mg/kg	3.15E-01	3.67E-01	95% Student's-t UCL	5.60E-01	3.67E-01	mg/kg	95% UCL	Footnote (2)		
Chrysene	mg/kg	7.77E-01	8.77E-01	95% Student's-t UCL	1.30E+00	8.77E-01	mg/kg	95% UCL	Footnote (2)		
Dibenzo(a,h)anthracene	mg/kg	1.25E-01	1.42E-01	95% Student's-t UCL	2.00E-01 J	1.42E-01	mg/kg	95% UCL	Footnote (2)		
Indeno(1,2,3-cd)pyrene	mg/kg	4.18E-01	4.79E-01	95% Student's-t UCL	6.40E-01	4.79E-01	mg/kg	95% UCL	Footnote (2)		

**Notes:**

EPC = Exposure point concentration.

J = The chemical was positively identified; however, the associated numerical value is an estimated concentration only.

PCB = Polychlorinated Biphenyl.

RME = Reasonable maximum exposure.

TCDD-TEQ = 2,3,7,8-Dioxin-Toxicity Equivalence.

UCL = Upper confidence limit.

(1) Arithmetic mean calculated using detected concentrations.

(2) 95% Upper Confidence Limit (UCL) on the arithmetic mean concentration calculated using USEPA ProUCL Version 5.0. The UCL suggested by ProUCL is used, unless otherwise noted.

In cases where more than one UCL is suggested, the higher UCL is used, unless otherwise noted. Where too few samples or detects are available, the 95% UCL is not calculated.

(3) The EPC is equal to the 95% UCL where a sufficient number of results are available. The EPC is equal to the maximum detected concentration where a sufficient number of samples and/or detects are not available to calculate a UCL. Statistic: Maximum Detected Value (Max); 95% UCL (95% UCL).

(4) EPCs calculated based on nearshore sediment samples available for exposure by human receptors. See text.

(5) ProUCL recommended the 99% Chebyshev Mean UCL which is above the maximum detected concentration, therefore, the 95% Chebyshev Mean UCL was selected for use as the EPC.

**Table 5-14**  
**Exposure Point Concentration Summary — Nearshore Sediment (CTE)<sup>(3)</sup>**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Surface Sediment

Exposure Point	Chemical of Potential Concern	Units	Arithmetic <sup>(1)</sup> Mean	Maximum Concentration (Qualifier)	Exposure Point Concentration (CTE)			
					Value	Units	Statistic	Rationale
Sediment	<b>Dioxin</b>							
	2,3,7,8-TCDD-TEQ	mg/kg	1.11E-04	7.07E-04	1.11E-04	mg/kg	Arithmetic Mean (1)	Footnote (2)
	<b>Metals</b>							
	Aluminum	mg/kg	7.78E+03	1.50E+04	7.78E+03	mg/kg	Arithmetic Mean (1)	Footnote (2)
	Arsenic	mg/kg	5.49E+00	1.70E+01 J-	5.49E+00	mg/kg	Arithmetic Mean (1)	Footnote (2)
	Chromium	mg/kg	4.02E+01	8.00E+01 J-	4.02E+01	mg/kg	Arithmetic Mean (1)	Footnote (2)
	Cobalt	mg/kg	1.59E+01	3.20E+01 J-	1.59E+01	mg/kg	Arithmetic Mean (1)	Footnote (2)
	Manganese	mg/kg	2.24E+02	3.90E+02	2.24E+02	mg/kg	Arithmetic Mean (1)	Footnote (2)
	Nickel	mg/kg	5.71E+01	1.60E+02 J-	5.71E+01	mg/kg	Arithmetic Mean (1)	Footnote (2)
	Thallium	mg/kg	2.34E-01	6.30E-01	2.34E-01	mg/kg	Arithmetic Mean (1)	Footnote (2)
	Vanadium	mg/kg	1.07E+02	4.40E+02	1.07E+02	mg/kg	Arithmetic Mean (1)	Footnote (2)
	<b>PCBs</b>							
	Total PCBs	mg/kg	5.58E-01	1.90E+00	5.58E-01	mg/kg	Arithmetic Mean (1)	Footnote (2)
	<b>SVOCs</b>							
	Benzo(a)anthracene	mg/kg	4.95E-01	9.50E-01	4.95E-01	mg/kg	Arithmetic Mean (1)	Footnote (2)
	Benzo(a)pyrene	mg/kg	5.54E-01	8.90E-01	5.54E-01	mg/kg	Arithmetic Mean (1)	Footnote (2)
	Benzo(b)fluoranthene	mg/kg	8.35E-01	1.50E+00	8.35E-01	mg/kg	Arithmetic Mean (1)	Footnote (2)
Benzo(k)fluoranthene	mg/kg	3.15E-01	5.60E-01	3.15E-01	mg/kg	Arithmetic Mean (1)	Footnote (2)	
Chrysene	mg/kg	7.77E-01	1.30E+00	7.77E-01	mg/kg	Arithmetic Mean (1)	Footnote (2)	
Dibenzo(a,h)anthracene	mg/kg	1.25E-01	2.00E-01 J	1.25E-01	mg/kg	Arithmetic Mean (1)	Footnote (2)	
Indeno(1,2,3-cd)pyrene	mg/kg	4.18E-01	6.40E-01	4.18E-01	mg/kg	Arithmetic Mean (1)	Footnote (2)	

**Notes:**

CTE = Central tendency exposure.

EPC = Exposure point concentration.

J = The chemical was positively identified; however, the associated numerical value is an estimated concentration only.

TCDD-TEQ = 2,3,7,8-Dioxin-Toxicity Equivalence.

(1) Arithmetic mean calculated using detected concentrations.

(2) The EPC is the arithmetic mean of detected results for datasets with only detected concentrations and the Kaplan-Meier mean calculated by USEPA ProUCL Version 5.0 for datasets with non-detects.

(3) EPCs calculated based on nearshore sediment samples available for exposure by human receptors. See text.

**Table 5-15**  
**Exposure Point Concentration Summary — Surface Water (RME)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Medium: Surface Water
Exposure Medium: Surface Water

Exposure Point	Chemical of Potential Concern	Units	Arithmetic <sup>(1)</sup> Mean	95% UCL <sup>(2)</sup>	Distribution	Maximum Concentration (Qualifier)	Exposure Point Concentration (RME)			
							Value	Units	Statistic <sup>(3)</sup>	Rationale
Surface Water	<b>Dioxin</b>									
	2,3,7,8-TCDD-TEQ	ug/L	3.78E-07	NC	NC	6.12E-07	6.12E-07	ug/L	Max	Footnote (4)
	<b>Metals</b>									
	Arsenic	ug/L	7.40E-01	8.58E-01	95% Student's-t UCL	1.20E+00 J	8.58E-01	ug/L	95% UCL	Footnote (2)
	Chromium	ug/L	2.90E+00	3.16E+00	95% Student's-t UCL	3.50E+00	3.16E+00	ug/L	95% UCL	Footnote (2)
	Cobalt	ug/L	9.80E-01	1.04E+00	95% Student's-t UCL	1.10E+00	1.04E+00	ug/L	95% UCL	Footnote (2)
	Manganese	ug/L	1.40E+02	1.48E+02	95% Student's-t UCL	1.70E+02	1.48E+02	ug/L	95% UCL	Footnote (2)
	<b>Pesticides</b>									
4,4'-DDT	ug/L	1.30E-03	NC	NC	1.60E-03	1.60E-03	ug/L	Max	Footnote (4)	
<b>PCBs</b>										
Total PCBs	ug/L	--	--	--	--	--	9.40E-03	ug/L	Lowest RL	Footnote (5)

**Notes:**

EPC = Exposure point concentration.

J = The chemical was positively identified; however, the associated numerical value is an estimated concentration only.

NC = Not Calculated; A sufficient number of samples is not available to calculate a UCL.

RL = Reporting Limit.

RME = Reasonable maximum exposure.

TCDD-TEQ = 2,3,7,8-Dioxin-Toxicity Equivalence.

UCL = Upper confidence limit.

(1) Arithmetic mean calculated using detected concentrations.

(2) 95% Upper Confidence Limit (UCL) on the arithmetic mean concentration calculated using USEPA ProUCL Version 5.0. The UCL suggested by ProUCL is used, unless otherwise noted. In cases where more than one UCL is suggested, the higher UCL is used, unless otherwise noted. Where too few samples or detects are available, the 95% UCL is not calculated.

(3) The EPC is equal to the 95% UCL where a minimum of 10 samples and 6 detects are available. The EPC is equal to the maximum detected concentration where a sufficient number of samples and/or detects are not available to calculate a UCL. Statistic: Maximum Detected Value (Max); 95% UCL (95% UCL).

(4) The 95% UCL exceeded the maximum detected concentration or was not calculated, and the maximum detected concentration was selected as the EPC.

(5) PCBs were not detected in Anacostia River surface water samples analyzed via Method 8082. Historical data analyzed via EPA 1668 suggest much lower concentrations in the 1 to 5 ng/L range. However, the lowest reporting limit (RL) for Method 8082 has been used, which is highly conservative.

**Table 5-16**  
**Exposure Point Concentration Summary — Surface Water (CTE)**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Medium: Surface Water
Exposure Medium: Surface Water

Exposure Point	Chemical of Potential Concern	Units	Arithmetic <sup>(1)</sup> Mean	Maximum Concentration (Qualifier)	Exposure Point Concentration (CTE)			
					Value	Units	Statistic	Rationale
Surface Water	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	ug/L	3.78E-07	6.12E-07	3.78E-07	ug/L	Arithmetic Mean (1)	Footnote (2)
	<b>Metals</b>							
	Arsenic	ug/L	7.40E-01	1.20E+00 J	7.40E-01	ug/L	Arithmetic Mean (1)	Footnote (2)
	Chromium	ug/L	2.90E+00	3.50E+00	2.90E+00	ug/L	Arithmetic Mean (1)	Footnote (2)
	Cobalt	ug/L	9.80E-01	1.10E+00	9.80E-01	ug/L	Arithmetic Mean (1)	Footnote (2)
	Manganese	ug/L	1.40E+02	1.70E+02	1.40E+02	ug/L	Arithmetic Mean (1)	Footnote (2)
	<b>Pesticides</b>							
	4,4'-DDT	ug/L	1.30E-03	1.60E-03	1.30E-03	ug/L	Arithmetic Mean (1)	Footnote (2)
<b>PCBs</b>								
Total PCBs	ug/L	--	--	--	9.40E-03	ug/L	Lowest RL	Footnote (3)

**Notes:**

CTE = Central tendency exposure.

EPC = Exposure point concentration.

J = The chemical was positively identified; however, the associated numerical value is an estimated concentration only.

RL = Reporting Limit.

TCDD-TEQ = 2,3,7,8-Dioxin-Toxicity Equivalence.

(1) Arithmetic mean calculated using detected concentrations.

(2) The CTE EPC is the arithmetic mean of detected results for datasets with only detected concentrations and the Kaplan-Meier mean calculated by USEPA ProUCL Version 5.0 for datasets with non-detects.

(3) PCBs were not detected in Anacostia River surface water samples analyzed via Method 8082. Historical data analyzed via EPA 1668 suggest much lower concentrations in the 1 to 5 ng/L range. However, the lowest reporting limit (RL) for Method 8082 has been used, which is highly conservative.



**Table 5-17**  
**Exposure Point Concentration Summary — Fish Tissue (RME)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Medium: Fish Tissue
Exposure Medium: Fish Tissue (fillet)

Exposure Area <sup>(5)</sup> /Species	Chemical of Potential Concern	Units	Arithmetic <sup>(1)</sup> Mean	95% UCL <sup>(2)</sup> (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration (RME)			
						Value	Units	Statistic <sup>(3)</sup>	Rationale
<b>Upper Anacostia</b>									
American Eel	Total PCBs	mg/kg	NA	NA	NA	NA	NA	NA	NA
American Eel	PCB-TEQ	mg/kg	NA	NA	NA	NA	NA	NA	NA
Carp	Total PCBs	mg/kg	NC	NC	1.01E-01	1.01E-01	mg/kg	Max	Footnote (4)
Carp	PCB-TEQ	mg/kg	NC	NC	1.15E-05	1.15E-05	mg/kg	Max	Footnote (4)
Catfish (6)	Total PCBs	mg/kg	1.98E-01	NC	2.54E-01	2.54E-01	mg/kg	Max	Footnote (4)
Catfish (6)	PCB-TEQ	mg/kg	4.09E-06	NC	5.14E-06	5.14E-06	mg/kg	Max	Footnote (4)
Largemouth Bass	Total PCBs	mg/kg	NC	NC	1.20E-01	1.20E-01	mg/kg	Max	Footnote (4)
Largemouth Bass	PCB-TEQ	mg/kg	NC	NC	2.00E-06	2.00E-06	mg/kg	Max	Footnote (4)
Sunfish	Total PCBs	mg/kg	NC	NC	4.19E-02	4.19E-02	mg/kg	Max	Footnote (4)
Sunfish	PCB-TEQ	mg/kg	NC	NC	7.57E-07	7.57E-07	mg/kg	Max	Footnote (4)
Mixed Diet (7)	Total PCBs	mg/kg	NC	NC	NC	1.29E-01	mg/kg	Ave. of Max's	Footnote (7)
Mixed Diet (7)	PCB-TEQ	mg/kg	NC	NC	NC	4.84E-06	mg/kg	Ave. of Max's	Footnote (7)
<b>Lower Anacostia</b>									
American Eel	Total PCBs	mg/kg	NC	NC	6.45E-01	6.45E-01	mg/kg	Max	Footnote (4)
American Eel	PCB-TEQ	mg/kg	NC	NC	1.12E-05	1.12E-05	mg/kg	Max	Footnote (4)
Carp	Total PCBs	mg/kg	NC	NC	5.42E-01	5.42E-01	mg/kg	Max	Footnote (4)
Carp	PCB-TEQ	mg/kg	NC	NC	7.48E-06	7.48E-06	mg/kg	Max	Footnote (4)
Catfish (6)	Total PCBs	mg/kg	2.86E-01	NC	4.52E-01	4.52E-01	mg/kg	Max	Footnote (4)
Catfish (6)	PCB-TEQ	mg/kg	1.80E-06	NC	1.84E-06	1.84E-06	mg/kg	Max	Footnote (4)
Largemouth Bass	Total PCBs	mg/kg	NC	NC	1.14E-01	1.14E-01	mg/kg	Max	Footnote (4)
Largemouth Bass	PCB-TEQ	mg/kg	NC	NC	2.09E-06	2.09E-06	mg/kg	Max	Footnote (4)
Sunfish	Total PCBs	mg/kg	NC	NC	4.11E-02	4.11E-02	mg/kg	Max	Footnote (4)
Sunfish	PCB-TEQ	mg/kg	NC	NC	6.26E-07	6.26E-07	mg/kg	Max	Footnote (4)
Mixed Diet (7)	Total PCBs	mg/kg	NC	NC	NC	3.59E-01	mg/kg	Ave. of Max's	Footnote (7)
Mixed Diet (7)	PCB-TEQ	mg/kg	NC	NC	NC	4.64E-06	mg/kg	Ave. of Max's	Footnote (7)
<b>Upstream Maryland (8)</b>									
American Eel	Total PCBs	mg/kg	2.38E-01	NC	2.76E-01	2.76E-01	mg/kg	Max	Footnote (4)
Carp	Total PCBs	mg/kg	NC	NC	1.83E+00	1.83E+00	mg/kg	Max	Footnote (4)
Catfish (6)	Total PCBs	mg/kg	5.06E-01	NC	7.11E-01	7.11E-01	mg/kg	Max	Footnote (4)
Largemouth Bass	Total PCBs	mg/kg	NA	NA	NA	NA	NA	NA	NA
Sunfish	Total PCBs	mg/kg	9.25E-02	NC	2.41E-01	2.41E-01	mg/kg	Max	Footnote (4)
Mixed Diet (7)	Total PCBs	mg/kg	NC	NC	NC	7.64E-01	mg/kg	Ave. of Max's	Footnote (7)

Notes: (see next page)

**Notes:**

EPC = Exposure point concentration.

NA = Data not available for this species in this exposure area.

NC = Not Calculated; A sufficient number of samples is not available to calculate a mean or UCL.

PCB = Polychlorinated Biphenyl.

RME = Reasonable Maximum Exposure.

TEQ = Toxicity Equivalents.

UCL = Upper confidence limit.

- (1) Arithmetic mean calculated using detected concentrations; A mean is only presented where there is more than one detected concentration per species.
- (2) 95% Upper Confidence Limit (UCL) on the arithmetic mean concentration calculated using USEPA ProUCL Version 5.0. The UCL suggested by ProUCL is used, unless otherwise noted.  
In cases where more than one UCL is suggested, the higher UCL is used, unless otherwise noted. Where too few samples or detects are available, the 95% UCL is not calculated.
- (3) The EPC is equal to the 95% UCL where a minimum of 10 samples and 6 detects are available. The EPC is equal to the maximum detected concentration where a sufficient number of samples and/or detects are not available to calculate a UCL. Statistic: Maximum Detected Value (Max); 95% UCL (95% UCL).
- (4) The 95% UCL exceeded the maximum detected concentration or was not calculated, and the maximum detected concentration was selected as the EPC.
- (5) Fish tissue exposure areas are delineated using the sampling areas defined in US Fish & Wildlife (Pinkney 2014) and Maryland Department of Environment (MDE 2012) data sets, as follows:  
Lower Anacostia = from mouth of Anacostia to CSX railroad bridge.  
Upper Anacostia = from CSX railroad bridge to Maryland state line.  
Upstream Maryland = includes main stem, northeast branch, and northwest branch of Anacostia River in Maryland.
- (6) Includes channel catfish and blue catfish.
- (7) Calculated based on a mixed fish diet comprised of equal amounts of each species in the exposure area.
- (8) PCB-TEQ not included for Upstream Maryland area, due to incomplete dioxin-like congener analytes in MDE fish tissue data set.

**Table 5-18**  
**Exposure Point Concentration Summary — Fish Tissue (CTE)**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Medium: Fish Tissue
Exposure Medium: Fish Tissue (fillet)

Exposure Area <sup>(5)</sup> /Species	Chemical of Potential Concern	Units	Arithmetic <sup>(1)</sup> Mean	Maximum Concentration (Qualifier)	Exposure Point Concentration (CTE)			
					Value	Units	Statistic <sup>(2)</sup>	Rationale
<b>Upper Anacostia</b>								
American Eel	Total PCBs	mg/kg	NA	NA	NA	NA	NA	NA
American Eel	PCB-TEQ	mg/kg	NA	NA	NA	NA	NA	NA
Carp	Total PCBs	mg/kg	NC	1.01E-01	1.01E-01	mg/kg	Max	Footnote (3)
Carp	PCB-TEQ	mg/kg	NC	1.15E-05	1.15E-05	mg/kg	Max	Footnote (3)
Catfish (5)	Total PCBs	mg/kg	1.98E-01	2.54E-01	1.98E-01	mg/kg	Arithmetic Mean	Footnote (2)
Catfish (5)	PCB-TEQ	mg/kg	4.09E-06	5.14E-06	4.09E-06	mg/kg	Arithmetic Mean	Footnote (2)
Largemouth Bass	Total PCBs	mg/kg	NC	1.20E-01	1.20E-01	mg/kg	Max	Footnote (3)
Largemouth Bass	PCB-TEQ	mg/kg	NC	2.00E-06	2.00E-06	mg/kg	Max	Footnote (3)
Sunfish	Total PCBs	mg/kg	NC	4.19E-02	4.19E-02	mg/kg	Max	Footnote (3)
Sunfish	PCB-TEQ	mg/kg	NC	7.57E-07	7.57E-07	mg/kg	Max	Footnote (3)
Mixed Diet (6)	Total PCBs	mg/kg	NC	NC	1.15E-01	mg/kg	Average	Footnote (6)
Mixed Diet (6)	PCB-TEQ	mg/kg	NC	NC	4.58E-06	mg/kg	Average	Footnote (6)
<b>Lower Anacostia</b>								
American Eel	Total PCBs	mg/kg	NC	6.45E-01	6.45E-01	mg/kg	Max	Footnote (3)
American Eel	PCB-TEQ	mg/kg	NC	1.12E-05	1.12E-05	mg/kg	Max	Footnote (3)
Carp	Total PCBs	mg/kg	NC	5.42E-01	5.42E-01	mg/kg	Max	Footnote (3)
Carp	PCB-TEQ	mg/kg	NC	7.48E-06	7.48E-06	mg/kg	Max	Footnote (3)
Catfish (5)	Total PCBs	mg/kg	2.86E-01	4.52E-01	2.86E-01	mg/kg	Arithmetic Mean	Footnote (2)
Catfish (5)	PCB-TEQ	mg/kg	1.80E-06	1.84E-06	1.80E-06	mg/kg	Arithmetic Mean	Footnote (2)
Largemouth Bass	Total PCBs	mg/kg	NC	1.14E-01	1.14E-01	mg/kg	Max	Footnote (3)
Largemouth Bass	PCB-TEQ	mg/kg	NC	2.09E-06	2.09E-06	mg/kg	Max	Footnote (3)
Sunfish	Total PCBs	mg/kg	NC	4.11E-02	4.11E-02	mg/kg	Max	Footnote (3)
Sunfish	PCB-TEQ	mg/kg	NC	6.26E-07	6.26E-07	mg/kg	Max	Footnote (3)
Mixed Diet (6)	Total PCBs	mg/kg	NC	NC	3.26E-01	mg/kg	Average	Footnote (6)
Mixed Diet (6)	PCB-TEQ	mg/kg	NC	NC	4.63E-06	mg/kg	Average	Footnote (6)
<b>Upstream Maryland (7)</b>								
American Eel	Total PCBs	mg/kg	2.38E-01	2.76E-01	2.38E-01	mg/kg	Arithmetic Mean	Footnote (2)
Carp	Total PCBs	mg/kg	NC	1.83E+00	1.83E+00	mg/kg	Max	Footnote (3)
Catfish (6)	Total PCBs	mg/kg	5.06E-01	7.11E-01	5.06E-01	mg/kg	Arithmetic Mean	Footnote (2)
Largemouth Bass	Total PCBs	mg/kg	NA	NA	NA	NA	NA	NA
Sunfish	Total PCBs	mg/kg	9.25E-02	2.41E-01	9.25E-02	mg/kg	Arithmetic Mean	Footnote (2)
Mixed Diet (6)	Total PCBs	mg/kg	NC	NC	6.66E-01	mg/kg	Average	Footnote (6)

Notes: (see next page)

**Notes:**

CTE = Central tendency exposure.

EPC = Exposure point concentration.

NA = Data not available for this species in this exposure area.

NC = Not Calculated; A sufficient number of samples is not available to calculate a mean or UCL.

PCB = Polychlorinated Biphenyl.

TEQ = Toxicity Equivalents.

UCL = Upper confidence limit.

USEPA = United States Environmental Protection Agency.

(1) Arithmetic mean calculated based on detected concentrations; A mean is only presented where there is more than one detected concentration per exposure point/tissue type/COPC.

(2) The EPC is the arithmetic mean of detected results for datasets with only detected concentrations and the Kaplan-Meier mean calculated by USEPA ProUCL Version 5.0 for datasets with non-detects.

(3) Only one result is available for this species in this exposure area, therefore, the EPC is equal to the maximum detected concentration.

(4) Fish tissue exposure areas are delineated using the sampling areas defined in US Fish & Wildlife (Pinkney 2014) and Maryland Department of Environment (MDE 2012) data sets, as follows:  
Lower Anacostia = from mouth of Anacostia to CSX railroad bridge.

Upper Anacostia = from CSX railroad bridge to Maryland state line.

Upstream Maryland = includes main stem, northeast branch, and northwest branch of Anacostia River in Maryland.

(5) Includes channel catfish and blue catfish.

(6) Calculated based on a mixed fish diet comprised of equal amounts of each species in the exposure area.

(7) PCB-TEQ not included for Upstream Maryland area, due to incomplete dioxin-like congener analytes in MDE fish tissue data set.

Table 5-19  
Evaluation of the Groundwater to Surface Water Migration Pathway  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

Location ID Sample ID Sample Date DAF						Nearshore Groundwater Wells - Upper Aquifer											
						MW01 MW01AN 11/5/2014		MW02 MW02AN 11/5/2014		MW03 MW03AN 11/4/2014		MW04 MW04AN 11/4/2014		MW08 MW08AN 11/10/2014		MW11 MW11AN 11/4/2014	
						Method Group	Chemical (d)	CAS	Analytical Method	Fraction (e)	Units						
RA_GW_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	N	ug/L	1.72E-07		NA		1.25E-08		5.79E-08		NA		0.405	
RA_GW_Metals	Aluminum	7429-90-5	SW6020A	T	ug/L	730	J+	160	J+	210	J+	500	J+	30	U	30	U
RA_GW_Metals	Arsenic	7440-38-2	SW6020A	T	ug/L	2.5	J+	3.7	J+	6.1	J+	8	J+	1.2		1	U
RA_GW_Metals	Barium	7440-39-3	SW6020A	T	ug/L	270		18		98		110		58		38	
RA_GW_Metals	Beryllium	7440-41-7	SW6020A	T	ug/L	0.072	J+	1	U	1	U	0.041	J	1	U	1	U
RA_GW_Metals	Calcium	7440-70-2	SW6020A	T	ug/L	80000		53000		39000		68000		38000		20000	
RA_GW_Metals	Cobalt	7440-48-4	SW6020A	T	ug/L	13		0.74	J+	6.7		33		5.3		2.2	
RA_GW_Metals	Copper	7440-50-8	SW6020A	T	ug/L	2	U	2	U	3.1	U	2.4	U	2	U	2	U
RA_GW_Metals	Iron	7439-89-6	SW6020A	T	ug/L	44000		820		1900		12000		50		50	
RA_GW_Metals	Lead	7439-92-1	SW6020A	T	ug/L	1.4	J	1	U	0.48	J	0.73	J	1	U	1	U
RA_GW_Metals	Magnesium	7439-95-4	SW6020A	T	ug/L	12000		5100		3800		17000		7300		4100	
RA_GW_Metals	Manganese	7439-96-5	SW6020A	T	ug/L	4100		280		3900		5700		1300		430	
RA_GW_Metals	Nickel	7440-02-0	SW6020A	T	ug/L	2.3		0.85	J-	4		7.9		2		1.1	
RA_GW_Metals	Potassium	7440-09-7	SW6020A	T	ug/L	7100		7900		6600		8200		6000		4000	
RA_GW_Metals	Sodium	7440-23-5	SW6020A	T	ug/L	110000	J	100000	J	47000	J	190000	J	26000		14000	
RA_GW_Metals	Vanadium	7440-62-2	SW6020A	T	ug/L	9.8	J+	3.1	J	1	U	1	U	4.1	J+	5.8	J+
RA_GW_Metals	Zinc	7440-66-6	SW6020A	T	ug/L	6.1	U	5	U	5	U	5	U	5	U	5	U
RA_GW_PestPCBs	beta-BHC	319-85-7	SW8081B LL	N	ug/L	0.0012	U	0.0013	U	0.00095	J	0.0013	U	0.0013	U	0.0012	U
RA_GW_PestPCBs	delta-BHC	319-86-8	SW8081B LL	N	ug/L	0.0012	U	0.0004	J	0.0012	U	0.0013	U	0.0013	U	0.0012	U
RA_GW_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	N	ug/L	0.0012	U	0.0013	U	0.0012	U	0.0013	U	0.0013	U	0.0012	U
RA_GW_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	N	ug/L	0.0012	U	0.0013	U	0.0012	U	0.0013	U	0.0013	U	0.0012	U
RA_GW_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	N	ug/L	0.0012	U	0.0013	U	0.0012	U	0.0013	U	0.0013	U	0.0012	U
RA_GW_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	N	ug/L	1	U	0.27	J	1	U	1.1	U	1	U	1	U
RA_GW_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	N	ug/L	0.029	J	1.2		0.21	U	0.22	U	0.2	U	0.2	U
RA_GW_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	N	ug/L	0.33	J	0.96	U	1	U	1.1	U	1	U	1	U
RA_GW_SVOCs	Acenaphthene	83-32-9	SW8270D LL	N	ug/L	0.2	U	1.3		0.21	U	0.22	U	0.2	U	0.2	U
RA_GW_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	N	ug/L	0.2	U	0.086	J	0.21	U	0.22	U	0.2	U	0.2	U
RA_GW_SVOCs	Anthracene	120-12-7	SW8270D LL	N	ug/L	0.2	U	0.044	J	0.21	U	0.22	U	0.2	U	0.2	U
RA_GW_SVOCs	Carbazole	86-74-8	SW8270D LL	N	ug/L	1	U	0.27	J	1	U	1.1	U	1	U	1	U
RA_GW_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	N	ug/L	1	U	0.71	J	1	U	1.1	U	1	U	1	U
RA_GW_SVOCs	Fluoranthene	206-44-0	SW8270D LL	N	ug/L	0.2	U	0.088	J	0.21	U	0.22	U	0.2	U	0.2	U
RA_GW_SVOCs	Fluorene	86-73-7	SW8270D LL	N	ug/L	0.2	U	0.64		0.21	U	0.22	U	0.2	U	0.2	U
RA_GW_SVOCs	Naphthalene	91-20-3	SW8270D LL	N	ug/L	0.2		13	J	0.21	U	0.22	U	0.046	J	0.2	U
RA_GW_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	N	ug/L	1	U	0.96	U	1	U	1.1	U	1	U	1	U
RA_GW_SVOCs	Phenanthrene	85-01-8	SW8270D LL	N	ug/L	0.2	U	0.67		0.21	U	0.22	U	0.2	U	0.2	U
RA_GW_SVOCs	Phenol	108-95-2	SW8270D LL	N	ug/L	0.57	J	0.96	U	1	U	1.1	U	1	U	1	U
RA_GW_SVOCs	Pyrene	129-00-0	SW8270D LL	N	ug/L	0.2	U	0.042	J	0.21	U	0.22	U	0.2	U	0.2	U
RA_GW_VOCs	2-Butanone	78-93-3	SW8260B	N	ug/L	5	U	5	U	7.5	U	5	U	5	U	5	U
RA_GW_VOCs	Acetone	67-64-1	SW8260B	N	ug/L	5	U	5	U	4.1	J	5	U	5	U	5	U
RA_GW_VOCs	Bromodichloromethane	75-27-4	SW8260B	N	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
RA_GW_VOCs	Carbon Disulfide	75-15-0	SW8260B	N	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
RA_GW_VOCs	Chloroform	67-66-3	SW8260B	N	ug/L	1	U	1	U	1.2	U	0.22	J	1.2	U	1	U
RA_GW_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	N	ug/L	0.92	J	1	U	1	U	1	U	1	U	1	U
RA_GW_VOCs	Dibromochloromethane	124-48-1	SW8260B	N	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
RA_GW_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	N	ug/L	1.6		1	U	1	U	0.29	J	1	U	1	U
RA_GW_VOCs	Tetrachloroethylene	127-18-4	SW8260B	N	ug/L	4.4		2.3		0.32	J	0.25	J	1	U	0.18	J
RA_GW_VOCs	Toluene	108-88-3	SW8260B	N	ug/L	1	U	1	U	0.34	J	1	U	1	U	1	U
RA_GW_VOCs	Trichloroethene	79-01-6	SW8260B	N	ug/L	0.43	J	1	U	1	U	1	U	1	U	1	U

Table 5-19  
 Evaluation of the Groundwater to Surface Water Migration Pathway  
 Benning Road Facility RI/FS Project  
 3400 Benning Rd, N.E., Washington DC 20019

						Nearshore Groundwater Wells - Lower Aquifer											
						MW01	MW02	MW03	MW04	MW08	MW08	MW11					
						MW01BN	MW02BN	MW03BN	MW04BN	MW08BN	MW08BR	MW11BN					
						11/5/2014	11/5/2014	11/4/2014	11/4/2014	11/5/2014	11/5/2014	11/4/2014					
						Sample Date											
						DAF											
Method Group	Chemical (d)	CAS	Analytical Method	Fraction (e)	Units												
RA_GW_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	N	ug/L	7.11E-09		NA		8.49E-09		2.53E-06	U	NA	NA	0.44	U
RA_GW_Metals	Aluminum	7429-90-5	SW6020A	T	ug/L	260	J+	900	J+	690	J+	600	J+	30	U	30	U
RA_GW_Metals	Arsenic	7440-38-2	SW6020A	T	ug/L	2	J+	1	U	3.6	J+	5.2	J	0.31	J	1	U
RA_GW_Metals	Barium	7440-39-3	SW6020A	T	ug/L	240		80		170		120		140		130	U
RA_GW_Metals	Beryllium	7440-41-7	SW6020A	T	ug/L	0.059	J+	0.91	J	0.098	J	0.064	J	1	U	1	U
RA_GW_Metals	Calcium	7440-70-2	SW6020A	T	ug/L	34000		12000		21000		27000		17000		16000	29000
RA_GW_Metals	Cobalt	7440-48-4	SW6020A	T	ug/L	8		26		2.8		2.8		0.83		0.75	0.2
RA_GW_Metals	Copper	7440-50-8	SW6020A	T	ug/L	2	U	2	U	4.8		2.7	U	2	U	2	U
RA_GW_Metals	Iron	7439-89-6	SW6020A	T	ug/L	37000		41000		24000		7600	U	50	U	50	50
RA_GW_Metals	Lead	7439-92-1	SW6020A	T	ug/L	0.48	J	1.2	J	1.5	J	0.75	J	1	U	1	U
RA_GW_Metals	Magnesium	7439-95-4	SW6020A	T	ug/L	15000		4700		5700		7700		6400		5700	6800
RA_GW_Metals	Manganese	7439-96-5	SW6020A	T	ug/L	3700		1600		550		1000		280		250	360
RA_GW_Metals	Nickel	7440-02-0	SW6020A	T	ug/L	4.7		12		3.9		3.5		0.87	J	0.67	J
RA_GW_Metals	Potassium	7440-09-7	SW6020A	T	ug/L	5800		2600		3000		4300		3900		3500	9700
RA_GW_Metals	Sodium	7440-23-5	SW6020A	T	ug/L	130000	J	35000	J	15000	J	21000	J	19000		17000	46000
RA_GW_Metals	Vanadium	7440-62-2	SW6020A	T	ug/L	20	J+	12	J+	3	J+	1	U	1	U	4.2	J+
RA_GW_Metals	Zinc	7440-66-6	SW6020A	T	ug/L	6.4	U	37		9.9		6.7	U	5	U	5	U
RA_GW_PestPCBs	beta-BHC	319-85-7	SW8081B LL	N	ug/L	0.0013	U	0.0011	J	0.0013	U	0.0012	U	0.0013	U	0.0013	U
RA_GW_PestPCBs	delta-BHC	319-86-8	SW8081B LL	N	ug/L	0.0013	U	0.0012	U	0.0013	U	0.0012	U	0.0013	U	0.0013	U
RA_GW_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	N	ug/L	0.0013	U	0.0012	U	0.0013	U	0.00073	J	0.0013	U	0.0013	U
RA_GW_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	N	ug/L	0.0013	U	0.0012	U	0.0013	U	0.0014	J	0.0016	J	0.0013	J
RA_GW_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	N	ug/L	0.0013	U	0.0012	U	0.0013	U	0.0014	U	0.0026	J	0.00098	J
RA_GW_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	N	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
RA_GW_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	N	ug/L	0.02	J	0.2	U	0.2	U	0.21	U	0.21	U	0.2	U
RA_GW_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	N	ug/L	1	U	1	U	1	U	1	U	1	U	0.49	J
RA_GW_SVOCs	Acenaphthene	83-32-9	SW8270D LL	N	ug/L	0.2	U	0.2	U	0.2	U	0.21	U	0.21	U	0.2	U
RA_GW_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	N	ug/L	0.2	U	0.2	U	0.2	U	0.21	U	0.21	U	0.2	U
RA_GW_SVOCs	Anthracene	120-12-7	SW8270D LL	N	ug/L	0.2	U	0.2	U	0.2	U	0.21	U	0.21	U	0.2	U
RA_GW_SVOCs	Carbazole	86-74-8	SW8270D LL	N	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
RA_GW_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	N	ug/L	1	U	0.11	J	1	U	1	U	1	U	1	U
RA_GW_SVOCs	Fluoranthene	206-44-0	SW8270D LL	N	ug/L	0.2	U	0.2	U	0.2	U	0.21	U	0.21	U	0.2	U
RA_GW_SVOCs	Fluorene	86-73-7	SW8270D LL	N	ug/L	0.2	U	0.2	U	0.2	U	0.21	U	0.21	U	0.2	U
RA_GW_SVOCs	Naphthalene	91-20-3	SW8270D LL	N	ug/L	0.27		2.6		0.2	U	0.21	U	0.21	U	0.2	U
RA_GW_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	N	ug/L	0.53	J	1	U	1	U	1	U	1	U	1	U
RA_GW_SVOCs	Phenanthrene	85-01-8	SW8270D LL	N	ug/L	0.2	U	0.068	J	0.2	U	0.21	U	0.21	U	0.2	U
RA_GW_SVOCs	Phenol	108-95-2	SW8270D LL	N	ug/L	0.26	J	1	U	1	U	1	U	0.12	J	0.22	J
RA_GW_SVOCs	Pyrene	129-00-0	SW8270D LL	N	ug/L	0.2	U	0.2	U	0.2	U	0.21	U	0.21	U	0.2	U
RA_GW_VOCs	2-Butanone	78-93-3	SW8260B	N	ug/L	5	U	5	U	5	U	5	U	5	U	5	U
RA_GW_VOCs	Acetone	67-64-1	SW8260B	N	ug/L	5	U	5	U	5	U	2.8	J	5	U	5	U
RA_GW_VOCs	Bromodichloromethane	75-27-4	SW8260B	N	ug/L	1	U	1	U	0.65	J	1	U	0.23	J	1	U
RA_GW_VOCs	Carbon Disulfide	75-15-0	SW8260B	N	ug/L	0.27	J	1	U	1.8		1.1	U	1	U	1	U
RA_GW_VOCs	Chloroform	67-66-3	SW8260B	N	ug/L	0.87	J	1	U	3.2		1.4		3.2		2	J
RA_GW_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	N	ug/L	2.6	U	1	U	1	U	1	U	1	U	1	U
RA_GW_VOCs	Dibromochloromethane	124-48-1	SW8260B	N	ug/L	1	U	1	U	0.24	J	1	U	1	U	1	U
RA_GW_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	N	ug/L	1		0.39	J	1	U	1	U	1	U	1	U
RA_GW_VOCs	Tetrachloroethylene	127-18-4	SW8260B	N	ug/L	110		1	U	1	U	1	U	1	U	1	U
RA_GW_VOCs	Toluene	108-88-3	SW8260B	N	ug/L	1	U	1	U	0.28	J	1	U	0.18	J	0.19	J
RA_GW_VOCs	Trichloroethylene	79-01-6	SW8260B	N	ug/L	25		1	U	1	U	1	U	1	U	1	U







Notes:

All units are in µg/L.  
 CAS - Chemical Abstracts Service.  
 DAF - Dilution Attenuation Factor.  
 EN - Essential Nutrient.  
 HH - Human health.  
 J - Estimated value.  
 LWZ - Lower water-bearing zone.  
 NA - Not analyzed.  
 PAH - Polycyclic Aromatic Hydrocarbons.  
 PCB - Polychlorinated Biphenyl.  
 SVOC - Semivolatile organic compound.  
 TCDD TEQ - Dioxin toxicity equivalence.  
 UWZ - Upper water-bearing zone.  
 VOC - Volatile organic compound.  
 U - Not detected above the laboratory reporting limit.  
 UJ - Not detected above laboratory reporting limit; Estimated value, ug/L - microgram per liter.  
 USEPA - United States Environmental Protection Agency.  
 +/- Likely to have a high (+) or low (-) bias.

- (a) Surface water concentrations were estimated by multiplying groundwater results from the nearshore monitoring wells by a site-specific dilution attenuation factor (DAF). DAFs were derived separately for the upper and lower aquifers as further discussed in the Remedial Investigation Report and shown in Attachment E of the BHHRA report.
- (b) Surface water screening levels were selected based on the following hierarchy:
1. District Department of the Environment. Title 21 of the District of Columbia Municipal Regulations, Chapter 11, Water Quality Standards. Effective November 1, 2013.
  2. USEPA National Recommended Water Quality Criteria for Priority Pollutants. Value for Human Health for the consumption of organisms. 2009.
  3. USEPA Regional Screening Level for Tapwater based on  $1 \times 10^{-6}$  target risk level and target hazard quotient of 0.1. January 2015.
- See Table 3-10 for surface water screening levels and surrogates used.
- (c) The flow-weighted average surface water concentration is calculated using the following equation:
- $$\frac{([CMW1A \cdot QMW1A] + [CMW1B \cdot QMW1B] + \dots) + (CSWBCK \cdot 7Q10)}{(QMW1A + QMW1A + \dots + 7Q10)}$$
- where:
- CMW1A = Chemical concentration measured at monitoring well MW1A
  - QMW1A = Discharge rate calculated for monitoring well MW1A
  - CSWBCK = Average chemical concentration of upstream background surface water samples 1, 2, 3, 4, 5, and 6 (presented in Appendix J).
  - 7Q10 = the lowest 7-day average flow that occurs on average once every 10 years
- (d) Only chemicals detected at least once in nearshore groundwater monitoring wells are presented
- (e) Fraction: N - Not applicable, T - Total (Unfiltered).

**Table 6-1  
Total Potential Carcinogenic Risks for the Angler Receptors - Catfish Diet  
Reasonable Maximum Exposure  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Carcinogenic Risks									
	Adult Angler				Young Child Angler <sup>(a)</sup>	Sum of Adult and Young Child Angler	Older Child Angler			
	Sediment	Surface Water	Fish Tissue (100% catfish)	Total	Fish Tissue (100% catfish)		Sediment	Surface Water	Fish Tissue (100% catfish)	Total
<b>Dioxin</b>										
2,3,7,8-TCDD-TEQ	1E-06	2E-07	NCOPC	1E-06	NCOPC	1E-06	9E-07	1E-07	NCOPC	1E-06
<b>Metals</b>										
Aluminum	NA	NCOPC	NCOPC	NC	NCOPC	NC	NA	NCOPC	NCOPC	NC
Arsenic	2E-07	5E-09	NCOPC	2E-07	NCOPC	2E-07	1E-07	5E-09	NCOPC	1E-07
Chromium	3E-07	1E-07	NCOPC	4E-07	NCOPC	4E-07	7E-07	2E-07	NCOPC	9E-07
Cobalt	NA	NA	NCOPC	NC	NCOPC	NC	NA	NA	NCOPC	NC
Manganese	NA	NA	NCOPC	NC	NCOPC	NC	NA	NA	NCOPC	NC
Nickel	NA	NCOPC	NCOPC	NC	NCOPC	NC	NA	NCOPC	NCOPC	NC
Thallium	NA	NCOPC	NCOPC	NC	NCOPC	NC	NA	NCOPC	NCOPC	NC
Vanadium	NA	NCOPC	NCOPC	NC	NCOPC	NC	NA	NCOPC	NCOPC	NC
<b>PCBs</b>										
Total PCBs										
Upper Anacostia	8E-08	4E-09	2E-05	2E-05	8E-06	2E-05	5E-08	2E-09	9E-06	9E-06
Lower Anacostia	8E-08	4E-09	3E-05	3E-05	1E-05	4E-05	5E-08	2E-09	2E-05	2E-05
Upstream	8E-08	4E-09	4E-05	4E-05	2E-05	7E-05	5E-08	2E-09	3E-05	3E-05
<b>PCB-TEQ</b>										
Upper Anacostia	NA	NA	2E-05	2E-05	1E-05	3E-05	NA	NA	1E-05	1E-05
Lower Anacostia	NA	NA	7E-06	7E-06	4E-06	1E-05	NA	NA	4E-06	4E-06
Upstream	NA	NA	NC	NC	NC	NC	NA	NA	NC	NC
<b>SVOCs</b>										
Benzo(a)anthracene	2E-08	NCOPC	NCOPC	2E-08	NCOPC	2E-08	3E-08	NCOPC	NCOPC	3E-08
Benzo(a)pyrene	2E-07	NCOPC	NCOPC	2E-07	NCOPC	2E-07	4E-07	NCOPC	NCOPC	4E-07
Benzo(b)fluoranthene	3E-08	NCOPC	NCOPC	3E-08	NCOPC	3E-08	6E-08	NCOPC	NCOPC	6E-08
Benzo(k)fluoranthene	1E-09	NCOPC	NCOPC	1E-09	NCOPC	1E-09	2E-09	NCOPC	NCOPC	2E-09
Chrysene	3E-10	NCOPC	NCOPC	3E-10	NCOPC	3E-10	5E-10	NCOPC	NCOPC	5E-10
Dibenzo(a,h)anthracene	5E-08	NCOPC	NCOPC	5E-08	NCOPC	5E-08	8E-08	NCOPC	NCOPC	8E-08
Indeno(1,2,3-cd)pyrene	2E-08	NCOPC	NCOPC	2E-08	NCOPC	2E-08	3E-08	NCOPC	NCOPC	3E-08
<b>Pesticides</b>										
4,4'-DDT	NCOPC	9E-10	NCOPC	9E-10	NCOPC	9E-10	NCOPC	6E-10	NCOPC	6E-10
<b>Totals</b>										
Upper Anacostia (Total PCBs) (b)	2E-06	4E-07	2E-05	2E-05	8E-06	3E-05	2E-06	4E-07	9E-06	1E-05
Upper Anacostia (PCB-TEQ) (c)	2E-06	4E-07	2E-05	2E-05	1E-05	3E-05	2E-06	4E-07	1E-05	1E-05
Lower Anacostia (Total PCBs) (b)	2E-06	4E-07	3E-05	3E-05	1E-05	4E-05	2E-06	4E-07	2E-05	2E-05
Lower Anacostia (PCB-TEQ) (c)	2E-06	4E-07	7E-06	5E-05	4E-06	1E-05	2E-06	4E-07	4E-06	7E-06
Upstream Maryland (Total PCBs) (b)	2E-06	4E-07	4E-05	5E-05	2E-05	7E-05	2E-06	4E-07	3E-05	3E-05
Upstream Maryland (PCB-TEQ) (c)	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC

**Table 6-1  
Total Potential Carcinogenic Risks for the Angler Receptors - Catfish Diet  
Reasonable Maximum Exposure  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Carcinogenic Risks									
	Adult Angler				Young Child Angler <sup>(a)</sup>	Sum of Adult and Young Child Angler	Older Child Angler			
	Sediment	Surface Water	Fish Tissue (100% catfish)	Total	Fish Tissue (100% catfish)		Sediment	Surface Water	Fish Tissue (100% catfish)	Total

Notes:

Values are presented to one significant figure.

NA - Not Applicable.

NC - Not Calculated.

NCOPC - Not a Chemical of Potential Concern in this medium.

(a) - The young child is assumed to not accompany the adult or older child anglers on fishing trips to the river, but is assumed to eat river fish that is brought home.

(b) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.

(c) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

**Table 6-2**  
**Total Potential Hazard Index for the Angler Receptors - Catfish Diet**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Hazard Index								
	Adult Angler				Young Child Angler <sup>(a)</sup>	Older Child Angler			
	Sediment	Surface Water	Fish Tissue (100% catfish)	Total	Fish Tissue (100% catfish)	Sediment	Surface Water	Fish Tissue (100% catfish)	Total
<b>Dioxin</b>									
2,3,7,8-TCDD-TEQ	5E-02	9E-03	NCOPC	6E-02	NCOPC	6E-02	9E-03	NCOPC	7E-02
<b>Metals</b>									
Aluminum	4E-04	NCOPC	NCOPC	4E-04	NCOPC	6E-04	NCOPC	NCOPC	6E-04
Arsenic	1E-03	4E-05	NCOPC	1E-03	NCOPC	2E-03	6E-05	NCOPC	2E-03
Chromium	7E-04	3E-04	NCOPC	1E-03	NCOPC	1E-03	3E-04	NCOPC	1E-03
Cobalt	3E-03	4E-05	NCOPC	3E-03	NCOPC	4E-03	7E-05	NCOPC	4E-03
Manganese	5E-04	6E-04	NCOPC	1E-03	NCOPC	7E-04	7E-04	NCOPC	1E-03
Nickel	2E-04	NCOPC	NCOPC	2E-04	NCOPC	3E-04	NCOPC	NCOPC	3E-04
Thallium	1E-03	NCOPC	NCOPC	1E-03	NCOPC	2E-03	NCOPC	NCOPC	2E-03
Vanadium	2E-03	NCOPC	NCOPC	2E-03	NCOPC	3E-03	NCOPC	NCOPC	3E-03
<b>PCBs</b>									
Total PCBs									
Upper Anacostia	7E-03	2E-03	1E+00	1E+00	2E+00	7E-03	2E-03	1E+00	1E+00
Lower Anacostia	7E-03	2E-03	2E+00	2E+00	4E+00	7E-03	2E-03	2E+00	2E+00
Upstream	7E-03	2E-03	4E+00	4E+00	6E+00	7E-03	2E-03	4E+00	4E+00
PCB-TEQ									
Upper Anacostia	NA	NA	8E-01	8E-01	1E+00	NA	NA	8E-01	8E-01
Lower Anacostia	NA	NA	3E-01	3E-01	5E-01	NA	NA	3E-01	3E-01
Upstream	NA	NA	NC	NC	NC	NA	NA	NC	NC
<b>SVOCs</b>									
Benzo(a)anthracene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
Benzo(a)pyrene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
Benzo(b)fluoranthene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
Benzo(k)fluoranthene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
Chrysene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
Dibenzo(a,h)anthracene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
Indeno(1,2,3-cd)pyrene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
<b>Pesticides</b>									
4,4'-DDT	NCOPC	2E-05	NCOPC	2E-05	NCOPC	NCOPC	2E-05	NCOPC	2E-05
<b>Totals</b>									
Upper Anacostia (Total PCBs) (b)	6E-02	1E-02	1E+00	1E+00	2E+00	8E-02	1E-02	1E+00	1E+00
Upper Anacostia (PCB-TEQ) (c)	6E-02	1E-02	8E-01	9E-01	1E+00	8E-02	1E-02	8E-01	9E-01
Lower Anacostia (Total PCBs) (b)	6E-02	1E-02	2E+00	3E+00	4E+00	8E-02	1E-02	2E+00	3E+00
Lower Anacostia (PCB-TEQ) (c)	6E-02	1E-02	3E-01	4E-01	5E-01	8E-02	1E-02	3E-01	4E-01
Upstream Maryland (Total PCBs) (b)	6E-02	1E-02	4E+00	4E+00	6E+00	8E-02	1E-02	4E+00	4E+00
Upstream Maryland (PCB-TEQ) (c)	NC	NC	NC	NC	NC	NC	NC	NC	NC

**Table 6-2  
Total Potential Hazard Index for the Angler Receptors - Catfish Diet  
Reasonable Maximum Exposure  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Hazard Index								
	Adult Angler				Young Child Angler <sup>(a)</sup>	Older Child Angler			
	Sediment	Surface Water	Fish Tissue (100% catfish)	Total	Fish Tissue (100% catfish)	Sediment	Surface Water	Fish Tissue (100% catfish)	Total

Notes:

Values are presented to one significant figure.

Total hazard indices that are presented in bold and highlighted exceed a target endpoint hazard index of one, due to PCBs in fish tissue.

NA - Not Applicable.

NC - Not Calculated.

NCOPC - Not a Chemical of Potential Concern in this media.

(a) - The young child is assumed to not accompany the adult or older child anglers on fishing trips to the river, but is assumed to eat river fish that is brought home.

(b) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.

(c) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

**Table 6-3  
Total Potential Carcinogenic Risks for the Angler Receptors - Catfish Diet  
Central Tendency Exposure  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Carcinogenic Risks									
	Adult Angler				Young Child Angler <sup>(a)</sup>	Sum of Adult and Young Child Angler	Older Child Angler			
	Sediment	Surface Water	Fish Tissue (100% catfish)	Total	Fish Tissue (100% catfish)		Sediment	Surface Water	Fish Tissue (100% catfish)	Total
<b>Dioxin</b>										
2,3,7,8-TCDD-TEQ	5E-08	2E-08	NCOPC	8E-08	NCOPC	8E-08	4E-08	2E-08	NCOPC	5E-08
<b>Metals</b>										
Aluminum	NA	NCOPC	NCOPC	NC	NCOPC	NC	NA	NCOPC	NCOPC	NC
Arsenic	3E-08	4E-10	NCOPC	3E-08	NCOPC	3E-08	2E-08	3E-10	NCOPC	2E-08
Chromium	3E-08	1E-08	NCOPC	5E-08	NCOPC	5E-08	7E-08	2E-08	NCOPC	1E-07
Cobalt	NA	NA	NCOPC	NC	NCOPC	NC	NA	NA	NCOPC	NC
Manganese	NA	NA	NCOPC	NC	NCOPC	NC	NA	NA	NCOPC	NC
Nickel	NA	NCOPC	NCOPC	NC	NCOPC	NC	NA	NCOPC	NCOPC	NC
Thallium	NA	NCOPC	NCOPC	NC	NCOPC	NC	NA	NCOPC	NCOPC	NC
Vanadium	NA	NCOPC	NCOPC	NC	NCOPC	NC	NA	NCOPC	NCOPC	NC
<b>PCBs</b>										
Total PCBs										
Upper Anacostia	7E-09	7E-10	6E-07	6E-07	2E-07	8E-07	4E-09	4E-10	4E-07	4E-07
Lower Anacostia	7E-09	7E-10	9E-07	9E-07	3E-07	1E-06	4E-09	4E-10	6E-07	6E-07
Upstream	7E-09	7E-10	2E-06	2E-06	4E-07	2E-06	4E-09	4E-10	1E-06	1E-06
PCB-TEQ										
Upper Anacostia	NA	NA	2E-06	2E-06	5E-07	2E-06	NA	NA	1E-06	1E-06
Lower Anacostia	NA	NA	7E-07	7E-07	2E-07	9E-07	NA	NA	5E-07	5E-07
Upstream	NA	NA	NC	NC	NC	NC	NA	NA	NC	NC
<b>SVOCs</b>										
Benzo(a)anthracene	4E-09	NCOPC	NCOPC	4E-09	NCOPC	4E-09	6E-09	NCOPC	NCOPC	6E-09
Benzo(a)pyrene	4E-08	NCOPC	NCOPC	4E-08	NCOPC	4E-08	7E-08	NCOPC	NCOPC	7E-08
Benzo(b)fluoranthene	7E-09	NCOPC	NCOPC	7E-09	NCOPC	7E-09	1E-08	NCOPC	NCOPC	1E-08
Benzo(k)fluoranthene	3E-10	NCOPC	NCOPC	3E-10	NCOPC	3E-10	4E-10	NCOPC	NCOPC	4E-10
Chrysene	6E-11	NCOPC	NCOPC	6E-11	NCOPC	6E-11	9E-11	NCOPC	NCOPC	9E-11
Dibenzo(a,h)anthracene	1E-08	NCOPC	NCOPC	1E-08	NCOPC	1E-08	1E-08	NCOPC	NCOPC	1E-08
Indeno(1,2,3-cd)pyrene	3E-09	NCOPC	NCOPC	3E-09	NCOPC	3E-09	5E-09	NCOPC	NCOPC	5E-09
<b>Pesticides</b>										
4,4'-DDT	NCOPC	1E-10	NCOPC	1E-10	NCOPC	1E-10	NCOPC	8E-11	NCOPC	8E-11
<b>Totals</b>										
Upper Anacostia (Total PCBs) (b)	2E-07	4E-08	6E-07	8E-07	2E-07	1E-06	2E-07	4E-08	4E-07	7E-07
Upper Anacostia (PCB-TEQ) (c)	2E-07	4E-08	2E-06	2E-06	5E-07	2E-06	2E-07	4E-08	1E-06	7E-07
Lower Anacostia (Total PCBs) (b)	2E-07	4E-08	9E-07	1E-06	3E-07	1E-06	2E-07	4E-08	6E-07	8E-07
Lower Anacostia (PCB-TEQ) (c)	2E-07	4E-08	7E-07	1E-06	2E-07	1E-06	2E-07	4E-08	5E-07	7E-07
Upstream Maryland (Total PCBs) (b)	2E-07	4E-08	2E-06	2E-06	4E-07	2E-06	2E-07	4E-08	1E-06	1E-06
Upstream Maryland (PCB-TEQ) (c)	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC

**Table 6-3  
Total Potential Carcinogenic Risks for the Angler Receptors - Catfish Diet  
Central Tendency Exposure  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Carcinogenic Risks									
	Adult Angler				Young Child Angler <sup>(a)</sup>	Sum of Adult and Young Child Angler	Older Child Angler			
	Sediment	Surface Water	Fish Tissue (100% catfish)	Total	Fish Tissue (100% catfish)		Sediment	Surface Water	Fish Tissue (100% catfish)	Total

Notes:

Values are presented to one significant figure.

NA - Not Applicable.

NC - Not Calculated.

NCOPC - Not a Chemical of Potential Concern in this media.

(a) - The young child is assumed to not accompany the adult or older child anglers on fishing trips to the river, but is assumed to eat river fish that is brought home.

(b) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.

(c) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

**Table 6-4**  
**Total Potential Hazard Index for the Angler Receptors - Catfish Diet**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Hazard Index								
	Adult Angler				Young Child Angler <sup>(a)</sup>	Older Child Angler			
	Sediment	Surface Water	Fish Tissue (100% catfish)	Total	Fish Tissue (100% catfish)	Sediment	Surface Water	Fish Tissue (100% catfish)	Total
<b>Dioxin</b>									
2,3,7,8-TCDD-TEQ	4E-03	2E-03	NCOPC	6E-03	NCOPC	5E-03	2E-03	NCOPC	7E-03
<b>Metals</b>									
Aluminum	9E-05	NCOPC	NCOPC	9E-05	NCOPC	1E-04	NCOPC	NCOPC	1E-04
Arsenic	4E-04	6E-06	NCOPC	4E-04	NCOPC	4E-04	9E-06	NCOPC	4E-04
Chromium	1E-04	7E-05	NCOPC	2E-04	NCOPC	2E-04	7E-05	NCOPC	3E-04
Cobalt	6E-04	7E-06	NCOPC	6E-04	NCOPC	9E-04	1E-05	NCOPC	9E-04
Manganese	1E-04	1E-04	NCOPC	2E-04	NCOPC	2E-04	1E-04	NCOPC	3E-04
Nickel	3E-05	NCOPC	NCOPC	3E-05	NCOPC	5E-05	NCOPC	NCOPC	5E-05
Thallium	3E-04	NCOPC	NCOPC	3E-04	NCOPC	4E-04	NCOPC	NCOPC	4E-04
Vanadium	2E-04	NCOPC	NCOPC	2E-04	NCOPC	4E-04	NCOPC	NCOPC	4E-04
<b>PCBs</b>									
Total PCBs									
Upper Anacostia	2E-03	8E-04	2E-01	2E-01	3E-01	2E-03	9E-04	2E-01	2E-01
Lower Anacostia	2E-03	8E-04	3E-01	3E-01	4E-01	2E-03	9E-04	3E-01	3E-01
Upstream	2E-03	8E-04	6E-01	6E-01	8E-01	2E-03	9E-04	6E-01	6E-01
PCB-TEQ									
Upper Anacostia	NA	NA	1E-01	1E-01	2E-01	NA	NA	1E-01	1E-01
Lower Anacostia	NA	NA	6E-02	6E-02	8E-02	NA	NA	6E-02	6E-02
Upstream	NA	NA	NC	NC	NC	NA	NA	NC	NC
<b>SVOCs</b>									
Benzo(a)anthracene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
Benzo(a)pyrene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
Benzo(b)fluoranthene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
Benzo(k)fluoranthene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
Chrysene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
Dibenzo(a,h)anthracene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
Indeno(1,2,3-cd)pyrene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
<b>Pesticides</b>									
4,4'-DDT	NCOPC	5E-06	NCOPC	5E-06	NCOPC	NCOPC	6E-06	NCOPC	6E-06
<b>Totals</b>									
Upper Anacostia (Total PCBs) (b)	8E-03	3E-03	2E-01	2E-01	3E-01	1E-02	3E-03	2E-01	2E-01
Upper Anacostia (PCB-TEQ) (c)	8E-03	3E-03	1E-01	1E-01	2E-01	1E-02	3E-03	6E-02	1E-01
Lower Anacostia (Total PCBs) (b)	8E-03	3E-03	3E-01	3E-01	4E-01	1E-02	3E-03	3E-01	3E-01
Lower Anacostia (PCB-TEQ) (c)	8E-03	3E-03	6E-02	6E-02	8E-02	1E-02	3E-03	6E-02	7E-02
Upstream Maryland (Total PCBs) (b)	8E-03	3E-03	6E-01	6E-01	8E-01	1E-02	3E-03	6E-01	6E-01
Upstream Maryland (PCB-TEQ) (c)	NC	NC	NC	NC	NC	NC	NC	NC	NC



**Table 6-4  
Total Potential Hazard Index for the Angler Receptors - Catfish Diet  
Central Tendency Exposure  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Hazard Index								
	Adult Angler				Young Child Angler <sup>(a)</sup>	Older Child Angler			
	Sediment	Surface Water	Fish Tissue (100% catfish)	Total	Fish Tissue (100% catfish)	Sediment	Surface Water	Fish Tissue (100% catfish)	Total

Notes:

Values are presented to one significant figure.

NA - Not Applicable.

NC - Not Calculated.

NCOPC - Not a Chemical of Potential Concern in this media.

(a) - The young child is assumed to not accompany the adult or older child anglers on fishing trips to the river, but is assumed to eat river fish that is brought home.

(b) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.

(c) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

**Table 6-5  
Total Potential Carcinogenic Risks for the Angler Receptors - Mixed Fish Diet  
Reasonable Maximum Exposure  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Carcinogenic Risks									
	Adult Angler				Young Child Angler <sup>(a)</sup>	Sum of Adult and Young Child Angler	Older Child Angler			
	Sediment	Surface Water	Fish Tissue (Mixed Fish Diet)	Total	Fish Tissue (Mixed Fish Diet)		Sediment	Surface Water	Fish Tissue (Mixed Fish Diet)	Total
<b>Dioxin</b>										
2,3,7,8-TCDD-TEQ	1E-06	2E-07	NCOPC	1E-06	NCOPC	1E-06	9E-07	1E-07	NCOPC	1E-06
<b>Metals</b>										
Aluminum	NA	NCOPC	NCOPC	NC	NCOPC	NC	NA	NCOPC	NCOPC	NC
Arsenic	2E-07	5E-09	NCOPC	2E-07	NCOPC	2E-07	1E-07	5E-09	NCOPC	1E-07
Chromium	3E-07	1E-07	NCOPC	4E-07	NCOPC	4E-07	7E-07	2E-07	NCOPC	9E-07
Cobalt	NA	NA	NCOPC	NC	NCOPC	NC	NA	NA	NCOPC	NC
Manganese	NA	NA	NCOPC	NC	NCOPC	NC	NA	NA	NCOPC	NC
Nickel	NA	NCOPC	NCOPC	NC	NCOPC	NC	NA	NCOPC	NCOPC	NC
Thallium	NA	NCOPC	NCOPC	NC	NCOPC	NC	NA	NCOPC	NCOPC	NC
Vanadium	NA	NCOPC	NCOPC	NC	NCOPC	NC	NA	NCOPC	NCOPC	NC
<b>PCBs</b>										
Total PCBs										
Upper Anacostia	8E-08	4E-09	8E-06	8E-06	4E-06	1E-05	5E-08	2E-09	5E-06	5E-06
Lower Anacostia	8E-08	4E-09	2E-05	2E-05	1E-05	3E-05	5E-08	2E-09	1E-05	1E-05
Upstream	8E-08	4E-09	5E-05	5E-05	2E-05	7E-05	5E-08	2E-09	3E-05	3E-05
PCB-TEQ										
Upper Anacostia	NA	NA	2E-05	2E-05	1E-05	3E-05	NA	NA	1E-05	1E-05
Lower Anacostia	NA	NA	2E-05	2E-05	9E-06	3E-05	NA	NA	1E-05	1E-05
Upstream	NA	NA	NC	NC	NC	NC	NA	NA	NC	NC
<b>SVOCs</b>										
Benzo(a)anthracene	2E-08	NCOPC	NCOPC	2E-08	NCOPC	2E-08	3E-08	NCOPC	NCOPC	3E-08
Benzo(a)pyrene	2E-07	NCOPC	NCOPC	2E-07	NCOPC	2E-07	4E-07	NCOPC	NCOPC	4E-07
Benzo(b)fluoranthene	3E-08	NCOPC	NCOPC	3E-08	NCOPC	3E-08	6E-08	NCOPC	NCOPC	6E-08
Benzo(k)fluoranthene	1E-09	NCOPC	NCOPC	1E-09	NCOPC	1E-09	2E-09	NCOPC	NCOPC	2E-09
Chrysene	3E-10	NCOPC	NCOPC	3E-10	NCOPC	3E-10	5E-10	NCOPC	NCOPC	5E-10
Dibenzo(a,h)anthracene	5E-08	NCOPC	NCOPC	5E-08	NCOPC	5E-08	8E-08	NCOPC	NCOPC	8E-08
Indeno(1,2,3-cd)pyrene	2E-08	NCOPC	NCOPC	2E-08	NCOPC	2E-08	3E-08	NCOPC	NCOPC	3E-08
<b>Pesticides</b>										
4,4'-DDT	NCOPC	9E-10	NCOPC	9E-10	NCOPC	9E-10	NCOPC	6E-10	NCOPC	6E-10
<b>Totals</b>										
Upper Anacostia (Total PCBs) (b)	2E-06	4E-07	8E-06	1E-05	4E-06	1E-05	2E-06	4E-07	5E-06	7E-06
Upper Anacostia (PCB-TEQ) (c)	2E-06	4E-07	2E-05	2E-05	1E-05	3E-05	2E-06	4E-07	1E-05	1E-05
Lower Anacostia (Total PCBs) (b)	2E-06	4E-07	2E-05	2E-05	1E-05	4E-05	2E-06	4E-07	1E-05	2E-05
Lower Anacostia (PCB-TEQ) (c)	2E-06	4E-07	2E-05	2E-05	9E-06	3E-05	2E-06	4E-07	1E-05	1E-05
Upstream Maryland (Total PCBs) (b)	2E-06	4E-07	5E-05	5E-05	2E-05	7E-05	2E-06	4E-07	3E-05	3E-05
Upstream Maryland (PCB-TEQ) (c)	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC

**Table 6-5  
Total Potential Carcinogenic Risks for the Angler Receptors - Mixed Fish Diet  
Reasonable Maximum Exposure  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Carcinogenic Risks									
	Adult Angler				Young Child Angler <sup>(a)</sup>	Sum of Adult and Young Child Angler	Older Child Angler			
	Sediment	Surface Water	Fish Tissue (Mixed Fish Diet)	Total	Fish Tissue (Mixed Fish Diet)		Sediment	Surface Water	Fish Tissue (Mixed Fish Diet)	Total

Notes:

Values are presented to one significant figure.

NA - Not Applicable.

NC - Not Calculated.

NCOPC - Not a Chemical of Potential Concern in this media.

(a) - The young child is assumed to not accompany the adult or older child anglers on fishing trips to the river, but is assumed to eat river fish that is brought home.

(b) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.

(c) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

**Table 6-6**  
**Total Potential Hazard Index for the Angler Receptors - Mixed Fish Diet**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Hazard Index								
	Adult Angler				Young Child Angler <sup>(a)</sup>	Older Child Angler			
	Sediment	Surface Water	Fish Tissue (Mixed Fish Diet)	Total	Fish Tissue (Mixed Fish Diet)	Sediment	Surface Water	Fish Tissue (Mixed Fish Diet)	Total
<b>Dioxin</b>									
2,3,7,8-TCDD-TEQ	5E-02	9E-03	NCOPC	6E-02	NCOPC	6E-02	9E-03	NCOPC	7E-02
<b>Metals</b>									
Aluminum	4E-04	NCOPC	NCOPC	4E-04	NCOPC	6E-04	NCOPC	NCOPC	6E-04
Arsenic	1E-03	4E-05	NCOPC	1E-03	NCOPC	2E-03	6E-05	NCOPC	2E-03
Chromium	7E-04	3E-04	NCOPC	1E-03	NCOPC	1E-03	3E-04	NCOPC	1E-03
Cobalt	3E-03	4E-05	NCOPC	3E-03	NCOPC	4E-03	7E-05	NCOPC	4E-03
Manganese	5E-04	6E-04	NCOPC	1E-03	NCOPC	7E-04	7E-04	NCOPC	1E-03
Nickel	2E-04	NCOPC	NCOPC	2E-04	NCOPC	3E-04	NCOPC	NCOPC	3E-04
Thallium	1E-03	NCOPC	NCOPC	1E-03	NCOPC	2E-03	NCOPC	NCOPC	2E-03
Vanadium	2E-03	NCOPC	NCOPC	2E-03	NCOPC	3E-03	NCOPC	NCOPC	3E-03
<b>PCBs</b>									
Total PCBs									
Upper Anacostia	7E-03	2E-03	7E-01	7E-01	1E+00	7E-03	2E-03	7E-01	7E-01
Lower Anacostia	7E-03	2E-03	2E+00	2E+00	3E+00	7E-03	2E-03	2E+00	2E+00
Upstream	7E-03	2E-03	4E+00	4E+00	7E+00	7E-03	2E-03	4E+00	4E+00
PCB-TEQ									
Upper Anacostia	NA	NA	8E-01	8E-01	1E+00	NA	NA	7E-01	7E-01
Lower Anacostia	NA	NA	7E-01	7E-01	1E+00	NA	NA	7E-01	7E-01
Upstream	NA	NA	NC	NC	NC	NA	NA	NC	NC
<b>SVOCs</b>									
Benzo(a)anthracene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
Benzo(a)pyrene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
Benzo(b)fluoranthene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
Benzo(k)fluoranthene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
Chrysene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
Dibenzo(a,h)anthracene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
Indeno(1,2,3-cd)pyrene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
<b>Pesticides</b>									
4,4'-DDT	NCOPC	2E-05	NCOPC	2E-05	NCOPC	NCOPC	2E-05	NCOPC	2E-05
<b>Totals</b>									
Upper Anacostia (Total PCBs) (b)	6E-02	1E-02	7E-01	8E-01	1E+00	8E-02	1E-02	7E-01	8E-01
Upper Anacostia (PCB-TEQ) (c)	6E-02	1E-02	8E-01	8E-01	1E+00	8E-02	1E-02	7E-01	8E-01
Lower Anacostia (Total PCBs) (b)	6E-02	1E-02	<b>2E+00</b>	<b>2E+00</b>	<b>3E+00</b>	8E-02	1E-02	<b>2E+00</b>	<b>2E+00</b>
Lower Anacostia (PCB-TEQ) (c)	6E-02	1E-02	7E-01	8E-01	1E+00	8E-02	1E-02	7E-01	8E-01
Upstream Maryland (Total PCBs) (b)	6E-02	1E-02	<b>4E+00</b>	<b>4E+00</b>	<b>7E+00</b>	8E-02	1E-02	<b>4E+00</b>	<b>4E+00</b>
Upstream Maryland (PCB-TEQ) (c)	NC	NC	NC	NC	NC	NC	NC	NC	NC

**Table 6-6  
Total Potential Hazard Index for the Angler Receptors - (Mixed Fish Diet)  
Reasonable Maximum Exposure  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Hazard Index								
	Adult Angler				Young Child Angler <sup>(a)</sup>	Older Child Angler			
	Sediment	Surface Water	Fish Tissue (Mixed Fish Diet)	Total	Fish Tissue (Mixed Fish Diet)	Sediment	Surface Water	Fish Tissue (Mixed Fish Diet)	Total

Notes:

Values are presented to one significant figure.

Total hazard indices that are presented in bold and highlighted exceed a target endpoint hazard index of one, due to PCBs in fish tissue.

NA - Not Applicable.

NC - Not Calculated.

NCOPC - Not a Chemical of Potential Concern in this media.

(a) - The young child is assumed to not accompany the adult or older child anglers on fishing trips to the river, but is assumed to eat river fish that is brought home.

(b) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.

(c) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

**Table 6-7**  
**Total Potential Carcinogenic Risks for the Angler Receptors - (Mixed Fish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Carcinogenic Risks									
	Adult Angler				Young Child Angler <sup>(a)</sup>	Sum of Adult and Young Child Angler	Older Child Angler			
	Sediment	Surface Water	Fish Tissue (Mixed Fish Diet)	Total	Fish Tissue (Mixed Fish Diet)		Sediment	Surface Water	Fish Tissue (Mixed Fish Diet)	Total
<b>Dioxin</b>										
2,3,7,8-TCDD-TEQ	5E-08	2E-08	NCOPC	8E-08	NCOPC	8E-08	4E-08	2E-08	NCOPC	5E-08
<b>Metals</b>										
Aluminum	NA	NCOPC	NCOPC	NC	NCOPC	NC	NA	NCOPC	NCOPC	NC
Arsenic	3E-08	4E-10	NCOPC	3E-08	NCOPC	3E-08	2E-08	3E-10	NCOPC	2E-08
Chromium	3E-08	1E-08	NCOPC	5E-08	NCOPC	5E-08	7E-08	2E-08	NCOPC	1E-07
Cobalt	NA	NA	NCOPC	NC	NCOPC	NC	NA	NA	NCOPC	NC
Manganese	NA	NA	NCOPC	NC	NCOPC	NC	NA	NA	NCOPC	NC
Nickel	NA	NCOPC	NCOPC	NC	NCOPC	NC	NA	NCOPC	NCOPC	NC
Thallium	NA	NCOPC	NCOPC	NC	NCOPC	NC	NA	NCOPC	NCOPC	NC
Vanadium	NA	NCOPC	NCOPC	NC	NCOPC	NC	NA	NCOPC	NCOPC	NC
<b>PCBs</b>										
Total PCBs										
Upper Anacostia	7E-09	7E-10	4E-07	4E-07	1E-07	5E-07	4E-09	4E-10	2E-07	2E-07
Lower Anacostia	7E-09	7E-10	1E-06	1E-06	3E-07	1E-06	4E-09	4E-10	6E-07	6E-07
Upstream	7E-09	7E-10	2E-06	2E-06	6E-07	3E-06	4E-09	4E-10	1E-06	1E-06
<b>PCB-TEQ</b>										
Upper Anacostia	NA	NA	2E-06	2E-06	5E-07	2E-06	NA	NA	1E-06	1E-06
Lower Anacostia	NA	NA	2E-06	2E-06	5E-07	2E-06	NA	NA	1E-06	1E-06
Upstream	NA	NA	NC	NC	NC	NC	NA	NA	NC	NC
<b>SVOCs</b>										
Benzo(a)anthracene	4E-09	NCOPC	NCOPC	4E-09	NCOPC	4E-09	6E-09	NCOPC	NCOPC	6E-09
Benzo(a)pyrene	4E-08	NCOPC	NCOPC	4E-08	NCOPC	4E-08	7E-08	NCOPC	NCOPC	7E-08
Benzo(b)fluoranthene	7E-09	NCOPC	NCOPC	7E-09	NCOPC	7E-09	1E-08	NCOPC	NCOPC	1E-08
Benzo(k)fluoranthene	3E-10	NCOPC	NCOPC	3E-10	NCOPC	3E-10	4E-10	NCOPC	NCOPC	4E-10
Chrysene	6E-11	NCOPC	NCOPC	6E-11	NCOPC	6E-11	9E-11	NCOPC	NCOPC	9E-11
Dibenzo(a,h)anthracene	1E-08	NCOPC	NCOPC	1E-08	NCOPC	1E-08	1E-08	NCOPC	NCOPC	1E-08
Indeno(1,2,3-cd)pyrene	3E-09	NCOPC	NCOPC	3E-09	NCOPC	3E-09	5E-09	NCOPC	NCOPC	5E-09
<b>Pesticides</b>										
4,4'-DDT	NCOPC	1E-10	NCOPC	1E-10	NCOPC	1E-10	NCOPC	8E-11	NCOPC	8E-11
<b>Totals</b>										
Upper Anacostia (Total PCBs) (b)	2E-07	4E-08	4E-07	6E-07	1E-07	7E-07	2E-07	4E-08	2E-07	5E-07
Upper Anacostia (PCB-TEQ) (c)	2E-07	4E-08	2E-06	2E-06	5E-07	3E-06	2E-07	4E-08	1E-06	1E-06
Lower Anacostia (Total PCBs) (b)	2E-07	4E-08	1E-06	1E-06	3E-07	2E-06	2E-07	4E-08	6E-07	9E-07
Lower Anacostia (PCB-TEQ) (c)	2E-07	4E-08	2E-06	2E-06	5E-07	3E-06	2E-07	4E-08	1E-06	1E-06
Upstream Maryland (Total PCBs) (b)	2E-07	4E-08	2E-06	2E-06	6E-07	3E-06	2E-07	4E-08	1E-06	2E-06
Upstream Maryland (PCB-TEQ) (c)	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC

**Table 6-7  
Total Potential Carcinogenic Risks for the Angler Receptors - (Mixed Fish Diet)  
Central Tendency Exposure  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Carcinogenic Risks									
	Adult Angler				Young Child Angler <sup>(a)</sup>	Sum of Adult and Young Child Angler	Older Child Angler			
	Sediment	Surface Water	Fish Tissue (Mixed Fish Diet)	Total	Fish Tissue (Mixed Fish Diet)		Sediment	Surface Water	Fish Tissue (Mixed Fish Diet)	Total

Notes:

Values are presented to one significant figure.

NA - Not Applicable.

NC - Not Calculated.

NCOPC - Not a Chemical of Potential Concern in this media.

(a) - The young child is assumed to not accompany the adult or older child anglers on fishing trips to the river, but is assumed to eat river fish that is brought home.

(a) - The young child is assumed to not accompany the adult or older child anglers on fishing trips to the river, but is assumed to eat river fish that is brought home.

(b) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.

(c) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

**Table 6-8**  
**Total Potential Hazard Index for the Angler Receptors - (Mixed Fish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Hazard Index								
	Adult Angler				Young Child Angler <sup>(a)</sup>	Older Child Angler			
	Sediment	Surface Water	Fish Tissue (Mixed Fish Diet)	Total	Fish Tissue (Mixed Fish Diet)	Sediment	Surface Water	Fish Tissue (Mixed Fish Diet)	Total
<b>Dioxin</b>									
2,3,7,8-TCDD-TEQ	4E-03	2E-03	NCOPC	6E-03	NCOPC	5E-03	2E-03	NCOPC	7E-03
<b>Metals</b>									
Aluminum	9E-05	NCOPC	NCOPC	9E-05	NCOPC	1E-04	NCOPC	NCOPC	1E-04
Arsenic	4E-04	6E-06	NCOPC	4E-04	NCOPC	4E-04	9E-06	NCOPC	4E-04
Chromium	1E-04	7E-05	NCOPC	2E-04	NCOPC	2E-04	7E-05	NCOPC	3E-04
Cobalt	6E-04	7E-06	NCOPC	6E-04	NCOPC	9E-04	1E-05	NCOPC	9E-04
Manganese	1E-04	1E-04	NCOPC	2E-04	NCOPC	2E-04	1E-04	NCOPC	3E-04
Nickel	3E-05	NCOPC	NCOPC	3E-05	NCOPC	5E-05	NCOPC	NCOPC	5E-05
Thallium	3E-04	NCOPC	NCOPC	3E-04	NCOPC	4E-04	NCOPC	NCOPC	4E-04
Vanadium	2E-04	NCOPC	NCOPC	2E-04	NCOPC	4E-04	NCOPC	NCOPC	4E-04
<b>PCBs</b>									
Total PCBs									
Upper Anacostia	2E-03	8E-04	1E-01	1E-01	2E-01	2E-03	9E-04	1E-01	1E-01
Lower Anacostia	2E-03	8E-04	4E-01	4E-01	5E-01	2E-03	9E-04	4E-01	4E-01
Upstream	2E-03	8E-04	7E-01	7E-01	1E+00	2E-03	9E-04	8E-01	8E-01
PCB-TEQ									
Upper Anacostia	NA	NA	1E-01	1E-01	2E-01	NA	NA	2E-01	2E-01
Lower Anacostia	NA	NA	1E-01	1E-01	2E-01	NA	NA	2E-01	2E-01
Upstream	NA	NA	NC	NC	NC	NA	NA	NC	NC
<b>SVOCs</b>									
Benzo(a)anthracene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
Benzo(a)pyrene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
Benzo(b)fluoranthene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
Benzo(k)fluoranthene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
Chrysene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
Dibenzo(a,h)anthracene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
Indeno(1,2,3-cd)pyrene	NA	NCOPC	NCOPC	NC	NCOPC	NA	NCOPC	NCOPC	NC
<b>Pesticides</b>									
4,4'-DDT	NCOPC	5E-06	NCOPC	5E-06	NCOPC	NCOPC	6E-06	NCOPC	6E-06
<b>Totals</b>									
Upper Anacostia (Total PCBs) (b)	8E-03	3E-03	1E-01	1E-01	2E-01	1E-02	3E-03	1E-01	1E-01
Upper Anacostia (PCB-TEQ) (c)	8E-03	3E-03	1E-01	2E-01	2E-01	1E-02	3E-03	2E-01	2E-01
Lower Anacostia (Total PCBs) (b)	8E-03	3E-03	4E-01	4E-01	5E-01	1E-02	3E-03	4E-01	4E-01
Lower Anacostia (PCB-TEQ) (c)	8E-03	3E-03	1E-01	2E-01	2E-01	1E-02	3E-03	2E-01	2E-01
Upstream Maryland (Total PCBs) (b)	8E-03	3E-03	7E-01	7E-01	1E+00	1E-02	3E-03	8E-01	8E-01
Upstream Maryland (PCB-TEQ) (c)	NC	NC	NC	NC	NC	NC	NC	NC	NC



**Table 6-8  
Total Potential Hazard Index for the Angler Receptors - (Mixed Fish Diet)  
Central Tendency Exposure  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Hazard Index								
	Adult Angler				Young Child Angler <sup>(a)</sup>	Older Child Angler			
	Sediment	Surface Water	Fish Tissue (Mixed Fish Diet)	Total	Fish Tissue (Mixed Fish Diet)	Sediment	Surface Water	Fish Tissue (Mixed Fish Diet)	Total

Notes:

Values are presented to one significant figure.

NA - Not Applicable.

NC - Not Calculated.

NCOPC - Not a Chemical of Potential Concern in this media.

(a) - The young child is assumed to not accompany the adult or older child anglers on fishing trips to the river, but is assumed to eat river fish that is brought home.

(b) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.

(c) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

**Table 6-9  
Total Potential Carcinogenic Risks for the Swimmer Receptors  
Reasonable Maximum Exposure  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Carcinogenic Risks									
	Adult Swimmer			Child Swimmer			Sum of Adult and Child Swimmer	Teen Swimmer		
	Sediment	Surface Water	Total	Sediment	Surface Water	Total		Sediment	Surface Water	Total
<b>Dioxin</b>										
2,3,7,8-TCDD-TEQ	6E-07	4E-07	1E-06	1E-06	2E-07	1E-06	3E-06	9E-07	6E-07	2E-06
<b>Metals</b>										
Aluminum	NA	NCOPC	NC	NA	NCOPC	NC	NC	NA	NCOPC	NC
Arsenic	9E-08	3E-09	1E-07	2E-07	7E-09	2E-07	3E-07	1E-07	9E-09	1E-07
Chromium	1E-07	2E-07	3E-07	2E-06	4E-07	2E-06	2E-06	7E-07	6E-07	1E-06
Cobalt	NA	NA	NC	NA	NA	NC	NC	NA	NA	NC
Manganese	NA	NA	NC	NA	NA	NC	NC	NA	NA	NC
Nickel	NA	NCOPC	NC	NA	NCOPC	NC	NC	NA	NCOPC	NC
Thallium	NA	NCOPC	NC	NA	NCOPC	NC	NC	NA	NCOPC	NC
Vanadium	NA	NCOPC	NC	NA	NCOPC	NC	NC	NA	NCOPC	NC
<b>PCBs</b>										
Total PCBs	4E-08	1E-08	6E-08	5E-08	7E-09	6E-08	1E-07	5E-08	2E-08	7E-08
<b>SVOCs</b>										
Benzo(a)anthracene	1E-08	NCOPC	1E-08	5E-08	NCOPC	5E-08	6E-08	3E-08	NCOPC	3E-08
Benzo(a)pyrene	1E-07	NCOPC	1E-07	6E-07	NCOPC	6E-07	7E-07	4E-07	NCOPC	4E-07
Benzo(b)fluoranthene	2E-08	NCOPC	2E-08	9E-08	NCOPC	9E-08	1E-07	6E-08	NCOPC	6E-08
Benzo(k)fluoranthene	7E-10	NCOPC	7E-10	4E-09	NCOPC	4E-09	4E-09	2E-09	NCOPC	2E-09
Chrysene	2E-10	NCOPC	2E-10	8E-10	NCOPC	8E-10	1E-09	5E-10	NCOPC	5E-10
Dibenzo(a,h)anthracene	3E-08	NCOPC	3E-08	1E-07	NCOPC	1E-07	2E-07	8E-08	NCOPC	8E-08
Indeno(1,2,3-cd)pyrene	9E-09	NCOPC	9E-09	5E-08	NCOPC	5E-08	5E-08	3E-08	NCOPC	3E-08
<b>Pesticides</b>										
4,4'-DDT	NCOPC	2E-09	2E-09	NCOPC	9E-10	9E-10	3E-09	NCOPC	2E-09	2E-09
<b>Totals</b>	1E-06	6E-07	2E-06	4E-06	6E-07	5E-06	6E-06	2E-06	1E-06	4E-06

Notes:

Values are presented to one significant figure.

NA - Not Applicable.

NC - Not Calculated.

NCOPC - Not a Chemical of Potential Concern in this media.

**Table 6-10**  
**Total Potential Hazard Index for the Swimmer Receptors**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Hazard Index								
	Adult Swimmer			Child Swimmer			Teen Swimmer		
	Sediment	Surface Water	Total	Sediment	Surface Water	Total	Sediment	Surface Water	Total
<b>Dioxin</b>									
2,3,7,8-TCDD-TEQ	2E-02	2E-02	4E-02	2E-01	3E-02	2E-01	6E-02	4E-02	1E-01
<b>Metals</b>									
Aluminum	2E-04	NCOPC	2E-04	2E-03	NCOPC	2E-03	6E-04	NCOPC	6E-04
Arsenic	7E-04	3E-05	7E-04	4E-03	2E-04	4E-03	2E-03	1E-04	2E-03
Chromium	3E-04	4E-04	7E-04	3E-03	7E-04	4E-03	1E-03	9E-04	2E-03
Cobalt	1E-03	2E-05	1E-03	1E-02	2E-04	1E-02	4E-03	1E-04	4E-03
Manganese	2E-04	7E-04	1E-03	2E-03	2E-03	4E-03	7E-04	2E-03	2E-03
Nickel	9E-05	NCOPC	9E-05	8E-04	NCOPC	8E-04	3E-04	NCOPC	3E-04
Thallium	7E-04	NCOPC	7E-04	6E-03	NCOPC	6E-03	2E-03	NCOPC	2E-03
Vanadium	1E-03	NCOPC	1E-03	9E-03	NCOPC	9E-03	3E-03	NCOPC	3E-03
<b>PCBs</b>									
Total PCBs	4E-03	6E-03	1E-02	1E-02	1E-02	2E-02	7E-03	1E-02	2E-02
<b>SVOCs</b>									
Benzo(a)anthracene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
Benzo(a)pyrene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
Benzo(b)fluoranthene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
Benzo(k)fluoranthene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
Chrysene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
Dibenzo(a,h)anthracene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
Indeno(1,2,3-cd)pyrene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
<b>Pesticides</b>									
4,4'-DDT	NCOPC	4E-05	4E-05	NCOPC	6E-05	6E-05	NCOPC	8E-05	8E-05
<b>Totals</b>	3E-02	2E-02	6E-02	2E-01	4E-02	3E-01	8E-02	5E-02	1E-01

Notes:

Values are presented to one significant figure.

NA - Not Applicable.

NC - Not Calculated.

NCOPC - Not a Chemical of Potential Concern in this media.

**Table 6-11**  
**Total Potential Carcinogenic Risks for the Swimmer Receptors**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Carcinogenic Risks									
	Adult Swimmer			Child Swimmer			Sum of Adult and Child Swimmer	Teen Swimmer		
	Sediment	Surface Water	Total	Sediment	Surface Water	Total		Sediment	Surface Water	Total
<b>Dioxin</b>										
2,3,7,8-TCDD-TEQ	3E-08	5E-08	7E-08	3E-08	2E-08	5E-08	1E-07	4E-08	6E-08	1E-07
<b>Metals</b>										
Aluminum	NA	NCOPC	NC	NA	NCOPC	NC	NC	NA	NCOPC	NC
Arsenic	1E-08	4E-10	1E-08	1E-08	5E-10	1E-08	3E-08	2E-08	1E-09	2E-08
Chromium	2E-08	2E-08	4E-08	1E-07	3E-08	2E-07	2E-07	7E-08	6E-08	1E-07
Cobalt	NA	NA	NC	NA	NA	NC	NC	NA	NA	NC
Manganese	NA	NA	NC	NA	0E+00	NC	NC	NA	NA	NC
Nickel	NA	NCOPC	NC	NA	NCOPC	NC	NC	NA	NCOPC	NC
Thallium	NA	NCOPC	NC	NA	NCOPC	NC	NC	NA	NCOPC	NC
Vanadium	NA	NCOPC	NC	NA	NCOPC	NC	NC	NA	NCOPC	NC
<b>PCBs</b>										
Total PCBs	3E-09	2E-09	5E-09	2E-09	6E-10	3E-09	8E-09	4E-09	2E-09	6E-09
<b>SVOCs</b>										
Benzo(a)anthracene	2E-09	NCOPC	2E-09	6E-09	NCOPC	6E-09	8E-09	6E-09	NCOPC	6E-09
Benzo(a)pyrene	2E-08	NCOPC	2E-08	6E-08	NCOPC	6E-08	9E-08	7E-08	NCOPC	7E-08
Benzo(b)fluoranthene	3E-09	NCOPC	3E-09	1E-08	NCOPC	1E-08	1E-08	1E-08	NCOPC	1E-08
Benzo(k)fluoranthene	1E-10	NCOPC	1E-10	4E-10	NCOPC	4E-10	5E-10	4E-10	NCOPC	4E-10
Chrysene	3E-11	NCOPC	3E-11	9E-11	NCOPC	9E-11	1E-10	9E-11	NCOPC	9E-11
Dibenzo(a,h)anthracene	5E-09	NCOPC	5E-09	1E-08	NCOPC	1E-08	2E-08	1E-08	NCOPC	1E-08
Indeno(1,2,3-cd)pyrene	2E-09	NCOPC	2E-09	5E-09	NCOPC	5E-09	6E-09	5E-09	NCOPC	5E-09
<b>Pesticides</b>										
4,4'-DDT	NCOPC	2E-10	2E-10	NCOPC	8E-11	8E-11	3E-10	NCOPC	3E-10	3E-10
<b>Totals</b>	9E-08	7E-08	2E-07	3E-07	5E-08	3E-07	5E-07	2E-07	1E-07	4E-07

Notes:

Values are presented to one significant figure.

NA - Not Applicable.

NC - Not Calculated.

NCOPC - Not a Chemical of Potential Concern in this media.

**Table 6-12**  
**Total Potential Hazard Index for the Swimmer Receptors**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Hazard Index								
	Adult Swimmer			Child Swimmer			Teen Swimmer		
	Sediment	Surface Water	Total	Sediment	Surface Water	Total	Sediment	Surface Water	Total
<b>Dioxin</b>									
2,3,7,8-TCDD-TEQ	2E-03	4E-03	6E-03	1E-02	6E-03	2E-02	5E-03	8E-03	1E-02
<b>Metals</b>									
Aluminum	4E-05	NCOPC	4E-05	4E-04	NCOPC	4E-04	1E-04	NCOPC	1E-04
Arsenic	2E-04	6E-06	2E-04	9E-04	4E-05	9E-04	4E-04	3E-05	5E-04
Chromium	7E-05	9E-05	2E-04	7E-04	2E-04	9E-04	2E-04	2E-04	4E-04
Cobalt	3E-04	5E-06	3E-04	3E-03	4E-05	3E-03	9E-04	3E-05	9E-04
Manganese	5E-05	2E-04	2E-04	5E-04	4E-04	8E-04	2E-04	4E-04	6E-04
Nickel	2E-05	NCOPC	2E-05	1E-04	NCOPC	1E-04	5E-05	NCOPC	5E-05
Thallium	1E-04	NCOPC	1E-04	1E-03	NCOPC	1E-03	4E-04	NCOPC	4E-04
Vanadium	1E-04	NCOPC	1E-04	1E-03	NCOPC	1E-03	4E-04	NCOPC	4E-04
<b>PCBs</b>									
Total PCBs	1E-03	2E-03	3E-03	4E-03	4E-03	7E-03	2E-03	5E-03	7E-03
<b>SVOCs</b>									
Benzo(a)anthracene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
Benzo(a)pyrene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
Benzo(b)fluoranthene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
Benzo(k)fluoranthene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
Chrysene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
Dibenzo(a,h)anthracene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
Indeno(1,2,3-cd)pyrene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
<b>Pesticides</b>									
4,4'-DDT	NCOPC	1E-05	1E-05	NCOPC	2E-05	2E-05	NCOPC	2E-05	2E-05
<b>Totals</b>	4E-03	6E-03	1E-02	2E-02	1E-02	3E-02	1E-02	1E-02	2E-02

Notes:

Values are presented to one significant figure.

NA - Not Applicable.

NC - Not Calculated.

NCOPC - Not a Chemical of Potential Concern in this media.

**Table 6-13**  
**Total Potential Carcinogenic Risks for the Wader Receptors**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Carcinogenic Risks									
	Adult Wader			Child Wader			Sum of Adult and Child Wader	Teen Wader		
	Sediment	Surface Water	Total	Sediment	Surface Water	Total		Sediment	Surface Water	Total
<b>Dioxin</b>										
2,3,7,8-TCDD-TEQ	2E-06	3E-07	2E-06	3E-06	2E-07	4E-06	5E-06	2E-06	2E-07	2E-06
<b>Metals</b>										
Aluminum	NA	NCOPC	NC	NA	NCOPC	NC	NC	NA	NCOPC	NC
Arsenic	2E-07	7E-09	3E-07	4E-07	9E-09	4E-07	7E-07	2E-07	8E-09	2E-07
Chromium	4E-07	2E-07	6E-07	5E-06	6E-07	5E-06	6E-06	1E-06	3E-07	1E-06
Cobalt	NA	NA	NC	NA	NA	NC	NC	NA	NA	NC
Manganese	NA	NA	NC	NA	NA	NC	NC	NA	NA	NC
Nickel	NA	NCOPC	NC	NA	NCOPC	NC	NC	NA	NCOPC	NC
Thallium	NA	NCOPC	NC	NA	NCOPC	NC	NC	NA	NCOPC	NC
Vanadium	NA	NCOPC	NC	NA	NCOPC	NC	NC	NA	NCOPC	NC
<b>PCBs</b>										
Total PCBs	1E-07	1E-08	1E-07	1E-07	7E-09	1E-07	3E-07	9E-08	8E-09	9E-08
<b>SVOCs</b>										
Benzo(a)anthracene	3E-08	NCOPC	3E-08	1E-07	NCOPC	1E-07	2E-07	5E-08	NCOPC	5E-08
Benzo(a)pyrene	3E-07	NCOPC	3E-07	2E-06	NCOPC	2E-06	2E-06	6E-07	NCOPC	6E-07
Benzo(b)fluoranthene	5E-08	NCOPC	5E-08	2E-07	NCOPC	2E-07	3E-07	9E-08	NCOPC	9E-08
Benzo(k)fluoranthene	2E-09	NCOPC	2E-09	9E-09	NCOPC	9E-09	1E-08	4E-09	NCOPC	4E-09
Chrysene	4E-10	NCOPC	4E-10	2E-09	NCOPC	2E-09	3E-09	8E-10	NCOPC	8E-10
Dibenzo(a,h)anthracene	7E-08	NCOPC	7E-08	4E-07	NCOPC	4E-07	4E-07	1E-07	NCOPC	1E-07
Indeno(1,2,3-cd)pyrene	2E-08	NCOPC	2E-08	1E-07	NCOPC	1E-07	1E-07	5E-08	NCOPC	5E-08
<b>Pesticides</b>										
4,4'-DDT	NCOPC	1E-09	1E-09	NCOPC	9E-10	9E-10	2E-09	NCOPC	1E-09	1E-09
<b>Totals</b>	3E-06	5E-07	3E-06	1E-05	8E-07	1E-05	2E-05	4E-06	6E-07	5E-06

Notes:

Values are presented to one significant figure.

NA - Not Applicable.

NC - Not Calculated.

NCOPC - Not a Chemical of Potential Concern in this media.

**Table 6-14**  
**Total Potential Hazard Index for the Wader Receptors**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Hazard Index								
	Adult Wader			Child Wader			Teen Wader		
	Sediment	Surface Water	Total	Sediment	Surface Water	Total	Sediment	Surface Water	Total
<b>Dioxin</b>									
2,3,7,8-TCDD-TEQ	6E-02	1E-02	8E-02	4E-01	3E-02	4E-01	1E-01	2E-02	1E-01
<b>Metals</b>									
Aluminum	5E-04	NCOPC	5E-04	5E-03	NCOPC	5E-03	1E-03	NCOPC	1E-03
Arsenic	2E-03	6E-05	2E-03	1E-02	2E-04	1E-02	3E-03	1E-04	3E-03
Chromium	9E-04	4E-04	1E-03	9E-03	1E-03	1E-02	2E-03	5E-04	2E-03
Cobalt	4E-03	6E-05	4E-03	3E-02	3E-04	3E-02	7E-03	1E-04	7E-03
Manganese	6E-04	8E-04	1E-03	6E-03	2E-03	8E-03	1E-03	1E-03	2E-03
Nickel	2E-04	NCOPC	2E-04	2E-03	NCOPC	2E-03	4E-04	NCOPC	4E-04
Thallium	2E-03	NCOPC	2E-03	2E-02	NCOPC	2E-02	3E-03	NCOPC	3E-03
Vanadium	3E-03	NCOPC	3E-03	3E-02	NCOPC	3E-02	5E-03	NCOPC	5E-03
<b>PCBs</b>									
Total PCBs	1E-02	4E-03	1E-02	4E-02	1E-02	5E-02	1E-02	6E-03	2E-02
<b>SVOCs</b>									
Benzo(a)anthracene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
Benzo(a)pyrene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
Benzo(b)fluoranthene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
Benzo(k)fluoranthene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
Chrysene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
Dibenzo(a,h)anthracene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
Indeno(1,2,3-cd)pyrene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
<b>Pesticides</b>									
4,4'-DDT	NCOPC	2E-05	2E-05	NCOPC	6E-05	6E-05	NCOPC	3E-05	3E-05
<b>Totals</b>	9E-02	2E-02	1E-01	6E-01	4E-02	6E-01	1E-01	2E-02	2E-01

Notes:

Values are presented to one significant figure.

NA - Not Applicable.

NC - Not Calculated.

NCOPC - Not a Chemical of Potential Concern in this media.

**Table 6-15**  
**Total Potential Carcinogenic Risks for the Wader Receptors**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Carcinogenic Risks									
	Adult Wader			Child Wader			Sum of Adult and Child Wader	Teen Wader		
	Sediment	Surface Water	Total	Sediment	Surface Water	Total		Sediment	Surface Water	Total
<b>Dioxin</b>										
2,3,7,8-TCDD-TEQ	7E-08	3E-08	1E-07	8E-08	2E-08	9E-08	2E-07	4E-08	2E-08	5E-08
<b>Metals</b>										
Aluminum	NA	NCOPC	NC	NA	NCOPC	NC	NC	NA	NCOPC	NC
Arsenic	3E-08	6E-10	3E-08	3E-08	4E-10	3E-08	7E-08	2E-08	3E-10	2E-08
Chromium	4E-08	2E-08	6E-08	3E-07	4E-08	4E-07	4E-07	7E-08	2E-08	1E-07
Cobalt	NA	NA	NC	NA	NA	NC	NC	NA	NA	NC
Manganese	NA	NA	NC	NA	NA	NC	NC	NA	NA	NC
Nickel	NA	NCOPC	NC	NA	NCOPC	NC	NC	NA	NCOPC	NC
Thallium	NA	NCOPC	NC	NA	NCOPC	NC	NC	NA	NCOPC	NC
Vanadium	NA	NCOPC	NC	NA	NCOPC	NC	NC	NA	NCOPC	NC
<b>PCBs</b>										
Total PCBs	9E-09	1E-09	1E-08	6E-09	7E-10	6E-09	2E-08	4E-09	6E-10	4E-09
<b>SVOCs</b>										
Benzo(a)anthracene	5E-09	NCOPC	5E-09	2E-08	NCOPC	2E-08	2E-08	6E-09	NCOPC	6E-09
Benzo(a)pyrene	6E-08	NCOPC	6E-08	2E-07	NCOPC	2E-07	2E-07	7E-08	NCOPC	7E-08
Benzo(b)fluoranthene	9E-09	NCOPC	9E-09	3E-08	NCOPC	3E-08	3E-08	1E-08	NCOPC	1E-08
Benzo(k)fluoranthene	3E-10	NCOPC	3E-10	1E-09	NCOPC	1E-09	1E-09	4E-10	NCOPC	4E-10
Chrysene	8E-11	NCOPC	8E-11	2E-10	NCOPC	2E-10	3E-10	9E-11	NCOPC	9E-11
Dibenzo(a,h)anthracene	1E-08	NCOPC	1E-08	4E-08	NCOPC	4E-08	5E-08	1E-08	NCOPC	1E-08
Indeno(1,2,3-cd)pyrene	4E-09	NCOPC	4E-09	1E-08	NCOPC	1E-08	2E-08	5E-09	NCOPC	5E-09
<b>Pesticides</b>										
4,4'-DDT	NCOPC	2E-10	2E-10	NCOPC	9E-11	9E-11	3E-10	NCOPC	8E-11	8E-11
<b>Totals</b>	2E-07	5E-08	3E-07	7E-07	6E-08	8E-07	1E-06	2E-07	4E-08	3E-07

Notes:

Values are presented to one significant figure.

NA - Not Applicable.

NC - Not Calculated.

NCOPC - Not a Chemical of Potential Concern in this media.



**Table 6-16**  
**Total Potential Hazard Index for the Wader Receptors**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Hazard Index								
	Adult Wader			Child Wader			Teen Wader		
	Sediment	Surface Water	Total	Sediment	Surface Water	Total	Sediment	Surface Water	Total
<b>Dioxin</b>									
2,3,7,8-TCDD-TEQ	6E-03	3E-03	8E-03	3E-02	6E-03	4E-02	5E-03	2E-03	7E-03
<b>Metals</b>									
Aluminum	1E-04	NCOPC	1E-04	1E-03	NCOPC	1E-03	1E-04	NCOPC	1E-04
Arsenic	5E-04	9E-06	5E-04	2E-03	3E-05	2E-03	4E-04	9E-06	4E-04
Chromium	2E-04	9E-05	3E-04	2E-03	2E-04	2E-03	2E-04	7E-05	3E-04
Cobalt	8E-04	9E-06	8E-04	7E-03	4E-05	7E-03	9E-04	1E-05	9E-04
Manganese	1E-04	2E-04	3E-04	1E-03	5E-04	2E-03	2E-04	1E-04	3E-04
Nickel	4E-05	NCOPC	4E-05	4E-04	NCOPC	4E-04	5E-05	NCOPC	5E-05
Thallium	3E-04	NCOPC	3E-04	3E-03	NCOPC	3E-03	4E-04	NCOPC	4E-04
Vanadium	3E-04	NCOPC	3E-04	3E-03	NCOPC	3E-03	4E-04	NCOPC	4E-04
<b>PCBs</b>									
Total PCBs	3E-03	1E-03	5E-03	1E-02	4E-03	1E-02	2E-03	1E-03	3E-03
<b>SVOCs</b>									
Benzo(a)anthracene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
Benzo(a)pyrene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
Benzo(b)fluoranthene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
Benzo(k)fluoranthene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
Chrysene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
Dibenzo(a,h)anthracene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
Indeno(1,2,3-cd)pyrene	NA	NCOPC	NC	NA	NCOPC	NC	NA	NCOPC	NC
<b>Pesticides</b>									
4,4'-DDT	NCOPC	7E-06	7E-06	NCOPC	2E-05	2E-05	NCOPC	6E-06	6E-06
<b>Totals</b>	1E-02	4E-03	2E-02	6E-02	1E-02	7E-02	1E-02	3E-03	1E-02

Notes:

Values are presented to one significant figure.

NA - Not Applicable.

NC - Not Calculated.

NCOPC - Not a Chemical of Potential Concern in this media.

**Table 6-17**  
**Total Potential Carcinogenic Risks for the Worker Receptor**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Carcinogenic Risks		
	Adult Worker		
	Sediment	Surface Water	Total
<b>Dioxin</b>			
2,3,7,8-TCDD-TEQ	5E-06	7E-07	5E-06
<b>Metals</b>			
Aluminum	NA	NCOPC	NC
Arsenic	6E-07	2E-08	7E-07
Chromium	1E-06	6E-07	2E-06
Cobalt	NA	NA	NC
Manganese	NA	NA	NC
Nickel	NA	NCOPC	NC
Thallium	NA	NCOPC	NC
Vanadium	NA	NCOPC	NC
<b>PCBs</b>			
Total PCBs	2E-07	2E-08	3E-07
<b>SVOCs</b>			
Benzo(a)anthracene	6E-08	NCOPC	6E-08
Benzo(a)pyrene	7E-07	NCOPC	7E-07
Benzo(b)fluoranthene	1E-07	NCOPC	1E-07
Benzo(k)fluoranthene	4E-09	NCOPC	4E-09
Chrysene	9E-10	NCOPC	9E-10
Dibenzo(a,h)anthracene	2E-07	NCOPC	2E-07
Indeno(1,2,3-cd)pyrene	5E-08	NCOPC	5E-08
<b>Pesticides</b>			
4,4'-DDT	NCOPC	3E-09	3E-09
<b>Totals</b>	<b>8E-06</b>	<b>1E-06</b>	<b>9E-06</b>

Notes:

Values are presented to one significant figure.

NA - Not Applicable.

NC - Not Calculated.

NCOPC - Not a Chemical of Potential Concern in this media.

**Table 6-18**  
**Total Potential Hazard Index for the Worker Receptor**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Hazard Index		
	Adult Worker		
	Sediment	Surface Water	Total
<b>Dioxin</b>			
2,3,7,8-TCDD-TEQ	1E-01	2E-02	2E-01
<b>Metals</b>			
Aluminum	2E-03	NCOPC	2E-03
Arsenic	4E-03	1E-04	4E-03
Chromium	3E-03	1E-03	4E-03
Cobalt	1E-02	9E-05	1E-02
Manganese	2E-03	2E-03	4E-03
Nickel	7E-04	NCOPC	7E-04
Thallium	5E-03	NCOPC	5E-03
Vanadium	8E-03	NCOPC	8E-03
<b>PCBs</b>			
Total PCBs	2E-02	8E-03	2E-02
<b>SVOCs</b>			
Benzo(a)anthracene	NA	NCOPC	NC
Benzo(a)pyrene	NA	NCOPC	NC
Benzo(b)fluoranthene	NA	NCOPC	NC
Benzo(k)fluoranthene	NA	NCOPC	NC
Chrysene	NA	NCOPC	NC
Dibenzo(a,h)anthracene	NA	NCOPC	NC
Indeno(1,2,3-cd)pyrene	NA	NCOPC	NC
<b>Pesticides</b>			
4,4'-DDT	NCOPC	5E-05	5E-05
<b>Totals</b>	2E-01	3E-02	2E-01

Notes:

Values are presented to one significant figure.

NA - Not Applicable.

NC - Not Calculated.

NCOPC - Not a Chemical of Potential Concern in this media.

**Table 6-19**  
**Total Potential Carcinogenic Risks for the Worker Receptor**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Carcinogenic Risks		
	Adult Worker		
	Sediment	Surface Water	Total
<b>Dioxin</b>			
2,3,7,8-TCDD-TEQ	1E-07	4E-08	1E-07
<b>Metals</b>			
Aluminum	NA	NCOPC	NC
Arsenic	4E-08	7E-10	4E-08
Chromium	8E-08	3E-08	1E-07
Cobalt	NA	NA	NC
Manganese	NA	NA	NC
Nickel	NA	NCOPC	NC
Thallium	NA	NCOPC	NC
Vanadium	NA	NCOPC	NC
<b>PCBs</b>			
Total PCBs	9E-09	2E-09	1E-08
<b>SVOCs</b>			
Benzo(a)anthracene	5E-09	NCOPC	5E-09
Benzo(a)pyrene	6E-08	NCOPC	6E-08
Benzo(b)fluoranthene	9E-09	NCOPC	9E-09
Benzo(k)fluoranthene	3E-10	NCOPC	3E-10
Chrysene	9E-11	NCOPC	9E-11
Dibenzo(a,h)anthracene	1E-08	NCOPC	1E-08
Indeno(1,2,3-cd)pyrene	5E-09	NCOPC	5E-09
<b>Pesticides</b>			
4,4'-DDT	NCOPC	2E-10	2E-10
<b>Totals</b>	3E-07	8E-08	4E-07

Notes:

Values are presented to one significant figure.

NA - Not Applicable.

NC - Not Calculated.

NCOPC - Not a Chemical of Potential Concern in this media.

**Table 6-20**  
**Total Potential Hazard Index for the Worker Receptor**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Chemical of Potential Concern	Potential Hazard Index		
	Adult Worker		
	Sediment	Surface Water	Total
<b>Dioxin</b>			
2,3,7,8-TCDD-TEQ	1E-02	5E-03	2E-02
<b>Metals</b>			
Aluminum	3E-04	NCOPC	3E-04
Arsenic	1E-03	2E-05	1E-03
Chromium	6E-04	2E-04	8E-04
Cobalt	2E-03	2E-05	2E-03
Manganese	4E-04	5E-04	9E-04
Nickel	1E-04	NCOPC	1E-04
Thallium	1E-03	NCOPC	1E-03
Vanadium	9E-04	NCOPC	9E-04
<b>PCBs</b>			
Total PCBs	5E-03	3E-03	8E-03
<b>SVOCs</b>			
Benzo(a)anthracene	NA	NCOPC	NC
Benzo(a)pyrene	NA	NCOPC	NC
Benzo(b)fluoranthene	NA	NCOPC	NC
Benzo(k)fluoranthene	NA	NCOPC	NC
Chrysene	NA	NCOPC	NC
Dibenzo(a,h)anthracene	NA	NCOPC	NC
Indeno(1,2,3-cd)pyrene	NA	NCOPC	NC
<b>Pesticides</b>			
4,4'-DDT	NCOPC	1E-05	1E-05
<b>Totals</b>	2E-02	8E-03	3E-02

Notes:

Values are presented to one significant figure.

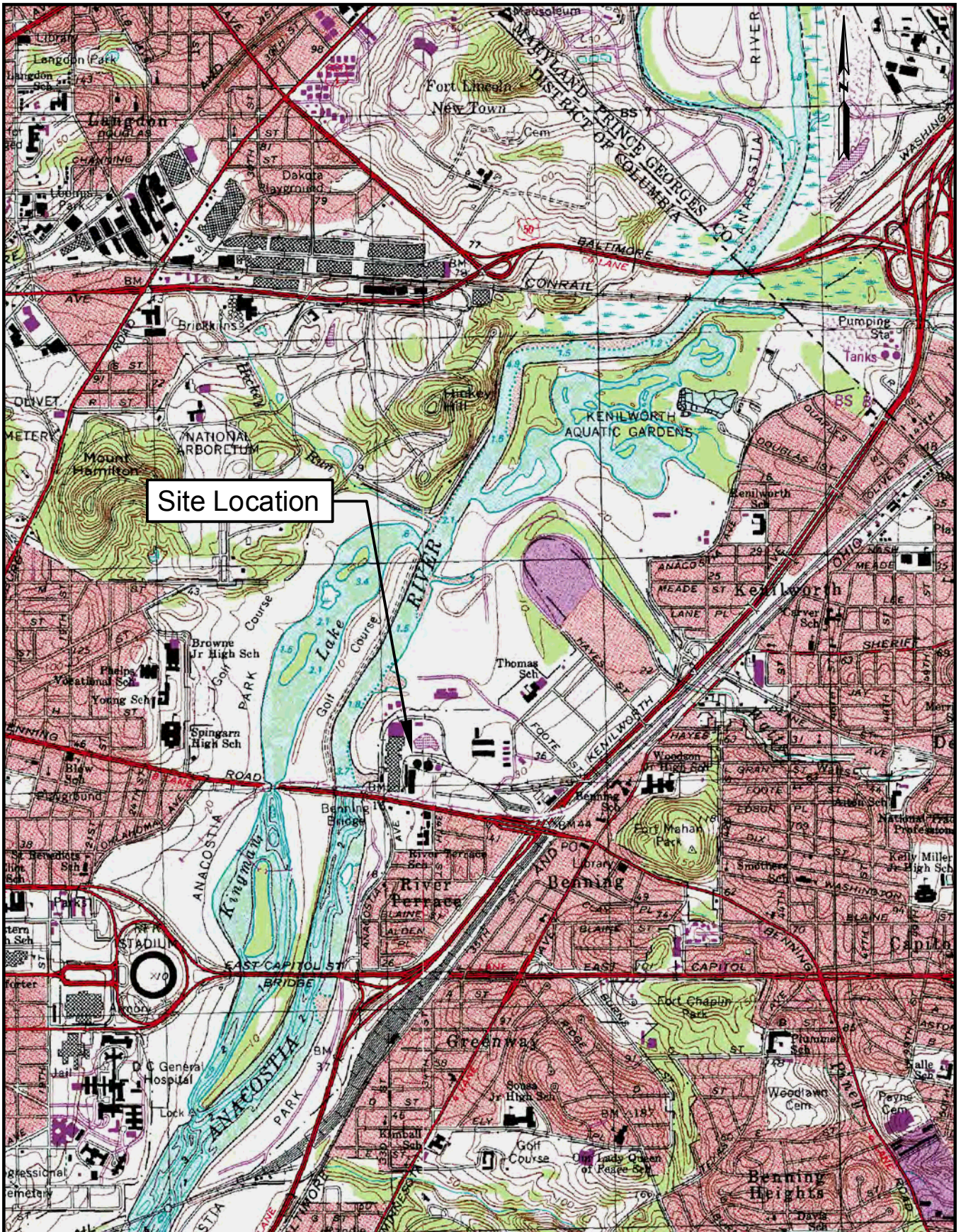
NA - Not Applicable.

NC - Not Calculated.

NCOPC - Not a Chemical of Potential Concern in this media.



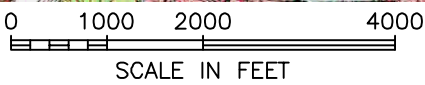
## Figures



Site Location



Source:  
USGS 7.5 Minute Topographic Map  
Washington East Quadrangle



Benning Road Facility RI/FS Project  
3400 Benning Rd., NE  
Washington, DC 20019

Site Location Map

DATE: 07/09/2012

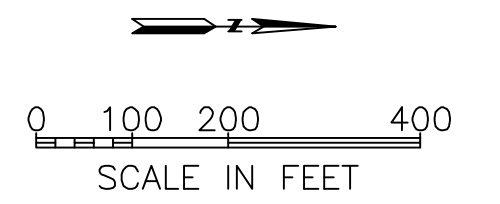
DRAWN BY: LAD

CHECKED BY: RD

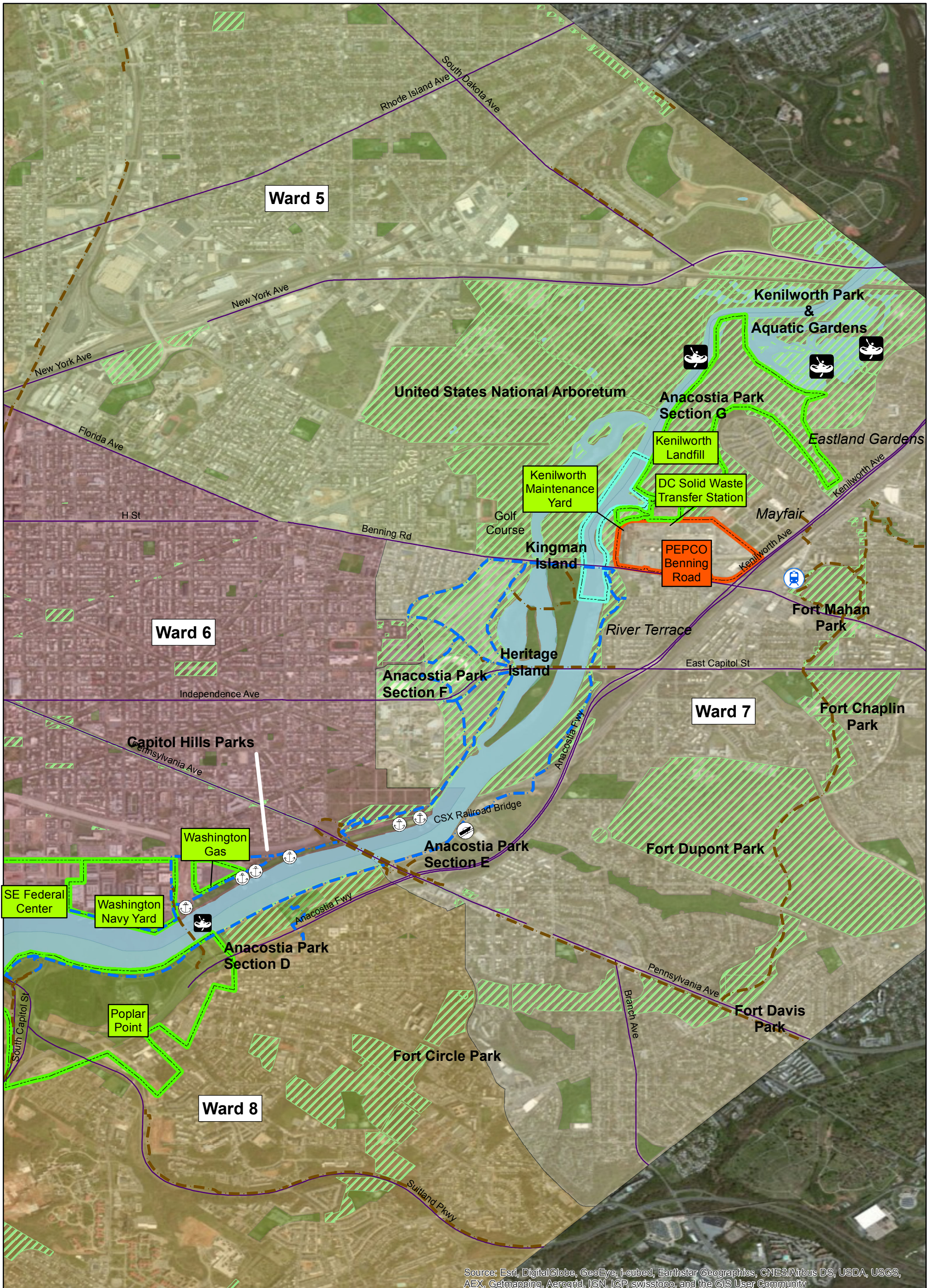
FIGURE 1



- LEGEND:
- PROPOSED INVESTIGATION AREA
  - BENNING ROAD FACILITY PROPERTY BOUNDARY
  - PROPERTY BOUNDARY







Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

**Legend**

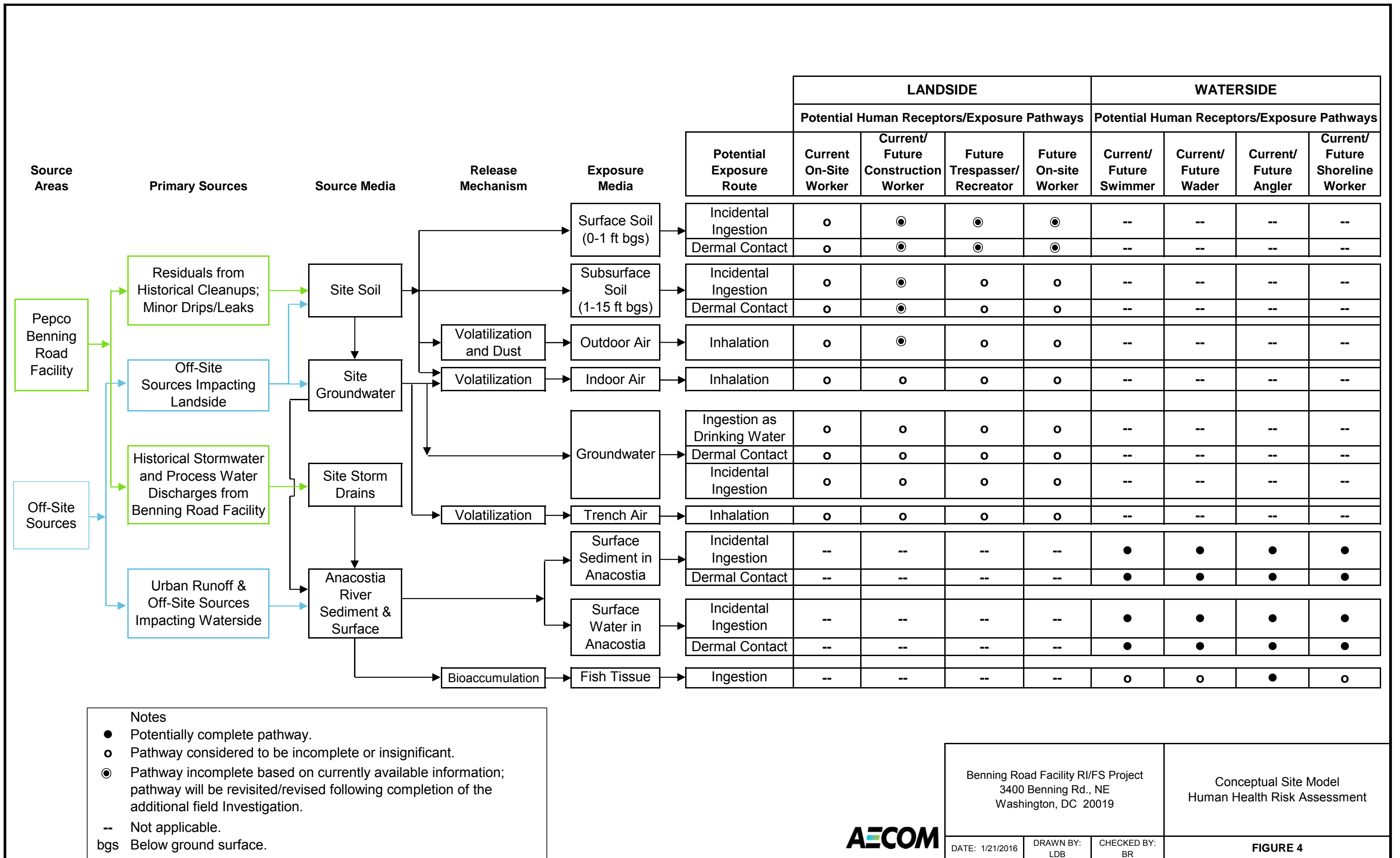
- Property Boundaries
- Waterside Investigation Area
- Benning Road Facility
- Minnesota Ave Metrorail WMATA Station
- National Parks
- DC Parks
- Major Roads
- Trails
- Anacostia Riverwalk Trail
- Marina
- Boat Launch
- Canoe Launch

**Scale:** 0 625 1,250 2,500 3,750 5,000 Feet

**AECOM**

**Benning Road Facility RI/FS Project**  
3400 Benning Rd., NE  
Washington, DC 20019

03/19/2015	CMH		<b>Land Use Along the Anacostia River</b>
			<b>FIGURE 3</b>



Notes

- Potentially complete pathway.
- Pathway considered to be incomplete or insignificant.
- Pathway incomplete based on currently available information; pathway will be revisited/revised following completion of the additional field Investigation.
- Not applicable.
- bgs Below ground surface.

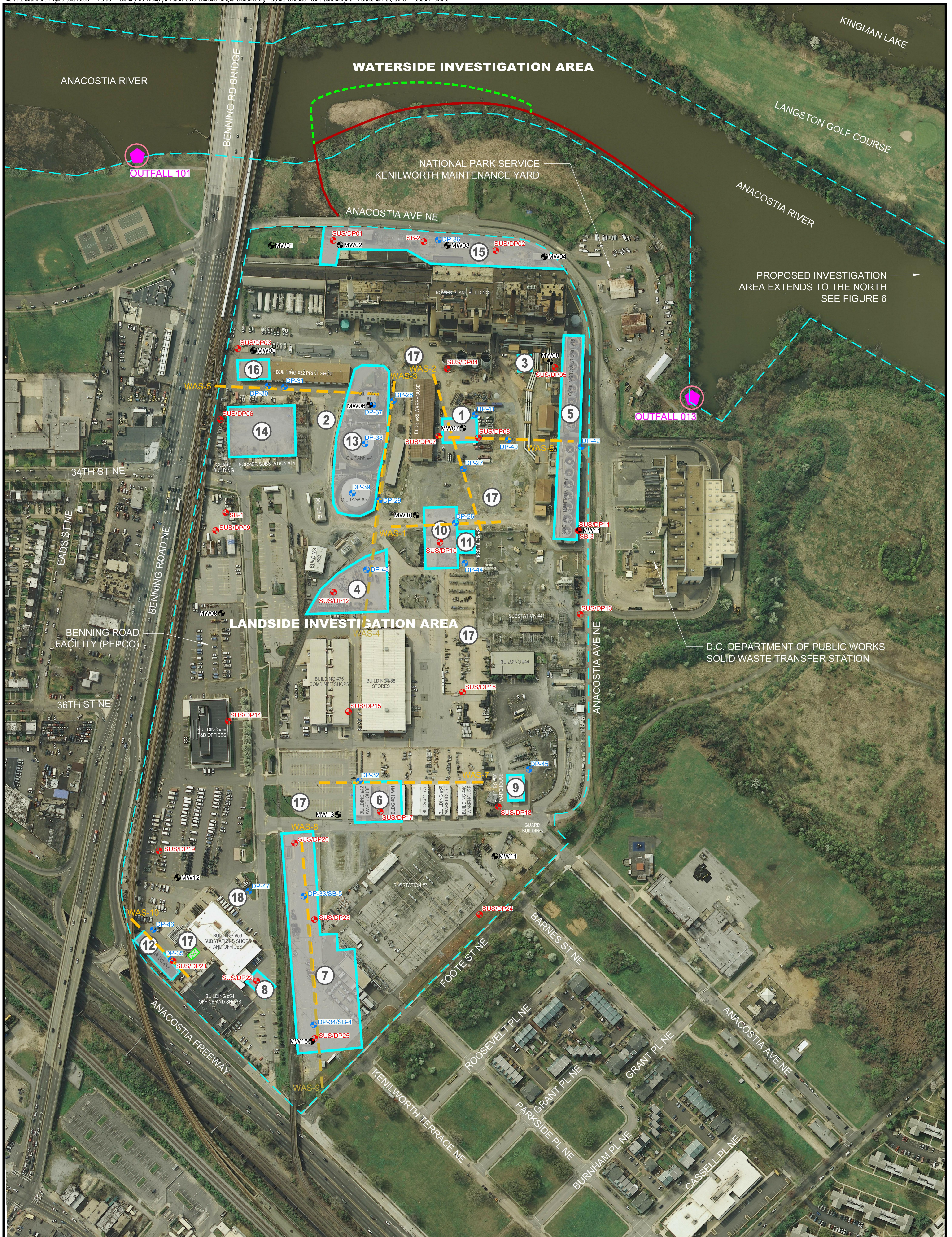
Benning Road Facility RI/FS Project  
3400 Benning Rd., NE  
Washington, DC 20019

Conceptual Site Model  
Human Health Risk Assessment

**AECOM**

DATE: 1/21/2016    DRAWN BY: LDB    CHECKED BY: BR

**FIGURE 4**

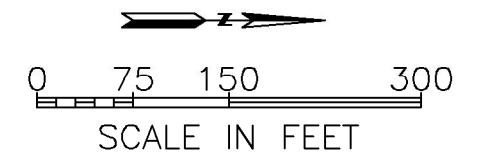


PROPOSED INVESTIGATION AREA EXTENDS TO THE NORTH SEE FIGURE 6

D.C. DEPARTMENT OF PUBLIC WORKS SOLID WASTE TRANSFER STATION

- LEGEND:**
- SURFACE AND SUBSURFACE SOIL SAMPLE LOCATION
  - DIRECT PUSH SAMPLE LOCATION
  - MONITORING WELL LOCATION
  - ELECTRICAL RESISTIVE IMAGING (ERI) TRANSECT
  - 18 TARGET AREA # - CORRESPONDS TO DESCRIPTION IN TABLE 1-3
  - TARGET AREA
  - NPDES OUTFALL TO ANACOSTIA RIVER
  - INVESTIGATION AREA
  - APPROXIMATE FORMER CONSTRUCTED WETLANDS BOUNDARY
  - APPROXIMATE LOCATION OF SEA WALL
  - 15,000 GALLON TRANSFORMER OIL UST

- TARGET AREA KEY:**
- |   |  |
|---|--|
| ① FORMER SLUDGE DEWATERING AREA           | ⑩ RED TAG STORAGE AREA   |
| ② BENNING FUELING ISLAND                  | ⑪ BUILDING #68 (PCB BUILDING)  |
| ③ FORMER 15,000 GALLON No. 2 FUEL OIL UST | ⑫ BUILDING #57   |
| ④ 2003 SALVAGE YARD INVESTIGATION         | ⑬ BULK STORAGE ASTS WITH LOADING RACK, 550 GALLON FUEL OIL UST AND 2,000 GALLON USED OIL UST |
| ⑤ 1995 CLEANUP AREA                       | ⑭ FORMER RAILROAD SWITCHYARD   |
| ⑥ 1991 CLEANUP AREA                       | ⑮ GENERATING STATION TRANSFORMERS  |
| ⑦ 1988 PARKING LOT CLEANUP AREA           | ⑯ PRINT SHOP   |
| ⑧ 1985 EXCAVATION AREA                    | ⑰ STORM DRAIN SYSTEM   |
| ⑨ GREEN TAG STORAGE AREA                  | ⑱ KENILWORTH FUELING ISLAND  |



**Benning Road Facility RI/FS Project**  
 3400 Benning Rd., NE  
 Washington, DC 20019

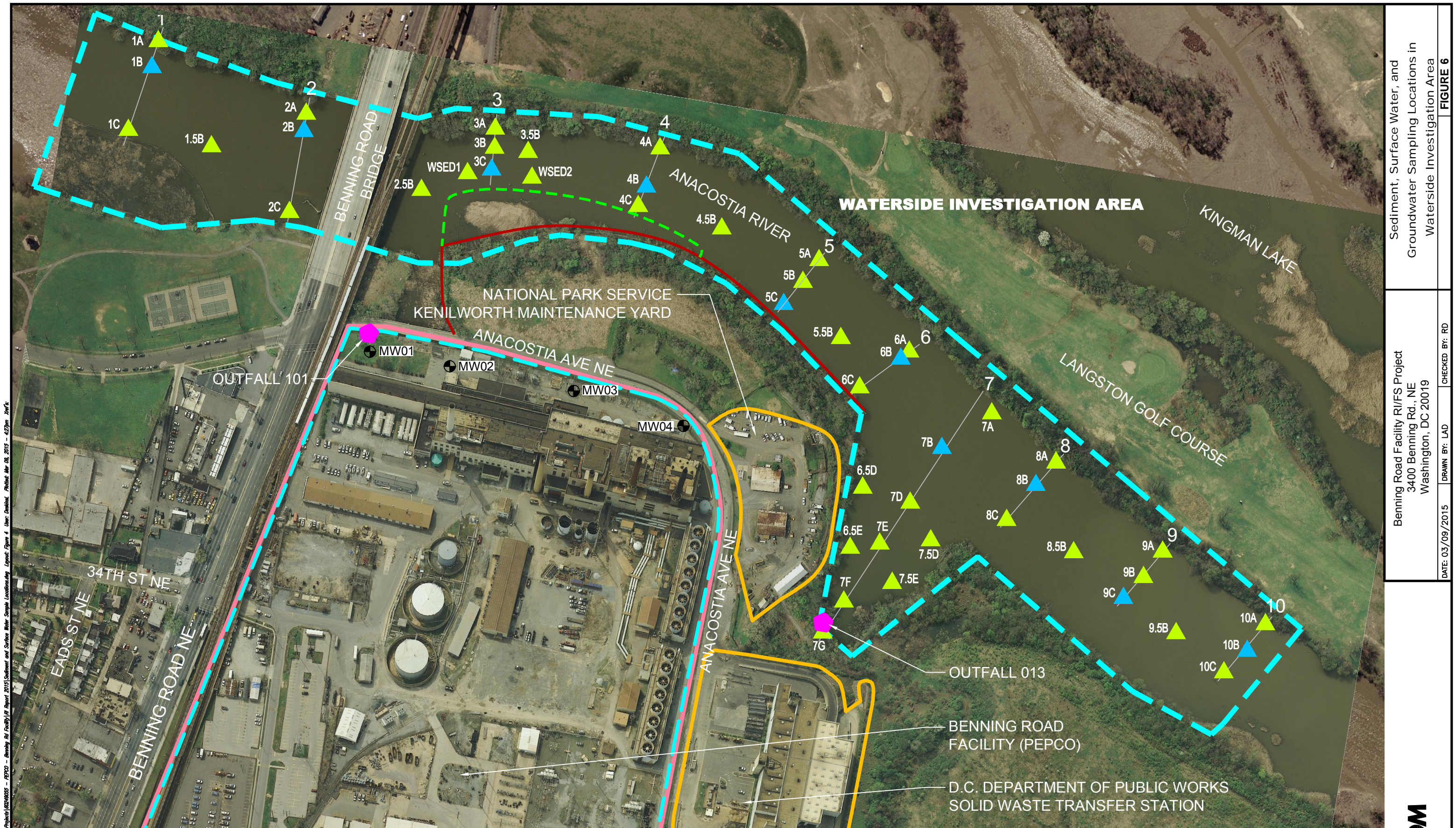
**Phase I, Phase II, Phase III**  
**Landside Sample Locations**

DATE: 03/04/2015

DRAWN BY: LAD

CHECKED BY: RD

**FIGURE 5**



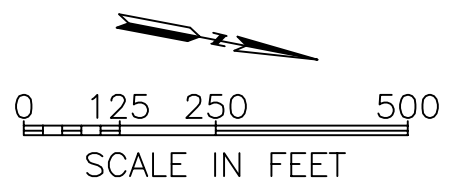
File: \\CS001\770021\Projects\00240000 - PEPCO - Benning Rd Facility\01 Report\2015 Settlement and Surface Water Sample Locations\Layout\Figure 4 - 4.27pm 2015

Sediment, Surface Water, and Groundwater Sampling Locations in Waterside Investigation Area **FIGURE 6**

Benning Road Facility R/IFS Project  
 3400 Benning Rd., NE  
 Washington, DC 20019

DATE: 03/09/2015 DRAWN BY: LAD CHECKED BY: RD

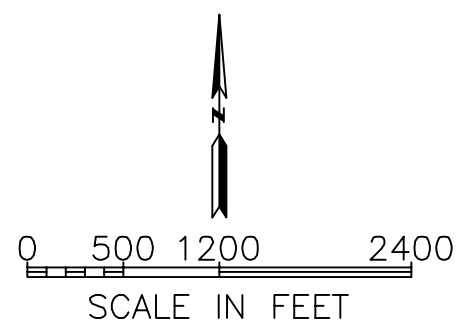
**AECOM**





LEGEND:

▲BACK15 BACKGROUND CO-LOCATED SEDIMENT AND SURFACE WATER SAMPLE LOCATION



Benning Road Facility RI/FS Project  
3400 Benning Rd., NE  
Washington, DC 20019

DATE: 03/03/2015

DRAWN BY: LAD

CHECKED BY: RD

Background **Sediment and Surface Water**  
Sample Locations

FIGURE 7

**Summary of Upstream Maryland Area Fish Tissue Samples**

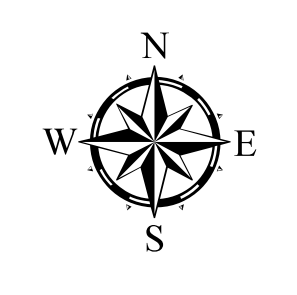
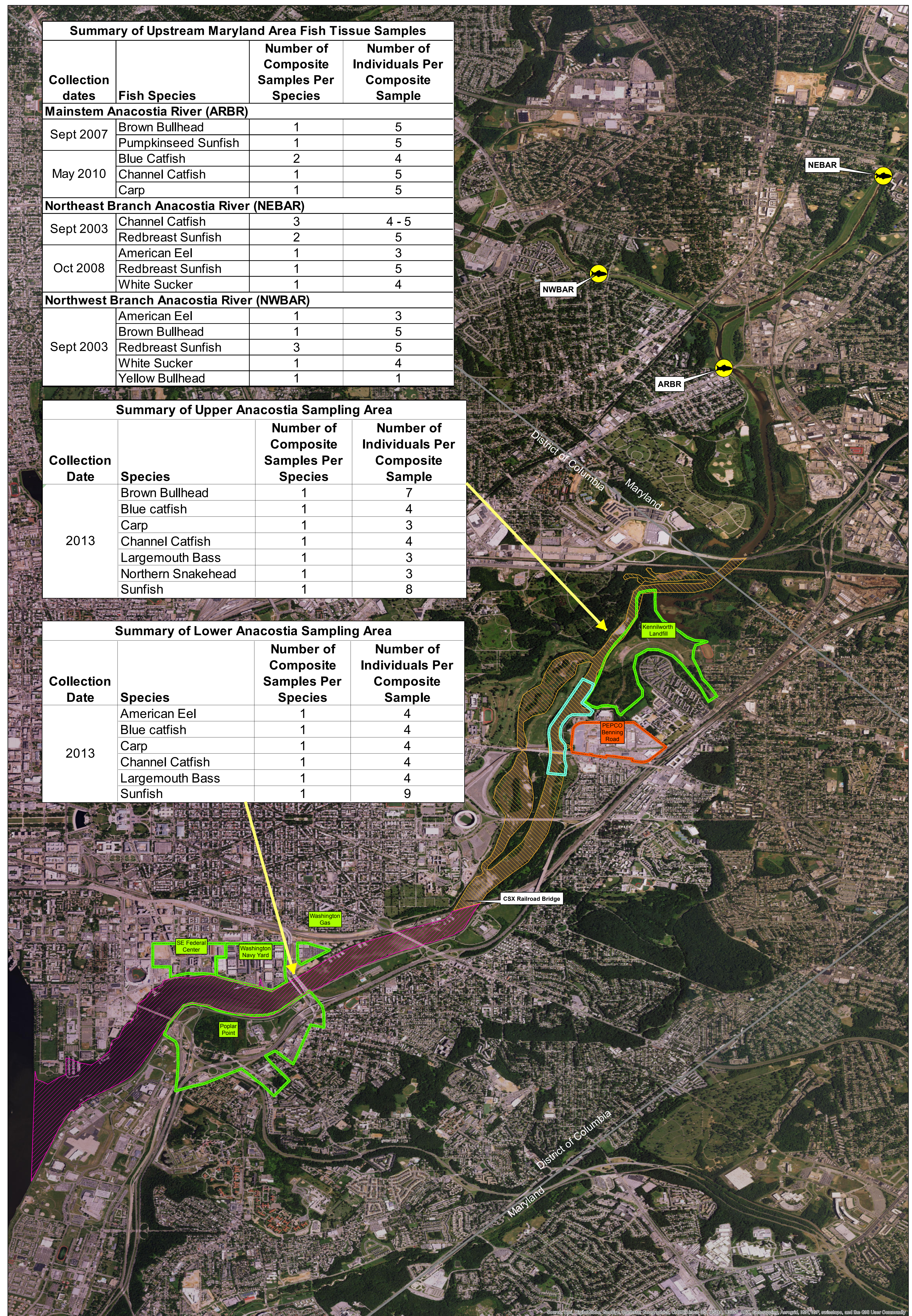
Collection dates	Fish Species	Number of Composite Samples Per Species	Number of Individuals Per Composite Sample
<b>Mainstem Anacostia River (ARBR)</b>			
Sept 2007	Brown Bullhead	1	5
	Pumpkinseed Sunfish	1	5
May 2010	Blue Catfish	2	4
	Channel Catfish	1	5
	Carp	1	5
<b>Northeast Branch Anacostia River (NEBAR)</b>			
Sept 2003	Channel Catfish	3	4 - 5
	Redbreast Sunfish	2	5
Oct 2008	American Eel	1	3
	Redbreast Sunfish	1	5
	White Sucker	1	4
<b>Northwest Branch Anacostia River (NWBAR)</b>			
Sept 2003	American Eel	1	3
	Brown Bullhead	1	5
	Redbreast Sunfish	3	5
	White Sucker	1	4
	Yellow Bullhead	1	1

**Summary of Upper Anacostia Sampling Area**

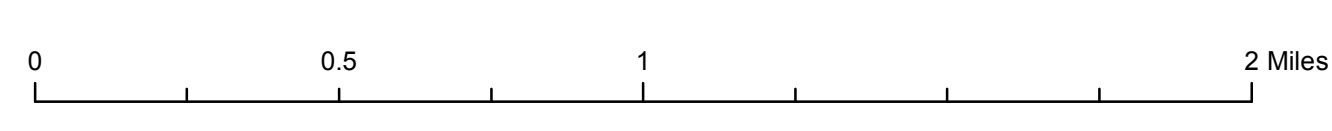
Collection Date	Species	Number of Composite Samples Per Species	Number of Individuals Per Composite Sample
2013	Brown Bullhead	1	7
	Blue catfish	1	4
	Carp	1	3
	Channel Catfish	1	4
	Largemouth Bass	1	3
	Northern Snakehead	1	3
	Sunfish	1	8

**Summary of Lower Anacostia Sampling Area**

Collection Date	Species	Number of Composite Samples Per Species	Number of Individuals Per Composite Sample
2013	American Eel	1	4
	Blue catfish	1	4
	Carp	1	4
	Channel Catfish	1	4
	Largemouth Bass	1	4
	Sunfish	1	9



**Fish Tissue Sampling Locations on the Anacostia River  
Pepeco – Benning Road Facility  
Washington, DC**

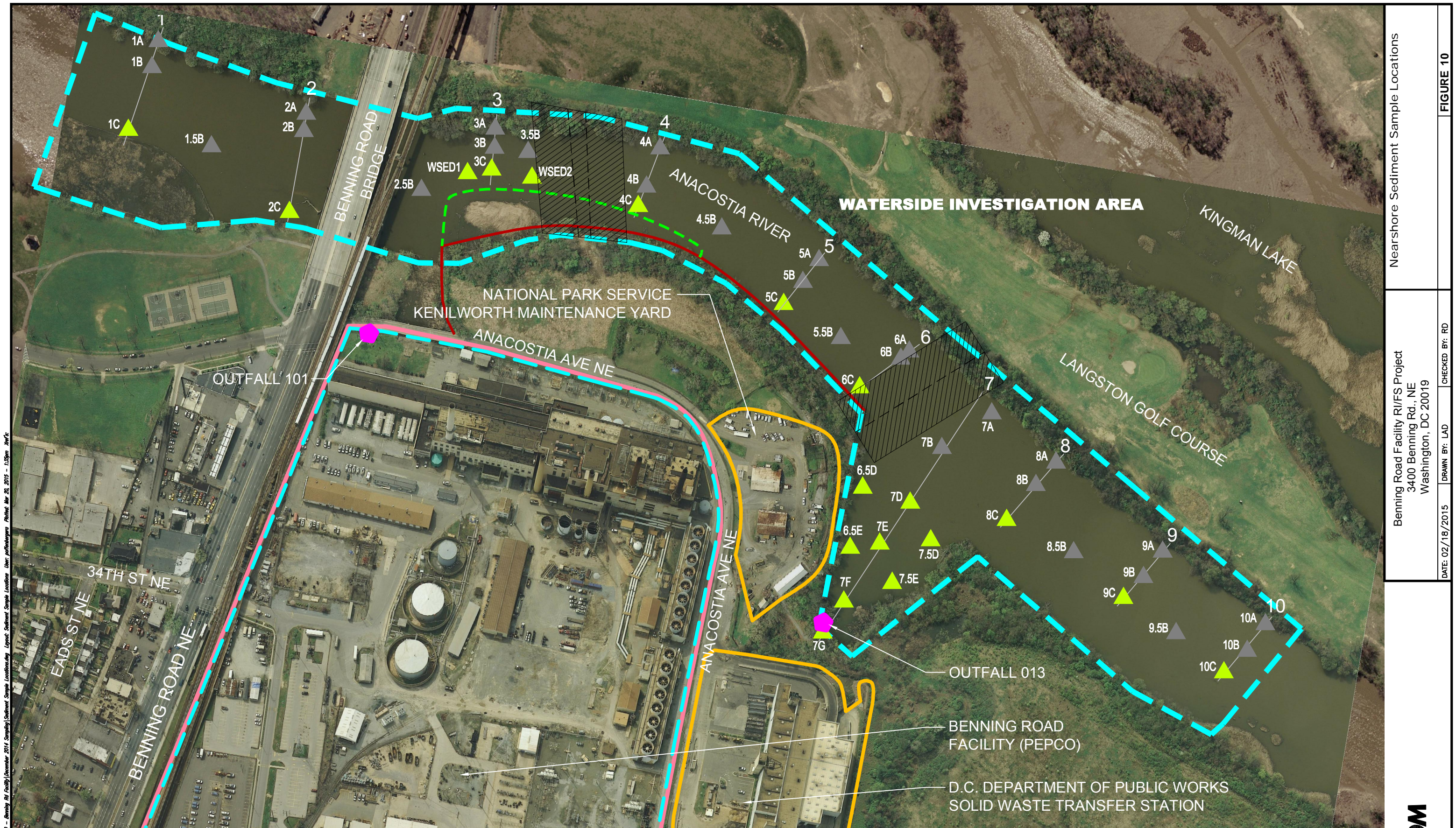


- ARBR—Anacostia River, Mainstem
- NEBAR—Anacostia River, Northeast Branch
- NWBAR—Anacostia River, Northwest Branch
- Property Boundaries
- Waterside Investigation Area
- Benning Road Facility
- Upstream Locations (Maryland Department of Environment)
- Upper Anacostia River Sampling Area (US Fish and Wildlife Service)
- Lower Anacostia River Sampling Area (US Fish and Wildlife Service)



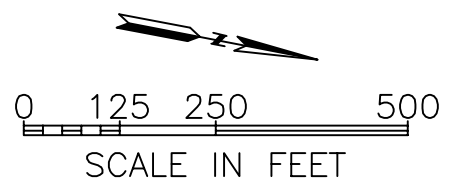
Figure 8





File: C:\Environment\Projects\02260205 - RFD\02 - Benning Rd Facility\December 2014 Sampling\Settlement Sample Locations.dwg User: poffenberg Date: 12/18/15 1:55pm 2x4"

- LEGEND:**
- PROPERTY BOUNDARY
  - BENNING ROAD FACILITY PROPERTY BOUNDARY
  - - - INVESTIGATION AREA
  - - - APPROXIMATE FORMER CONSTRUCTED WETLANDS BOUNDARY
  - ▲ NEARSHORE SEDIMENT SAMPLE LOCATION
  - ▲ SEDIMENT SAMPLE LOCATION
  - - - UTILITY CROSSING LOCATION
  - APPROXIMATE LOCATION OF SEA WALL
  - 100' UTILITY BUFFER ZONE







## **Attachment A**

### **Analytical Data Used in the BHHRA**

## Groundwater Data

Attachment A  
Groundwater Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		loc_group		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area			
		sys_loc_code		MW01		MW01		MW02		MW02		MW03		MW03			
		MW01AN		MW01BN		MW02AN		MW02BN		MW03AN		MW03BN					
		11/5/2014		11/5/2014		11/5/2014		11/5/2014		11/4/2014		11/4/2014					
		N		N		N		N		N		N					
		Phase3-2014		Phase3-2014		Phase3-2014		Phase3-2014		Phase3-2014		Phase3-2014					
		Y		Y		Y		Y		Y		Y					
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	
RA_GW_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	N	ug/L	1.28E-05	JN	1.33E-06	U					1.25E-06	JN	1.34E-06	U
RA_GW_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	N	ug/L	8.06E-07	U	5.41E-07	U					6.84E-07	U	1.57E-06	UJ
RA_GW_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	N	ug/L	1.19E-06	U	8.29E-07	U					8.16E-07	U	1.85E-06	UJ
RA_GW_DioxinFurans	1,2,3,4,7,8-HxCDF	39227-28-6	SW8290A	N	ug/L	1.11E-06	U	6.52E-07	U					8.04E-07	U	1.31E-06	U
RA_GW_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	N	ug/L	5.73E-07	U	4.2E-07	U					5.11E-07	U	8.06E-07	U
RA_GW_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	N	ug/L	1.27E-06	U	7.74E-07	U					8.47E-07	U	1.36E-06	U
RA_GW_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	N	ug/L	5.82E-07	U	4.32E-07	U					4.71E-07	U	7.15E-07	U
RA_GW_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	N	ug/L	1.1E-06	U	6.59E-07	U					7.68E-07	U	1.24E-06	U
RA_GW_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	N	ug/L	8.04E-07	U	5.92E-07	U					6.41E-07	U	9.2E-07	U
RA_GW_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	N	ug/L	1.63E-06	U	1.21E-06	U					6.71E-07	U	1.55E-06	U
RA_GW_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	N	ug/L	1.43E-06	U	9.81E-07	U					6.48E-07	U	1.14E-06	U
RA_GW_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	N	ug/L	5.43E-07	U	3.97E-07	U					4.83E-07	U	7.95E-07	U
RA_GW_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	N	ug/L	1.25E-06	U	8.64E-07	U					5.81E-07	U	1.15E-06	U
RA_GW_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	N	ug/L	2.7E-06	U	1.82E-06	U					2.33E-06	U	2.69E-06	U
RA_GW_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	N	ug/L	1.96E-06	U	1.29E-06	U					1.55E-06	U	2.27E-06	U
RA_GW_DioxinFurans	OCDD	3268-87-9	SW8290A	N	ug/L	0.000148	JN	2.37E-05	J					1.51E-05	U	2.83E-05	J
RA_GW_DioxinFurans	OCDF	39001-02-0	SW8290A	N	ug/L	7.52E-06	U	3.79E-06	U					2.9E-06	UJ	2.75E-06	UJ
RA_GW_DioxinFurans	TCDD TEQ Bird	DFTEQ-Bird	SW8290A	N	ug/L	2.76E-08		2.37E-09						1.25E-09		2.83E-09	
RA_GW_DioxinFurans	TCDD TEQ Fish	DFTEQ-Fish	SW8290A	N	ug/L	2.76E-08		2.37E-09						1.25E-09		2.83E-09	
RA_GW_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	N	ug/L	1.72E-07		7.11E-09						1.25E-08		8.49E-09	
RA_GW_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	N	ug/L	2.43E-05	JN	1.33E-06	U					1.9E-06	JN	1.34E-06	U
RA_GW_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	N	ug/L	9.66E-07	U	6.58E-07	U					7.45E-07	U	1.7E-06	UJ
RA_GW_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	N	ug/L	1.9E-06	U	3.97E-06	JN					7.27E-06	JN	1.3E-06	U
RA_GW_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	N	ug/L	6.1E-07	U	4.49E-07	U					5.18E-07	U	3.59E-06	JN
RA_GW_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	N	ug/L	4.18E-06	JN	1.21E-06	U					6.71E-07	U	1.55E-06	U
RA_GW_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	N	ug/L	1.33E-06	U	9.17E-07	U					6.11E-07	U	1.15E-06	U
RA_GW_DioxinFurans	Total TCDD	41903-57-5	SW8290A	N	ug/L	2.7E-06	U	1.82E-06	U					2.33E-06	U	2.69E-06	U
RA_GW_DioxinFurans	Total TCDF	55722-27-5	SW8290A	N	ug/L	1.96E-06	U	1.29E-06	U					1.55E-06	U	2.27E-06	U
RA_GW_Metals	Aluminum	7429-90-5	SW6020A	D	ug/L	30	U	30	U	30	U	30	U	30	U	30	U
RA_GW_Metals	Aluminum	7429-90-5	SW6020A	T	ug/L	730	J+	260	J+	160	J+	900	J+	210	J+	690	J+
RA_GW_Metals	Antimony	7440-36-0	SW6020A	D	ug/L	2	U	2	U	2	U	2	U	2	U	2	U
RA_GW_Metals	Antimony	7440-36-0	SW6020A	T	ug/L	2	U	2	U	2	U	2	U	2	U	2	U
RA_GW_Metals	Arsenic	7440-38-2	SW6020A	D	ug/L	1	U	1	U	2.3	U	1	U	1.2	U	0.48	J
RA_GW_Metals	Arsenic	7440-38-2	SW6020A	T	ug/L	2.5	J+	2	J+	3.7	J+	1	U	6.1	J+	3.6	J+
RA_GW_Metals	Barium	7440-39-3	SW6020A	D	ug/L	180	U	190	U	16	U	75	U	92	U	150	U
RA_GW_Metals	Barium	7440-39-3	SW6020A	T	ug/L	270	U	240	U	18	U	80	U	98	U	170	U
RA_GW_Metals	Beryllium	7440-41-7	SW6020A	D	ug/L	1	UJ	1	UJ	1	U	0.51	J	1	U	1	U
RA_GW_Metals	Beryllium	7440-41-7	SW6020A	T	ug/L	0.072	J+	0.059	J+	1	U	0.91	J	1	U	0.096	J
RA_GW_Metals	Cadmium	7440-43-9	SW6020A	D	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
RA_GW_Metals	Cadmium	7440-43-9	SW6020A	T	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
RA_GW_Metals	Calcium	7440-70-2	SW6020A	D	ug/L	72000	U	30000	U	50000	U	12000	U	37000	U	20000	U
RA_GW_Metals	Calcium	7440-70-2	SW6020A	T	ug/L	80000	U	34000	U	53000	U	12000	U	39000	U	21000	U
RA_GW_Metals	Chromium	7440-47-3	SW6020A	D	ug/L	2	U	2	U	2	U	2	U	2	U	2	U
RA_GW_Metals	Chromium	7440-47-3	SW6020A	T	ug/L	3.4	U	2	U	2	U	3	U	4.3	U	6.5	U

Attachment A  
Groundwater Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area								
		sys_loc_code	MW01	MW01	MW02	MW02	MW03	MW03	MW03								
		sys_sample_code	MW01AN	MW01BN	MW02AN	MW02BN	MW03AN	MW03BN	MW03BN								
		sample_date	11/5/2014	11/5/2014	11/5/2014	11/5/2014	11/4/2014	11/4/2014	11/4/2014								
		sample_type_code	N	N	N	N	N	N	N								
		task_code	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014								
		validated_yn	Y	Y	Y	Y	Y	Y	Y								
RA_GW_Metals	Cobalt	7440-48-4	SW6020A	D	ug/L	8.5		8.2		0.5	U	26		5.8		1.9	
RA_GW_Metals	Cobalt	7440-48-4	SW6020A	T	ug/L	13		8		0.74	J+	26		6.7		2.8	
RA_GW_Metals	Copper	7440-50-8	SW6020A	D	ug/L	2	U	2	U	2	U	2	U	2	U	2	U
RA_GW_Metals	Copper	7440-50-8	SW6020A	T	ug/L	2	U	2	U	2	U	2	U	3.1	U	4.8	
RA_GW_Metals	Iron	7439-89-6	SW6020A	D	ug/L	50	U	5800	J	50	U	30000	J	50	U	190	J
RA_GW_Metals	Iron	7439-89-6	SW6020A	T	ug/L	44000		37000		820		41000		1900		24000	
RA_GW_Metals	Lead	7439-92-1	SW6020A	D	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
RA_GW_Metals	Lead	7439-92-1	SW6020A	T	ug/L	1.4	J	0.48	J	1	U	1.2	J	0.48	J	1.5	J
RA_GW_Metals	Magnesium	7439-95-4	SW6020A	D	ug/L	11000		13000		5000		4800		4300		6100	
RA_GW_Metals	Magnesium	7439-95-4	SW6020A	T	ug/L	12000		15000		5100		4700		3800		5700	
RA_GW_Metals	Manganese	7439-96-5	SW6020A	D	ug/L	3800		3400		200		1600		3800		530	
RA_GW_Metals	Manganese	7439-96-5	SW6020A	T	ug/L	4100		3700		280		1600		3900		550	
RA_GW_Metals	Mercury	7439-97-6	SW7470A	D	ug/L	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
RA_GW_Metals	Mercury	7439-97-6	SW7470A	T	ug/L	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
RA_GW_Metals	Nickel	7440-02-0	SW6020A	D	ug/L	0.28	J-	4.3	J-	0.41	J	11		3		1.2	
RA_GW_Metals	Nickel	7440-02-0	SW6020A	T	ug/L	2.3		4.7		0.85	J-	12		4		3.9	
RA_GW_Metals	Potassium	7440-09-7	SW6020A	D	ug/L	6200		5000		7400		2400		5900		2700	
RA_GW_Metals	Potassium	7440-09-7	SW6020A	T	ug/L	7100		5800		7900		2600		6600		3000	
RA_GW_Metals	Selenium	7782-49-2	SW6020A	D	ug/L	5	U	5	U	5	U	5	U	5	U	5	U
RA_GW_Metals	Selenium	7782-49-2	SW6020A	T	ug/L	5	U	5	U	5	U	5	U	5	U	5	U
RA_GW_Metals	Silver	7440-22-4	SW6020A	D	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
RA_GW_Metals	Silver	7440-22-4	SW6020A	T	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
RA_GW_Metals	Sodium	7440-23-5	SW6020A	D	ug/L	100000		120000		96000		36000		42000		13000	
RA_GW_Metals	Sodium	7440-23-5	SW6020A	T	ug/L	110000	J	130000	J	100000	J	35000	J	47000	J	15000	J
RA_GW_Metals	Thallium	7440-28-0	SW6020A	D	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
RA_GW_Metals	Thallium	7440-28-0	SW6020A	T	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
RA_GW_Metals	Vanadium	7440-62-2	SW6020A	D	ug/L	4.7	J+	3.2	J	6.5	J+	3.5	J+	4.5	J+	2.5	J+
RA_GW_Metals	Vanadium	7440-62-2	SW6020A	T	ug/L	9.8	J+	20	J+	3.1	J	12	J+	1	U	3	J+
RA_GW_Metals	Zinc	7440-66-6	SW6020A	D	ug/L	5	U	5.4	U	5	U	39		5	U	7.5	U
RA_GW_Metals	Zinc	7440-66-6	SW6020A	T	ug/L	6.1	U	6.4	U	5	U	37		5	U	9.9	U
RA_GW_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	N	ug/L	0.0012	U	0.0013	U	0.0013	U	0.0012	U	0.0012	U	0.0013	U
RA_GW_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	N	ug/L	0.0012	U	0.0013	U	0.0013	U	0.0012	U	0.0012	U	0.0013	U
RA_GW_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	N	ug/L	0.0012	U	0.0013	U	0.0013	U	0.0012	U	0.0012	U	0.0013	U
RA_GW_PestPCBs	Aldrin	309-00-2	SW8081B LL	N	ug/L	0.0012	U	0.0013	U	0.0013	U	0.0012	U	0.0012	U	0.0013	U
RA_GW_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	N	ug/L	0.0012	U	0.0013	U	0.0013	U	0.0012	U	0.0012	U	0.0013	U
RA_GW_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	N	ug/L	0.0095	U	0.0096	U	0.0096	U	0.0095	U	0.0095	UJ	0.0097	UJ
RA_GW_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	N	ug/L	0.0095	U	0.0096	U	0.0096	U	0.0095	U	0.0095	UJ	0.0097	UJ
RA_GW_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	N	ug/L	0.0095	U	0.0096	U	0.0096	U	0.0095	U	0.0095	UJ	0.0097	UJ
RA_GW_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	N	ug/L	0.0095	U	0.0096	U	0.0096	U	0.0095	U	0.0095	UJ	0.0097	UJ
RA_GW_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	N	ug/L	0.0095	U	0.0096	U	0.0096	U	0.0095	U	0.0095	UJ	0.0097	UJ
RA_GW_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	N	ug/L	0.0095	U	0.0096	U	0.0096	U	0.0095	U	0.0095	UJ	0.0097	UJ
RA_GW_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	N	ug/L	0.0095	U	0.0096	U	0.0096	U	0.0095	U	0.0095	UJ	0.0097	UJ
RA_GW_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	N	ug/L	0.0095	U	0.0096	U	0.0096	U	0.0095	U	0.0095	UJ	0.0097	UJ
RA_GW_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	N	ug/L	0.0095	U	0.0096	U	0.0096	U	0.0095	U	0.0095	UJ	0.0097	UJ
RA_GW_PestPCBs	beta-BHC	319-85-7	SW8081B LL	N	ug/L	0.0012	U	0.0013	U	0.0013	U	0.0011	J	0.00095	J	0.0013	U
RA_GW_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	N	ug/L	0.0012	U	0.0013	U	0.0013	U	0.0012	U	0.0012	U	0.0013	U

Attachment A  
Groundwater Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	MW01	MW01	MW02	MW02	MW03	MW03	MW03
				sys_sample_code	MW01AN	MW01BN	MW02AN	MW02BN	MW03AN	MW03BN	MW03BN
				sample_date	11/5/2014	11/5/2014	11/5/2014	11/5/2014	11/4/2014	11/4/2014	11/4/2014
				sample_type_code	N	N	N	N	N	N	N
				task_code	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014
				validated_yn	Y	Y	Y	Y	Y	Y	Y
RA_GW_PestPCBs	Decachlorobiphenyl (PCB-126)	2051-24-3	E1668C	N	ug/L						
RA_GW_PestPCBs	delta-BHC	319-86-8	SW8081B LL	N	ug/L	0.0012	U	0.0013	U	0.0004	J
RA_GW_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	N	ug/L						
RA_GW_PestPCBs	Dieldrin	60-57-1	SW8081B LL	N	ug/L	0.0012	U	0.0013	U	0.0013	U
RA_GW_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	N	ug/L	0.0012	U	0.0013	U	0.0013	U
RA_GW_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	N	ug/L	0.0012	U	0.0013	U	0.0013	U
RA_GW_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	N	ug/L	0.0012	U	0.0013	U	0.0013	U
RA_GW_PestPCBs	Endrin	72-20-8	SW8081B LL	N	ug/L	0.0012	U	0.0013	U	0.0013	U
RA_GW_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	N	ug/L	0.0012	U	0.0013	U	0.0013	U
RA_GW_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	N	ug/L	0.0012	U	0.0013	U	0.0013	U
RA_GW_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	N	ug/L	0.0012	U	0.0013	U	0.0013	U
RA_GW_PestPCBs	Heptachlor	76-44-8	SW8081B LL	N	ug/L	0.0012	U	0.0013	U	0.0013	U
RA_GW_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	N	ug/L	0.0012	U	0.0013	U	0.0013	U
RA_GW_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	N	ug/L						
RA_GW_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	N	ug/L						
RA_GW_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	N	ug/L	0.0024	U	0.0024	U	0.0024	U
RA_GW_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	N	ug/L						
RA_GW_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	N	ug/L						
RA_GW_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	N	ug/L						
RA_GW_PestPCBs	PCB TEQ Bird	PCBTEQ-Bird	E1668C	N	ug/L						
RA_GW_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	N	ug/L						
RA_GW_PestPCBs	PCB, TOTAL	PCB	E1668C	N	ug/L						
RA_GW_PestPCBs	PCB, Total Aroclors (AE)	TOT-PCB-ARO-C	SW8082A LL	N	ug/L	0.0095	U	0.0096	U	0.0096	U
RA_GW_PestPCBs	PCB, Total Aroclors (La)	TOT-PCB-ARO	SW8082A LL	N	ug/L	0.0095	U	0.0096	U	0.0096	U
RA_GW_PestPCBs	PCB-1	2051-60-7	E1668C	N	ug/L						
RA_GW_PestPCBs	PCB-10	33146-45-1	E1668C	N	ug/L						
RA_GW_PestPCBs	PCB-100	39485-83-1	E1668C	N	ug/L						
RA_GW_PestPCBs	PCB-101	37680-73-2	E1668C	N	ug/L						
RA_GW_PestPCBs	PCB-102	68194-06-9	E1668C	N	ug/L						
RA_GW_PestPCBs	PCB-103	60145-21-3	E1668C	N	ug/L						
RA_GW_PestPCBs	PCB-104	56558-16-8	E1668C	N	ug/L						
RA_GW_PestPCBs	PCB-105	32598-14-4	E1668C	N	ug/L						
RA_GW_PestPCBs	PCB-106	70424-69-0	E1668C	N	ug/L						
RA_GW_PestPCBs	PCB-107	70424-68-9	E1668C	N	ug/L						
RA_GW_PestPCBs	PCB-108	70362-41-3	E1668C	N	ug/L						
RA_GW_PestPCBs	PCB-109	74472-35-8	E1668C	N	ug/L						
RA_GW_PestPCBs	PCB-11	2050-67-1	E1668C	N	ug/L						
RA_GW_PestPCBs	PCB-110	38380-03-9	E1668C	N	ug/L						
RA_GW_PestPCBs	PCB-111	39635-32-0	E1668C	N	ug/L						
RA_GW_PestPCBs	PCB-112	74472-36-9	E1668C	N	ug/L						
RA_GW_PestPCBs	PCB-113	68194-10-5	E1668C	N	ug/L						
RA_GW_PestPCBs	PCB-114	74472-37-0	E1668C	N	ug/L						
RA_GW_PestPCBs	PCB-115	74472-38-1	E1668C	N	ug/L						
RA_GW_PestPCBs	PCB-116	18259-05-7	E1668C	N	ug/L						
RA_GW_PestPCBs	PCB-117	68194-11-6	E1668C	N	ug/L						
RA_GW_PestPCBs	PCB-118	31508-00-6	E1668C	N	ug/L						

	loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
	sys_loc_code	MW01	MW01	MW02	MW02	MW03	MW03
	sys_sample_code	MW01AN	MW01BN	MW02AN	MW02BN	MW03AN	MW03BN
	sample_date	11/5/2014	11/5/2014	11/5/2014	11/5/2014	11/4/2014	11/4/2014
	sample_type_code	N	N	N	N	N	N
	task_code	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014
	validated_yn	Y	Y	Y	Y	Y	Y
RA_GW_PestPCBs	PCB-119	56558-17-9	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-12	2974-92-7	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-120	68194-12-7	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-121	56558-18-0	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-122	76842-07-4	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-123	65510-44-3	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-124	70424-70-3	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-125	74472-39-2	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-126	57465-28-8	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-127	39635-33-1	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-128	38380-07-3	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-129	55215-18-4	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-13	2974-90-5	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-130	52663-66-8	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-131	61798-70-7	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-132	38380-05-1	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-133	35694-04-3	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-134	52704-70-8	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-135	52744-13-5	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-136	38411-22-2	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-137	35694-06-5	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-138	35065-28-2	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-139	56030-56-9	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-14	34883-41-5	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-140	59291-64-4	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-141	52712-04-6	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-142	41411-61-4	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-143	68194-15-0	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-144	68194-14-9	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-145	74472-40-5	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-146	51908-16-8	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-147	68194-13-8	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-148	74472-41-6	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-149	38380-04-0	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-15	2050-68-2	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-150	68194-08-1	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-151	52663-63-5	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-152	68194-09-2	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-153	35065-27-1	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-154	60145-22-4	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-155	33979-03-2	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-156	38380-08-4	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-157	69782-90-7	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-158	74472-42-7	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-159	39635-35-3	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-16	38444-78-9	E1668C	N	ug/L		

	loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
	sys_loc_code	MW01	MW01	MW02	MW02	MW03	MW03
	sys_sample_code	MW01AN	MW01BN	MW02AN	MW02BN	MW03AN	MW03BN
	sample_date	11/5/2014	11/5/2014	11/5/2014	11/5/2014	11/4/2014	11/4/2014
	sample_type_code	N	N	N	N	N	N
	task_code	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014
	validated_yn	Y	Y	Y	Y	Y	Y
RA_GW_PestPCBs	PCB-160	41411-62-5	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-161	74472-43-8	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-162	39635-34-2	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-163	74472-44-9	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-164	74472-45-0	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-165	74472-46-1	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-166	41411-63-6	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-167	52663-72-6	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-168	59291-65-5	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-169	32774-16-6	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-17	37680-66-3	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-170	35065-30-6	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-171	52663-71-5	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-172	52663-74-8	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-173	68194-16-1	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-174	38411-25-5	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-175	40186-70-7	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-176	52663-65-7	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-177	52663-70-4	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-178	52663-67-9	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-179	52663-64-6	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-18	37680-65-2	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-180	35065-29-3	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-181	74472-47-2	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-182	60145-23-5	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-183	52663-69-1	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-184	74472-48-3	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-185	52712-05-7	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-186	74472-49-4	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-187	52663-68-0	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-188	74487-85-7	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-189	39635-31-9	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-19	38444-73-4	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-190	41411-64-7	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-191	74472-50-7	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-192	74472-51-8	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-193	69782-91-8	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-194	35694-08-7	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-195	52663-78-2	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-196	42740-50-1	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-197	33091-17-7	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-198	68194-17-2	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-199	52663-75-9	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-2	2051-61-8	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-20	38444-84-7	E1668C	N	ug/L		
RA_GW_PestPCBs	PCB-200	52663-73-7	E1668C	N	ug/L		

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	MW01	MW01	MW02	MW02	MW03	MW03
				sys_sample_code	MW01AN	MW01BN	MW02AN	MW02BN	MW03AN	MW03BN
				sample_date	11/5/2014	11/5/2014	11/5/2014	11/5/2014	11/4/2014	11/4/2014
				sample_type_code	N	N	N	N	N	N
				task_code	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014
				validated_yn	Y	Y	Y	Y	Y	Y
RA_GW_PestPCBs	PCB-201	40186-71-8	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-202	2136-99-4	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-203	52663-76-0	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-204	74472-52-9	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-205	74472-53-0	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-206	40186-72-9	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-207	52663-79-3	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-208	52663-77-1	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-21	55702-46-0	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-22	38444-85-8	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-23	55720-44-0	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-24	55702-45-9	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-25	55712-37-3	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-26	38444-81-4	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-27	38444-76-7	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-28	7012-37-5	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-29	15862-07-4	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-3	2051-62-9	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-30	35693-92-6	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-31	16606-02-3	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-32	38444-77-8	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-33	38444-86-9	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-34	37680-68-5	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-35	37680-69-6	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-36	38444-87-0	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-37	38444-90-5	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-38	53555-66-1	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-39	38444-88-1	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-4	13029-08-8	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-40	38444-93-8	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-41	52663-59-9	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-42	36559-22-5	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-43	70362-46-8	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-44	41464-39-5	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-45	70362-45-7	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-46	41464-47-5	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-47	2437-79-8	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-48	70362-47-9	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-49	41464-40-8	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-5	16605-91-7	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-50	62796-65-0	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-51	68194-04-7	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-52	35693-99-3	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-53	41464-41-9	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-54	15968-05-5	E1668C	N	ug/L					
RA_GW_PestPCBs	PCB-55	74338-24-2	E1668C	N	ug/L					



			loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
			sys_loc_code	MW01	MW01	MW02	MW02	MW03	MW03
			sys_sample_code	MW01AN	MW01BN	MW02AN	MW02BN	MW03AN	MW03BN
			sample_date	11/5/2014	11/5/2014	11/5/2014	11/5/2014	11/4/2014	11/4/2014
			sample_type_code	N	N	N	N	N	N
			task_code	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014
			validated_yn	Y	Y	Y	Y	Y	Y
RA_GW_PestPCBs	PCB-56	41464-43-1	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-57	70424-67-8	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-58	41464-49-7	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-59	74472-33-6	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-6	25569-80-6	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-60	33025-41-1	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-61	33284-53-6	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-62	54230-22-7	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-63	74472-34-7	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-64	52663-58-8	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-65	33284-54-7	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-66	32598-10-0	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-67	73575-53-8	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-68	73575-52-7	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-69	60233-24-1	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-7	33284-50-3	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-70	32598-11-1	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-71	41464-46-4	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-72	41464-42-0	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-73	74338-23-1	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-74	32690-93-0	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-75	32598-12-2	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-76	70362-48-0	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-77	32598-13-3	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-78	70362-49-1	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-79	41464-48-6	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-8	34883-43-7	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-80	33284-52-5	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-81	70362-50-4	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-82	52663-62-4	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-83	60145-20-2	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-84	52663-60-2	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-85	65510-45-4	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-86	55312-69-1	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-87	38380-02-8	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-88	55215-17-3	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-89	73575-57-2	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-9	34883-39-1	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-90	68194-07-0	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-91	68194-05-8	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-92	52663-61-3	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-93	73575-56-1	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-94	73575-55-0	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-95	38379-99-6	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-96	73575-54-9	E1668C	N	ug/L				
RA_GW_PestPCBs	PCB-97	41464-51-1	E1668C	N	ug/L				

						loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area		
						sys_loc_code	MW01	MW01	MW02	MW02	MW03	MW03	MW03		
						sys_sample_code	MW01AN	MW01BN	MW02AN	MW02BN	MW03AN	MW03BN	MW03BN		
						sample_date	11/5/2014	11/5/2014	11/5/2014	11/5/2014	11/4/2014	11/4/2014	11/4/2014		
						sample_type_code	N	N	N	N	N	N	N		
						task_code	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014		
						validated_yn	Y	Y	Y	Y	Y	Y	Y		
RA_GW_PestPCBs	PCB-98	60233-25-2	E1668C	N	ug/L										
RA_GW_PestPCBs	PCB-99	38380-01-7	E1668C	N	ug/L										
RA_GW_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	N	ug/L										
RA_GW_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	N	ug/L										
RA_GW_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	N	ug/L	0.095	U	0.096	U	0.096	U	0.095	U	0.097	U
RA_GW_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	N	ug/L	0.0012	U	0.0013	U	0.0013	U	0.0012	U	0.0013	U
RA_GW_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	N	ug/L										
RA_GW_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	N	ug/L	1	U	1	U	0.27	J	1	U	1	U
RA_GW_SVOCs	1,2,4,5-Tetrachloroben	95-94-3	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U
RA_GW_SVOCs	2,2'-oxybis(1-Chloroprop	108-60-1	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U
RA_GW_SVOCs	2,3,4,6-Tetrachlorophe	58-90-2	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U
RA_GW_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U
RA_GW_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U
RA_GW_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U
RA_GW_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U
RA_GW_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	N	ug/L	5	U	5	U	4.8	U	5	U	5.2	U
RA_GW_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U
RA_GW_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U
RA_GW_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	N	ug/L	0.2	U	0.2	U	0.19	U	0.2	U	0.21	U
RA_GW_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U
RA_GW_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	N	ug/L	0.029	J	0.02	J	1.2		0.2	U	0.21	U
RA_GW_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U
RA_GW_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	N	ug/L	5	U	5	U	4.8	U	5	U	5.2	U
RA_GW_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U
RA_GW_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U
RA_GW_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	N	ug/L	5	U	5	U	4.8	U	5	U	5.2	U
RA_GW_SVOCs	4,6-Dinitro-2-methylph	534-52-1	SW8270D LL	N	ug/L	5	U	5	U	4.8	U	5	U	5.2	U
RA_GW_SVOCs	4-Bromophenyl-phenyl	101-55-3	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U
RA_GW_SVOCs	4-Chloro-3-methylphen	59-50-7	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U
RA_GW_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U
RA_GW_SVOCs	4-Chlorophenyl-phenyl	7005-72-3	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U
RA_GW_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	N	ug/L	0.33	J	1	U	0.96	U	1	U	1	U
RA_GW_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	N	ug/L	5	U	5	U	4.8	U	5	U	5.2	U
RA_GW_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	N	ug/L	5	U	5	U	4.8	U	5	U	5.2	U
RA_GW_SVOCs	Acenaphthene	83-32-9	SW8270D LL	N	ug/L	0.2	U	0.2	U	1.3		0.2	U	0.21	U
RA_GW_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	N	ug/L	0.2	U	0.2	U	0.086	J	0.2	U	0.21	U
RA_GW_SVOCs	Acetophenone	98-86-2	SW8270D LL	N	ug/L	2	U	2	U	1.9	U	2	U	2.1	U
RA_GW_SVOCs	Anthracene	120-12-7	SW8270D LL	N	ug/L	0.2	U	0.2	U	0.044	J	0.2	U	0.21	U
RA_GW_SVOCs	Atrazine	1912-24-9	SW8270D LL	N	ug/L	2	U	2	U	1.9	U	2	U	2.1	U
RA_GW_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	N	ug/L	2	U	2	U	1.9	U	2	U	2.1	U
RA_GW_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	N	ug/L	0.2	U	0.2	U	0.19	U	0.2	U	0.21	U
RA_GW_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	N	ug/L	0.2	U	0.2	U	0.19	U	0.2	U	0.21	U
RA_GW_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	N	ug/L	0.2	U	0.2	U	0.19	U	0.2	U	0.21	U
RA_GW_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	N	ug/L	0.2	U	0.2	U	0.19	U	0.2	U	0.21	U
RA_GW_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	N	ug/L	0.2	U	0.2	U	0.19	U	0.2	U	0.21	U
RA_GW_SVOCs	bis-(2-chloroethoxy)me	111-91-1	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U

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	loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area									
	sys_loc_code	MW01	MW01	MW02	MW02	MW03	MW03	MW03									
	sys_sample_code	MW01AN	MW01BN	MW02AN	MW02BN	MW03AN	MW03BN	MW03BN									
	sample_date	11/5/2014	11/5/2014	11/5/2014	11/5/2014	11/4/2014	11/4/2014	11/4/2014									
	sample_type_code	N	N	N	N	N	N	N									
	task_code	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014									
	validated_yn	Y	Y	Y	Y	Y	Y	Y									
RA_GW_SVOCs	bis-(2-Chloroethyl)ethe	111-44-4	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U	1	U
RA_GW_SVOCs	bis-(2-Ethylhexyl)phtha	117-81-7	SW8270D LL	N	ug/L	2	U	2	U	1.9	U	2	U	2.1	U	2	U
RA_GW_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U	1	U
RA_GW_SVOCs	Caprolactam	105-60-2	SW8270D LL	N	ug/L	5	U	5	U	4.8	U	5	U	5.2	U	5	U
RA_GW_SVOCs	Carbazole	86-74-8	SW8270D LL	N	ug/L	1	U	1	U	0.27	J	1	U	1	U	1	U
RA_GW_SVOCs	Chrysene	218-01-9	SW8270D LL	N	ug/L	0.2	U	0.2	U	0.19	U	0.2	U	0.21	U	0.2	U
RA_GW_SVOCs	Dibenzo(a,h)anthracen	53-70-3	SW8270D LL	N	ug/L	0.2	U	0.2	U	0.19	U	0.2	U	0.21	U	0.2	U
RA_GW_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	N	ug/L	1	U	1	U	0.71	J	0.11	J	1	U	1	U
RA_GW_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U	1	U
RA_GW_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U	1	U
RA_GW_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U	1	U
RA_GW_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U	1	U
RA_GW_SVOCs	Fluoranthene	206-44-0	SW8270D LL	N	ug/L	0.2	U	0.2	U	0.088	J	0.2	U	0.21	U	0.2	U
RA_GW_SVOCs	Fluorene	86-73-7	SW8270D LL	N	ug/L	0.2	U	0.2	U	0.64	U	0.2	U	0.21	U	0.2	U
RA_GW_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U	1	U
RA_GW_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U	1	U
RA_GW_SVOCs	Hexachlorocyclo-penta	77-47-4	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U	1	U
RA_GW_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U	1	U
RA_GW_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	N	ug/L	0.2	U	0.2	U	0.19	U	0.2	U	0.21	U	0.2	U
RA_GW_SVOCs	Isophorone	78-59-1	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U	1	U
RA_GW_SVOCs	Naphthalene	91-20-3	SW8270D LL	N	ug/L	0.2	U	0.27	J	13	J	2.6	U	0.21	U	0.2	U
RA_GW_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	N	ug/L	2	U	2	U	1.9	U	2	U	2.1	U	2	U
RA_GW_SVOCs	N-Nitroso-di-n-propylar	621-64-7	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U	1	U
RA_GW_SVOCs	N-Nitrosodiphenylamin	86-30-6	SW8270D LL	N	ug/L	1	U	1	U	0.96	U	1	U	1	U	1	U
RA_GW_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	N	ug/L	1	U	0.53	J	0.96	U	1	U	1	U	1	U
RA_GW_SVOCs	Phenanthrene	85-01-8	SW8270D LL	N	ug/L	0.2	U	0.2	U	0.67	U	0.068	J	0.21	U	0.2	U
RA_GW_SVOCs	Phenol	108-95-2	SW8270D LL	N	ug/L	0.57	J	0.26	J	0.96	U	1	U	1	U	1	U
RA_GW_SVOCs	Pyrene	129-00-0	SW8270D LL	N	ug/L	0.2	U	0.2	U	0.042	J	0.2	U	0.21	U	0.2	U
RA_GW_SVOCs	Total High-molecular-w	TOT-PAH-HMW	SW8270D LL	N	ug/L	0.2	U	0.2	U	0.13	U	0.2	U	0.21	U	0.2	U
RA_GW_SVOCs	Total Low-molecular-w	TOT-PAH-LMW	SW8270D LL	N	ug/L	0.2	U	0.27	U	16	U	2.7	U	0.21	U	0.2	U
RA_GW_SVOCs	Total PAHs (sum 16)	TOT-PAH	SW8270D LL	N	ug/L	0.2	U	0.27	U	16	U	2.7	U	0.21	U	0.2	U
RA_GW_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	N	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
RA_GW_VOCs	1,1,2,2-Tetrachloroeth	79-34-5	SW8260B	N	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
RA_GW_VOCs	1,1,2-Trichloro-1,2,2-tr	76-13-1	SW8260B	N	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
RA_GW_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	N	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
RA_GW_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	N	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
RA_GW_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	N	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
RA_GW_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	N	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
RA_GW_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	N	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
RA_GW_VOCs	1,2-Dibromo-3-chlorop	96-12-8	SW8260B	N	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
RA_GW_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	N	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
RA_GW_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	N	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
RA_GW_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	N	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
RA_GW_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	N	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
RA_GW_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	N	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
RA_GW_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	N	ug/L	1	U	1	U	1	U	1	U	1	U	1	U

Attachment A  
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	loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area					
	sys_loc_code	MW01	MW01	MW02	MW02	MW03	MW03	MW03					
	sys_sample_code	MW01AN	MW01BN	MW02AN	MW02BN	MW03AN	MW03BN	MW03BN					
	sample_date	11/5/2014	11/5/2014	11/5/2014	11/5/2014	11/4/2014	11/4/2014	11/4/2014					
	sample_type_code	N	N	N	N	N	N	N					
	task_code	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014	Phase3-2014					
	validated_yn	Y	Y	Y	Y	Y	Y	Y					
RA_GW_VOCs	1,4-Dioxane	123-91-1	SW8260B	N	ug/L	200	U	200	U	200	U	200	U
RA_GW_VOCs	2-Butanone	78-93-3	SW8260B	N	ug/L	5	U	5	U	5	U	7.5	U
RA_GW_VOCs	2-Hexanone	591-78-6	SW8260B	N	ug/L	5	U	5	U	5	U	5	UJ
RA_GW_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	N	ug/L	5	UJ	5	UJ	5	UJ	5	U
RA_GW_VOCs	Acetone	67-64-1	SW8260B	N	ug/L	5	U	5	U	5	U	4.1	J
RA_GW_VOCs	Benzene	71-43-2	SW8260B	N	ug/L	1	U	1	U	1	U	1	U
RA_GW_VOCs	Bromochloromethane	74-97-5	SW8260B	N	ug/L	1	U	1	U	1	U	1	U
RA_GW_VOCs	Bromodichloromethane	75-27-4	SW8260B	N	ug/L	1	U	1	U	1	U	1	U
RA_GW_VOCs	Bromoform	75-25-2	SW8260B	N	ug/L	1	U	1	U	1	U	1	U
RA_GW_VOCs	Bromomethane	74-83-9	SW8260B	N	ug/L	1	UJ	1	UJ	1	UJ	1	UJ
RA_GW_VOCs	Carbon Disulfide	75-15-0	SW8260B	N	ug/L	1	U	0.27	J	1	U	1	U
RA_GW_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	N	ug/L	1	U	1	U	1	U	1	U
RA_GW_VOCs	Chlorobenzene	108-90-7	SW8260B	N	ug/L	1	U	1	U	1	U	1	U
RA_GW_VOCs	Chloroethane	75-00-3	SW8260B	N	ug/L	1	U	1	U	1	U	1	UJ
RA_GW_VOCs	Chloroform	67-66-3	SW8260B	N	ug/L	1	U	0.87	J	1	U	1.2	3.2
RA_GW_VOCs	Chloromethane	74-87-3	SW8260B	N	ug/L	1	U	1	U	1	U	1	U
RA_GW_VOCs	cis-1,2-Dichloroethylen	156-59-2	SW8260B	N	ug/L	0.92	J	2.6	U	1	U	1	U
RA_GW_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	N	ug/L	1	U	1	U	1	U	1	U
RA_GW_VOCs	Cyclohexane	110-82-7	SW8260B	N	ug/L	1	U	1	U	1	U	1	U
RA_GW_VOCs	Dibromochloromethane	124-48-1	SW8260B	N	ug/L	1	U	1	U	1	U	1	U
RA_GW_VOCs	Dichlorodifluoromethan	75-71-8	SW8260B	N	ug/L	1	U	1	U	1	U	1	UJ
RA_GW_VOCs	Ethylbenzene	100-41-4	SW8260B	N	ug/L	1	U	1	U	1	U	1	U
RA_GW_VOCs	Isopropylbenzene	98-82-8	SW8260B	N	ug/L	1	U	1	U	1	U	1	U
RA_GW_VOCs	m, p-Xylene	XYLMP	SW8260B	N	ug/L	2	U	2	U	2	U	2	U
RA_GW_VOCs	Methyl Acetate	79-20-9	SW8260B	N	ug/L	1	U	1	U	1	U	1	U
RA_GW_VOCs	Methyl tert-Butyl Ether	1634-04-4	SW8260B	N	ug/L	1.6	U	1	U	0.39	J	1	U
RA_GW_VOCs	Methylcyclohexane	108-87-2	SW8260B	N	ug/L	1	U	1	U	1	U	1	U
RA_GW_VOCs	Methylene Chloride	75-09-2	SW8260B	N	ug/L	1	U	1	U	1	U	1	U
RA_GW_VOCs	o-Xylene	95-47-6	SW8260B	N	ug/L	1	U	1	U	1	U	1	U
RA_GW_VOCs	Styrene	100-42-5	SW8260B	N	ug/L	1	U	1	U	1	U	1	U
RA_GW_VOCs	Tetrachloroethylene	127-18-4	SW8260B	N	ug/L	4.4	U	110	U	2.3	U	0.32	J
RA_GW_VOCs	Toluene	108-88-3	SW8260B	N	ug/L	1	U	1	U	1	U	0.34	J
RA_GW_VOCs	trans-1,2-Dichloroether	156-60-5	SW8260B	N	ug/L	1	U	1	U	1	U	1	U
RA_GW_VOCs	trans-1,3-Dichloroprop	10061-02-6	SW8260B	N	ug/L	1	U	1	U	1	U	1	U
RA_GW_VOCs	Trichloroethene	79-01-6	SW8260B	N	ug/L	0.43	J	25	U	1	U	1	U
RA_GW_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	N	ug/L	1	U	1	U	1	U	1	UJ
RA_GW_VOCs	Vinyl Chloride	75-01-4	SW8260B	N	ug/L	1	U	1	U	1	U	1	U
RA_GW_VOCs	Xylenes (total)	1330-20-7	SW8260B	N	ug/L	2	U	2	U	2	U	2	U

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				loc_group		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area	
				sys_loc_code		MW04		MW04		MW04	
				sys_sample_code		MW04AN		MW04AN2		MW04BN	
				sample_date		11/4/2014		12/19/2014		11/4/2014	
				sample_type_code		N		N		N	
				task_code		Phase3-2014		Phase3-2014		Phase3-2014	
				validated_yn		Y		Y		Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_GW_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	N	ug/L	3.12E-06	JN			1.25E-06	U
RA_GW_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	N	ug/L	7.96E-07	U			1.01E-06	U
RA_GW_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	N	ug/L	9.36E-07	U			1.21E-06	U
RA_GW_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	N	ug/L	1.42E-06	U			9.3E-07	U
RA_GW_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	N	ug/L	5.86E-07	U			6.39E-07	U
RA_GW_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	N	ug/L	1.41E-06	U			9.57E-07	U
RA_GW_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	N	ug/L	5.69E-07	U			6.27E-07	U
RA_GW_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	N	ug/L	1.31E-06	U			8.77E-07	U
RA_GW_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	N	ug/L	7.41E-07	U			8.06E-07	U
RA_GW_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	N	ug/L	1.34E-06	U			9.56E-07	U
RA_GW_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	N	ug/L	1.06E-06	U			7.79E-07	U
RA_GW_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	N	ug/L	5.65E-07	U			6.87E-07	U
RA_GW_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	N	ug/L	8.96E-07	U			6.9E-07	U
RA_GW_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	N	ug/L	3.59E-06	U			2.53E-06	U
RA_GW_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	N	ug/L	2.18E-06	U			1.81E-06	U
RA_GW_DioxinFurans	OCDD	3268-87-9	SW8290A	N	ug/L	8.9E-05	J			1.35E-05	U
RA_GW_DioxinFurans	OCDF	39001-02-0	SW8290A	N	ug/L	1.45E-06	U			2.08E-06	U
RA_GW_DioxinFurans	TCDD TEQ Bird	DFTEQ-Bird	SW8290A	N	ug/L	1.2E-08				2.53E-06	U
RA_GW_DioxinFurans	TCDD TEQ Fish	DFTEQ-Fish	SW8290A	N	ug/L	1.2E-08				2.53E-06	U
RA_GW_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	N	ug/L	5.79E-08				2.53E-06	U
RA_GW_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	N	ug/L	9.72E-06	JN			1.25E-06	U
RA_GW_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	N	ug/L	8.62E-07	U			1.1E-06	U
RA_GW_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	N	ug/L	6.6E-06	JN			1.28E-05	JN
RA_GW_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	N	ug/L	6.07E-07	U			6.83E-07	U
RA_GW_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	N	ug/L	1.34E-06	U			9.56E-07	U
RA_GW_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	N	ug/L	9.67E-07	U			7.3E-07	U
RA_GW_DioxinFurans	Total TCDD	41903-57-5	SW8290A	N	ug/L	3.59E-06	U			2.53E-06	U
RA_GW_DioxinFurans	Total TCDF	55722-27-5	SW8290A	N	ug/L	2.18E-06	U			1.81E-06	U
RA_GW_Metals	Aluminum	7429-90-5	SW6020A	D	ug/L	30	U			55	U
RA_GW_Metals	Aluminum	7429-90-5	SW6020A	T	ug/L	500	J+			600	J+
RA_GW_Metals	Antimony	7440-36-0	SW6020A	D	ug/L	2	U			2	U
RA_GW_Metals	Antimony	7440-36-0	SW6020A	T	ug/L	2	UJ			2	U
RA_GW_Metals	Arsenic	7440-38-2	SW6020A	D	ug/L	1	U			0.91	J
RA_GW_Metals	Arsenic	7440-38-2	SW6020A	T	ug/L	8	J+			5.2	J+
RA_GW_Metals	Barium	7440-39-3	SW6020A	D	ug/L	86	U			100	U
RA_GW_Metals	Barium	7440-39-3	SW6020A	T	ug/L	110	U			120	U
RA_GW_Metals	Beryllium	7440-41-7	SW6020A	D	ug/L	1	UJ			1	U
RA_GW_Metals	Beryllium	7440-41-7	SW6020A	T	ug/L	0.041	J			0.064	J
RA_GW_Metals	Cadmium	7440-43-9	SW6020A	D	ug/L	1	U			1	U
RA_GW_Metals	Cadmium	7440-43-9	SW6020A	T	ug/L	1	U			1	U
RA_GW_Metals	Calcium	7440-70-2	SW6020A	D	ug/L	57000	U			25000	U
RA_GW_Metals	Calcium	7440-70-2	SW6020A	T	ug/L	68000	U			27000	U
RA_GW_Metals	Chromium	7440-47-3	SW6020A	D	ug/L	2	U			2	U
RA_GW_Metals	Chromium	7440-47-3	SW6020A	T	ug/L	4.8	U			6.1	U

		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area		
		sys_loc_code	MW04	MW04	MW04		
		sys_sample_code	MW04AN	MW04AN2	MW04BN		
		sample_date	11/4/2014	12/19/2014	11/4/2014		
		sample_type_code	N	N	N		
		task_code	Phase3-2014	Phase3-2014	Phase3-2014		
		validated_yn	Y	Y	Y		
RA_GW_Metals	Cobalt	7440-48-4	SW6020A	D	ug/L	30	
RA_GW_Metals	Cobalt	7440-48-4	SW6020A	T	ug/L	33	
RA_GW_Metals	Copper	7440-50-8	SW6020A	D	ug/L	2	U
RA_GW_Metals	Copper	7440-50-8	SW6020A	T	ug/L	2.4	U
RA_GW_Metals	Iron	7439-89-6	SW6020A	D	ug/L	50	U
RA_GW_Metals	Iron	7439-89-6	SW6020A	T	ug/L	12000	
RA_GW_Metals	Lead	7439-92-1	SW6020A	D	ug/L	1	U
RA_GW_Metals	Lead	7439-92-1	SW6020A	T	ug/L	0.73	J
RA_GW_Metals	Magnesium	7439-95-4	SW6020A	D	ug/L	15000	
RA_GW_Metals	Magnesium	7439-95-4	SW6020A	T	ug/L	17000	
RA_GW_Metals	Manganese	7439-96-5	SW6020A	D	ug/L	5000	
RA_GW_Metals	Manganese	7439-96-5	SW6020A	T	ug/L	5700	
RA_GW_Metals	Mercury	7439-97-6	SW7470A	D	ug/L	0.2	U
RA_GW_Metals	Mercury	7439-97-6	SW7470A	T	ug/L	0.2	U
RA_GW_Metals	Nickel	7440-02-0	SW6020A	D	ug/L	5.7	
RA_GW_Metals	Nickel	7440-02-0	SW6020A	T	ug/L	7.9	
RA_GW_Metals	Potassium	7440-09-7	SW6020A	D	ug/L	6800	
RA_GW_Metals	Potassium	7440-09-7	SW6020A	T	ug/L	8200	
RA_GW_Metals	Selenium	7782-49-2	SW6020A	D	ug/L	5	U
RA_GW_Metals	Selenium	7782-49-2	SW6020A	T	ug/L	5	U
RA_GW_Metals	Silver	7440-22-4	SW6020A	D	ug/L	1	U
RA_GW_Metals	Silver	7440-22-4	SW6020A	T	ug/L	1	U
RA_GW_Metals	Sodium	7440-23-5	SW6020A	D	ug/L	160000	
RA_GW_Metals	Sodium	7440-23-5	SW6020A	T	ug/L	190000	J
RA_GW_Metals	Thallium	7440-28-0	SW6020A	D	ug/L	1	U
RA_GW_Metals	Thallium	7440-28-0	SW6020A	T	ug/L	1	U
RA_GW_Metals	Vanadium	7440-62-2	SW6020A	D	ug/L	2.6	J
RA_GW_Metals	Vanadium	7440-62-2	SW6020A	T	ug/L	1	U
RA_GW_Metals	Zinc	7440-66-6	SW6020A	D	ug/L	5	U
RA_GW_Metals	Zinc	7440-66-6	SW6020A	T	ug/L	5	U
RA_GW_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	N	ug/L	0.0013	U
RA_GW_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	N	ug/L	0.0013	U
RA_GW_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	N	ug/L	0.0013	U
RA_GW_PestPCBs	Aldrin	309-00-2	SW8081B LL	N	ug/L	0.0013	U
RA_GW_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	N	ug/L	0.0013	U
RA_GW_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	N	ug/L	0.0098	UJ
RA_GW_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	N	ug/L	0.0098	UJ
RA_GW_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	N	ug/L	0.0098	UJ
RA_GW_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	N	ug/L	0.0098	UJ
RA_GW_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	N	ug/L	0.0098	UJ
RA_GW_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	N	ug/L	0.0098	UJ
RA_GW_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	N	ug/L	0.0098	UJ
RA_GW_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	N	ug/L	0.0098	UJ
RA_GW_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	N	ug/L	0.0098	UJ
RA_GW_PestPCBs	beta-BHC	319-85-7	SW8081B LL	N	ug/L	0.0013	U
RA_GW_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	N	ug/L	0.0013	U

				loc_group		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area
				sys_loc_code		MW04		MW04		MW04
				sys_sample_code		MW04AN		MW04AN2		MW04BN
				sample_date		11/4/2014		12/19/2014		11/4/2014
				sample_type_code		N		N		N
				task_code		Phase3-2014		Phase3-2014		Phase3-2014
				validated_yn		Y		Y		Y
RA_GW_PestPCBs	Decachlorobiphenyl (PCB-126)	2051-24-3	E1668C	N	ug/L			1.04E-06	U	
RA_GW_PestPCBs	delta-BHC	319-86-8	SW8081B LL	N	ug/L	0.0013	U			0.0012 U
RA_GW_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	N	ug/L			5.45E-05	JN	
RA_GW_PestPCBs	Dieldrin	60-57-1	SW8081B LL	N	ug/L	0.0013	U			0.0012 U
RA_GW_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	N	ug/L	0.0013	U			0.0012 U
RA_GW_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	N	ug/L	0.0013	U			0.0012 U
RA_GW_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	N	ug/L	0.0013	U			0.00073 J
RA_GW_PestPCBs	Endrin	72-20-8	SW8081B LL	N	ug/L	0.0013	U			0.0012 U
RA_GW_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	N	ug/L	0.0013	U			0.0012 U
RA_GW_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	N	ug/L	0.0013	U			0.0012 U
RA_GW_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	N	ug/L	0.0013	U			0.0012 U
RA_GW_PestPCBs	Heptachlor	76-44-8	SW8081B LL	N	ug/L	0.0013	U			0.0012 U
RA_GW_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	N	ug/L	0.0013	U			0.0014 J
RA_GW_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	N	ug/L			3.49E-05	JN	
RA_GW_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	N	ug/L			8.78E-05	JN	
RA_GW_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	N	ug/L	0.0025	U			0.0024 U
RA_GW_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	N	ug/L			9.21E-06	JN	
RA_GW_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	N	ug/L			5.52E-06	JN	
RA_GW_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	N	ug/L			8.38E-06	JN	
RA_GW_PestPCBs	PCB TEQ Bird	PCBTEQ-Bird	E1668C	N	ug/L			6.87E-10		
RA_GW_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	N	ug/L			6.52E-10		
RA_GW_PestPCBs	PCB, TOTAL	PCB	E1668C	N	ug/L			0.000372		
RA_GW_PestPCBs	PCB, Total Aroclors (AE)	TOT-PCB-ARO-C	SW8082A LL	N	ug/L	0.0098	U			0.0094 U
RA_GW_PestPCBs	PCB, Total Aroclors (La)	TOT-PCB-ARO	SW8082A LL	N	ug/L	0.0098	U			0.0094 U
RA_GW_PestPCBs	PCB-1	2051-60-7	E1668C	N	ug/L			3.05E-06	J	
RA_GW_PestPCBs	PCB-10	33146-45-1	E1668C	N	ug/L			2.38E-06	U	
RA_GW_PestPCBs	PCB-100	39485-83-1	E1668C	N	ug/L			1.19E-06	U	
RA_GW_PestPCBs	PCB-101	37680-73-2	E1668C	N	ug/L			1.67E-05		
RA_GW_PestPCBs	PCB-102	68194-06-9	E1668C	N	ug/L			1.15E-06	U	
RA_GW_PestPCBs	PCB-103	60145-21-3	E1668C	N	ug/L			1.17E-06	U	
RA_GW_PestPCBs	PCB-104	56558-16-8	E1668C	N	ug/L			8.9E-07	U	
RA_GW_PestPCBs	PCB-105	32598-14-4	E1668C	N	ug/L			5.22E-06	JN	
RA_GW_PestPCBs	PCB-106	70424-69-0	E1668C	N	ug/L			7.95E-07	U	
RA_GW_PestPCBs	PCB-107	70424-68-9	E1668C	N	ug/L			7.71E-07	U	
RA_GW_PestPCBs	PCB-108	70362-41-3	E1668C	N	ug/L			8.11E-07	U	
RA_GW_PestPCBs	PCB-109	74472-35-8	E1668C	N	ug/L			1.4E-05		
RA_GW_PestPCBs	PCB-11	2050-67-1	E1668C	N	ug/L			3.46E-05	JN	
RA_GW_PestPCBs	PCB-110	38380-03-9	E1668C	N	ug/L			1.87E-05	JN	
RA_GW_PestPCBs	PCB-111	39635-32-0	E1668C	N	ug/L			8.37E-07	U	
RA_GW_PestPCBs	PCB-112	74472-36-9	E1668C	N	ug/L			9.09E-07	U	
RA_GW_PestPCBs	PCB-113	68194-10-5	E1668C	N	ug/L			1.67E-05		
RA_GW_PestPCBs	PCB-114	74472-37-0	E1668C	N	ug/L			7.41E-07	U	
RA_GW_PestPCBs	PCB-115	74472-38-1	E1668C	N	ug/L			1.87E-05	JN	
RA_GW_PestPCBs	PCB-116	18259-05-7	E1668C	N	ug/L			1.96E-06	JN	
RA_GW_PestPCBs	PCB-117	68194-11-6	E1668C	N	ug/L			1.96E-06	JN	
RA_GW_PestPCBs	PCB-118	31508-00-6	E1668C	N	ug/L			1.65E-05	J	

			loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area			
			sys_loc_code	MW04	MW04	MW04			
			sys_sample_code	MW04AN	MW04AN2	MW04BN			
			sample_date	11/4/2014	12/19/2014	11/4/2014			
			sample_type_code	N	N	N			
			task_code	Phase3-2014	Phase3-2014	Phase3-2014			
			validated_yn	Y	Y	Y			
RA_GW_PestPCBs	PCB-119	56558-17-9	E1668C	N	ug/L	1.4E-05			
RA_GW_PestPCBs	PCB-12	2974-92-7	E1668C	N	ug/L	2.16E-06	U		
RA_GW_PestPCBs	PCB-120	68194-12-7	E1668C	N	ug/L	8.61E-07	U		
RA_GW_PestPCBs	PCB-121	56558-18-0	E1668C	N	ug/L	8.67E-07	U		
RA_GW_PestPCBs	PCB-122	76842-07-4	E1668C	N	ug/L	8.65E-07	U		
RA_GW_PestPCBs	PCB-123	65510-44-3	E1668C	N	ug/L	7.9E-07	U		
RA_GW_PestPCBs	PCB-124	70424-70-3	E1668C	N	ug/L	8.11E-07	U		
RA_GW_PestPCBs	PCB-125	74472-39-2	E1668C	N	ug/L	1.4E-05			
RA_GW_PestPCBs	PCB-126	57465-28-8	E1668C	N	ug/L	8.2E-07	U		
RA_GW_PestPCBs	PCB-127	39635-33-1	E1668C	N	ug/L	7.85E-07	U		
RA_GW_PestPCBs	PCB-128	38380-07-3	E1668C	N	ug/L	3.99E-06			
RA_GW_PestPCBs	PCB-129	55215-18-4	E1668C	N	ug/L	2.45E-05			
RA_GW_PestPCBs	PCB-13	2974-90-5	E1668C	N	ug/L	2.16E-06	U		
RA_GW_PestPCBs	PCB-130	52663-66-8	E1668C	N	ug/L	2.44E-06	JN		
RA_GW_PestPCBs	PCB-131	61798-70-7	E1668C	N	ug/L	1.55E-06	U		
RA_GW_PestPCBs	PCB-132	38380-05-1	E1668C	N	ug/L	9.21E-06	J		
RA_GW_PestPCBs	PCB-133	35694-04-3	E1668C	N	ug/L	1.43E-06	U		
RA_GW_PestPCBs	PCB-134	52704-70-8	E1668C	N	ug/L	1.52E-06	U		
RA_GW_PestPCBs	PCB-135	52744-13-5	E1668C	N	ug/L	6.91E-06	JN		
RA_GW_PestPCBs	PCB-136	38411-22-2	E1668C	N	ug/L	1.12E-06	U		
RA_GW_PestPCBs	PCB-137	35694-06-5	E1668C	N	ug/L	1.31E-06	U		
RA_GW_PestPCBs	PCB-138	35065-28-2	E1668C	N	ug/L	2.45E-05			
RA_GW_PestPCBs	PCB-139	56030-56-9	E1668C	N	ug/L	1.3E-06	U		
RA_GW_PestPCBs	PCB-14	34883-41-5	E1668C	N	ug/L	1.86E-06	U		
RA_GW_PestPCBs	PCB-140	59291-64-4	E1668C	N	ug/L	1.3E-06	U		
RA_GW_PestPCBs	PCB-141	52712-04-6	E1668C	N	ug/L	3.62E-06	JN		
RA_GW_PestPCBs	PCB-142	41411-61-4	E1668C	N	ug/L	1.49E-06	U		
RA_GW_PestPCBs	PCB-143	68194-15-0	E1668C	N	ug/L	1.52E-06	U		
RA_GW_PestPCBs	PCB-144	68194-14-9	E1668C	N	ug/L	1.42E-06	U		
RA_GW_PestPCBs	PCB-145	74472-40-5	E1668C	N	ug/L	1.07E-06	U		
RA_GW_PestPCBs	PCB-146	51908-16-8	E1668C	N	ug/L	1.62E-06	JN		
RA_GW_PestPCBs	PCB-147	68194-13-8	E1668C	N	ug/L	1.75E-05			
RA_GW_PestPCBs	PCB-148	74472-41-6	E1668C	N	ug/L	1.5E-06	U		
RA_GW_PestPCBs	PCB-149	38380-04-0	E1668C	N	ug/L	1.75E-05			
RA_GW_PestPCBs	PCB-15	2050-68-2	E1668C	N	ug/L	4.46E-06	JN		
RA_GW_PestPCBs	PCB-150	68194-08-1	E1668C	N	ug/L	1.05E-06	U		
RA_GW_PestPCBs	PCB-151	52663-63-5	E1668C	N	ug/L	6.91E-06	JN		
RA_GW_PestPCBs	PCB-152	68194-09-2	E1668C	N	ug/L	1.07E-06	U		
RA_GW_PestPCBs	PCB-153	35065-27-1	E1668C	N	ug/L	1.58E-05			
RA_GW_PestPCBs	PCB-154	60145-22-4	E1668C	N	ug/L	1.25E-06	U		
RA_GW_PestPCBs	PCB-155	33979-03-2	E1668C	N	ug/L	1.02E-06	U		
RA_GW_PestPCBs	PCB-156	38380-08-4	E1668C	N	ug/L	1.28E-06	U		
RA_GW_PestPCBs	PCB-157	69782-90-7	E1668C	N	ug/L	1.28E-06	U		
RA_GW_PestPCBs	PCB-158	74472-42-7	E1668C	N	ug/L	2.1E-06	JN		
RA_GW_PestPCBs	PCB-159	39635-35-3	E1668C	N	ug/L	9.94E-07	U		
RA_GW_PestPCBs	PCB-16	38444-78-9	E1668C	N	ug/L	1.92E-06	U		



Attachment A  
Groundwater Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

			loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
			sys_loc_code	MW04	MW04	MW04
			sys_sample_code	MW04AN	MW04AN2	MW04BN
			sample_date	11/4/2014	12/19/2014	11/4/2014
			sample_type_code	N	N	N
			task_code	Phase3-2014	Phase3-2014	Phase3-2014
			validated_yn	Y	Y	Y
RA_GW_PestPCBs	PCB-160	41411-62-5	E1668C	N	ug/L	2.45E-05
RA_GW_PestPCBs	PCB-161	74472-43-8	E1668C	N	ug/L	9.89E-07
RA_GW_PestPCBs	PCB-162	39635-34-2	E1668C	N	ug/L	9.82E-07
RA_GW_PestPCBs	PCB-163	74472-44-9	E1668C	N	ug/L	2.45E-05
RA_GW_PestPCBs	PCB-164	74472-45-0	E1668C	N	ug/L	1.04E-06
RA_GW_PestPCBs	PCB-165	74472-46-1	E1668C	N	ug/L	1.09E-06
RA_GW_PestPCBs	PCB-166	41411-63-6	E1668C	N	ug/L	3.99E-06
RA_GW_PestPCBs	PCB-167	52663-72-6	E1668C	N	ug/L	7.56E-07
RA_GW_PestPCBs	PCB-168	59291-65-5	E1668C	N	ug/L	1.58E-05
RA_GW_PestPCBs	PCB-169	32774-16-6	E1668C	N	ug/L	7.18E-07
RA_GW_PestPCBs	PCB-17	37680-66-3	E1668C	N	ug/L	1.6E-06
RA_GW_PestPCBs	PCB-170	35065-30-6	E1668C	N	ug/L	3.51E-06
RA_GW_PestPCBs	PCB-171	52663-71-5	E1668C	N	ug/L	1.13E-06
RA_GW_PestPCBs	PCB-172	52663-74-8	E1668C	N	ug/L	1.12E-06
RA_GW_PestPCBs	PCB-173	68194-16-1	E1668C	N	ug/L	1.13E-06
RA_GW_PestPCBs	PCB-174	38411-25-5	E1668C	N	ug/L	4.63E-06
RA_GW_PestPCBs	PCB-175	40186-70-7	E1668C	N	ug/L	1.01E-06
RA_GW_PestPCBs	PCB-176	52663-65-7	E1668C	N	ug/L	7.66E-07
RA_GW_PestPCBs	PCB-177	52663-70-4	E1668C	N	ug/L	2.48E-06
RA_GW_PestPCBs	PCB-178	52663-67-9	E1668C	N	ug/L	1.09E-06
RA_GW_PestPCBs	PCB-179	52663-64-6	E1668C	N	ug/L	2.27E-06
RA_GW_PestPCBs	PCB-18	37680-65-2	E1668C	N	ug/L	6.57E-06
RA_GW_PestPCBs	PCB-180	35065-29-3	E1668C	N	ug/L	1.33E-05
RA_GW_PestPCBs	PCB-181	74472-47-2	E1668C	N	ug/L	1E-06
RA_GW_PestPCBs	PCB-182	60145-23-5	E1668C	N	ug/L	9.77E-07
RA_GW_PestPCBs	PCB-183	52663-69-1	E1668C	N	ug/L	4.21E-06
RA_GW_PestPCBs	PCB-184	74472-48-3	E1668C	N	ug/L	8.29E-07
RA_GW_PestPCBs	PCB-185	52712-05-7	E1668C	N	ug/L	4.21E-06
RA_GW_PestPCBs	PCB-186	74472-49-4	E1668C	N	ug/L	8.05E-07
RA_GW_PestPCBs	PCB-187	52663-68-0	E1668C	N	ug/L	4.51E-06
RA_GW_PestPCBs	PCB-188	74487-85-7	E1668C	N	ug/L	7.19E-07
RA_GW_PestPCBs	PCB-189	39635-31-9	E1668C	N	ug/L	6.75E-07
RA_GW_PestPCBs	PCB-19	38444-73-4	E1668C	N	ug/L	1.96E-06
RA_GW_PestPCBs	PCB-190	41411-64-7	E1668C	N	ug/L	7.79E-07
RA_GW_PestPCBs	PCB-191	74472-50-7	E1668C	N	ug/L	7.65E-07
RA_GW_PestPCBs	PCB-192	74472-51-8	E1668C	N	ug/L	8.55E-07
RA_GW_PestPCBs	PCB-193	69782-91-8	E1668C	N	ug/L	1.33E-05
RA_GW_PestPCBs	PCB-194	35694-08-7	E1668C	N	ug/L	4.76E-06
RA_GW_PestPCBs	PCB-195	52663-78-2	E1668C	N	ug/L	1.11E-06
RA_GW_PestPCBs	PCB-196	42740-50-1	E1668C	N	ug/L	1.12E-06
RA_GW_PestPCBs	PCB-197	33091-17-7	E1668C	N	ug/L	8.31E-07
RA_GW_PestPCBs	PCB-198	68194-17-2	E1668C	N	ug/L	3.62E-06
RA_GW_PestPCBs	PCB-199	52663-75-9	E1668C	N	ug/L	3.62E-06
RA_GW_PestPCBs	PCB-2	2051-61-8	E1668C	N	ug/L	2.4E-06
RA_GW_PestPCBs	PCB-20	38444-84-7	E1668C	N	ug/L	1.07E-05
RA_GW_PestPCBs	PCB-200	52663-73-7	E1668C	N	ug/L	8.16E-07

			loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	
			sys_loc_code	MW04	MW04	MW04	
			sys_sample_code	MW04AN	MW04AN2	MW04BN	
			sample_date	11/4/2014	12/19/2014	11/4/2014	
			sample_type_code	N	N	N	
			task_code	Phase3-2014	Phase3-2014	Phase3-2014	
			validated_yn	Y	Y	Y	
RA_GW_PestPCBs	PCB-201	40186-71-8	E1668C	N	ug/L	7.88E-07	U
RA_GW_PestPCBs	PCB-202	2136-99-4	E1668C	N	ug/L	8.88E-07	U
RA_GW_PestPCBs	PCB-203	52663-76-0	E1668C	N	ug/L	1.03E-06	U
RA_GW_PestPCBs	PCB-204	74472-52-9	E1668C	N	ug/L	8.64E-07	U
RA_GW_PestPCBs	PCB-205	74472-53-0	E1668C	N	ug/L	8.64E-07	U
RA_GW_PestPCBs	PCB-206	40186-72-9	E1668C	N	ug/L	5.52E-06	JN
RA_GW_PestPCBs	PCB-207	52663-79-3	E1668C	N	ug/L	8.27E-07	U
RA_GW_PestPCBs	PCB-208	52663-77-1	E1668C	N	ug/L	8.92E-07	U
RA_GW_PestPCBs	PCB-21	55702-46-0	E1668C	N	ug/L	3.52E-06	JN
RA_GW_PestPCBs	PCB-22	38444-85-8	E1668C	N	ug/L	3.33E-06	J
RA_GW_PestPCBs	PCB-23	55720-44-0	E1668C	N	ug/L	9.87E-07	U
RA_GW_PestPCBs	PCB-24	55702-45-9	E1668C	N	ug/L	1.34E-06	U
RA_GW_PestPCBs	PCB-25	55712-37-3	E1668C	N	ug/L	8.8E-07	U
RA_GW_PestPCBs	PCB-26	38444-81-4	E1668C	N	ug/L	2.56E-06	JN
RA_GW_PestPCBs	PCB-27	38444-76-7	E1668C	N	ug/L	1.16E-06	U
RA_GW_PestPCBs	PCB-28	7012-37-5	E1668C	N	ug/L	1.07E-05	J
RA_GW_PestPCBs	PCB-29	15862-07-4	E1668C	N	ug/L	2.56E-06	JN
RA_GW_PestPCBs	PCB-3	2051-62-9	E1668C	N	ug/L	3.76E-06	J
RA_GW_PestPCBs	PCB-30	35693-92-6	E1668C	N	ug/L	6.57E-06	JN
RA_GW_PestPCBs	PCB-31	16606-02-3	E1668C	N	ug/L	7.75E-06	J
RA_GW_PestPCBs	PCB-32	38444-77-8	E1668C	N	ug/L	1.14E-06	U
RA_GW_PestPCBs	PCB-33	38444-86-9	E1668C	N	ug/L	3.52E-06	JN
RA_GW_PestPCBs	PCB-34	37680-68-5	E1668C	N	ug/L	9.72E-07	U
RA_GW_PestPCBs	PCB-35	37680-69-6	E1668C	N	ug/L	9.98E-07	U
RA_GW_PestPCBs	PCB-36	38444-87-0	E1668C	N	ug/L	9.65E-07	U
RA_GW_PestPCBs	PCB-37	38444-90-5	E1668C	N	ug/L	2.99E-06	JN
RA_GW_PestPCBs	PCB-38	53555-66-1	E1668C	N	ug/L	3.89E-06	JN
RA_GW_PestPCBs	PCB-39	38444-88-1	E1668C	N	ug/L	9.05E-07	U
RA_GW_PestPCBs	PCB-4	13029-08-8	E1668C	N	ug/L	7.34E-06	JN
RA_GW_PestPCBs	PCB-40	38444-93-8	E1668C	N	ug/L	3.79E-06	JN
RA_GW_PestPCBs	PCB-41	52663-59-9	E1668C	N	ug/L	3.79E-06	JN
RA_GW_PestPCBs	PCB-42	36559-22-5	E1668C	N	ug/L	1.04E-06	U
RA_GW_PestPCBs	PCB-43	70362-46-8	E1668C	N	ug/L	9.56E-07	U
RA_GW_PestPCBs	PCB-44	41464-39-5	E1668C	N	ug/L	5.51E-06	U
RA_GW_PestPCBs	PCB-45	70362-45-7	E1668C	N	ug/L	1.06E-06	U
RA_GW_PestPCBs	PCB-46	41464-47-5	E1668C	N	ug/L	1.25E-06	U
RA_GW_PestPCBs	PCB-47	2437-79-8	E1668C	N	ug/L	5.51E-06	U
RA_GW_PestPCBs	PCB-48	70362-47-9	E1668C	N	ug/L	1.02E-06	U
RA_GW_PestPCBs	PCB-49	41464-40-8	E1668C	N	ug/L	3.56E-06	U
RA_GW_PestPCBs	PCB-5	16605-91-7	E1668C	N	ug/L	2.28E-06	U
RA_GW_PestPCBs	PCB-50	62796-65-0	E1668C	N	ug/L	9.85E-07	U
RA_GW_PestPCBs	PCB-51	68194-04-7	E1668C	N	ug/L	1.06E-06	U
RA_GW_PestPCBs	PCB-52	35693-99-3	E1668C	N	ug/L	9.7E-06	JN
RA_GW_PestPCBs	PCB-53	41464-41-9	E1668C	N	ug/L	9.85E-07	U
RA_GW_PestPCBs	PCB-54	15968-05-5	E1668C	N	ug/L	1.2E-06	U
RA_GW_PestPCBs	PCB-55	74338-24-2	E1668C	N	ug/L	7.93E-07	U



Attachment A  
Groundwater Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
		sys_loc_code	MW04	MW04	MW04
		sys_sample_code	MW04AN	MW04AN2	MW04BN
		sample_date	11/4/2014	12/19/2014	11/4/2014
		sample_type_code	N	N	N
		task_code	Phase3-2014	Phase3-2014	Phase3-2014
		validated_yn	Y	Y	Y
RA_GW_PestPCBs	PCB-56	41464-43-1	E1668C	2.76E-06	JN
RA_GW_PestPCBs	PCB-57	70424-67-8	E1668C	7.55E-07	U
RA_GW_PestPCBs	PCB-58	41464-49-7	E1668C	7.51E-07	U
RA_GW_PestPCBs	PCB-59	74472-33-6	E1668C	7.29E-07	U
RA_GW_PestPCBs	PCB-6	25569-80-6	E1668C	2.14E-06	U
RA_GW_PestPCBs	PCB-60	33025-41-1	E1668C	7.68E-07	U
RA_GW_PestPCBs	PCB-61	33284-53-6	E1668C	1.11E-05	JN
RA_GW_PestPCBs	PCB-62	54230-22-7	E1668C	7.29E-07	U
RA_GW_PestPCBs	PCB-63	74472-34-7	E1668C	7E-07	U
RA_GW_PestPCBs	PCB-64	52663-58-8	E1668C	2.69E-06	J
RA_GW_PestPCBs	PCB-65	33284-54-7	E1668C	5.51E-06	U
RA_GW_PestPCBs	PCB-66	32598-10-0	E1668C	5.48E-06	J
RA_GW_PestPCBs	PCB-67	73575-53-8	E1668C	6.79E-07	U
RA_GW_PestPCBs	PCB-68	73575-52-7	E1668C	6.84E-07	U
RA_GW_PestPCBs	PCB-69	60233-24-1	E1668C	3.56E-06	
RA_GW_PestPCBs	PCB-7	33284-50-3	E1668C	2.2E-06	U
RA_GW_PestPCBs	PCB-70	32598-11-1	E1668C	1.11E-05	JN
RA_GW_PestPCBs	PCB-71	41464-46-4	E1668C	3.79E-06	JN
RA_GW_PestPCBs	PCB-72	41464-42-0	E1668C	7.34E-07	U
RA_GW_PestPCBs	PCB-73	74338-23-1	E1668C	9.56E-07	U
RA_GW_PestPCBs	PCB-74	32690-93-0	E1668C	1.11E-05	JN
RA_GW_PestPCBs	PCB-75	32598-12-2	E1668C	7.29E-07	U
RA_GW_PestPCBs	PCB-76	70362-48-0	E1668C	1.11E-05	JN
RA_GW_PestPCBs	PCB-77	32598-13-3	E1668C	6.9E-07	U
RA_GW_PestPCBs	PCB-78	70362-49-1	E1668C	7.8E-07	U
RA_GW_PestPCBs	PCB-79	41464-48-6	E1668C	6.85E-07	U
RA_GW_PestPCBs	PCB-8	34883-43-7	E1668C	8.02E-06	U
RA_GW_PestPCBs	PCB-80	33284-52-5	E1668C	6.68E-07	U
RA_GW_PestPCBs	PCB-81	70362-50-4	E1668C	7.25E-07	U
RA_GW_PestPCBs	PCB-82	52663-62-4	E1668C	1.44E-06	U
RA_GW_PestPCBs	PCB-83	60145-20-2	E1668C	6.9E-06	JN
RA_GW_PestPCBs	PCB-84	52663-60-2	E1668C	1.38E-06	U
RA_GW_PestPCBs	PCB-85	65510-45-4	E1668C	1.96E-06	JN
RA_GW_PestPCBs	PCB-86	55312-69-1	E1668C	1.4E-05	
RA_GW_PestPCBs	PCB-87	38380-02-8	E1668C	1.4E-05	
RA_GW_PestPCBs	PCB-88	55215-17-3	E1668C	2.14E-06	
RA_GW_PestPCBs	PCB-89	73575-57-2	E1668C	1.34E-06	U
RA_GW_PestPCBs	PCB-9	34883-39-1	E1668C	2.21E-06	U
RA_GW_PestPCBs	PCB-90	68194-07-0	E1668C	1.67E-05	
RA_GW_PestPCBs	PCB-91	68194-05-8	E1668C	2.14E-06	
RA_GW_PestPCBs	PCB-92	52663-61-3	E1668C	1.18E-06	U
RA_GW_PestPCBs	PCB-93	73575-56-1	E1668C	1.19E-06	U
RA_GW_PestPCBs	PCB-94	73575-55-0	E1668C	1.34E-06	U
RA_GW_PestPCBs	PCB-95	38379-99-6	E1668C	1.78E-05	J
RA_GW_PestPCBs	PCB-96	73575-54-9	E1668C	9.99E-07	U
RA_GW_PestPCBs	PCB-97	41464-51-1	E1668C	1.4E-05	

				loc_group			RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area
				sys_loc_code			MW04		MW04		MW04
				sys_sample_code			MW04AN		MW04AN2		MW04BN
				sample_date			11/4/2014		12/19/2014		11/4/2014
				sample_type_code			N		N		N
				task_code			Phase3-2014		Phase3-2014		Phase3-2014
				validated_yn			Y		Y		Y
RA_GW_PestPCBs	PCB-98	60233-25-2	E1668C	N	ug/L				1.15E-06	U	
RA_GW_PestPCBs	PCB-99	38380-01-7	E1668C	N	ug/L				6.9E-06	JN	
RA_GW_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	N	ug/L				9.99E-05	JN	
RA_GW_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	N	ug/L				4.46E-05	JN	
RA_GW_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	N	ug/L	0.098	U				0.094 U
RA_GW_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	N	ug/L	0.0013	U				0.0014 U
RA_GW_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	N	ug/L				4.13E-05	JN	
RA_GW_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	N	ug/L	1.1	U				1 U
RA_GW_SVOCs	1,2,4,5-Tetrachloroben	95-94-3	SW8270D LL	N	ug/L	1.1	U				1 U
RA_GW_SVOCs	2,2'-oxybis(1-Chloroprop	108-60-1	SW8270D LL	N	ug/L	1.1	U				1 U
RA_GW_SVOCs	2,3,4,6-Tetrachlorophen	58-90-2	SW8270D LL	N	ug/L	1.1	U				1 U
RA_GW_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	N	ug/L	1.1	U				1 U
RA_GW_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	N	ug/L	1.1	U				1 U
RA_GW_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	N	ug/L	1.1	U				1 U
RA_GW_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	N	ug/L	1.1	U				1 U
RA_GW_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	N	ug/L	5.4	U				5.2 U
RA_GW_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	N	ug/L	1.1	U				1 U
RA_GW_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	N	ug/L	1.1	U				1 U
RA_GW_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	N	ug/L	0.22	U				0.21 U
RA_GW_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	N	ug/L	1.1	U				1 U
RA_GW_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	N	ug/L	0.22	U				0.21 U
RA_GW_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	N	ug/L	1.1	U				1 U
RA_GW_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	N	ug/L	5.4	U				5.2 U
RA_GW_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	N	ug/L	1.1	U				1 U
RA_GW_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	N	ug/L	1.1	U				1 U
RA_GW_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	N	ug/L	5.4	U				5.2 U
RA_GW_SVOCs	4,6-Dinitro-2-methylph	534-52-1	SW8270D LL	N	ug/L	5.4	U				5.2 U
RA_GW_SVOCs	4-Bromophenyl-phenyl	101-55-3	SW8270D LL	N	ug/L	1.1	U				1 U
RA_GW_SVOCs	4-Chloro-3-methylphen	59-50-7	SW8270D LL	N	ug/L	1.1	U				1 U
RA_GW_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	N	ug/L	1.1	U				1 U
RA_GW_SVOCs	4-Chlorophenyl-phenyl	7005-72-3	SW8270D LL	N	ug/L	1.1	U				1 U
RA_GW_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	N	ug/L	1.1	U				1 U
RA_GW_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	N	ug/L	5.4	U				5.2 U
RA_GW_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	N	ug/L	5.4	U				5.2 U
RA_GW_SVOCs	Acenaphthene	83-32-9	SW8270D LL	N	ug/L	0.22	U				0.21 U
RA_GW_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	N	ug/L	0.22	U				0.21 U
RA_GW_SVOCs	Acetophenone	98-86-2	SW8270D LL	N	ug/L	2.2	U				2.1 U
RA_GW_SVOCs	Anthracene	120-12-7	SW8270D LL	N	ug/L	0.22	U				0.21 U
RA_GW_SVOCs	Atrazine	1912-24-9	SW8270D LL	N	ug/L	2.2	U				2.1 U
RA_GW_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	N	ug/L	2.2	U				2.1 U
RA_GW_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	N	ug/L	0.22	U				0.21 U
RA_GW_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	N	ug/L	0.22	U				0.21 U
RA_GW_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	N	ug/L	0.22	U				0.21 U
RA_GW_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	N	ug/L	0.22	U				0.21 U
RA_GW_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	N	ug/L	0.22	U				0.21 U
RA_GW_SVOCs	bis-(2-chloroethoxy)me	111-91-1	SW8270D LL	N	ug/L	1.1	U				1 U

			loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	
			sys_loc_code	MW04	MW04	MW04	
			sys_sample_code	MW04AN	MW04AN2	MW04BN	
			sample_date	11/4/2014	12/19/2014	11/4/2014	
			sample_type_code	N	N	N	
			task_code	Phase3-2014	Phase3-2014	Phase3-2014	
			validated_yr	Y	Y	Y	
RA_GW_SVOCs	bis-(2-Chloroethyl)etha	111-44-4	SW8270D LL	N	ug/L	1	U
RA_GW_SVOCs	bis-(2-Ethylhexyl)phtha	117-81-7	SW8270D LL	N	ug/L	2.2	U
RA_GW_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	N	ug/L	1.1	U
RA_GW_SVOCs	Caprolactam	105-60-2	SW8270D LL	N	ug/L	5.4	U
RA_GW_SVOCs	Carbazole	86-74-8	SW8270D LL	N	ug/L	1.1	U
RA_GW_SVOCs	Chrysene	218-01-9	SW8270D LL	N	ug/L	0.22	U
RA_GW_SVOCs	Dibenzo(a,h)anthracen	53-70-3	SW8270D LL	N	ug/L	0.22	U
RA_GW_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	N	ug/L	1.1	U
RA_GW_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	N	ug/L	1.1	U
RA_GW_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	N	ug/L	1.1	U
RA_GW_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	N	ug/L	1.1	U
RA_GW_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	N	ug/L	1.1	U
RA_GW_SVOCs	Fluoranthene	206-44-0	SW8270D LL	N	ug/L	0.22	U
RA_GW_SVOCs	Fluorene	86-73-7	SW8270D LL	N	ug/L	0.22	U
RA_GW_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	N	ug/L	1.1	U
RA_GW_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	N	ug/L	1.1	U
RA_GW_SVOCs	Hexachlorocyclo-penta	77-47-4	SW8270D LL	N	ug/L	1.1	U
RA_GW_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	N	ug/L	1.1	U
RA_GW_SVOCs	Indeno(1,2,3-cd)pyren	193-39-5	SW8270D LL	N	ug/L	0.22	U
RA_GW_SVOCs	Isophorone	78-59-1	SW8270D LL	N	ug/L	1.1	U
RA_GW_SVOCs	Naphthalene	91-20-3	SW8270D LL	N	ug/L	0.22	U
RA_GW_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	N	ug/L	2.2	U
RA_GW_SVOCs	N-Nitroso-di-n-propylar	621-64-7	SW8270D LL	N	ug/L	1.1	U
RA_GW_SVOCs	N-Nitrosodiphenylamin	86-30-6	SW8270D LL	N	ug/L	1.1	U
RA_GW_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	N	ug/L	1.1	U
RA_GW_SVOCs	Phenanthrene	85-01-8	SW8270D LL	N	ug/L	0.22	U
RA_GW_SVOCs	Phenol	108-95-2	SW8270D LL	N	ug/L	1.1	U
RA_GW_SVOCs	Pyrene	129-00-0	SW8270D LL	N	ug/L	0.22	U
RA_GW_SVOCs	Total High-molecular-w	TOT-PAH-HMW	SW8270D LL	N	ug/L	0.22	U
RA_GW_SVOCs	Total Low-molecular-w	TOT-PAH-LMW	SW8270D LL	N	ug/L	0.22	U
RA_GW_SVOCs	Total PAHs (sum 16)	TOT-PAH	SW8270D LL	N	ug/L	0.22	U
RA_GW_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	N	ug/L	1	U
RA_GW_VOCs	1,1,2,2-Tetrachloroetha	79-34-5	SW8260B	N	ug/L	1	U
RA_GW_VOCs	1,1,2-Trichloro-1,2,2-tr	76-13-1	SW8260B	N	ug/L	1	U
RA_GW_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	N	ug/L	1	U
RA_GW_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	N	ug/L	1	U
RA_GW_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	N	ug/L	1	U
RA_GW_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	N	ug/L	1	U
RA_GW_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	N	ug/L	1	U
RA_GW_VOCs	1,2-Dibromo-3-chlorop	96-12-8	SW8260B	N	ug/L	1	U
RA_GW_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	N	ug/L	1	U
RA_GW_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	N	ug/L	1	U
RA_GW_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	N	ug/L	1	U
RA_GW_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	N	ug/L	1	U
RA_GW_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	N	ug/L	1	U
RA_GW_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	N	ug/L	1	U

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	MW04	MW04	MW04
				sys_sample_code	MW04AN	MW04AN2	MW04BN
				sample_date	11/4/2014	12/19/2014	11/4/2014
				sample_type_code	N	N	N
				task_code	Phase3-2014	Phase3-2014	Phase3-2014
				validated_yr	Y	Y	Y
RA_GW_VOCs	1,4-Dioxane	123-91-1	SW8260B	N	ug/L	200	U
RA_GW_VOCs	2-Butanone	78-93-3	SW8260B	N	ug/L	5	U
RA_GW_VOCs	2-Hexanone	591-78-6	SW8260B	N	ug/L	5	UJ
RA_GW_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	N	ug/L	5	U
RA_GW_VOCs	Acetone	67-64-1	SW8260B	N	ug/L	5	U
RA_GW_VOCs	Benzene	71-43-2	SW8260B	N	ug/L	1	U
RA_GW_VOCs	Bromochloromethane	74-97-5	SW8260B	N	ug/L	1	U
RA_GW_VOCs	Bromodichloromethane	75-27-4	SW8260B	N	ug/L	1	U
RA_GW_VOCs	Bromoform	75-25-2	SW8260B	N	ug/L	1	U
RA_GW_VOCs	Bromomethane	74-83-9	SW8260B	N	ug/L	1	UJ
RA_GW_VOCs	Carbon Disulfide	75-15-0	SW8260B	N	ug/L	1	U
RA_GW_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	N	ug/L	1	U
RA_GW_VOCs	Chlorobenzene	108-90-7	SW8260B	N	ug/L	1	U
RA_GW_VOCs	Chloroethane	75-00-3	SW8260B	N	ug/L	1	UJ
RA_GW_VOCs	Chloroform	67-66-3	SW8260B	N	ug/L	0.22	J
RA_GW_VOCs	Chloromethane	74-87-3	SW8260B	N	ug/L	1	U
RA_GW_VOCs	cis-1,2-Dichloroethylen	156-59-2	SW8260B	N	ug/L	1	U
RA_GW_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	N	ug/L	1	U
RA_GW_VOCs	Cyclohexane	110-82-7	SW8260B	N	ug/L	1	U
RA_GW_VOCs	Dibromochloromethane	124-48-1	SW8260B	N	ug/L	1	U
RA_GW_VOCs	Dichlorodifluoromethan	75-71-8	SW8260B	N	ug/L	1	UJ
RA_GW_VOCs	Ethylbenzene	100-41-4	SW8260B	N	ug/L	1	U
RA_GW_VOCs	Isopropylbenzene	98-82-8	SW8260B	N	ug/L	1	U
RA_GW_VOCs	m, p-Xylene	XYLMP	SW8260B	N	ug/L	2	U
RA_GW_VOCs	Methyl Acetate	79-20-9	SW8260B	N	ug/L	1	U
RA_GW_VOCs	Methyl tert-Butyl Ether	1634-04-4	SW8260B	N	ug/L	0.29	J
RA_GW_VOCs	Methylcyclohexane	108-87-2	SW8260B	N	ug/L	1	U
RA_GW_VOCs	Methylene Chloride	75-09-2	SW8260B	N	ug/L	1	U
RA_GW_VOCs	o-Xylene	95-47-6	SW8260B	N	ug/L	1	U
RA_GW_VOCs	Styrene	100-42-5	SW8260B	N	ug/L	1	U
RA_GW_VOCs	Tetrachloroethylene	127-18-4	SW8260B	N	ug/L	0.25	J
RA_GW_VOCs	Toluene	108-88-3	SW8260B	N	ug/L	1	U
RA_GW_VOCs	trans-1,2-Dichloroether	156-60-5	SW8260B	N	ug/L	1	U
RA_GW_VOCs	trans-1,3-Dichloroprop	10061-02-6	SW8260B	N	ug/L	1	U
RA_GW_VOCs	Trichloroethene	79-01-6	SW8260B	N	ug/L	1	U
RA_GW_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	N	ug/L	1	UJ
RA_GW_VOCs	Vinyl Chloride	75-01-4	SW8260B	N	ug/L	1	U
RA_GW_VOCs	Xylenes (total)	1330-20-7	SW8260B	N	ug/L	2	U

## Surface Water Data

Attachment A  
Surface Water Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

			loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	
			sys_loc_code	SUWBACK1	SUWBACK11	SUWBACK12	SUWBACK13	SUWBACK15	
			sys_sample_code	SUWBACK1N	SUWBACK11N	SUWBACK12N	SUWBACK13N	SUWBACK15N	
			sample_date	10/3/2013	9/25/2013	9/25/2013	9/25/2013	9/25/2013	
			sample_type_code	N	N	N	N	N	
			task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
			start_depth	0.5	6.1	1.8	11.9	5.15	
			depth_unit	ft	ft	ft	ft	ft	
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result	report_result	report_result	report_result	report_result
			od	n	t_unit	t_value	interpreted	t_value	interpreted
							_qualifiers		_qualifiers
RA_SW_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	N	ug/l	7.84E-07	U	6.46E-06	J
RA_SW_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	N	ug/l	6.68E-07	J	1.09E-06	J
RA_SW_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	N	ug/l	6.86E-08	U	7.79E-08	U
RA_SW_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	N	ug/l	4.87E-08	U	7.07E-08	U
RA_SW_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	N	ug/l	3E-07	J	8.16E-08	U
RA_SW_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	N	ug/l	5.28E-08	U	7.44E-08	U
RA_SW_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	N	ug/l	6.57E-08	U	8.86E-08	U
RA_SW_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	N	ug/l	3.46E-07	J	6.57E-08	U
RA_SW_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	N	ug/l	7.52E-08	U	9.96E-08	U
RA_SW_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	N	ug/l	3.5E-08	U	5.73E-08	U
RA_SW_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	N	ug/l	6.55E-08	U	9.26E-08	U
RA_SW_DioxinFurans	2,3,4,7,8-HxCDF	60851-34-5	SW8290A	N	ug/l	5.37E-08	U	7.79E-08	U
RA_SW_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	N	ug/l	7.21E-07	J	8.65E-08	U
RA_SW_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	N	ug/l	2.21E-07	J	7.43E-08	U
RA_SW_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	N	ug/l	2.49E-08	U	1.13E-07	U
RA_SW_DioxinFurans	OCDD	3268-87-9	SW8290A	N	ug/l	1.4E-05	U	0.000194	
RA_SW_DioxinFurans	OCDF	39001-02-0	SW8290A	N	ug/l	1.35E-06	J	2.43E-06	J
RA_SW_DioxinFurans	TCDD TEQ Bird	DFTEQ-Bird	SW8290A	N	ug/l	1.01E-06		3.7E-08	
RA_SW_DioxinFurans	TCDD TEQ Fish	DFTEQ-Fish	SW8290A	N	ug/l	6.22E-07		3.7E-08	
RA_SW_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	N	ug/l	5.09E-07		1.34E-07	
RA_SW_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	N	ug/l	1.97E-06	J	1.43E-05	J
RA_SW_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	N	ug/l	6.68E-07	J	2.88E-06	J
RA_SW_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	N	ug/l	3.46E-07	U	1.93E-06	J
RA_SW_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	N	ug/l	4.79E-07	U	5.56E-06	J
RA_SW_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	N	ug/l	6.91E-07	J	5.73E-08	U
RA_SW_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	N	ug/l	1.21E-06	U	7.47E-06	J
RA_SW_DioxinFurans	Total TCDD	41903-57-5	SW8290A	N	ug/l	3.12E-07	J	4.6E-07	J
RA_SW_DioxinFurans	Total TCDF	55722-27-5	SW8290A	N	ug/l	2.45E-07	J	1.23E-05	J
RA_SW_DioxinFurans	Total TEQ	TTEQ	SW8290A	N	ug/l	5.09E-07		1.34E-07	
RA_SW_Field	Conductivity	Cond	FIELD	T	ms/cm	0.376		0.287	
RA_SW_Field	DO	DO	FIELD	T	mg/l	8.23	4.44	3.71	3.62
RA_SW_Field	OXIDATION-REDUCTION POTENTIAL	ORP	FIELD	T	mV	4.9	83.8	53	72.6
RA_SW_Field	PH	PH	FIELD	T	ph units	7.43	6.44	6.7	6.66
RA_SW_Field	SALINITY	SAL	FIELD	T	ppt	0.18	0.12	0.14	0.14
RA_SW_Field	TEMPERATURE	TEMP	FIELD	T	deg F	64.72	66.18	68.13	68.07
RA_SW_Field	TURBIDITY	TURB	FIELD	T	ntu	1.3	11.2	0	5.5
RA_SW_Metals	Aluminum	7429-90-5	SW6020A	D	ug/l	30	U	30	U
RA_SW_Metals	Aluminum	7429-90-5	SW6020A	T	ug/l	26	J	610	350
RA_SW_Metals	Antimony	7440-36-0	SW6020A	D	ug/l	0.19	J	1.1	J
RA_SW_Metals	Antimony	7440-36-0	SW6020A	T	ug/l	0.17	J	0.56	J
RA_SW_Metals	Arsenic	7440-38-2	SW6020A	D	ug/l	1	U	0.48	J
RA_SW_Metals	Arsenic	7440-38-2	SW6020A	T	ug/l	2.1		0.95	J
RA_SW_Metals	Barium	7440-39-3	SW6020A	D	ug/l	43		38	38



Attachment A  
Surface Water Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

			loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	
			sys_loc_code	SUWBACK1	SUWBACK11	SUWBACK12	SUWBACK13	SUWBACK15	
			sys_sample_code	SUWBACK1N	SUWBACK11N	SUWBACK12N	SUWBACK13N	SUWBACK15N	
			sample_date	10/3/2013	9/25/2013	9/25/2013	9/25/2013	9/25/2013	
			sample_type_code	N	N	N	N	N	
			task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
			start_depth	0.5	6.1	1.8	11.9	5.15	
			depth_unit	ft	ft	ft	ft	ft	
method_analyte_group	chemical_name	cas_rn	analytic_meth	fraction	report_resul	report_resul	report_resul	report_resul	report_resul
			od	n	t_unit	t_value	t_value	t_value	t_value
						interpreted	interpreted	interpreted	interpreted
						_qualifiers	_qualifiers	_qualifiers	_qualifiers
RA_SW_Metals	Barium	7440-39-3	SW6020A	T	ug/l	45	46	44	43
RA_SW_Metals	Beryllium	7440-41-7	SW6020A	D	ug/l	1	1	1	1
RA_SW_Metals	Beryllium	7440-41-7	SW6020A	T	ug/l	0.05	J	0.099	J
RA_SW_Metals	Cadmium	7440-43-9	SW6020A	D	ug/l	1	U	1	U
RA_SW_Metals	Cadmium	7440-43-9	SW6020A	T	ug/l	1	U	1	U
RA_SW_Metals	Calcium	7440-70-2	SW6020A	D	ug/l	19000	18000	20000	21000
RA_SW_Metals	Calcium	7440-70-2	SW6020A	T	ug/l	21000	18000	21000	20000
RA_SW_Metals	Chromium	7440-47-3	SW6020A	D	ug/l	1.9	J	1.9	J
RA_SW_Metals	Chromium	7440-47-3	SW6020A	T	ug/l	1.1	J	3.3	2.6
RA_SW_Metals	Cobalt	7440-48-4	SW6020A	D	ug/l	0.16	J	0.21	J
RA_SW_Metals	Cobalt	7440-48-4	SW6020A	T	ug/l	0.52	1.3	0.88	0.93
RA_SW_Metals	Copper	7440-50-8	SW6020A	D	ug/l	1.7	J	2.7	1.7
RA_SW_Metals	Copper	7440-50-8	SW6020A	T	ug/l	5	4.1	3.2	3.5
RA_SW_Metals	Iron	7439-89-6	SW6020A	D	ug/l	14	J	24	50
RA_SW_Metals	Iron	7439-89-6	SW6020A	T	ug/l	310	1600	930	1000
RA_SW_Metals	Lead	7439-92-1	SW6020A	D	ug/l	1	U	1	U
RA_SW_Metals	Lead	7439-92-1	SW6020A	T	ug/l	0.19	J	3.8	2.4
RA_SW_Metals	Magnesium	7439-95-4	SW6020A	D	ug/l	7500	5400	6500	6800
RA_SW_Metals	Magnesium	7439-95-4	SW6020A	T	ug/l	6500	5600	6700	6600
RA_SW_Metals	Manganese	7439-96-5	SW6020A	D	ug/l	5	U	5	U
RA_SW_Metals	Manganese	7439-96-5	SW6020A	T	ug/l	26	210	150	150
RA_SW_Metals	Mercury	7439-97-6	SW7470A	D	ug/l	0.2	U	0.2	U
RA_SW_Metals	Mercury	7439-97-6	SW7470A	T	ug/l	0.2	U	0.2	U
RA_SW_Metals	Nickel	7440-02-0	SW6020A	D	ug/l	1.6	1.6	1.5	1.6
RA_SW_Metals	Nickel	7440-02-0	SW6020A	T	ug/l	2.7	U	3.2	2.6
RA_SW_Metals	Potassium	7440-09-7	SW6020A	D	ug/l	3600	3700	3800	3900
RA_SW_Metals	Potassium	7440-09-7	SW6020A	T	ug/l	3600	3700	3800	3800
RA_SW_Metals	Selenium	7782-49-2	SW6020A	D	ug/l	5	U	0.44	J
RA_SW_Metals	Selenium	7782-49-2	SW6020A	T	ug/l	5	U	5	U
RA_SW_Metals	Silver	7440-22-4	SW6020A	D	ug/l	1	U	1	U
RA_SW_Metals	Silver	7440-22-4	SW6020A	T	ug/l	1	U	1	U
RA_SW_Metals	Sodium	7440-23-5	SW6020A	D	ug/l	37000	19000	21000	21000
RA_SW_Metals	Sodium	7440-23-5	SW6020A	T	ug/l	38000	19000	21000	20000
RA_SW_Metals	Thallium	7440-28-0	SW6020A	D	ug/l	0.02	J	0.051	J
RA_SW_Metals	Thallium	7440-28-0	SW6020A	T	ug/l	1	U	0.024	J
RA_SW_Metals	Vanadium	7440-62-2	SW6020A	D	ug/l	1	U	1	U
RA_SW_Metals	Vanadium	7440-62-2	SW6020A	T	ug/l	1	U	2.5	1.6
RA_SW_Metals	Zinc	7440-66-6	SW6020A	D	ug/l	4.7	J	9.1	5
RA_SW_Metals	Zinc	7440-66-6	SW6020A	T	ug/l	5.5	U	12	7.3
RA_SW_Other	Hardness (as CaCO3)	HARD	A2340C	D	ug/l	80000	76000	78000	78000
RA_SW_Other	Hardness (as CaCO3)	HARD	A2340C	T	ug/l	80000	70000	80000	80000
RA_SW_Other	HEM (Oil and Grease)	348	E1664B	N	ug/l	2000	J	4800	U
RA_SW_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	N	ug/l	0.0013	U	0.0013	U

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			loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background			
			sys_loc_code	SUWBACK1	SUWBACK11	SUWBACK12	SUWBACK13	SUWBACK15			
			sys_sample_code	SUWBACK1N	SUWBACK11N	SUWBACK12N	SUWBACK13N	SUWBACK15N			
			sample_date	10/3/2013	9/25/2013	9/25/2013	9/25/2013	9/25/2013			
			sample_type_code	N	N	N	N	N			
			task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
			start_depth	0.5	6.1	1.8	11.9	5.15			
			depth_unit	ft	ft	ft	ft	ft			
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result	report_result	report_result	report_result	report_result		
			od	n	t_unit	t_value	interpreted	t_value	interpreted		
							_qualifiers		_qualifiers		
RA_SW_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	N	ug/l	0.0013	U	0.0013	U	0.0013	UJ
RA_SW_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	N	ug/l	0.0013	U	0.0011	J	0.0012	J
RA_SW_PestPCBs	Aldrin	309-00-2	SW8081B LL	N	ug/l	0.0013	U	0.0013	U	0.0013	UJ
RA_SW_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	N	ug/l	0.0013	U	0.0013	U	0.0013	UJ
RA_SW_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	N	ug/l	0.01	U	0.0094	U	0.01	U
RA_SW_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	N	ug/l	0.01	U	0.0094	U	0.01	U
RA_SW_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	N	ug/l	0.01	U	0.0094	U	0.01	U
RA_SW_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	N	ug/l	0.01	U	0.0094	U	0.01	U
RA_SW_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	N	ug/l	0.01	U	0.0094	U	0.01	U
RA_SW_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	N	ug/l	0.01	U	0.0094	U	0.01	U
RA_SW_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	N	ug/l	0.01	U	0.0094	U	0.01	U
RA_SW_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	N	ug/l	0.01	U	0.0094	U	0.01	U
RA_SW_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	N	ug/l	0.01	U	0.0094	U	0.01	U
RA_SW_PestPCBs	beta-BHC	319-85-7	SW8081B LL	N	ug/l	0.0013	U	0.0013	U	0.0013	UJ
RA_SW_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	N	ug/l	0.0013	U	0.0013	U	0.0013	UJ
RA_SW_PestPCBs	delta-BHC	319-86-8	SW8081B LL	N	ug/l	0.0013	U	0.0013	U	0.0013	UJ
RA_SW_PestPCBs	Dieldrin	60-57-1	SW8081B LL	N	ug/l	0.0013	U	0.0013	U	0.0013	UJ
RA_SW_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	N	ug/l	0.0013	U	0.0013	U	0.0013	UJ
RA_SW_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	N	ug/l	0.0013	U	0.0013	U	0.0013	UJ
RA_SW_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	N	ug/l	0.0013	U	0.0013	U	0.0013	UJ
RA_SW_PestPCBs	Endrin	72-20-8	SW8081B LL	N	ug/l	0.0013	U	0.0013	U	0.0013	UJ
RA_SW_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	N	ug/l	0.0013	U	0.0013	U	0.0013	UJ
RA_SW_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	N	ug/l	0.0013	U	0.0013	U	0.0013	UJ
RA_SW_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	N	ug/l	0.0013	U	0.0013	U	0.0013	UJ
RA_SW_PestPCBs	Heptachlor	76-44-8	SW8081B LL	N	ug/l	0.0013	U	0.0013	U	0.0013	UJ
RA_SW_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	N	ug/l	0.0013	U	0.0013	U	0.0013	UJ
RA_SW_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	N	ug/l	0.0026	U	0.0026	U	0.0026	UJ
RA_SW_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	N	ug/l	0.01	U	0.0094	U	0.01	U
RA_SW_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	N	ug/l	0.01	U	0.0094	U	0.01	U
RA_SW_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	N	ug/l	0.1	U	0.1	U	0.1	UJ
RA_SW_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	N	ug/l	0.0013	U	0.0013	U	0.0012	J
RA_SW_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	N	ug/l	1	U	1.1	U	1.1	U
RA_SW_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	N	ug/l	1	U	1.1	U	1.1	U
RA_SW_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	N	ug/l	0.21	U	0.21	U	0.22	U
RA_SW_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	N	ug/l	1	U	1.1	U	1.1	U
RA_SW_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	N	ug/l	1	U	1.1	U	1.1	U
RA_SW_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	N	ug/l	1	U	1.1	U	1.1	U
RA_SW_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	N	ug/l	0.21	U	0.21	U	0.22	U
RA_SW_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	N	ug/l	1	U	1.1	U	1.1	U
RA_SW_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	N	ug/l	5.2	U	5.3	U	5.4	U
RA_SW_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	N	ug/l	1	U	1.1	U	1.1	U
RA_SW_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	N	ug/l	1	U	1.1	U	1.1	U
RA_SW_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	N	ug/l	0.21	U	0.21	U	0.22	U

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			loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	
			sys_loc_code	SUWBACK1	SUWBACK11	SUWBACK12	SUWBACK13	SUWBACK15	
			sys_sample_code	SUWBACK1N	SUWBACK11N	SUWBACK12N	SUWBACK13N	SUWBACK15N	
			sample_date	10/3/2013	9/25/2013	9/25/2013	9/25/2013	9/25/2013	
			sample_type_code	N	N	N	N	N	
			task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
			start_depth	0.5	6.1	1.8	11.9	5.15	
			depth_unit	ft	ft	ft	ft	ft	
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result	report_result	report_result	report_result	report_result
			od	n	t_unit	t_value	t_value	t_value	t_value
						interpreted	interpreted	interpreted	interpreted
						_qualifiers	_qualifiers	_qualifiers	_qualifiers
RA_SW_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	N	ug/l	1	U	1.1	U
RA_SW_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	N	ug/l	0.21	U	0.21	U
RA_SW_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	N	ug/l	1	U	1.1	U
RA_SW_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	N	ug/l	5.2	U	5.3	U
RA_SW_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	N	ug/l	1	U	1.1	U
RA_SW_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	N	ug/l	1	U	1.1	U
RA_SW_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	N	ug/l	5.2	U	5.3	U
RA_SW_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	N	ug/l	5.2	U	5.3	U
RA_SW_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	N	ug/l	1	U	1.1	U
RA_SW_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	N	ug/l	1	U	1.1	U
RA_SW_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	N	ug/l	1	U	1.1	U
RA_SW_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	N	ug/l	1	U	1.1	U
RA_SW_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	N	ug/l	1	U	1.1	U
RA_SW_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	N	ug/l	5.2	U	5.3	U
RA_SW_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	N	ug/l	5.2	U	5.3	U
RA_SW_SVOCs	Acenaphthene	83-32-9	SW8270D LL	N	ug/l	0.21	U	0.21	U
RA_SW_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	N	ug/l	0.21	U	0.21	U
RA_SW_SVOCs	Acetophenone	98-86-2	SW8270D LL	N	ug/l	1	U	1.1	U
RA_SW_SVOCs	Anthracene	120-12-7	SW8270D LL	N	ug/l	0.21	U	0.21	U
RA_SW_SVOCs	Atrazine	1912-24-9	SW8270D LL	N	ug/l	1	U	1.1	U
RA_SW_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	N	ug/l	1	U	1.1	U
RA_SW_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	N	ug/l	0.21	U	0.21	U
RA_SW_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	N	ug/l	0.21	U	0.21	U
RA_SW_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	N	ug/l	0.21	U	0.21	U
RA_SW_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	N	ug/l	0.21	U	0.21	U
RA_SW_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	N	ug/l	0.21	U	0.21	U
RA_SW_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	N	ug/l	1	U	1.1	U
RA_SW_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	N	ug/l	0.21	U	0.21	U
RA_SW_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	N	ug/l	2.1	U	3.6	U
RA_SW_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	N	ug/l	1	U	1.1	U
RA_SW_SVOCs	Caprolactam	105-60-2	SW8270D LL	N	ug/l	5.2	U	5.3	U
RA_SW_SVOCs	Carbazole	86-74-8	SW8270D LL	N	ug/l	0.21	U	0.21	U
RA_SW_SVOCs	Chrysene	218-01-9	SW8270D LL	N	ug/l	0.21	U	0.21	U
RA_SW_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	N	ug/l	0.21	U	0.21	U
RA_SW_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	N	ug/l	1	U	1.1	U
RA_SW_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	N	ug/l	1	U	1.1	U
RA_SW_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	N	ug/l	1	U	1.1	U
RA_SW_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	N	ug/l	1	U	1.1	U
RA_SW_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	N	ug/l	1	U	1.1	U
RA_SW_SVOCs	Fluoranthene	206-44-0	SW8270D LL	N	ug/l	0.21	U	0.21	U
RA_SW_SVOCs	Fluorene	86-73-7	SW8270D LL	N	ug/l	0.21	U	0.21	U
RA_SW_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	N	ug/l	0.21	U	0.21	U
RA_SW_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	N	ug/l	0.21	U	0.21	U

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			loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	
			sys_loc_code	SUWBACK1	SUWBACK11	SUWBACK12	SUWBACK13	SUWBACK15	
			sys_sample_code	SUWBACK1N	SUWBACK11N	SUWBACK12N	SUWBACK13N	SUWBACK15N	
			sample_date	10/3/2013	9/25/2013	9/25/2013	9/25/2013	9/25/2013	
			sample_type_code	N	N	N	N	N	
			task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
			start_depth	0.5	6.1	1.8	11.9	5.15	
			depth_unit	ft	ft	ft	ft	ft	
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result	report_result	report_result	report_result	report_result
					t_unit	t_value	interpreted	t_value	interpreted
							_qualifiers		_qualifiers
RA_SW_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	N	ug/l	1	U	1.1	U
RA_SW_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	N	ug/l	1	U	1.1	U
RA_SW_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	N	ug/l	0.21	U	0.21	U
RA_SW_SVOCs	Isophorone	78-59-1	SW8270D LL	N	ug/l	1	U	1.1	U
RA_SW_SVOCs	Naphthalene	91-20-3	SW8270D LL	N	ug/l	0.21	U	0.21	U
RA_SW_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	N	ug/l	2.1	U	2.1	U
RA_SW_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	N	ug/l	0.21	U	0.21	U
RA_SW_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	N	ug/l	1	U	1.1	U
RA_SW_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	N	ug/l	1	U	1.1	U
RA_SW_SVOCs	Phenanthrene	85-01-8	SW8270D LL	N	ug/l	0.21	U	0.21	U
RA_SW_SVOCs	Phenol	108-95-2	SW8270D LL	N	ug/l	0.21	U	0.21	U
RA_SW_SVOCs	Pyrene	129-00-0	SW8270D LL	N	ug/l	0.21	U	0.21	U
RA_SW_SVOCs	Total High-molecular-weight PAHs	TOT-PAH-HMW	SW8270D LL	N	ug/l	0.21	U	0.028	U
RA_SW_SVOCs	Total Low-molecular-weight PAHs	TOT-PAH-LMW	SW8270D LL	N	ug/l	0.21	U	0.21	U
RA_SW_SVOCs	Total PAHs (sum 16)	TOT-PAH	SW8270D LL	N	ug/l	0.21	U	0.028	U
RA_SW_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	1,4-Dioxane	123-91-1	SW8260B	N	ug/l	200	U	200	U
RA_SW_VOCs	2-Butanone	78-93-3	SW8260B	N	ug/l	5	U	5	U
RA_SW_VOCs	2-Hexanone	591-78-6	SW8260B	N	ug/l	5	U	5	U
RA_SW_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	N	ug/l	5	U	5	U
RA_SW_VOCs	Acetone	67-64-1	SW8260B	N	ug/l	3.7	J	5	U
RA_SW_VOCs	Benzene	71-43-2	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Bromochloromethane	74-97-5	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Bromodichloromethane	75-27-4	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Bromoform	75-25-2	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Bromomethane	74-83-9	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Carbon Disulfide	75-15-0	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Chlorobenzene	108-90-7	SW8260B	N	ug/l	1	U	1	U

			loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	
			sys_loc_code	SUWBACK1	SUWBACK11	SUWBACK12	SUWBACK13	SUWBACK15	
			sys_sample_code	SUWBACK1N	SUWBACK11N	SUWBACK12N	SUWBACK13N	SUWBACK15N	
			sample_date	10/3/2013	9/25/2013	9/25/2013	9/25/2013	9/25/2013	
			sample_type_code	N	N	N	N	N	
			task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
			start_depth	0.5	6.1	1.8	11.9	5.15	
			depth_unit	ft	ft	ft	ft	ft	
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result	report_result	report_result	report_result	report_result
			od	n	t_unit	t_value	interpreted	t_value	interpreted
							_qualifiers		_qualifiers
RA_SW_VOCs	Chloroethane	75-00-3	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Chloroform	67-66-3	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Chloromethane	74-87-3	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Cyclohexane	110-82-7	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Dibromochloromethane	124-48-1	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Ethylbenzene	100-41-4	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Isopropylbenzene	98-82-8	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	m, p-Xylene	XYLMP	SW8260B	N	ug/l	2	U	2	U
RA_SW_VOCs	Methyl Acetate	79-20-9	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Methylcyclohexane	108-87-2	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Methylene Chloride	75-09-2	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	o-Xylene	95-47-6	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Styrene	100-42-5	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Tetrachloroethylene	127-18-4	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Toluene	108-88-3	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Trichloroethene	79-01-6	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Vinyl Chloride	75-01-4	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Xylenes (total)	1330-20-7	SW8260B	N	ug/l	2	U	2	U

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			loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background			
			sys_loc_code	SUWBACK2	SUWBACK3	SUWBACK4	SUWBACK5	SUWBACK6			
			sys_sample_code	SUWBACK2N	SUWBACK3N	SUWBACK4N	SUWBACK5N	SUWBACK6N			
			sample_date	10/3/2013	9/26/2013	9/26/2013	9/26/2013	9/26/2013			
			sample_type_code	N	N	N	N	N			
			task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
			start_depth	0.5	1.5	7.6	5.1	1.8			
			depth_unit	ft	ft	ft	ft	ft			
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result	report_result	report_result	report_result	report_result		
					unit	value	value	value	value		
						interpreted	interpreted	interpreted	interpreted		
						qualifiers	qualifiers	qualifiers	qualifiers		
RA_SW_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	N	ug/l	5.21E-07	U	8.86E-06	J	4.87E-06	J
RA_SW_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	N	ug/l	4.12E-08	U	8.66E-07	J	6.57E-07	J
RA_SW_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	N	ug/l	5.64E-08	U	1.1E-07	U	1.13E-07	U
RA_SW_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	N	ug/l	4.46E-07	J	8.47E-08	U	8.31E-08	U
RA_SW_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	N	ug/l	3.19E-08	U	1.13E-07	U	4.54E-07	J
RA_SW_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	N	ug/l	4.28E-08	U	8.19E-08	U	8.57E-08	U
RA_SW_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	N	ug/l	2.97E-08	U	1.09E-07	U	1.02E-06	J
RA_SW_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	N	ug/l	3.81E-08	U	5.41E-07	J	7.64E-08	U
RA_SW_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	N	ug/l	3.36E-08	U	1.33E-07	U	1.03E-07	U
RA_SW_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	N	ug/l	2E-08	U	4.59E-08	U	5.77E-08	U
RA_SW_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	N	ug/l	1.2E-07	J	2.1E-07	J	1.04E-07	U
RA_SW_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	N	ug/l	1.15E-07	J	5.97E-07	J	8.49E-08	U
RA_SW_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	N	ug/l	3.41E-08	U	7.5E-08	U	9.55E-08	U
RA_SW_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	N	ug/l	4.01E-08	U	4.08E-08	U	6.93E-08	U
RA_SW_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	N	ug/l	2.21E-08	U	5.01E-08	U	9.97E-08	U
RA_SW_DioxinFurans	OCDD	3268-87-9	SW8290A	N	ug/l	9.34E-06	U	0.000228		0.000183	
RA_SW_DioxinFurans	OCDF	39001-02-0	SW8290A	N	ug/l	3.73E-07	U	8.27E-07	J	1.41E-06	J
RA_SW_DioxinFurans	TCDD TEQ Bird	DFTEQ-Bird	SW8290A	N	ug/l	4.58E-08		1.75E-07		1.77E-07	
RA_SW_DioxinFurans	TCDD TEQ Fish	DFTEQ-Fish	SW8290A	N	ug/l	2.41E-07		1.16E-07		1.77E-07	
RA_SW_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	N	ug/l	5.97E-08		2.86E-07		2.58E-07	
RA_SW_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	N	ug/l	1.97E-06	J	1.66E-05	J	1.08E-05	J
RA_SW_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	N	ug/l	4.78E-08	U	2.15E-06	J	6.57E-07	J
RA_SW_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	N	ug/l	1.05E-06	U	5.41E-07	J	1.68E-06	J
RA_SW_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	N	ug/l	1.15E-07	U	4.79E-06	J	5.57E-06	J
RA_SW_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	N	ug/l	2E-08	U	4.59E-08	U	5.77E-08	U
RA_SW_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	N	ug/l	1.2E-07	U	4.22E-06	J	6.4E-06	J
RA_SW_DioxinFurans	Total TCDD	41903-57-5	SW8290A	N	ug/l	4.01E-08	U	4.08E-08	U	6.93E-08	U
RA_SW_DioxinFurans	Total TCDF	55722-27-5	SW8290A	N	ug/l	2.21E-08	U	4.06E-06	J	1.06E-05	J
RA_SW_DioxinFurans	Total TEQ	TTEQ	SW8290A	N	ug/l	5.97E-08		2.86E-07		2.58E-07	
RA_SW_Field	Conductivity	Cond	FIELD	T	ms/cm	0.47		0.266		0.24	
RA_SW_Field	DO	DO	FIELD	T	mg/l	10.24		7.55		5.13	
RA_SW_Field	OXIDATION-REDUCTION POTENTIAL	ORP	FIELD	T	mV	31.7		45.2		23.2	
RA_SW_Field	PH	PH	FIELD	T	ph units	7.11		6.91		7.03	
RA_SW_Field	SALINITY	SAL	FIELD	T	ppt	0.23		0.15		0.11	
RA_SW_Field	TEMPERATURE	TEMP	FIELD	T	deg F	68.3		66.02		64.32	
RA_SW_Field	TURBIDITY	TURB	FIELD	T	ntu	1.4		2.5		17.2	
RA_SW_Metals	Aluminum	7429-90-5	SW6020A	D	ug/l	6.1	J	30	U	30	U
RA_SW_Metals	Aluminum	7429-90-5	SW6020A	T	ug/l	35		150		300	
RA_SW_Metals	Antimony	7440-36-0	SW6020A	D	ug/l	0.25	J	0.54	J	0.75	J
RA_SW_Metals	Antimony	7440-36-0	SW6020A	T	ug/l	0.23	J	0.37	J	0.51	J
RA_SW_Metals	Arsenic	7440-38-2	SW6020A	D	ug/l	1	U	1	U	1	U
RA_SW_Metals	Arsenic	7440-38-2	SW6020A	T	ug/l	2.4		0.34	J	0.68	J
RA_SW_Metals	Barium	7440-39-3	SW6020A	D	ug/l	58		39		33	

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			loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background				
			sys_loc_code	SUWBACK2	SUWBACK3	SUWBACK4	SUWBACK5	SUWBACK6	SUWBACK6				
			sys_sample_code	SUWBACK2N	SUWBACK3N	SUWBACK4N	SUWBACK5N	SUWBACK6N	SUWBACK6N				
			sample_date	10/3/2013	9/26/2013	9/26/2013	9/26/2013	9/26/2013	9/26/2013				
			sample_type_code	N	N	N	N	N	N				
			task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
			start_depth	0.5	1.5	7.6	5.1	1.8	1.8				
			depth_unit	ft	ft	ft	ft	ft	ft				
method_analyte_group	chemical_name	cas_rn	analytic_meth	fraction	report_resul	report_resul	report_resul	report_resul	report_resul	report_resul	report_resul	report_resul	report_resul
			od	n	t_unit	t_value	interpreted	t_value	interpreted	t_value	interpreted	t_value	interpreted
							_qualifiers		_qualifiers		_qualifiers		_qualifiers
RA_SW_Metals	Barium	7440-39-3	SW6020A	T	ug/l	60		44		40		36	
RA_SW_Metals	Beryllium	7440-41-7	SW6020A	D	ug/l	1	U	1	U	1	U	1	U
RA_SW_Metals	Beryllium	7440-41-7	SW6020A	T	ug/l	0.21	J	0.037	J	0.086	J	0.063	J
RA_SW_Metals	Cadmium	7440-43-9	SW6020A	D	ug/l	1	U	1	U	1	U	1	U
RA_SW_Metals	Cadmium	7440-43-9	SW6020A	T	ug/l	1	U	1	U	1	U	1	U
RA_SW_Metals	Calcium	7440-70-2	SW6020A	D	ug/l	32000		21000		18000		16000	
RA_SW_Metals	Calcium	7440-70-2	SW6020A	T	ug/l	36000		20000		18000		16000	
RA_SW_Metals	Chromium	7440-47-3	SW6020A	D	ug/l	2		1.6	J	1.5	J	1.6	J
RA_SW_Metals	Chromium	7440-47-3	SW6020A	T	ug/l	0.85	J	2.2		2.6		2.4	
RA_SW_Metals	Cobalt	7440-48-4	SW6020A	D	ug/l	0.09	J	0.16	J	0.12	J	0.12	J
RA_SW_Metals	Cobalt	7440-48-4	SW6020A	T	ug/l	0.49	J	1.4		1.3		1.1	
RA_SW_Metals	Copper	7440-50-8	SW6020A	D	ug/l	1.7	J	1.7	J	1.7	J	1.7	J
RA_SW_Metals	Copper	7440-50-8	SW6020A	T	ug/l	4.4		2.7		3.3		3.1	
RA_SW_Metals	Iron	7439-89-6	SW6020A	D	ug/l	50	U	50	U	50	U	6.3	J
RA_SW_Metals	Iron	7439-89-6	SW6020A	T	ug/l	440		1100		1300		1100	
RA_SW_Metals	Lead	7439-92-1	SW6020A	D	ug/l	1	U	1	U	1	U	1	U
RA_SW_Metals	Lead	7439-92-1	SW6020A	T	ug/l	0.19	J	1.2		2		2.2	
RA_SW_Metals	Magnesium	7439-95-4	SW6020A	D	ug/l	10000		6400		5300		4600	
RA_SW_Metals	Magnesium	7439-95-4	SW6020A	T	ug/l	9200		6300		5300		4600	
RA_SW_Metals	Manganese	7439-96-5	SW6020A	D	ug/l	5	U	5	U	5	U	5	U
RA_SW_Metals	Manganese	7439-96-5	SW6020A	T	ug/l	60		260		260		190	
RA_SW_Metals	Mercury	7439-97-6	SW7470A	D	ug/l	0.2	U	0.2	U	0.2	U	0.2	U
RA_SW_Metals	Mercury	7439-97-6	SW7470A	T	ug/l	0.2	U	0.2	U	0.2	U	0.2	U
RA_SW_Metals	Nickel	7440-02-0	SW6020A	D	ug/l	2.7		1.8		1.8		1.6	
RA_SW_Metals	Nickel	7440-02-0	SW6020A	T	ug/l	4	U	3		3.2		2.6	
RA_SW_Metals	Potassium	7440-09-7	SW6020A	D	ug/l	4900		3800		3600		3300	
RA_SW_Metals	Potassium	7440-09-7	SW6020A	T	ug/l	4900		3700		3600		3300	
RA_SW_Metals	Selenium	7782-49-2	SW6020A	D	ug/l	5	U	5	U	5	U	5	U
RA_SW_Metals	Selenium	7782-49-2	SW6020A	T	ug/l	5	U	5	U	5	U	5	U
RA_SW_Metals	Silver	7440-22-4	SW6020A	D	ug/l	1	U	1	U	1	U	1	U
RA_SW_Metals	Silver	7440-22-4	SW6020A	T	ug/l	1	U	1	U	1	U	1	U
RA_SW_Metals	Sodium	7440-23-5	SW6020A	D	ug/l	38000		27000		21000		18000	
RA_SW_Metals	Sodium	7440-23-5	SW6020A	T	ug/l	39000		26000		20000		18000	
RA_SW_Metals	Thallium	7440-28-0	SW6020A	D	ug/l	0.027	J	0.021	J	1	U	0.023	J
RA_SW_Metals	Thallium	7440-28-0	SW6020A	T	ug/l	1	U	0.025	J	0.034	J	0.029	J
RA_SW_Metals	Vanadium	7440-62-2	SW6020A	D	ug/l	0.11	J	1	U	1	U	0.16	J
RA_SW_Metals	Vanadium	7440-62-2	SW6020A	T	ug/l	1	U	1.5		1.8		1.7	
RA_SW_Metals	Zinc	7440-66-6	SW6020A	D	ug/l	8.9		3.3	J	4.2	J	3.3	J
RA_SW_Metals	Zinc	7440-66-6	SW6020A	T	ug/l	10	U	5.5		8.5		7.6	
RA_SW_Other	Hardness (as CaCO3)	HARD	A2340C	D	ug/l	130000		76000		66000		58000	
RA_SW_Other	Hardness (as CaCO3)	HARD	A2340C	T	ug/l	130000		80000		68000		60000	
RA_SW_Other	HEM (Oil and Grease)	348	E1664B	N	ug/l	2200	J			4800	U	2300	J
RA_SW_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	N	ug/l	0.0013	U			0.0012	U	0.0012	U

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			loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	
			sys_loc_code	SUWBACK2	SUWBACK3	SUWBACK4	SUWBACK5	SUWBACK6	
			sys_sample_code	SUWBACK2N	SUWBACK3N	SUWBACK4N	SUWBACK5N	SUWBACK6N	
			sample_date	10/3/2013	9/26/2013	9/26/2013	9/26/2013	9/26/2013	
			sample_type_code	N	N	N	N	N	
			task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
			start_depth	0.5	1.5	7.6	5.1	1.8	
			depth_unit	ft	ft	ft	ft	ft	
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result	report_result	report_result	report_result	report_result
			od	n	t_unit	t_value	interpreted	t_value	interpreted
							_qualifiers		_qualifiers
RA_SW_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	N	ug/l	0.0013	U	0.0012	U
RA_SW_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	N	ug/l	0.0013	U	0.0012	J
RA_SW_PestPCBs	Aldrin	309-00-2	SW8081B LL	N	ug/l	0.0013	U	0.0012	U
RA_SW_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	N	ug/l	0.0013	U	0.0012	U
RA_SW_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	N	ug/l	0.01	U	0.0095	U
RA_SW_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	N	ug/l	0.01	U	0.0095	U
RA_SW_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	N	ug/l	0.01	U	0.0095	U
RA_SW_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	N	ug/l	0.01	U	0.0095	U
RA_SW_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	N	ug/l	0.01	U	0.0095	U
RA_SW_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	N	ug/l	0.01	U	0.0095	U
RA_SW_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	N	ug/l	0.01	U	0.0095	U
RA_SW_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	N	ug/l	0.01	U	0.0095	U
RA_SW_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	N	ug/l	0.01	U	0.0095	U
RA_SW_PestPCBs	beta-BHC	319-85-7	SW8081B LL	N	ug/l	0.0013	U	0.0012	U
RA_SW_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	N	ug/l	0.0013	U	0.0012	U
RA_SW_PestPCBs	delta-BHC	319-86-8	SW8081B LL	N	ug/l	0.0013	U	0.0012	U
RA_SW_PestPCBs	Dieldrin	60-57-1	SW8081B LL	N	ug/l	0.0011	J	0.0012	U
RA_SW_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	N	ug/l	0.0013	U	0.0012	U
RA_SW_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	N	ug/l	0.0013	U	0.0012	U
RA_SW_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	N	ug/l	0.0013	U	0.0012	U
RA_SW_PestPCBs	Endrin	72-20-8	SW8081B LL	N	ug/l	0.0013	U	0.0012	U
RA_SW_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	N	ug/l	0.0013	U	0.0012	U
RA_SW_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	N	ug/l	0.0013	U	0.0012	U
RA_SW_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	N	ug/l	0.0013	U	0.0012	U
RA_SW_PestPCBs	Heptachlor	76-44-8	SW8081B LL	N	ug/l	0.0013	U	0.0012	U
RA_SW_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	N	ug/l	0.0013	U	0.0012	U
RA_SW_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	N	ug/l	0.0025	U	0.0024	U
RA_SW_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	N	ug/l	0.01	U	0.0095	U
RA_SW_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	N	ug/l	0.01	U	0.0095	U
RA_SW_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	N	ug/l	0.1	U	0.095	U
RA_SW_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	N	ug/l	0.0013	U	0.0012	U
RA_SW_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	N	ug/l	0.99	U	0.96	U
RA_SW_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	N	ug/l	0.99	U	0.96	U
RA_SW_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	N	ug/l	0.2	U	0.19	U
RA_SW_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	N	ug/l	0.99	U	0.96	U
RA_SW_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	N	ug/l	0.99	U	0.96	U
RA_SW_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	N	ug/l	0.99	U	0.96	U
RA_SW_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	N	ug/l	0.2	U	0.19	U
RA_SW_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	N	ug/l	0.99	U	0.96	U
RA_SW_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	N	ug/l	5	U	4.8	U
RA_SW_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	N	ug/l	0.99	U	0.96	U
RA_SW_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	N	ug/l	0.99	U	0.96	U
RA_SW_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	N	ug/l	0.2	U	0.19	U



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			loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background			
			sys_loc_code	SUWBACK2	SUWBACK3	SUWBACK4	SUWBACK5	SUWBACK6	SUWBACK6	SUWBACK6			
			sys_sample_code	SUWBACK2N	SUWBACK3N	SUWBACK4N	SUWBACK5N	SUWBACK6N	SUWBACK6N	SUWBACK6N			
			sample_date	10/3/2013	9/26/2013	9/26/2013	9/26/2013	9/26/2013	9/26/2013	9/26/2013			
			sample_type_code	N	N	N	N	N	N	N			
			task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
			start_depth	0.5	1.5	7.6	5.1	1.8	1.8	1.8			
			depth_unit	ft	ft	ft	ft	ft	ft	ft			
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result	report_result	interpreted	report_result	interpreted	report_result	interpreted	report_result	interpreted
			od	n	t_unit	t_value	_qualifiers	t_value	_qualifiers	t_value	_qualifiers	t_value	_qualifiers
RA_SW_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	N	ug/l	0.99	U	0.96	U	0.97	U	0.97	U
RA_SW_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	N	ug/l	0.2	U	0.19	U	0.19	U		
RA_SW_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	N	ug/l	0.99	U	0.96	U	0.97	U		
RA_SW_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	N	ug/l	5	U	4.8	U	4.9	U		
RA_SW_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	N	ug/l	0.99	U	0.96	U	0.97	U		
RA_SW_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	N	ug/l	0.99	U	0.96	U	0.97	U		
RA_SW_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	N	ug/l	5	U	4.8	U	4.9	U		
RA_SW_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	N	ug/l	5	U	4.8	U	4.9	U		
RA_SW_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	N	ug/l	0.99	U	0.96	U	0.97	U		
RA_SW_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	N	ug/l	0.99	U	0.96	U	0.97	U		
RA_SW_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	N	ug/l	0.99	U	0.96	U	0.97	U		
RA_SW_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	N	ug/l	0.99	U	0.96	U	0.97	U		
RA_SW_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	N	ug/l	0.99	U	0.96	U	0.97	U		
RA_SW_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	N	ug/l	5	U	4.8	U	4.9	U		
RA_SW_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	N	ug/l	5	U	4.8	U	4.9	U		
RA_SW_SVOCs	Acenaphthene	83-32-9	SW8270D LL	N	ug/l	0.2	U	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	N	ug/l	0.2	U	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Acetophenone	98-86-2	SW8270D LL	N	ug/l	0.99	U	0.96	U	0.97	U		
RA_SW_SVOCs	Anthracene	120-12-7	SW8270D LL	N	ug/l	0.2	U	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Atrazine	1912-24-9	SW8270D LL	N	ug/l	0.99	U	0.96	U	0.97	U		
RA_SW_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	N	ug/l	0.99	U	0.96	U	0.97	U		
RA_SW_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	N	ug/l	0.2	U	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	N	ug/l	0.2	U	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	N	ug/l	0.2	U	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	N	ug/l	0.2	U	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	N	ug/l	0.2	U	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	N	ug/l	0.99	U	0.96	U	0.97	U		
RA_SW_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	N	ug/l	0.2	U	0.19	U	0.19	U		
RA_SW_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	N	ug/l	2	U	2.8	U	2.4	U		
RA_SW_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	N	ug/l	0.99	U	0.16	J	0.97	U		
RA_SW_SVOCs	Caprolactam	105-60-2	SW8270D LL	N	ug/l	5	U	4.8	U	4.9	U		
RA_SW_SVOCs	Carbazole	86-74-8	SW8270D LL	N	ug/l	0.2	U	0.19	U	0.19	U		
RA_SW_SVOCs	Chrysene	218-01-9	SW8270D LL	N	ug/l	0.2	U	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	N	ug/l	0.2	U	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	N	ug/l	0.99	U	0.96	U	0.97	U		
RA_SW_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	N	ug/l	0.99	U	0.96	U	0.97	U		
RA_SW_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	N	ug/l	0.99	U	0.96	U	0.97	U		
RA_SW_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	N	ug/l	0.99	U	0.96	U	0.12	J		
RA_SW_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	N	ug/l	0.99	U	0.96	U	0.97	U		
RA_SW_SVOCs	Fluoranthene	206-44-0	SW8270D LL	N	ug/l	0.2	U	0.024	J	0.031	J	0.19	U
RA_SW_SVOCs	Fluorene	86-73-7	SW8270D LL	N	ug/l	0.2	U	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	N	ug/l	0.2	U	0.19	U	0.19	U		
RA_SW_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	N	ug/l	0.2	U	0.19	U	0.19	U		



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			loc_group	RA_Background		RA_Background		RA_Background		RA_Background		RA_Background	
			sys_loc_code	SUVBACK2		SUVBACK3		SUVBACK4		SUVBACK5		SUVBACK6	
			sys_sample_code	SUVBACK2N		SUVBACK3N		SUVBACK4N		SUVBACK5N		SUVBACK6N	
			sample_date	10/3/2013		9/26/2013		9/26/2013		9/26/2013		9/26/2013	
			sample_type_code	N		N		N		N		N	
			task_code	Phase2-2013		Phase2-2013		Phase2-2013		Phase2-2013		Phase2-2013	
			start_depth	0.5		1.5		7.6		5.1		1.8	
			depth_unit	ft		ft		ft		ft		ft	
method_analyte_group	chemical_name	cas_rn	analytic_meth	fraction	report_resul	report_resul	interpreted	report_resul	interpreted	report_resul	interpreted	report_resul	interpreted
			od	n	t_unit	t_value	_qualifiers	t_value	_qualifiers	t_value	_qualifiers	t_value	_qualifiers
RA_SW_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	N	ug/l	0.99	U			0.96	U	0.97	U
RA_SW_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	N	ug/l	0.99	U			0.96	U	0.97	U
RA_SW_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	N	ug/l	0.2	U	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Isophorone	78-59-1	SW8270D LL	N	ug/l	0.99	U			0.96	U	0.97	U
RA_SW_SVOCs	Naphthalene	91-20-3	SW8270D LL	N	ug/l	0.2	U	0.19	U	0.025	J	0.19	U
RA_SW_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	N	ug/l	2	U			1.9	U	1.9	U
RA_SW_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	N	ug/l	0.2	U			0.19	U	0.19	U
RA_SW_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	N	ug/l	0.99	U			0.96	U	0.97	U
RA_SW_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	N	ug/l	0.99	U			0.96	U	0.97	U
RA_SW_SVOCs	Phenanthrene	85-01-8	SW8270D LL	N	ug/l	0.2	U	0.048	J	0.19	U	0.19	U
RA_SW_SVOCs	Phenol	108-95-2	SW8270D LL	N	ug/l	0.2	U			0.19	U	0.19	U
RA_SW_SVOCs	Pyrene	129-00-0	SW8270D LL	N	ug/l	0.2	U	0.022	J	0.023	J	0.19	U
RA_SW_SVOCs	Total High-molecular-weight PAHs	TOT-PAH-HMW	SW8270D LL	N	ug/l	0.2	U	0.046		0.054		0.19	U
RA_SW_SVOCs	Total Low-molecular-weight PAHs	TOT-PAH-LMW	SW8270D LL	N	ug/l	0.2	U	0.048		0.025		0.19	U
RA_SW_SVOCs	Total PAHs (sum 16)	TOT-PAH	SW8270D LL	N	ug/l	0.2	U	0.094		0.079		0.19	U
RA_SW_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	N	ug/l	1	U			1	U	1	U
RA_SW_VOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	N	ug/l	1	U			1	U	1	U
RA_SW_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	N	ug/l	1	U			1	U	1	U
RA_SW_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	N	ug/l	1	U			1	U	1	U
RA_SW_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	N	ug/l	1	U			1	U	1	U
RA_SW_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	N	ug/l	1	U			1	U	1	U
RA_SW_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	N	ug/l	1	U			1	U	1	U
RA_SW_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	N	ug/l	1	U			1	U	1	U
RA_SW_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	N	ug/l	1	U			1	U	1	U
RA_SW_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	N	ug/l	1	U			1	U	1	U
RA_SW_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	N	ug/l	1	U			1	U	1	U
RA_SW_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	N	ug/l	1	U			1	U	1	U
RA_SW_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	N	ug/l	1	U			1	U	1	U
RA_SW_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	N	ug/l	1	U			1	U	1	U
RA_SW_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	N	ug/l	1	U			1	U	1	U
RA_SW_VOCs	1,4-Dioxane	123-91-1	SW8260B	N	ug/l	200	U			200	U	200	U
RA_SW_VOCs	2-Butanone	78-93-3	SW8260B	N	ug/l	5	U			5	U	5	U
RA_SW_VOCs	2-Hexanone	591-78-6	SW8260B	N	ug/l	5	U			5	U	5	U
RA_SW_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	N	ug/l	5	U			5	U	5	U
RA_SW_VOCs	Acetone	67-64-1	SW8260B	N	ug/l	3	J			5	U	5	U
RA_SW_VOCs	Benzene	71-43-2	SW8260B	N	ug/l	1	U			1	U	1	U
RA_SW_VOCs	Bromochloromethane	74-97-5	SW8260B	N	ug/l	1	U			1	U	1	U
RA_SW_VOCs	Bromodichloromethane	75-27-4	SW8260B	N	ug/l	1	U			1	U	1	U
RA_SW_VOCs	Bromoform	75-25-2	SW8260B	N	ug/l	1	U			1	U	1	U
RA_SW_VOCs	Bromomethane	74-83-9	SW8260B	N	ug/l	1	U			1	U	1	U
RA_SW_VOCs	Carbon Disulfide	75-15-0	SW8260B	N	ug/l	1	U			1	U	1	U
RA_SW_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	N	ug/l	1	U			1	U	1	U
RA_SW_VOCs	Chlorobenzene	108-90-7	SW8260B	N	ug/l	1	U			1	U	1	U



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			loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	
			sys_loc_code	SUWBACK2	SUWBACK3	SUWBACK4	SUWBACK5	SUWBACK6	
			sys_sample_code	SUWBACK2N	SUWBACK3N	SUWBACK4N	SUWBACK5N	SUWBACK6N	
			sample_date	10/3/2013	9/26/2013	9/26/2013	9/26/2013	9/26/2013	
			sample_type_code	N	N	N	N	N	
			task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
			start_depth	0.5	1.5	7.6	5.1	1.8	
			depth_unit	ft	ft	ft	ft	ft	
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result	report_result	report_result	report_result	report_result
			od	n	t_unit	t_value	interpreted	t_value	interpreted
							_qualifiers		_qualifiers
RA_SW_VOCs	Chloroethane	75-00-3	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Chloroform	67-66-3	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Chloromethane	74-87-3	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Cyclohexane	110-82-7	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Dibromochloromethane	124-48-1	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Ethylbenzene	100-41-4	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Isopropylbenzene	98-82-8	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	m, p-Xylene	XVLM	SW8260B	N	ug/l	2	U	0.43	J
RA_SW_VOCs	Methyl Acetate	79-20-9	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Methylcyclohexane	108-87-2	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Methylene Chloride	75-09-2	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	o-Xylene	95-47-6	SW8260B	N	ug/l	1	U	0.17	J
RA_SW_VOCs	Styrene	100-42-5	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Tetrachloroethylene	127-18-4	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Toluene	108-88-3	SW8260B	N	ug/l	1	U	0.3	J
RA_SW_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Trichloroethene	79-01-6	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Vinyl Chloride	75-01-4	SW8260B	N	ug/l	1	U	1	U
RA_SW_VOCs	Xylenes (total)	1330-20-7	SW8260B	N	ug/l	2	U	0.6	0.12

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		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area				
		sys_loc_code	SUW10B	SUW1B	SUW2B	SUW3C	SUW4B	SUW4BN	SUW4BN				
		sys_sample_code	SUW10BN	SUW1BN	SUW2BN	SUW3CN	SUW4BN	SUW4BN	SUW4BN				
		sample_date	9/26/2013	9/23/2013	9/23/2013	9/23/2013	9/23/2013	9/24/2013	9/24/2013				
		sample_type_code	N	N	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	7.3	12.8	5.3	5.8	5.7	5.7	5.7				
		depth_unit	ft	ft	ft	ft	ft	ft	ft				
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result	report_result	interpreted	report_result	interpreted	report_result	interpreted	report_result	interpreted
			od	n	t_unit	t_value	_qualifiers	t_value	_qualifiers	t_value	_qualifiers	t_value	_qualifiers
RA_SW_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	N	ug/l	7.71E-06	J	6.59E-06	J			7E-06	J
RA_SW_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	N	ug/l	1.47E-06	J	1.41E-06	J			1.41E-06	J
RA_SW_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	N	ug/l	1.44E-07	U	6.01E-07	J			5.52E-07	J
RA_SW_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	N	ug/l	8.18E-08	U	8.87E-08	U			8.98E-08	U
RA_SW_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	N	ug/l	1.03E-07	U	9.35E-08	U			6.8E-07	J
RA_SW_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	N	ug/l	8.08E-08	U	4.2E-07	J			2.88E-07	U
RA_SW_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	N	ug/l	1.08E-07	U	9.46E-08	U			7.96E-07	J
RA_SW_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	N	ug/l	7.36E-08	U	4.43E-07	J			7.36E-07	J
RA_SW_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	N	ug/l	9.04E-07	J	1.98E-07	J			3.62E-07	J
RA_SW_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	N	ug/l	4.21E-08	U	5.09E-08	U			5.39E-08	U
RA_SW_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	N	ug/l	8.73E-08	U	1.84E-07	U			1.01E-07	U
RA_SW_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	N	ug/l	9.11E-08	U	2.75E-07	U			8.43E-08	U
RA_SW_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	N	ug/l	8.37E-08	U	8.5E-08	U			8.38E-08	U
RA_SW_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	N	ug/l	7.21E-08	U	6.23E-08	U			1.48E-07	J
RA_SW_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	N	ug/l	8E-08	U	7.75E-08	U			4.19E-07	J
RA_SW_DioxinFurans	OCDD	3268-87-9	SW8290A	N	ug/l	0.000191		0.00019				0.000248	
RA_SW_DioxinFurans	OCDF	39001-02-0	SW8290A	N	ug/l	1.96E-06	J	2.95E-06	J			3.35E-06	J
RA_SW_DioxinFurans	TCDD TEQ Bird	DFTEQ-Bird	SW8290A	N	ug/l	1.32E-07		1.14E-07				8.76E-07	
RA_SW_DioxinFurans	TCDD TEQ Fish	DFTEQ-Fish	SW8290A	N	ug/l	1.32E-07		7.44E-08				4.12E-07	
RA_SW_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	N	ug/l	2.4E-07		2.5E-07				6.12E-07	
RA_SW_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	N	ug/l	1.68E-05	J	1.59E-05	J			1.71E-05	J
RA_SW_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	N	ug/l	1.47E-06	J	2.88E-06	J			1.96E-06	J
RA_SW_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	N	ug/l	8.07E-07	J	3.42E-06	J			3.77E-06	J
RA_SW_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	N	ug/l	5E-06	J	5.67E-06	J			9.11E-06	J
RA_SW_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	N	ug/l	4.21E-08	U	3.08E-06	J			5.39E-08	U
RA_SW_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	N	ug/l	6.82E-06	J	1.02E-05	J			1.33E-05	J
RA_SW_DioxinFurans	Total TCDD	41903-57-5	SW8290A	N	ug/l	7.21E-08	U	1.1E-07	U			1.48E-07	U
RA_SW_DioxinFurans	Total TCDF	55722-27-5	SW8290A	N	ug/l	1.05E-05	J	1.6E-05	J			2.12E-05	J
RA_SW_DioxinFurans	Total TEQ	TTEQ	SW8290A	N	ug/l	2.4E-07		2.5E-07				6.12E-07	
RA_SW_Field	Conductivity	Cond	FIELD	T	ms/cm	0.228		0.263		0.231		0.198	
RA_SW_Field	DO	DO	FIELD	T	mg/l	3.94		3.41		3.79		3.94	
RA_SW_Field	OXIDATION-REDUCTION POTENTIAL	ORP	FIELD	T	mV	79.8		29.6		48.1		41.1	
RA_SW_Field	PH	PH	FIELD	T	ph units	6.81		6.81		6.82		6.67	
RA_SW_Field	SALINITY	SAL	FIELD	T	ppt	0.11		0.13		0.11		0.09	
RA_SW_Field	TEMPERATURE	TEMP	FIELD	T	deg F	65.62		67.87		67.8		68.2	
RA_SW_Field	TURBIDITY	TURB	FIELD	T	ntu	24.9		0		15		4.3	
RA_SW_Metals	Aluminum	7429-90-5	SW6020A	D	ug/l	30	U	30	U	30	U	30	U
RA_SW_Metals	Aluminum	7429-90-5	SW6020A	T	ug/l	310		460		330		570	
RA_SW_Metals	Antimony	7440-36-0	SW6020A	D	ug/l	0.74	J	0.92	J	0.84	J	1.8	J
RA_SW_Metals	Antimony	7440-36-0	SW6020A	T	ug/l	0.56	J	0.62	J	0.63	J	0.62	J
RA_SW_Metals	Arsenic	7440-38-2	SW6020A	D	ug/l	0.32	J	1	U	0.41	J	1	U
RA_SW_Metals	Arsenic	7440-38-2	SW6020A	T	ug/l	0.62	J	0.73	J	0.59	J	0.7	J
RA_SW_Metals	Barium	7440-39-3	SW6020A	D	ug/l	30		36		34		30	



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			loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
			sys_loc_code	SUW10B	SUW1B	SUW2B	SUW3C	SUW4B	
			sys_sample_code	SUW10BN	SUW1BN	SUW2BN	SUW3CN	SUW4BN	
			sample_date	9/26/2013	9/23/2013	9/23/2013	9/23/2013	9/24/2013	
			sample_type_code	N	N	N	N	N	
			task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
			start_depth	7.3	12.8	5.3	5.8	5.7	
			depth_unit	ft	ft	ft	ft	ft	
method_analyte_group	chemical_name	cas_rn	analytic_meth	fraction	report_resul	report_resul	report_resul	report_resul	report_resul
			od	t	t_value	t_value	t_value	t_value	t_value
				n	interpreted	interpreted	interpreted	interpreted	interpreted
					_qualifiers	_qualifiers	_qualifiers	_qualifiers	_qualifiers
RA_SW_Metals	Barium	7440-39-3	SW6020A	T	ug/l	35		41	36
RA_SW_Metals	Beryllium	7440-41-7	SW6020A	D	ug/l	1	U	0.045	J
RA_SW_Metals	Beryllium	7440-41-7	SW6020A	T	ug/l	0.048	J	0.038	J
RA_SW_Metals	Cadmium	7440-43-9	SW6020A	D	ug/l	1	U	1	U
RA_SW_Metals	Cadmium	7440-43-9	SW6020A	T	ug/l	1	U	1	U
RA_SW_Metals	Calcium	7440-70-2	SW6020A	D	ug/l	15000		19000	17000
RA_SW_Metals	Calcium	7440-70-2	SW6020A	T	ug/l	15000		19000	16000
RA_SW_Metals	Chromium	7440-47-3	SW6020A	D	ug/l	1.7	J	2.3	2.1
RA_SW_Metals	Chromium	7440-47-3	SW6020A	T	ug/l	2.7		3.3	2.9
RA_SW_Metals	Cobalt	7440-48-4	SW6020A	D	ug/l	0.093	J	0.31	J
RA_SW_Metals	Cobalt	7440-48-4	SW6020A	T	ug/l	1.1		0.96	0.93
RA_SW_Metals	Copper	7440-50-8	SW6020A	D	ug/l	1.8	J	2.7	3.3
RA_SW_Metals	Copper	7440-50-8	SW6020A	T	ug/l	3.3		3.9	4.1
RA_SW_Metals	Iron	7439-89-6	SW6020A	D	ug/l	9.1	J	50	U
RA_SW_Metals	Iron	7439-89-6	SW6020A	T	ug/l	1100		1200	1000
RA_SW_Metals	Lead	7439-92-1	SW6020A	D	ug/l	1	U	1	U
RA_SW_Metals	Lead	7439-92-1	SW6020A	T	ug/l	2.4		2.8	2.7
RA_SW_Metals	Magnesium	7439-95-4	SW6020A	D	ug/l	4300		5800	5000
RA_SW_Metals	Magnesium	7439-95-4	SW6020A	T	ug/l	4400		5700	4600
RA_SW_Metals	Manganese	7439-96-5	SW6020A	D	ug/l	5	U	42	36
RA_SW_Metals	Manganese	7439-96-5	SW6020A	T	ug/l	170		140	130
RA_SW_Metals	Mercury	7439-97-6	SW7470A	D	ug/l	0.2	U	0.2	U
RA_SW_Metals	Mercury	7439-97-6	SW7470A	T	ug/l	0.2	U	0.2	U
RA_SW_Metals	Nickel	7440-02-0	SW6020A	D	ug/l	1.5		2.4	2.4
RA_SW_Metals	Nickel	7440-02-0	SW6020A	T	ug/l	2.7		2.9	2.8
RA_SW_Metals	Potassium	7440-09-7	SW6020A	D	ug/l	3300		3800	3600
RA_SW_Metals	Potassium	7440-09-7	SW6020A	T	ug/l	3300		3800	3400
RA_SW_Metals	Selenium	7782-49-2	SW6020A	D	ug/l	5	U	5	U
RA_SW_Metals	Selenium	7782-49-2	SW6020A	T	ug/l	5	U	5	U
RA_SW_Metals	Silver	7440-22-4	SW6020A	D	ug/l	1	U	1	U
RA_SW_Metals	Silver	7440-22-4	SW6020A	T	ug/l	1	U	1	U
RA_SW_Metals	Sodium	7440-23-5	SW6020A	D	ug/l	17000		20000	19000
RA_SW_Metals	Sodium	7440-23-5	SW6020A	T	ug/l	17000		19000	17000
RA_SW_Metals	Thallium	7440-28-0	SW6020A	D	ug/l	0.034	J	0.19	J
RA_SW_Metals	Thallium	7440-28-0	SW6020A	T	ug/l	0.05	J	0.1	J
RA_SW_Metals	Vanadium	7440-62-2	SW6020A	D	ug/l	1	U	0.14	J
RA_SW_Metals	Vanadium	7440-62-2	SW6020A	T	ug/l	1.4		2.4	1.9
RA_SW_Metals	Zinc	7440-66-6	SW6020A	D	ug/l	4.7	J	7.6	J
RA_SW_Metals	Zinc	7440-66-6	SW6020A	T	ug/l	8.2		31	9.5
RA_SW_Other	Hardness (as CaCO3)	HARD	A2340C	D	ug/l	56000		68000	60000
RA_SW_Other	Hardness (as CaCO3)	HARD	A2340C	T	ug/l	58000		72000	58000
RA_SW_Other	HEM (Oil and Grease)	348	E1664B	N	ug/l	2100	J	1800	J
RA_SW_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	N	ug/l	0.0013	UJ	0.0013	U

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			loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area					
			sys_loc_code	SUW10B	SUW1B	SUW2B	SUW3C	SUW4B					
			sys_sample_code	SUW10BN	SUW1BN	SUW2BN	SUW3CN	SUW4BN					
			sample_date	9/26/2013	9/23/2013	9/23/2013	9/23/2013	9/24/2013					
			sample_type_code	N	N	N	N	N					
			task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
			start_depth	7.3	12.8	5.3	5.8	5.7					
			depth_unit	ft	ft	ft	ft	ft					
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result	report_result	report_result	report_result	report_result	report_result	report_result		
			od	unit	t_value	interpreted	t_value	interpreted	t_value	interpreted	t_value	interpreted	
						_qualifiers		_qualifiers		_qualifiers		_qualifiers	
RA_SW_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	N	ug/l	0.0013	UJ	0.0013	U		0.0012	U	
RA_SW_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	N	ug/l	0.0011	J	0.0016			0.0014		
RA_SW_PestPCBs	Aldrin	309-00-2	SW8081B LL	N	ug/l	0.0013	UJ	0.0013	U		0.0012	U	
RA_SW_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	N	ug/l	0.0013	UJ	0.0013	U		0.0012	U	
RA_SW_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	N	ug/l	0.01	U	0.01	U	0.0094	U	0.0095	U
RA_SW_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	N	ug/l	0.01	U	0.01	U	0.0094	U	0.0095	U
RA_SW_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	N	ug/l	0.01	U	0.01	U	0.0094	U	0.0095	U
RA_SW_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	N	ug/l	0.01	U	0.01	U	0.0094	U	0.0095	U
RA_SW_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	N	ug/l	0.01	U	0.01	U	0.0094	U	0.0095	U
RA_SW_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	N	ug/l	0.01	U	0.01	U	0.0094	U	0.0095	U
RA_SW_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	N	ug/l	0.01	U	0.01	U	0.0094	U	0.0095	U
RA_SW_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	N	ug/l	0.01	U	0.01	U	0.0094	U	0.0095	U
RA_SW_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	N	ug/l	0.01	U	0.01	U	0.0094	U	0.0095	U
RA_SW_PestPCBs	beta-BHC	319-85-7	SW8081B LL	N	ug/l	0.0013	UJ	0.0013	U		0.0012	U	
RA_SW_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	N	ug/l	0.0013	UJ	0.0013	U		0.0012	U	
RA_SW_PestPCBs	delta-BHC	319-86-8	SW8081B LL	N	ug/l	0.0013	UJ	0.0013	U		0.0012	U	
RA_SW_PestPCBs	Dieldrin	60-57-1	SW8081B LL	N	ug/l	0.0013	UJ	0.0013	U		0.0012	U	
RA_SW_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	N	ug/l	0.0013	UJ	0.0013	U		0.0012	U	
RA_SW_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	N	ug/l	0.0013	UJ	0.0013	U		0.0012	U	
RA_SW_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	N	ug/l	0.0013	UJ	0.0013	U		0.0012	U	
RA_SW_PestPCBs	Endrin	72-20-8	SW8081B LL	N	ug/l	0.0013	UJ	0.0013	U		0.0012	U	
RA_SW_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	N	ug/l	0.0013	UJ	0.0013	U		0.0012	U	
RA_SW_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	N	ug/l	0.0013	UJ	0.0013	U		0.0012	U	
RA_SW_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	N	ug/l	0.0013	UJ	0.0013	U		0.0012	U	
RA_SW_PestPCBs	Heptachlor	76-44-8	SW8081B LL	N	ug/l	0.0013	UJ	0.0013	U		0.0012	U	
RA_SW_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	N	ug/l	0.0013	UJ	0.0013	U		0.0012	U	
RA_SW_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	N	ug/l	0.0026	UJ	0.0025	U		0.0024	U	
RA_SW_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	N	ug/l	0.01	U	0.01	U	0.0094	U	0.0095	U
RA_SW_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	N	ug/l	0.01	U	0.01	U	0.0094	U	0.0095	U
RA_SW_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	N	ug/l	0.1	UJ	0.1	U		0.095	U	
RA_SW_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	N	ug/l	0.0013	UJ	0.0013	U		0.0012	U	
RA_SW_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	N	ug/l	1.1	U	1.1	U		0.96	U	
RA_SW_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	N	ug/l	1.1	U	1.1	U		0.96	U	
RA_SW_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	N	ug/l	0.21	U	0.22	U		0.19	U	
RA_SW_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	N	ug/l	1.1	U	1.1	U		0.96	U	
RA_SW_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	N	ug/l	1.1	U	1.1	U		0.96	U	
RA_SW_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	N	ug/l	1.1	U	1.1	U		0.96	U	
RA_SW_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	N	ug/l	0.21	U	0.22	U		0.19	U	
RA_SW_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	N	ug/l	1.1	U	1.1	U		0.96	U	
RA_SW_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	N	ug/l	5.3	U	5.6	U		4.8	U	
RA_SW_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	N	ug/l	1.1	U	1.1	U		0.96	U	
RA_SW_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	N	ug/l	1.1	U	1.1	U		0.96	U	
RA_SW_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	N	ug/l	0.21	U	0.22	U		0.19	U	

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			loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
			sys_loc_code	SUW10B	SUW1B	SUW2B	SUW3C	SUW4B	
			sys_sample_code	SUW10BN	SUW1BN	SUW2BN	SUW3CN	SUW4BN	
			sample_date	9/26/2013	9/23/2013	9/23/2013	9/23/2013	9/24/2013	
			sample_type_code	N	N	N	N	N	
			task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
			start_depth	7.3	12.8	5.3	5.8	5.7	
			depth_unit	ft	ft	ft	ft	ft	
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result	report_result	report_result	report_result	report_result
			od	n	t_unit	t_value	interpreted	t_value	interpreted
							_qualifiers		_qualifiers
RA_SW_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	N	ug/l	1.1	U	1.1	U
RA_SW_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	N	ug/l	0.21	U	0.22	U
RA_SW_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	N	ug/l	1.1	U	1.1	U
RA_SW_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	N	ug/l	5.3	U	5.6	U
RA_SW_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	N	ug/l	1.1	U	1.1	U
RA_SW_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	N	ug/l	1.1	U	1.1	U
RA_SW_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	N	ug/l	5.3	U	5.6	U
RA_SW_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	N	ug/l	5.3	U	5.6	U
RA_SW_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	N	ug/l	1.1	U	1.1	U
RA_SW_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	N	ug/l	1.1	U	1.1	U
RA_SW_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	N	ug/l	1.1	U	1.1	U
RA_SW_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	N	ug/l	1.1	U	1.1	U
RA_SW_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	N	ug/l	1.1	U	1.1	U
RA_SW_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	N	ug/l	5.3	U	5.6	U
RA_SW_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	N	ug/l	5.3	U	5.6	U
RA_SW_SVOCs	Acenaphthene	83-32-9	SW8270D LL	N	ug/l	0.21	U	0.22	U
RA_SW_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	N	ug/l	0.21	U	0.22	U
RA_SW_SVOCs	Acetophenone	98-86-2	SW8270D LL	N	ug/l	1.1	U	1.1	U
RA_SW_SVOCs	Anthracene	120-12-7	SW8270D LL	N	ug/l	0.21	U	0.22	U
RA_SW_SVOCs	Atrazine	1912-24-9	SW8270D LL	N	ug/l	1.1	U	1.1	U
RA_SW_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	N	ug/l	1.1	U	1.1	U
RA_SW_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	N	ug/l	0.21	U	0.22	U
RA_SW_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	N	ug/l	0.21	U	0.22	U
RA_SW_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	N	ug/l	0.21	U	0.22	U
RA_SW_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	N	ug/l	0.21	U	0.22	U
RA_SW_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	N	ug/l	0.21	U	0.22	U
RA_SW_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	N	ug/l	1.1	U	1.1	U
RA_SW_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	N	ug/l	0.21	U	0.22	U
RA_SW_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	N	ug/l	2.2	J	1.4	J
RA_SW_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	N	ug/l	1.1	U	1.1	U
RA_SW_SVOCs	Caprolactam	105-60-2	SW8270D LL	N	ug/l	5.3	U	5.6	U
RA_SW_SVOCs	Carbazole	86-74-8	SW8270D LL	N	ug/l	0.21	U	0.22	U
RA_SW_SVOCs	Chrysene	218-01-9	SW8270D LL	N	ug/l	0.21	U	0.22	U
RA_SW_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	N	ug/l	0.21	U	0.22	U
RA_SW_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	N	ug/l	1.1	U	1.1	U
RA_SW_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	N	ug/l	1.1	U	1.1	U
RA_SW_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	N	ug/l	1.1	U	1.1	U
RA_SW_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	N	ug/l	1.1	U	1.1	U
RA_SW_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	N	ug/l	1.1	U	1.1	U
RA_SW_SVOCs	Fluoranthene	206-44-0	SW8270D LL	N	ug/l	0.21	U	0.032	J
RA_SW_SVOCs	Fluorene	86-73-7	SW8270D LL	N	ug/l	0.21	U	0.22	U
RA_SW_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	N	ug/l	0.21	U	0.22	U
RA_SW_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	N	ug/l	0.21	U	0.22	U



Attachment A  
Surface Water Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

			loc_group		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area		
			SYS_LOC_CODE		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area		
			SYS_SAMPLE_CODE		SUV10B		SUV1B		SUV2B		SUV3C		SUV4B		
			SAMPLE_DATE		SUV10BN		SUV1BN		SUV2BN		SUV3CN		SUV4BN		
			SAMPLE_TYPE_CODE		9/26/2013		9/23/2013		9/23/2013		9/23/2013		9/24/2013		
			TASK_CODE		N		N		N		N		N		
			START_DEPTH		Phase2-2013		Phase2-2013		Phase2-2013		Phase2-2013		Phase2-2013		
			DEPTH_UNIT		7.3		12.8		5.3		5.8		5.7		
					ft		ft		ft		ft		ft		
method_analyte_group	chemical_name	cas_rn	analytic_meth	trac	report_resul	report_resul	interpreted	report_resul	interpreted	report_resul	interpreted	report_resul	interpreted	report_resul	interpreted
			od	n	t_unit	t_value	_qualifiers	t_value	_qualifiers	t_value	_qualifiers	t_value	_qualifiers	t_value	_qualifiers
RA_SW_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	N	ug/l	1.1	U	1.1	U			0.96	U		
RA_SW_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	N	ug/l	1.1	U	1.1	U			0.96	U		
RA_SW_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	N	ug/l	0.21	U	0.22	U	0.27	U	0.19	U	0.19	U
RA_SW_SVOCs	Isophorone	78-59-1	SW8270D LL	N	ug/l	1.1	U	1.1	U			0.96	U		
RA_SW_SVOCs	Naphthalene	91-20-3	SW8270D LL	N	ug/l	0.21	U	0.22	U	0.27	U	0.19	U	0.19	U
RA_SW_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	N	ug/l	2.1	U	2.2	U			1.9	U		
RA_SW_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	N	ug/l	0.21	U	0.22	U			0.19	U		
RA_SW_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	N	ug/l	1.1	U	1.1	U			0.96	U		
RA_SW_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	N	ug/l	1.1	U	1.1	U			0.96	U		
RA_SW_SVOCs	Phenanthrene	85-01-8	SW8270D LL	N	ug/l	0.21	U	0.22	U	0.27	U	0.19	U	0.19	U
RA_SW_SVOCs	Phenol	108-95-2	SW8270D LL	N	ug/l	0.21	U	0.22	U			0.19	U		
RA_SW_SVOCs	Pyrene	129-00-0	SW8270D LL	N	ug/l	0.21	U	0.038	J	0.026	J	0.034	J	0.19	U
RA_SW_SVOCs	Total High-molecular-weight PAHs	TOT-PAH-HMW	SW8270D LL	N	ug/l	0.21	U	0.07		0.057		0.07		0.035	
RA_SW_SVOCs	Total Low-molecular-weight PAHs	TOT-PAH-LMW	SW8270D LL	N	ug/l	0.21	U	0.22	U	0.27	U	0.19	U	0.018	
RA_SW_SVOCs	Total PAHs (sum 16)	TOT-PAH	SW8270D LL	N	ug/l	0.21	U	0.07		0.057		0.07		0.053	
RA_SW_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	N	ug/l	1	U	1	U			1	U		
RA_SW_VOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	N	ug/l	1	U	1	U			1	U		
RA_SW_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	N	ug/l	1	U	1	U			1	U		
RA_SW_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	N	ug/l	1	U	1	U			1	U		
RA_SW_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	N	ug/l	1	U	1	U			1	U		
RA_SW_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	N	ug/l	1	U	1	U			1	U		
RA_SW_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	N	ug/l	1	U	1	U			1	U		
RA_SW_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	N	ug/l	1	U	1	U			1	U		
RA_SW_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	N	ug/l	1	U	1	U			1	U		
RA_SW_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	N	ug/l	1	U	1	U			1	U		
RA_SW_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	N	ug/l	1	U	1	U			1	U		
RA_SW_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	N	ug/l	1	U	1	U			1	U		
RA_SW_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	N	ug/l	1	U	1	U			1	U		
RA_SW_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	N	ug/l	1	U	1	U			1	U		
RA_SW_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	N	ug/l	1	U	1	U			1	U		
RA_SW_VOCs	1,4-Dioxane	123-91-1	SW8260B	N	ug/l	200	U	200	U			200	U		
RA_SW_VOCs	2-Butanone	78-93-3	SW8260B	N	ug/l	5	U	5	U			5	U		
RA_SW_VOCs	2-Hexanone	591-78-6	SW8260B	N	ug/l	5	U	5	U			5	U		
RA_SW_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	N	ug/l	5	U	5	U			5	U		
RA_SW_VOCs	Acetone	67-64-1	SW8260B	N	ug/l	5	U	5	U			5	U		
RA_SW_VOCs	Benzene	71-43-2	SW8260B	N	ug/l	1	U	1	U			1	U		
RA_SW_VOCs	Bromochloromethane	74-97-5	SW8260B	N	ug/l	1	U	1	U			1	U		
RA_SW_VOCs	Bromodichloromethane	75-27-4	SW8260B	N	ug/l	1	U	1	U			1	U		
RA_SW_VOCs	Bromoform	75-25-2	SW8260B	N	ug/l	1	U	1	U			1	U		
RA_SW_VOCs	Bromomethane	74-83-9	SW8260B	N	ug/l	1	U	1	U			1	U		
RA_SW_VOCs	Carbon Disulfide	75-15-0	SW8260B	N	ug/l	1	U	1	U			1	U		
RA_SW_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	N	ug/l	1	U	1	U			1	U		
RA_SW_VOCs	Chlorobenzene	108-90-7	SW8260B	N	ug/l	1	U	1	U			1	U		



			loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area					
			sys_loc_code	SUW10B	SUW1B	SUW2B	SUW3C	SUW4B					
			sys_sample_code	SUW10BN	SUW1BN	SUW2BN	SUW3CN	SUW4BN					
			sample_date	9/26/2013	9/23/2013	9/23/2013	9/23/2013	9/24/2013					
			sample_type_code	N	N	N	N	N					
			task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
			start_depth	7.3	12.8	5.3	5.8	5.7					
			depth_unit	ft	ft	ft	ft	ft					
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result	report_result	report_result	report_result	report_result	report_result	report_result	report_result	report_result
			od	n	t_unit	t_value	interpreted	t_value	interpreted	t_value	interpreted	t_value	interpreted
							_qualifiers		_qualifiers		_qualifiers		_qualifiers
RA_SW_VOCs	Chloroethane	75-00-3	SW8260B	N	ug/l	1	U	1	U			1	U
RA_SW_VOCs	Chloroform	67-66-3	SW8260B	N	ug/l	1	U	1	U			1	U
RA_SW_VOCs	Chloromethane	74-87-3	SW8260B	N	ug/l	1	U	1	U			1	U
RA_SW_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	N	ug/l	1	U	1	U			1	U
RA_SW_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	N	ug/l	1	U	1	U			1	U
RA_SW_VOCs	Cyclohexane	110-82-7	SW8260B	N	ug/l	1	U	1	U			1	U
RA_SW_VOCs	Dibromochloromethane	124-48-1	SW8260B	N	ug/l	1	U	1	U			1	U
RA_SW_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	N	ug/l	1	U	1	U			1	U
RA_SW_VOCs	Ethylbenzene	100-41-4	SW8260B	N	ug/l	1	U	1	U			1	U
RA_SW_VOCs	Isopropylbenzene	98-82-8	SW8260B	N	ug/l	1	U	1	U			1	U
RA_SW_VOCs	m, p-Xylene	XYLMP	SW8260B	N	ug/l	2	U	2	U			2	U
RA_SW_VOCs	Methyl Acetate	79-20-9	SW8260B	N	ug/l	1	U	1	U			1	U
RA_SW_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	N	ug/l	1	U	1	U			1	U
RA_SW_VOCs	Methylcyclohexane	108-87-2	SW8260B	N	ug/l	1	U	1	U			1	U
RA_SW_VOCs	Methylene Chloride	75-09-2	SW8260B	N	ug/l	1	U	1	U			1	U
RA_SW_VOCs	o-Xylene	95-47-6	SW8260B	N	ug/l	1	U	1	U			1	U
RA_SW_VOCs	Styrene	100-42-5	SW8260B	N	ug/l	1	U	1	U			1	U
RA_SW_VOCs	Tetrachloroethylene	127-18-4	SW8260B	N	ug/l	1	U	1	U			1	U
RA_SW_VOCs	Toluene	108-88-3	SW8260B	N	ug/l	0.15	J	1	U			1	U
RA_SW_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	N	ug/l	1	U	1	U			1	U
RA_SW_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	N	ug/l	1	U	1	U			1	U
RA_SW_VOCs	Trichloroethene	79-01-6	SW8260B	N	ug/l	1	U	1	U			1	U
RA_SW_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	N	ug/l	1	U	1	U			1	U
RA_SW_VOCs	Vinyl Chloride	75-01-4	SW8260B	N	ug/l	1	U	1	U			1	U
RA_SW_VOCs	Xylenes (total)	1330-20-7	SW8260B	N	ug/l	2	U	2	U			2	U

Attachment A  
Surface Water Data  
Benning Road Facility RI/FS Project  
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			loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area								
			sys_loc_code	SUW5C	SUW6B	SUW6B	SUW7B	SUW8B	SUW9C								
			sys_sample_code	SUW5CN	SUW6BN	SUW6BR	SUW7BN	SUW8BN	SUW9CN								
			sample_date	9/24/2013	9/24/2013	9/24/2013	9/24/2013	9/24/2013	9/25/2013								
			sample_type_code	N	N	FD	N	N	N								
			task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013								
			start_depth	3.6	9.8	9.8	5.6	7.9	1.8								
			depth_unit	ft	ft	ft	ft	ft	ft								
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result	report_result	report_result	report_result	report_result	report_result							
					t_unit	t_value	interpreted_qualifiers	t_value	interpreted_qualifiers	t_value	interpreted_qualifiers						
RA_SW_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	N	ug/l	7.77E-06	J	7.51E-06	J	6.85E-06	J						
RA_SW_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	N	ug/l	2.28E-06	J	1.16E-06	J	1.11E-06	J						
RA_SW_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	N	ug/l	1.01E-07	U	5.64E-08	U	6.9E-08	U						
RA_SW_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	N	ug/l	8.37E-08	U	5.59E-07	J	7.97E-08	U						
RA_SW_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	N	ug/l	9.88E-08	U	2.58E-07	U	6.46E-08	U						
RA_SW_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	N	ug/l	4.29E-07	J	7.18E-08	U	4.55E-07	J						
RA_SW_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	N	ug/l	1.19E-06	J	5.86E-08	U	6.48E-08	U						
RA_SW_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	N	ug/l	2.13E-07	J	4.98E-07	J	2.24E-07	J						
RA_SW_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	N	ug/l	1.07E-07	U	6.69E-08	U	7.33E-08	U						
RA_SW_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	N	ug/l	4.57E-08	U	4.26E-08	U	5.06E-08	U						
RA_SW_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	N	ug/l	7.85E-08	U	6.52E-08	U	6.09E-08	U						
RA_SW_DioxinFurans	2,3,4,7,8-HxCDF	60851-34-5	SW8290A	N	ug/l	9.94E-08	U	5.21E-08	U	4.18E-07	J						
RA_SW_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	N	ug/l	6.92E-07	J	5.85E-08	U	4.44E-07	J						
RA_SW_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	N	ug/l	5.2E-08	U	4.06E-08	U	7.09E-08	U						
RA_SW_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	N	ug/l	7.6E-08	U	6.38E-08	U	7.24E-08	U						
RA_SW_DioxinFurans	OCDD	3268-87-9	SW8290A	N	ug/l	0.000219		0.000218		0.000182	J						
RA_SW_DioxinFurans	OCDF	39001-02-0	SW8290A	N	ug/l	1.88E-06	J	1.49E-06	J	1.67E-06	J						
RA_SW_DioxinFurans	TCDD TEQ Bird	DFTEQ-Bird	SW8290A	N	ug/l	8.89E-07		1.19E-07		5.49E-07							
RA_SW_DioxinFurans	TCDD TEQ Fish	DFTEQ-Fish	SW8290A	N	ug/l	5.24E-07		3.26E-07		3.07E-07							
RA_SW_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	N	ug/l	5.58E-07		2.58E-07		3.78E-07							
RA_SW_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	N	ug/l	1.68E-05	J	1.56E-05	J	1.39E-05	J						
RA_SW_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	N	ug/l	3.71E-06	J	2.41E-06	J	1.84E-06	J						
RA_SW_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	N	ug/l	1.9E-06	J	3.75E-06	J	1.34E-06	J						
RA_SW_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	N	ug/l	8.09E-06	J	5.36E-06	J	5.46E-06	J						
RA_SW_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	N	ug/l	3.33E-07	J	7.3E-07	J	5.06E-08	U						
RA_SW_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	N	ug/l	9.7E-06	J	8.67E-06	J	6.92E-06	J						
RA_SW_DioxinFurans	Total TCDD	41903-57-5	SW8290A	N	ug/l	5.2E-08	U	1.02E-07	U	5.38E-07	J						
RA_SW_DioxinFurans	Total TCDF	55722-27-5	SW8290A	N	ug/l	1.57E-05	J	1.13E-05	J	1.45E-05	J						
RA_SW_DioxinFurans	Total TEQ	TTEQ	SW8290A	N	ug/l	5.58E-07		2.58E-07		3.78E-07							
RA_SW_Field	Conductivity	Cond	FIELD	T	ms/cm	0.231		0.242		0.202		0.243					
RA_SW_Field	DO	DO	FIELD	T	mg/l	3.45		3.46		3.41		3.84		3.97			
RA_SW_Field	OXIDATION-REDUCTION POTENTIAL	ORP	FIELD	T	mV	54.3		63.9		7.6		68.7		58.8			
RA_SW_Field	PH	PH	FIELD	T	ph units	6.86		6.58		6.93		6.61		6.52			
RA_SW_Field	SALINITY	SAL	FIELD	T	ppt	0.11		0.11		0.12		0.1		0.12			
RA_SW_Field	TEMPERATURE	TEMP	FIELD	T	deg F	65.71		67.42		67.2		67.93		68.1			
RA_SW_Field	TURBIDITY	TURB	FIELD	T	ntu	19.4		17.2		3.3		8.4		10.7			
RA_SW_Metals	Aluminum	7429-90-5	SW6020A	D	ug/l	30	U	30	U	30	U	30	U	30	U		
RA_SW_Metals	Aluminum	7429-90-5	SW6020A	T	ug/l	490		430		550		230		290		250	
RA_SW_Metals	Antimony	7440-36-0	SW6020A	D	ug/l	0.79	J	0.87	J	0.88	J	0.94	J	0.79	J	0.77	J
RA_SW_Metals	Antimony	7440-36-0	SW6020A	T	ug/l	0.6	J	0.59	J	0.81	J	0.58	J	0.62	J	0.54	J
RA_SW_Metals	Arsenic	7440-38-2	SW6020A	D	ug/l	1	U	0.67	J	0.49	J	0.64	J	0.48	J	0.44	J
RA_SW_Metals	Arsenic	7440-38-2	SW6020A	T	ug/l	0.83	J	0.48	J	1.2	J	0.48	J	0.82	J	0.62	J
RA_SW_Metals	Barium	7440-39-3	SW6020A	D	ug/l	33		33		32		36		28		34	



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			loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area							
			sys_loc_code	SUW5C	SUW6B	SUW6B	SUW7B	SUW8B	SUW9C								
			sys_sample_code	SUW5CN	SUW6BN	SUW6BR	SUW7BN	SUW8BN	SUW9CN								
			sample_date	9/24/2013	9/24/2013	9/24/2013	9/24/2013	9/24/2013	9/25/2013								
			sample_type_code	N	N	FD	N	N	N								
			task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013								
			start_depth	3.6	9.8	9.8	5.6	7.9	1.8								
			depth_unit	ft	ft	ft	ft	ft	ft								
method_analyte_group	chemical_name	cas_rn	analytic_meth	report_resul	report_resul	report_resul	report_resul	report_resul	report_resul	report_resul	report_resul	report_resul	report_resul	report_resul	report_resul		
			od	n	t_value	_qualifiers	t_value	_qualifiers	t_value	_qualifiers	t_value	_qualifiers	t_value	_qualifiers	t_value	_qualifiers	
RA_SW_Metals	Barium	7440-39-3	SW6020A	T	ug/l	38			37		39		33		38		
RA_SW_Metals	Beryllium	7440-41-7	SW6020A	D	ug/l	0.037	J	1	1	U	1	U	0.042	J	0.048	J	
RA_SW_Metals	Beryllium	7440-41-7	SW6020A	T	ug/l	0.064	J	0.054	J	0.056	J	0.041	J	0.043	J	0.083	J
RA_SW_Metals	Cadmium	7440-43-9	SW6020A	D	ug/l	1	U	1	1	U	1	U	1	U	1	U	
RA_SW_Metals	Cadmium	7440-43-9	SW6020A	T	ug/l	1	U	1	1	U	1	U	1	U	1	U	
RA_SW_Metals	Calcium	7440-70-2	SW6020A	D	ug/l	16000		16000	16000		18000		14000		17000		
RA_SW_Metals	Calcium	7440-70-2	SW6020A	T	ug/l	16000		16000	15000		18000		14000		17000		
RA_SW_Metals	Chromium	7440-47-3	SW6020A	D	ug/l	1.9	J	1.7	1.8	J	1.8	J	1.9	J	1.6	J	
RA_SW_Metals	Chromium	7440-47-3	SW6020A	T	ug/l	3.2		2.9	3.6		2.4		2.8		2.3		
RA_SW_Metals	Cobalt	7440-48-4	SW6020A	D	ug/l	0.23	J	0.31	0.34	J	0.31	J	0.29	J	0.1	J	
RA_SW_Metals	Cobalt	7440-48-4	SW6020A	T	ug/l	0.97		1	1.1		0.8		0.98		0.89		
RA_SW_Metals	Copper	7440-50-8	SW6020A	D	ug/l	2.5		2.2	1.9	J	2.2	J	2.2		1.7	J	
RA_SW_Metals	Copper	7440-50-8	SW6020A	T	ug/l	4		4.2	4.2		2.9		4.2		2.9		
RA_SW_Metals	Iron	7439-89-6	SW6020A	D	ug/l	50	U	8.9	50	U	50	U	50	U	50	U	
RA_SW_Metals	Iron	7439-89-6	SW6020A	T	ug/l	1200		1200	1300		740		950		800		
RA_SW_Metals	Lead	7439-92-1	SW6020A	D	ug/l	1	U	1	1	U	1	U	1	U	1	U	
RA_SW_Metals	Lead	7439-92-1	SW6020A	T	ug/l	2.9		2.9	2.9		2.1		2.6		2.2		
RA_SW_Metals	Magnesium	7439-95-4	SW6020A	D	ug/l	4800		4500	4500		5500		3700		5100		
RA_SW_Metals	Magnesium	7439-95-4	SW6020A	T	ug/l	4900		4500	4500		5400		3900		5100		
RA_SW_Metals	Manganese	7439-96-5	SW6020A	D	ug/l	59		70	75		64		64		5	U	
RA_SW_Metals	Manganese	7439-96-5	SW6020A	T	ug/l	140		140	140		140		130		150		
RA_SW_Metals	Mercury	7439-97-6	SW7470A	D	ug/l	0.2	U	0.2	0.2	U	0.2	U	0.2	U	0.2	U	
RA_SW_Metals	Mercury	7439-97-6	SW7470A	T	ug/l	0.2	U	0.2	0.2	U	0.2	U	0.2	U	0.2	U	
RA_SW_Metals	Nickel	7440-02-0	SW6020A	D	ug/l	2.2		2.1	2		2.1		2.1		1.7		
RA_SW_Metals	Nickel	7440-02-0	SW6020A	T	ug/l	2.8		2.8	3		2.4		2.8		2.4		
RA_SW_Metals	Potassium	7440-09-7	SW6020A	D	ug/l	3500		3400	3500		3700		3100		3500		
RA_SW_Metals	Potassium	7440-09-7	SW6020A	T	ug/l	3500		3400	3300		3600		3200		3500		
RA_SW_Metals	Selenium	7782-49-2	SW6020A	D	ug/l	5	U	5	5	U	0.55	J	5	U	5	U	
RA_SW_Metals	Selenium	7782-49-2	SW6020A	T	ug/l	5	U	5	5	U	5	U	5	U	5	U	
RA_SW_Metals	Silver	7440-22-4	SW6020A	D	ug/l	1	U	1	1	U	1	U	1	U	1	U	
RA_SW_Metals	Silver	7440-22-4	SW6020A	T	ug/l	1	U	1	1	U	1	U	1	U	1	U	
RA_SW_Metals	Sodium	7440-23-5	SW6020A	D	ug/l	18000		17000	17000		19000		15000		19000		
RA_SW_Metals	Sodium	7440-23-5	SW6020A	T	ug/l	18000		17000	17000		19000		16000		18000		
RA_SW_Metals	Thallium	7440-28-0	SW6020A	D	ug/l	0.051	J	0.047	0.029	J	0.077	J	0.028	J	0.031	J	
RA_SW_Metals	Thallium	7440-28-0	SW6020A	T	ug/l	0.02	J	0.018	0.11	J	0.015	J	0.053	J	0.017	J	
RA_SW_Metals	Vanadium	7440-62-2	SW6020A	D	ug/l	0.29	J	0.61	0.11	J	0.29	J	1	U	1	U	
RA_SW_Metals	Vanadium	7440-62-2	SW6020A	T	ug/l	2.3		2.7	2.7		2		1.6		2.1		
RA_SW_Metals	Zinc	7440-66-6	SW6020A	D	ug/l	6.7	J	12	5.4	J	8.3	J	12	J	4	J	
RA_SW_Metals	Zinc	7440-66-6	SW6020A	T	ug/l	9.7		9.8	11		8.4		10		6.9		
RA_SW_Other	Hardness (as CaCO3)	HARD	A2340C	D	ug/l	58000		56000	56000		64000		48000		62000		
RA_SW_Other	Hardness (as CaCO3)	HARD	A2340C	T	ug/l	62000		58000	58000		68000		52000		64000		
RA_SW_Other	HEM (Oil and Grease)	348	E1664B	N	ug/l			1800	1500	J	1700	J					
RA_SW_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	N	ug/l			0.0013	0.0012	U	0.0012	U					

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			loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	
			sys_loc_code	SUW5C	SUW6B	SUW6B	SUW7B	SUW8B	SUW9C		
			sys_sample_code	SUW5CN	SUW6BN	SUW6BR	SUW7BN	SUW8BN	SUW9CN		
			sample_date	9/24/2013	9/24/2013	9/24/2013	9/24/2013	9/24/2013	9/25/2013		
			sample_type_code	N	N	FD	N	N	N		
			task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
			start_depth	3.6	9.8	9.8	5.6	7.9	1.8		
			depth_unit	ft	ft	ft	ft	ft	ft		
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result	report_result	report_result	report_result	report_result	report_result	
			od	n	t_unit	t_value	interpreted	t_value	interpreted	t_value	
							_qualifiers		_qualifiers		
RA_SW_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	N	ug/l	0.0013	UJ	0.0012	U	0.0012	U
RA_SW_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	N	ug/l	0.0011	J	0.0011	J	0.0011	J
RA_SW_PestPCBs	Aldrin	309-00-2	SW8081B LL	N	ug/l	0.0013	UJ	0.0012	U	0.0012	U
RA_SW_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	N	ug/l	0.0013	UJ	0.0012	U	0.0012	U
RA_SW_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	N	ug/l	0.0094	U	0.01	U	0.0095	U
RA_SW_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	N	ug/l	0.0094	U	0.01	U	0.0095	U
RA_SW_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	N	ug/l	0.0094	U	0.01	U	0.0095	U
RA_SW_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	N	ug/l	0.0094	U	0.01	U	0.0095	U
RA_SW_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	N	ug/l	0.0094	U	0.01	U	0.0095	U
RA_SW_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	N	ug/l	0.0094	U	0.01	U	0.0095	U
RA_SW_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	N	ug/l	0.0094	U	0.01	U	0.0095	U
RA_SW_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	N	ug/l	0.0094	U	0.01	U	0.0095	U
RA_SW_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	N	ug/l	0.0094	U	0.01	U	0.0095	U
RA_SW_PestPCBs	beta-BHC	319-85-7	SW8081B LL	N	ug/l	0.0013	UJ	0.0012	U	0.0012	U
RA_SW_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	N	ug/l	0.0013	UJ	0.0012	U	0.0012	U
RA_SW_PestPCBs	delta-BHC	319-86-8	SW8081B LL	N	ug/l	0.0013	UJ	0.0012	U	0.0012	U
RA_SW_PestPCBs	Dieldrin	60-57-1	SW8081B LL	N	ug/l	0.0013	UJ	0.0012	U	0.0012	U
RA_SW_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	N	ug/l	0.0013	UJ	0.0012	U	0.0012	U
RA_SW_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	N	ug/l	0.0013	UJ	0.0012	U	0.0012	U
RA_SW_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	N	ug/l	0.0013	UJ	0.0012	U	0.0012	U
RA_SW_PestPCBs	Endrin	72-20-8	SW8081B LL	N	ug/l	0.0013	UJ	0.0012	U	0.0012	U
RA_SW_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	N	ug/l	0.0013	UJ	0.0012	U	0.0012	UJ
RA_SW_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	N	ug/l	0.0013	UJ	0.0012	U	0.0012	U
RA_SW_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	N	ug/l	0.0013	UJ	0.0012	U	0.0012	U
RA_SW_PestPCBs	Heptachlor	76-44-8	SW8081B LL	N	ug/l	0.0013	UJ	0.0012	U	0.0012	U
RA_SW_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	N	ug/l	0.0013	UJ	0.0012	U	0.0012	U
RA_SW_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	N	ug/l	0.0026	UJ	0.0024	U	0.0024	U
RA_SW_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	N	ug/l	0.0094	U	0.01	U	0.0095	U
RA_SW_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	N	ug/l	0.0094	U	0.01	U	0.0095	U
RA_SW_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	N	ug/l	0.1	UJ	0.095	U	0.094	U
RA_SW_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	N	ug/l	0.0013	UJ	0.0012	U	0.0012	U
RA_SW_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U
RA_SW_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U
RA_SW_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	N	ug/l	0.19	U	0.19	U	0.19	UJ
RA_SW_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U
RA_SW_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U
RA_SW_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U
RA_SW_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	N	ug/l	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U
RA_SW_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	N	ug/l	4.9	U	4.8	U	4.8	U
RA_SW_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U
RA_SW_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U
RA_SW_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	N	ug/l	0.19	U	0.19	U	0.19	U

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			loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area			
			sys_loc_code	SUW5C	SUW6B	SUW6B	SUW7B	SUW8B	SUW9C	SUW9C			
			sys_sample_code	SUW5CN	SUW6BN	SUW6BR	SUW7BN	SUW8BN	SUW9CN	SUW9CN			
			sample_date	9/24/2013	9/24/2013	9/24/2013	9/24/2013	9/24/2013	9/25/2013	9/25/2013			
			sample_type_code	N	N	FD	N	N	N	N			
			task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
			start_depth	3.6	9.8	9.8	5.6	7.9	1.8	1.8			
			depth_unit	ft	ft	ft	ft	ft	ft	ft			
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result	report_result	report_result	report_result	report_result	report_result	report_result	report_result	report_result
			od	n	t_unit	t_value	interpreted	t_value	interpreted	t_value	interpreted	t_value	interpreted
							_qualifiers		_qualifiers		_qualifiers		_qualifiers
RA_SW_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U		
RA_SW_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	N	ug/l	0.19	U	0.19	U	0.19	U		
RA_SW_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U		
RA_SW_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	N	ug/l	4.9	U	4.8	U	4.8	U		
RA_SW_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U		
RA_SW_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	N	ug/l	0.97	U	0.96	U		R		
RA_SW_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	N	ug/l	4.9	U	4.8	U	4.8	U		
RA_SW_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	N	ug/l	4.9	U	4.8	U	4.8	U		
RA_SW_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U		
RA_SW_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U		
RA_SW_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U		
RA_SW_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U		
RA_SW_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U		
RA_SW_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	N	ug/l	4.9	U	4.8	U	4.8	U		
RA_SW_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	N	ug/l	4.9	U	4.8	U	4.8	U		
RA_SW_SVOCs	Acenaphthene	83-32-9	SW8270D LL	N	ug/l	0.19	U	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	N	ug/l	0.19	U	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Acetophenone	98-86-2	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U		
RA_SW_SVOCs	Anthracene	120-12-7	SW8270D LL	N	ug/l	0.19	U	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Atrazine	1912-24-9	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U		
RA_SW_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U		
RA_SW_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	N	ug/l	0.19	U	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	N	ug/l	0.19	U	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	N	ug/l	0.19	U	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	N	ug/l	0.19	U	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	N	ug/l	0.19	U	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U		
RA_SW_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	N	ug/l	0.19	U	0.19	U	0.19	U		
RA_SW_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	N	ug/l	2.2	U	1.9	U	1.9	U		
RA_SW_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	N	ug/l	0.86	J	0.86	J	0.96	U		
RA_SW_SVOCs	Caprolactam	105-60-2	SW8270D LL	N	ug/l	4.9	U	4.8	U	4.8	U		
RA_SW_SVOCs	Carbazole	86-74-8	SW8270D LL	N	ug/l	0.19	U	0.19	U	0.19	U		
RA_SW_SVOCs	Chrysene	218-01-9	SW8270D LL	N	ug/l	0.19	U	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	N	ug/l	0.19	U	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U		
RA_SW_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U		
RA_SW_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U		
RA_SW_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	N	ug/l	0.47	J	0.51	J	0.96	U		
RA_SW_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U		
RA_SW_SVOCs	Fluoranthene	206-44-0	SW8270D LL	N	ug/l	0.19	U	0.017	J	0.025	J	0.19	U
RA_SW_SVOCs	Fluorene	86-73-7	SW8270D LL	N	ug/l	0.19	U	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	N	ug/l	0.19	U	0.19	U	0.19	U		
RA_SW_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	N	ug/l	0.19	U	0.19	U	0.19	U		



Attachment A  
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			loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	
			sys_loc_code	SUW5C	SUW6B	SUW6B	SUW7B	SUW8B	SUW9C		
			sys_sample_code	SUW5CN	SUW6BN	SUW6BR	SUW7BN	SUW8BN	SUW9CN		
			sample_date	9/24/2013	9/24/2013	9/24/2013	9/24/2013	9/24/2013	9/25/2013		
			sample_type_code	N	N	FD	N	N	N		
			task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
			start_depth	3.6	9.8	9.8	5.6	7.9	1.8		
			depth_unit	ft	ft	ft	ft	ft	ft		
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result	report_result	report_result	report_result	report_result	report_result	
			od	n	t_unit	t_value	interpreted_qualifiers	t_value	interpreted_qualifiers	t_value	
RA_SW_SVOCs	Hexachlorocyclopentadiene	77-47-4	SW8270D LL	N	ug/l	0.97	UJ	0.96	UJ	0.96	UJ
RA_SW_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	UJ
RA_SW_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	N	ug/l	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Isophorone	78-59-1	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U
RA_SW_SVOCs	Naphthalene	91-20-3	SW8270D LL	N	ug/l	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	N	ug/l	1.9	U	1.9	U	1.9	U
RA_SW_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	N	ug/l	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U
RA_SW_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	N	ug/l	0.97	U	0.96	U	0.96	U
RA_SW_SVOCs	Phenanthrene	85-01-8	SW8270D LL	N	ug/l	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Phenol	108-95-2	SW8270D LL	N	ug/l	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Pyrene	129-00-0	SW8270D LL	N	ug/l	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Total High-molecular-weight PAHs	TOT-PAH-HMW	SW8270D LL	N	ug/l	0.19	U	0.017		0.025	
RA_SW_SVOCs	Total Low-molecular-weight PAHs	TOT-PAH-LMW	SW8270D LL	N	ug/l	0.19	U	0.19	U	0.19	U
RA_SW_SVOCs	Total PAHs (sum 16)	TOT-PAH	SW8270D LL	N	ug/l	0.19	U	0.017		0.025	
RA_SW_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	N	ug/l	1	U	1	U	1	U
RA_SW_VOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	N	ug/l	1	U	1	U	1	U
RA_SW_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	N	ug/l	1	U	1	U	1	U
RA_SW_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	N	ug/l	1	U	1	U	1	U
RA_SW_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	N	ug/l	1	U	1	U	1	U
RA_SW_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	N	ug/l	1	U	1	U	1	U
RA_SW_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	N	ug/l	1	U	1	U	1	U
RA_SW_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	N	ug/l	1	U	1	U	1	U
RA_SW_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	N	ug/l	1	U	1	U	1	U
RA_SW_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	N	ug/l	1	U	1	U	1	U
RA_SW_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	N	ug/l	1	U	1	U	1	U
RA_SW_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	N	ug/l	1	U	1	U	1	U
RA_SW_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	N	ug/l	1	U	1	U	1	U
RA_SW_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	N	ug/l	1	U	1	U	1	U
RA_SW_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	N	ug/l	1	U	1	U	1	U
RA_SW_VOCs	1,4-Dioxane	123-91-1	SW8260B	N	ug/l	200	U	200	U	200	U
RA_SW_VOCs	2-Butanone	78-93-3	SW8260B	N	ug/l	5	U	5	U	5	U
RA_SW_VOCs	2-Hexanone	591-78-6	SW8260B	N	ug/l	5	U	5	U	5	U
RA_SW_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	N	ug/l	5	U	5	U	5	U
RA_SW_VOCs	Acetone	67-64-1	SW8260B	N	ug/l	5	U	5	U	5	U
RA_SW_VOCs	Benzene	71-43-2	SW8260B	N	ug/l	1	U	1	U	1	U
RA_SW_VOCs	Bromochloromethane	74-97-5	SW8260B	N	ug/l	1	U	1	U	1	U
RA_SW_VOCs	Bromodichloromethane	75-27-4	SW8260B	N	ug/l	1	U	1	U	1	U
RA_SW_VOCs	Bromoform	75-25-2	SW8260B	N	ug/l	1	U	1	U	1	U
RA_SW_VOCs	Bromomethane	74-83-9	SW8260B	N	ug/l	1	U	1	U	1	U
RA_SW_VOCs	Carbon Disulfide	75-15-0	SW8260B	N	ug/l	0.4	J	1	U	1	U
RA_SW_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	N	ug/l	1	U	1	U	1	U
RA_SW_VOCs	Chlorobenzene	108-90-7	SW8260B	N	ug/l	1	U	1	U	1	U



Attachment A  
Surface Water Data  
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			loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area						
			sys_loc_code	SUW5C	SUW6B	SUW6B	SUW7B	SUW8B	SUW9C						
			sys_sample_code	SUW5CN	SUW6BN	SUW6BR	SUW7BN	SUW8BN	SUW9CN						
			sample_date	9/24/2013	9/24/2013	9/24/2013	9/24/2013	9/24/2013	9/25/2013						
			sample_type_code	N	N	FD	N	N	N						
			task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013						
			start_depth	3.6	9.8	9.8	5.6	7.9	1.8						
			depth_unit	ft	ft	ft	ft	ft	ft						
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result	report_result	report_result	report_result	report_result	report_result	report_result	report_result	report_result	report_result	
			od	n	t_unit	t_value	interpreted	t_value	interpreted	t_value	interpreted	t_value	interpreted	t_value	interpreted
							_qualifiers		_qualifiers		_qualifiers		_qualifiers		_qualifiers
RA_SW_VOCs	Chloroethane	75-00-3	SW8260B	N	ug/l	1	U	1	U	1	U	1	U		
RA_SW_VOCs	Chloroform	67-66-3	SW8260B	N	ug/l	1	U	1	U	1	U	1	U		
RA_SW_VOCs	Chloromethane	74-87-3	SW8260B	N	ug/l	1	U	1	U	1	U	1	U		
RA_SW_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	N	ug/l	1	U	1	U	1	U	1	U		
RA_SW_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	N	ug/l	1	U	1	U	1	U	1	U		
RA_SW_VOCs	Cyclohexane	110-82-7	SW8260B	N	ug/l	1	U	1	U	1	U	1	U		
RA_SW_VOCs	Dibromochloromethane	124-48-1	SW8260B	N	ug/l	1	U	1	U	1	U	1	U		
RA_SW_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	N	ug/l	1	U	1	U	1	U	1	U		
RA_SW_VOCs	Ethylbenzene	100-41-4	SW8260B	N	ug/l	1	U	1	U	1	U	1	U		
RA_SW_VOCs	Isopropylbenzene	98-82-8	SW8260B	N	ug/l	1	U	1	U	1	U	1	U		
RA_SW_VOCs	m, p-Xylene	XYLMP	SW8260B	N	ug/l	2	U	2	U	2	U	2	U		
RA_SW_VOCs	Methyl Acetate	79-20-9	SW8260B	N	ug/l	1	U	1	U	1	U	1	U		
RA_SW_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	N	ug/l	1	U	1	U	1	U	1	U		
RA_SW_VOCs	Methylcyclohexane	108-87-2	SW8260B	N	ug/l	1	U	1	U	1	U	1	U		
RA_SW_VOCs	Methylene Chloride	75-09-2	SW8260B	N	ug/l	1	U	1	U	1	U	1	U		
RA_SW_VOCs	o-Xylene	95-47-6	SW8260B	N	ug/l	1	U	1	U	1	U	1	U		
RA_SW_VOCs	Styrene	100-42-5	SW8260B	N	ug/l	1	U	1	U	1	U	1	U		
RA_SW_VOCs	Tetrachloroethylene	127-18-4	SW8260B	N	ug/l	1	U	1	U	1	U	1	U		
RA_SW_VOCs	Toluene	108-88-3	SW8260B	N	ug/l	1	U	1	U	1	U	1	U		
RA_SW_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	N	ug/l	1	U	1	U	1	U	1	U		
RA_SW_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	N	ug/l	1	U	1	U	1	U	1	U		
RA_SW_VOCs	Trichloroethene	79-01-6	SW8260B	N	ug/l	1	U	1	U	1	U	1	U		
RA_SW_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	N	ug/l	1	U	1	U	1	U	1	U		
RA_SW_VOCs	Vinyl Chloride	75-01-4	SW8260B	N	ug/l	1	U	1	U	1	U	1	U		
RA_SW_VOCs	Xylenes (total)	1330-20-7	SW8260B	N	ug/l	2	U	2	U	2	U	2	U		

## Surface Sediment Data



Attachment A  
Surface Sediment Data  
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				loc_group		RA_Background		RA_Background		RA_Background		RA_Background		RA_Background	
				sys_loc_code		SEDBACK1		SEDBACK11		SEDBACK12		SEDBACK12		SEDBACK13	
				sys_sample_code		SEDBACK100N		SEDBACK1100N		SEDBACK1200N		SEDBACK1200R		SEDBACK1300N	
				sample_date		12/3/2013		11/15/2013		11/14/2013		11/14/2013		11/14/2013	
				sample_type_code		N		N		N		FD		N	
				task_code		Phase2-2013		Phase2-2013		Phase2-2013		Phase2-2013		Phase2-2013	
				start_depth		0		0		0		0		0	
				end_depth		0.5		0.5		0.5		0.5		0.5	
				depth_unit		ft		ft		ft		ft		ft	
				validated_yn		Y		Y		Y		Y		Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SE_DioxinsFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	N	mg/kg	8.1E-07	J			4.21E-05		5.02E-05			
RA_SE_DioxinsFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	N	mg/kg	1.54E-07	U			8.83E-06	JN	9.21E-06	JN		
RA_SE_DioxinsFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	N	mg/kg	1.92E-07	U			7.05E-07	J	6.76E-07	J		
RA_SE_DioxinsFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	N	mg/kg	1.48E-07	U			8.96E-07	JN	1.06E-06	J		
RA_SE_DioxinsFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	N	mg/kg	9.09E-08	U			1.25E-06	JN	1.34E-06	J		
RA_SE_DioxinsFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	N	mg/kg	1.51E-07	U			1.95E-06	J	1.88E-06	J		
RA_SE_DioxinsFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	N	mg/kg	8.18E-08	U			2.14E-06	JN	2.18E-06	JN		
RA_SE_DioxinsFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	N	mg/kg	1.4E-07	U			2.2E-06	J	2.62E-06	J		
RA_SE_DioxinsFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	N	mg/kg	9.41E-08	U			1.01E-07	JN	1.33E-07	JN		
RA_SE_DioxinsFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	N	mg/kg	1.41E-07	U			5.12E-07	J	9.71E-07	JN		
RA_SE_DioxinsFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	N	mg/kg	1.16E-07	U			3.75E-07	JN	2.81E-07	JN		
RA_SE_DioxinsFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	N	mg/kg	8.64E-08	U			6.26E-07	JN	1.07E-06	J		
RA_SE_DioxinsFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	N	mg/kg	1.03E-07	U			8.71E-07	J	8.47E-07	JN		
RA_SE_DioxinsFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	N	mg/kg	3.19E-07	U			1.28E-07	JN	1.76E-07	JN		
RA_SE_DioxinsFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	N	mg/kg	1.79E-07	U			6.47E-07	JN	5.81E-07	J		
RA_SE_DioxinsFurans	OCDD	3268-87-9	SW8290A	N	mg/kg	3.51E-05				0.0012		0.00132			
RA_SE_DioxinsFurans	OCDF	39001-02-0	SW8290A	N	mg/kg	1.33E-07	U			1.51E-05	JN	1.62E-05			
RA_SE_DioxinsFurans	TCDD TEQ Bird	DFTEQ-Bird	SW8290A	N	mg/kg	4.32E-09				3.15E-06		3.69E-06			
RA_SE_DioxinsFurans	TCDD TEQ Fish	DFTEQ-Fish	SW8290A	N	mg/kg	4.32E-09				2.29E-06		2.94E-06			
RA_SE_DioxinsFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	N	mg/kg	1.86E-08				2.77E-06		3.5E-06			
RA_SE_DioxinsFurans	Total HpCDD	37871-00-4	SW8290A	N	mg/kg	1.63E-06	J			9.27E-05		0.000116			
RA_SE_DioxinsFurans	Total HpCDF	38998-75-3	SW8290A	N	mg/kg	1.72E-07	U			2.21E-05	JN	2.37E-05	JN		
RA_SE_DioxinsFurans	Total HxCDD	34465-46-8	SW8290A	N	mg/kg	1.46E-07	U			1.96E-05	JN	2.15E-05	JN		
RA_SE_DioxinsFurans	Total HxCDF	55684-94-1	SW8290A	N	mg/kg	8.79E-08	U			3.27E-05	JN	3.9E-05	JN		
RA_SE_DioxinsFurans	Total PeCDD	36088-22-9	SW8290A	N	mg/kg	1.41E-07	U			3.5E-05	JN	7.49E-06	JN		
RA_SE_DioxinsFurans	Total PeCDF	30402-15-4	SW8290A	N	mg/kg	1.09E-07	U			5.21E-05	JN	5.33E-05	JN		
RA_SE_DioxinsFurans	Total TCDD	41903-57-5	SW8290A	N	mg/kg	3.19E-07	U			4.1E-06	JN	3.92E-06	JN		
RA_SE_DioxinsFurans	Total TCDF	55722-27-5	SW8290A	N	mg/kg	1.79E-07	U			7.69E-05	JN	8.71E-05	JN		
RA_SE_DioxinsFurans	Total TEQ	TTEQ	SW8290A	N	mg/kg	1.86E-08				2.77E-06		3.5E-06			
RA_SE_Metals	Aluminum	7429-90-5	SW6020A	T	mg/kg	270	J	14000		13000		12000		6900	
RA_SE_Metals	Antimony	7440-36-0	SW6020A	T	mg/kg	0.051	J	0.74	J-	0.7	J-	0.66	J-	0.88	J-
RA_SE_Metals	Arsenic	7440-38-2	SW6020A	T	mg/kg	0.25	J-	5.3	J-	4.6	J-	4.2	J-	3.6	J-
RA_SE_Metals	Barium	7440-39-3	SW6020A	T	mg/kg	2.5		150		130		120		88	
RA_SE_Metals	Beryllium	7440-41-7	SW6020A	T	mg/kg	0.1		2		1.7		1.6		0.82	
RA_SE_Metals	Cadmium	7440-43-9	SW6020A	T	mg/kg	0.015	J	1.5		1.4		1.2		0.7	
RA_SE_Metals	Calcium	7440-70-2	SW6020A	T	mg/kg	600	J	3300	J	3300	J	3100	J	7000	J
RA_SE_Metals	Chromium	7440-47-3	SW6020A	T	mg/kg	3.7	J-	62	J	56	J	51	J	31	J
RA_SE_Metals	Cobalt	7440-48-4	SW6020A	T	mg/kg	1.4		27		24		22		17	
RA_SE_Metals	Copper	7440-50-8	SW6020A	T	mg/kg	2.7	J-	94	J	88	J	83	J	160	J
RA_SE_Metals	Iron	7439-89-6	SW6020A	T	mg/kg	2900		39000	J	34000	J	32000	J	20000	J
RA_SE_Metals	Lead	7439-92-1	SW6020A	T	mg/kg	2.1	J-	120		110		100		170	

				loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background						
				sys_loc_code	SEDBACK1	SEDBACK11	SEDBACK12	SEDBACK12	SEDBACK13						
				sys_sample_code	SEDBACK100N	SEDBACK1100N	SEDBACK1200N	SEDBACK1200R	SEDBACK1300N						
				sample_date	12/3/2013	11/15/2013	11/14/2013	11/14/2013	11/14/2013						
				sample_type_code	N	N	N	FD	N						
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013						
				start_depth	0	0	0	0	0						
				end_depth	0.5	0.5	0.5	0.5	0.5						
				depth_unit	ft	ft	ft	ft	ft						
				validated_yn	Y	Y	Y	Y	Y						
RA_SE_Metals	Magnesium	7439-95-4	SW6020A	T	mg/kg	440	J	3900		4000		3700		3600	
RA_SE_Metals	Manganese	7439-96-5	SW6020A	T	mg/kg	33	J-	680		470		440		280	
RA_SE_Metals	Mercury	7439-97-6	SW7471B	T	mg/kg	0.015	U	0.36	J+	0.32	J+	0.31	J+	0.096	J+
RA_SE_Metals	Nickel	7440-02-0	SW6020A	T	mg/kg	5.7	J-	50	J	46	J	42	J	33	J
RA_SE_Metals	Potassium	7440-09-7	SW6020A	T	mg/kg	32		1400		1400		1300		760	
RA_SE_Metals	Selenium	7782-49-2	SW6020A	T	mg/kg	0.29	U	1.8	J-	1.6	J-	1.5	J-	0.84	J-
RA_SE_Metals	Silver	7440-22-4	SW6020A	T	mg/kg	0.0062	J	0.83		0.61		0.56		0.43	
RA_SE_Metals	Sodium	7440-23-5	SW6020A	T	mg/kg	24		190		180		170		140	
RA_SE_Metals	Thallium	7440-28-0	SW6020A	T	mg/kg	0.058	U	0.32		0.28		0.26		0.17	
RA_SE_Metals	Vanadium	7440-62-2	SW6020A	T	mg/kg	1.7	J	52	J	43	J	41	J	24	J
RA_SE_Metals	Zinc	7440-66-6	SW6020A	T	mg/kg	9	J-	340	J	340	J	310	J	210	J
RA_SE_Other	Arsenic	7440-38-2	SW6010	SEM	umol/g	0.002	J	0.013	J	0.012	J	0.012	J	0.0085	J
RA_SE_Other	Cadmium	7440-43-9	SW6010	SEM	umol/g	6.7E-05	J	0.0092	J	0.0082	J	0.0081	J	0.0048	J
RA_SE_Other	Chromium	7440-47-3	SW6010	SEM	umol/g	0.026		0.52	J	0.42	J	0.44	J	0.26	J
RA_SE_Other	Copper	7440-50-8	SW6010	SEM	umol/g	0.013		0.88	J	0.87	J	0.85	J	1.9	J
RA_SE_Other	Lead	7439-92-1	SW6010	SEM	umol/g	0.0055		0.38	J	0.34	J	0.34	J	0.31	J
RA_SE_Other	Mercury	7439-97-6	SW7470A	SEM	umol/g	7.2E-05	U	0.00016	J	0.00013	J	0.00013	J	3.5E-05	J
RA_SE_Other	Nickel	7440-02-0	SW6010	SEM	umol/g	0.026		0.42	J	0.37	J	0.37	J	0.53	J
RA_SE_Other	Silver	7440-22-4	SW6010	SEM	umol/g	0.0013	U	0.002	J	0.0012	J	0.0016	J	0.005	J
RA_SE_Other	Sulfide	18496-25-8	SW9034	SEM	umol/g	0.54	UU	3.7	J	1.8	J	1.5	J	0.27	J
RA_SE_Other	Total Organic Carbon	7440-44-0	LKTOC	T	mg/kg	1700		46000		47000		47000		28000	
RA_SE_Other	Zinc	7440-66-6	SW6010	SEM	umol/g	0.12		3.8	J	3.7	J	3.6	J	3.2	J
RA_SE_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	N	mg/kg	3.4E-05	J			0.0051	J	0.0048	J		
RA_SE_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	N	mg/kg	0.00024	U			0.012		0.011			
RA_SE_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	N	mg/kg	0.00024	U			0.0063	J	0.0058	J		
RA_SE_PestPCBs	Aldrin	309-00-2	SW8081B LL	N	mg/kg	0.00024	U			0.0005	J	0.00041	J		
RA_SE_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	N	mg/kg	0.00024	U			0.0012	U	0.0012	U		
RA_SE_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	N	mg/kg	0.0048	U	0.013	U	0.011	U	0.012	U	0.008	U
RA_SE_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	N	mg/kg	0.0048	U	0.013	U	0.011	U	0.012	U	0.008	U
RA_SE_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	N	mg/kg	0.0048	U	0.013	U	0.011	U	0.012	U	0.008	U
RA_SE_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	N	mg/kg	0.0048	U	0.013	U	0.011	U	0.012	U	0.008	U
RA_SE_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	N	mg/kg	0.0048	U	0.12	J	0.16	J	0.19	J	0.078	J
RA_SE_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	N	mg/kg	0.0048	U	0.013	U	0.011	U	0.012	U	0.008	U
RA_SE_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	N	mg/kg	0.0048	U	0.067	J	0.082	J	0.071	J	0.039	J
RA_SE_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	N	mg/kg	0.0048	U	0.013	U	0.011	U	0.012	U	0.008	U
RA_SE_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	N	mg/kg	0.0048	U	0.013	U	0.011	U	0.012	U	0.008	U
RA_SE_PestPCBs	beta-BHC	319-85-7	SW8081B LL	N	mg/kg	0.00024	U			0.0012	U	0.00087	J		
RA_SE_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	N	mg/kg	0.00015	J			0.0091	J	0.013			
RA_SE_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	N	mg/kg			0.00225							
RA_SE_PestPCBs	delta-BHC	319-86-8	SW8081B LL	N	mg/kg	0.00024	U			0.0006	J	0.00057	J		
RA_SE_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	N	mg/kg			0.0106	JN						
RA_SE_PestPCBs	Dieldrin	60-57-1	SW8081B LL	N	mg/kg	5.6E-05	J			0.0018	J	0.0016	J		
RA_SE_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	N	mg/kg	0.00024	U			0.0012	U	0.0012	U		

Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				loc_group		RA_Background	RA_Background	RA_Background	RA_Background	RA_Background				
				sys_loc_code		SEDBACK1	SEDBACK11	SEDBACK12	SEDBACK12	SEDBACK13				
				sys_sample_code		SEDBACK100N	SEDBACK1100N	SEDBACK1200N	SEDBACK1200R	SEDBACK1300N				
				sample_date		12/3/2013	11/15/2013	11/14/2013	11/14/2013	11/14/2013				
				sample_type_code		N	N	N	FD	N				
				task_code		Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
				start_depth		0	0	0	0	0				
				end_depth		0.5	0.5	0.5	0.5	0.5				
				depth_unit		ft	ft	ft	ft	ft				
				validated_yn		Y	Y	Y	Y	Y				
RA_SE_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	N	mg/kg	0.00024	U		0.0008	J	0.00078	J		
RA_SE_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	N	mg/kg	0.00024	U		0.0012	J	0.00015	J		
RA_SE_PestPCBs	Endrin	72-20-8	SW8081B LL	N	mg/kg	0.00024	U		0.0031	J	0.0027	J		
RA_SE_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	N	mg/kg	0.00024	U		0.0014	J	0.0011	J		
RA_SE_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	N	mg/kg	0.00024	U		0.0034	J	0.0034	J		
RA_SE_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	N	mg/kg	0.00024	U		0.00028	J	0.0012	U		
RA_SE_PestPCBs	Heptachlor	76-44-8	SW8081B LL	N	mg/kg	0.00024	U		0.0019	J	0.0014	J		
RA_SE_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	N	mg/kg	0.00024	U		0.00066	J	0.00062	J		
RA_SE_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	N	mg/kg			0.159	JN					
RA_SE_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	N	mg/kg			0.269	JN					
RA_SE_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	N	mg/kg	0.00048	U		0.018	J	0.019	J		
RA_SE_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	N	mg/kg			0.00117						
RA_SE_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	N	mg/kg			0.00475						
RA_SE_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	N	mg/kg			0.0421	JN					
RA_SE_PestPCBs	PCB TEQ Bird	PCBTEQ-Bird	E1668C	N	mg/kg			0.000129						
RA_SE_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	N	mg/kg			2.58E-05						
RA_SE_PestPCBs	PCB, TOTAL	PCB	E1668C	N	mg/kg			1						
RA_SE_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	N	mg/kg	0.0048	U	0.19	0.24		0.26		0.12	
RA_SE_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	N	mg/kg	0.0048	U	0.19	0.24		0.26		0.12	
RA_SE_PestPCBs	PCB-1	2051-60-7	E1668C	N	mg/kg			0.000513						
RA_SE_PestPCBs	PCB-10	33146-45-1	E1668C	N	mg/kg			0.000157	J					
RA_SE_PestPCBs	PCB-100	39485-83-1	E1668C	N	mg/kg			0.000276	JN					
RA_SE_PestPCBs	PCB-101	37680-73-2	E1668C	N	mg/kg			0.0384						
RA_SE_PestPCBs	PCB-102	68194-06-9	E1668C	N	mg/kg			0.00104	JN					
RA_SE_PestPCBs	PCB-103	60145-21-3	E1668C	N	mg/kg			0.000362						
RA_SE_PestPCBs	PCB-104	56558-16-8	E1668C	N	mg/kg			2.27E-05	U					
RA_SE_PestPCBs	PCB-105	32598-14-4	E1668C	N	mg/kg			0.00846						
RA_SE_PestPCBs	PCB-106	70424-69-0	E1668C	N	mg/kg			2.51E-05	U					
RA_SE_PestPCBs	PCB-107	70424-68-9	E1668C	N	mg/kg			0.00264						
RA_SE_PestPCBs	PCB-108	70362-41-3	E1668C	N	mg/kg			0.00142						
RA_SE_PestPCBs	PCB-109	74472-35-8	E1668C	N	mg/kg			0.0222						
RA_SE_PestPCBs	PCB-11	2050-67-1	E1668C	N	mg/kg			0.000336	JN					
RA_SE_PestPCBs	PCB-110	38380-03-9	E1668C	N	mg/kg			0.0394						
RA_SE_PestPCBs	PCB-111	39635-32-0	E1668C	N	mg/kg			4.92E-05	JN					
RA_SE_PestPCBs	PCB-112	74472-36-9	E1668C	N	mg/kg			2.32E-05	U					
RA_SE_PestPCBs	PCB-113	68194-10-5	E1668C	N	mg/kg			0.0384						
RA_SE_PestPCBs	PCB-114	74472-37-0	E1668C	N	mg/kg			0.000836						
RA_SE_PestPCBs	PCB-115	74472-38-1	E1668C	N	mg/kg			0.0394						
RA_SE_PestPCBs	PCB-116	18259-05-7	E1668C	N	mg/kg			0.00584						
RA_SE_PestPCBs	PCB-117	68194-11-6	E1668C	N	mg/kg			0.00584						
RA_SE_PestPCBs	PCB-118	31508-00-6	E1668C	N	mg/kg			0.0333						
RA_SE_PestPCBs	PCB-119	56558-17-9	E1668C	N	mg/kg			0.0222						
RA_SE_PestPCBs	PCB-12	2974-92-7	E1668C	N	mg/kg			0.000527	JN					



Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background
				sys_loc_code	SEDBACK1	SEDBACK11	SEDBACK12	SEDBACK12	SEDBACK13
				sys_sample_code	SEDBACK100N	SEDBACK1100N	SEDBACK1200N	SEDBACK1200R	SEDBACK1300N
				sample_date	12/3/2013	11/15/2013	11/14/2013	11/14/2013	11/14/2013
				sample_type_code	N	N	N	FD	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-120	68194-12-7	E1668C	N	mg/kg	0.000104	JN		
RA_SE_PestPCBs	PCB-121	56558-18-0	E1668C	N	mg/kg	2.21E-05	U		
RA_SE_PestPCBs	PCB-122	76842-07-4	E1668C	N	mg/kg	0.000555	JN		
RA_SE_PestPCBs	PCB-123	65510-44-3	E1668C	N	mg/kg	0.000738			
RA_SE_PestPCBs	PCB-124	70424-70-3	E1668C	N	mg/kg	0.00142			
RA_SE_PestPCBs	PCB-125	74472-39-2	E1668C	N	mg/kg	0.0222			
RA_SE_PestPCBs	PCB-126	57465-28-8	E1668C	N	mg/kg	0.000166	J		
RA_SE_PestPCBs	PCB-127	39635-33-1	E1668C	N	mg/kg	4.62E-05	J		
RA_SE_PestPCBs	PCB-128	38380-07-3	E1668C	N	mg/kg	0.00663			
RA_SE_PestPCBs	PCB-129	55215-18-4	E1668C	N	mg/kg	0.0594			
RA_SE_PestPCBs	PCB-13	2974-90-5	E1668C	N	mg/kg	0.000527	JN		
RA_SE_PestPCBs	PCB-130	52663-66-8	E1668C	N	mg/kg	0.00303			
RA_SE_PestPCBs	PCB-131	61798-70-7	E1668C	N	mg/kg	0.000768			
RA_SE_PestPCBs	PCB-132	38380-05-1	E1668C	N	mg/kg	0.0185			
RA_SE_PestPCBs	PCB-133	35694-04-3	E1668C	N	mg/kg	0.000909			
RA_SE_PestPCBs	PCB-134	52704-70-8	E1668C	N	mg/kg	0.00297			
RA_SE_PestPCBs	PCB-135	52744-13-5	E1668C	N	mg/kg	0.0221			
RA_SE_PestPCBs	PCB-136	38411-22-2	E1668C	N	mg/kg	0.00742			
RA_SE_PestPCBs	PCB-137	35694-06-5	E1668C	N	mg/kg	0.00182			
RA_SE_PestPCBs	PCB-138	35065-28-2	E1668C	N	mg/kg	0.0594			
RA_SE_PestPCBs	PCB-139	56030-56-9	E1668C	N	mg/kg	0.000781			
RA_SE_PestPCBs	PCB-14	34883-41-5	E1668C	N	mg/kg	1.34E-05	JN		
RA_SE_PestPCBs	PCB-140	59291-64-4	E1668C	N	mg/kg	0.000781			
RA_SE_PestPCBs	PCB-141	52712-04-6	E1668C	N	mg/kg	0.013			
RA_SE_PestPCBs	PCB-142	41411-61-4	E1668C	N	mg/kg	5.47E-05	U		
RA_SE_PestPCBs	PCB-143	68194-15-0	E1668C	N	mg/kg	0.00297			
RA_SE_PestPCBs	PCB-144	68194-14-9	E1668C	N	mg/kg	0.00316			
RA_SE_PestPCBs	PCB-145	74472-40-5	E1668C	N	mg/kg	2.82E-05	U		
RA_SE_PestPCBs	PCB-146	51908-16-8	E1668C	N	mg/kg	0.00837			
RA_SE_PestPCBs	PCB-147	68194-13-8	E1668C	N	mg/kg	0.0487			
RA_SE_PestPCBs	PCB-148	74472-41-6	E1668C	N	mg/kg	3.94E-05	U		
RA_SE_PestPCBs	PCB-149	38380-04-0	E1668C	N	mg/kg	0.0487			
RA_SE_PestPCBs	PCB-15	2050-68-2	E1668C	N	mg/kg	0.00356			
RA_SE_PestPCBs	PCB-150	68194-08-1	E1668C	N	mg/kg	8.58E-05	J		
RA_SE_PestPCBs	PCB-151	52663-63-5	E1668C	N	mg/kg	0.0221			
RA_SE_PestPCBs	PCB-152	68194-09-2	E1668C	N	mg/kg	2.8E-05	U		
RA_SE_PestPCBs	PCB-153	35065-27-1	E1668C	N	mg/kg	0.0537			
RA_SE_PestPCBs	PCB-154	60145-22-4	E1668C	N	mg/kg	0.000461			
RA_SE_PestPCBs	PCB-155	33979-03-2	E1668C	N	mg/kg	2.67E-05	U		
RA_SE_PestPCBs	PCB-156	38380-08-4	E1668C	N	mg/kg	0.00521			
RA_SE_PestPCBs	PCB-157	69782-90-7	E1668C	N	mg/kg	0.00521			
RA_SE_PestPCBs	PCB-158	74472-42-7	E1668C	N	mg/kg	0.00542			
RA_SE_PestPCBs	PCB-159	39635-35-3	E1668C	N	mg/kg	0.000748			



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				loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background
				sys_loc_code	SEDBACK1	SEDBACK11	SEDBACK12	SEDBACK12	SEDBACK13
				sys_sample_code	SEDBACK100N	SEDBACK1100N	SEDBACK1200N	SEDBACK1200R	SEDBACK1300N
				sample_date	12/3/2013	11/15/2013	11/14/2013	11/14/2013	11/14/2013
				sample_type_code	N	N	N	FD	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-16	38444-78-9	E1668C	N	mg/kg	0.00445			
RA_SE_PestPCBs	PCB-160	41411-62-5	E1668C	N	mg/kg	0.0594			
RA_SE_PestPCBs	PCB-161	74472-43-8	E1668C	N	mg/kg	3.62E-05	U		
RA_SE_PestPCBs	PCB-162	39635-34-2	E1668C	N	mg/kg	0.000107	JN		
RA_SE_PestPCBs	PCB-163	74472-44-9	E1668C	N	mg/kg	0.0594			
RA_SE_PestPCBs	PCB-164	74472-45-0	E1668C	N	mg/kg	0.00401			
RA_SE_PestPCBs	PCB-165	74472-46-1	E1668C	N	mg/kg	4.17E-05	JN		
RA_SE_PestPCBs	PCB-166	41411-63-6	E1668C	N	mg/kg	0.00663			
RA_SE_PestPCBs	PCB-167	52663-72-6	E1668C	N	mg/kg	0.0018			
RA_SE_PestPCBs	PCB-168	59291-65-5	E1668C	N	mg/kg	0.0537			
RA_SE_PestPCBs	PCB-169	32774-16-6	E1668C	N	mg/kg	0.000247	JN		
RA_SE_PestPCBs	PCB-17	37680-66-3	E1668C	N	mg/kg	0.00516			
RA_SE_PestPCBs	PCB-170	35065-30-6	E1668C	N	mg/kg	0.019			
RA_SE_PestPCBs	PCB-171	52663-71-5	E1668C	N	mg/kg	0.00569			
RA_SE_PestPCBs	PCB-172	52663-74-8	E1668C	N	mg/kg	0.00335			
RA_SE_PestPCBs	PCB-173	68194-16-1	E1668C	N	mg/kg	0.00569			
RA_SE_PestPCBs	PCB-174	38411-25-5	E1668C	N	mg/kg	0.0196			
RA_SE_PestPCBs	PCB-175	40186-70-7	E1668C	N	mg/kg	0.000832			
RA_SE_PestPCBs	PCB-176	52663-65-7	E1668C	N	mg/kg	0.00246			
RA_SE_PestPCBs	PCB-177	52663-70-4	E1668C	N	mg/kg	0.0107			
RA_SE_PestPCBs	PCB-178	52663-67-9	E1668C	N	mg/kg	0.00376			
RA_SE_PestPCBs	PCB-179	52663-64-6	E1668C	N	mg/kg	0.00869			
RA_SE_PestPCBs	PCB-18	37680-65-2	E1668C	N	mg/kg	0.0111			
RA_SE_PestPCBs	PCB-180	35065-29-3	E1668C	N	mg/kg	0.0419			
RA_SE_PestPCBs	PCB-181	74472-47-2	E1668C	N	mg/kg	0.000141	JN		
RA_SE_PestPCBs	PCB-182	60145-23-5	E1668C	N	mg/kg	0.000111	J		
RA_SE_PestPCBs	PCB-183	52663-69-1	E1668C	N	mg/kg	0.014			
RA_SE_PestPCBs	PCB-184	74472-48-3	E1668C	N	mg/kg	2.99E-05	U		
RA_SE_PestPCBs	PCB-185	52712-05-7	E1668C	N	mg/kg	0.014			
RA_SE_PestPCBs	PCB-186	74472-49-4	E1668C	N	mg/kg	2.9E-05	U		
RA_SE_PestPCBs	PCB-187	52663-68-0	E1668C	N	mg/kg	0.0231			
RA_SE_PestPCBs	PCB-188	74487-85-7	E1668C	N	mg/kg	2.48E-05	U		
RA_SE_PestPCBs	PCB-189	39635-31-9	E1668C	N	mg/kg	0.000771			
RA_SE_PestPCBs	PCB-19	38444-73-4	E1668C	N	mg/kg	0.00134			
RA_SE_PestPCBs	PCB-190	41411-64-7	E1668C	N	mg/kg	0.00358			
RA_SE_PestPCBs	PCB-191	74472-50-7	E1668C	N	mg/kg	0.000831			
RA_SE_PestPCBs	PCB-192	74472-51-8	E1668C	N	mg/kg	3.08E-05	U		
RA_SE_PestPCBs	PCB-193	69782-91-8	E1668C	N	mg/kg	0.0419			
RA_SE_PestPCBs	PCB-194	35694-08-7	E1668C	N	mg/kg	0.0107			
RA_SE_PestPCBs	PCB-195	52663-78-2	E1668C	N	mg/kg	0.00443			
RA_SE_PestPCBs	PCB-196	42740-50-1	E1668C	N	mg/kg	0.00496			
RA_SE_PestPCBs	PCB-197	33091-17-7	E1668C	N	mg/kg	0.000362	JN		
RA_SE_PestPCBs	PCB-198	68194-17-2	E1668C	N	mg/kg	0.0105			



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				loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background
				sys_loc_code	SEDBACK1	SEDBACK11	SEDBACK12	SEDBACK12	SEDBACK13
				sys_sample_code	SEDBACK100N	SEDBACK1100N	SEDBACK1200N	SEDBACK1200R	SEDBACK1300N
				sample_date	12/3/2013	11/15/2013	11/14/2013	11/14/2013	11/14/2013
				sample_type_code	N	N	N	FD	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-199	52663-75-9	E1668C	N	mg/kg	0.0105			
RA_SE_PestPCBs	PCB-2	2051-61-8	E1668C	N	mg/kg	0.000141	J		
RA_SE_PestPCBs	PCB-20	38444-84-7	E1668C	N	mg/kg	0.0242			
RA_SE_PestPCBs	PCB-200	52663-73-7	E1668C	N	mg/kg	0.00124			
RA_SE_PestPCBs	PCB-201	40186-71-8	E1668C	N	mg/kg	0.00127			
RA_SE_PestPCBs	PCB-202	2136-99-4	E1668C	N	mg/kg	0.00185			
RA_SE_PestPCBs	PCB-203	52663-76-0	E1668C	N	mg/kg	0.00619			
RA_SE_PestPCBs	PCB-204	74472-52-9	E1668C	N	mg/kg	1.94E-05	U		
RA_SE_PestPCBs	PCB-205	74472-53-0	E1668C	N	mg/kg	0.00055			
RA_SE_PestPCBs	PCB-206	40186-72-9	E1668C	N	mg/kg	0.00338			
RA_SE_PestPCBs	PCB-207	52663-79-3	E1668C	N	mg/kg	0.000471			
RA_SE_PestPCBs	PCB-208	52663-77-1	E1668C	N	mg/kg	0.000901			
RA_SE_PestPCBs	PCB-21	55702-46-0	E1668C	N	mg/kg	0.00746			
RA_SE_PestPCBs	PCB-22	38444-85-8	E1668C	N	mg/kg	0.00527			
RA_SE_PestPCBs	PCB-23	55720-44-0	E1668C	N	mg/kg	2E-05	U		
RA_SE_PestPCBs	PCB-24	55702-45-9	E1668C	N	mg/kg	0.000218	J		
RA_SE_PestPCBs	PCB-25	55712-37-3	E1668C	N	mg/kg	0.00137			
RA_SE_PestPCBs	PCB-26	38444-81-4	E1668C	N	mg/kg	0.00313			
RA_SE_PestPCBs	PCB-27	38444-76-7	E1668C	N	mg/kg	0.000924			
RA_SE_PestPCBs	PCB-28	7012-37-5	E1668C	N	mg/kg	0.0242			
RA_SE_PestPCBs	PCB-29	15862-07-4	E1668C	N	mg/kg	0.00313			
RA_SE_PestPCBs	PCB-3	2051-62-9	E1668C	N	mg/kg	0.000519			
RA_SE_PestPCBs	PCB-30	35693-92-6	E1668C	N	mg/kg	0.0111			
RA_SE_PestPCBs	PCB-31	16606-02-3	E1668C	N	mg/kg	0.0172			
RA_SE_PestPCBs	PCB-32	38444-77-8	E1668C	N	mg/kg	0.00458			
RA_SE_PestPCBs	PCB-33	38444-86-9	E1668C	N	mg/kg	0.00746			
RA_SE_PestPCBs	PCB-34	37680-68-5	E1668C	N	mg/kg	0.000122	JN		
RA_SE_PestPCBs	PCB-35	37680-69-6	E1668C	N	mg/kg	0.000268			
RA_SE_PestPCBs	PCB-36	38444-87-0	E1668C	N	mg/kg	1.95E-05	U		
RA_SE_PestPCBs	PCB-37	38444-90-5	E1668C	N	mg/kg	0.00649			
RA_SE_PestPCBs	PCB-38	53555-66-1	E1668C	N	mg/kg	3.32E-05	JN		
RA_SE_PestPCBs	PCB-39	38444-88-1	E1668C	N	mg/kg	0.000189	J		
RA_SE_PestPCBs	PCB-4	13029-08-8	E1668C	N	mg/kg	0.00143			
RA_SE_PestPCBs	PCB-40	38444-93-8	E1668C	N	mg/kg	0.0119			
RA_SE_PestPCBs	PCB-41	52663-59-9	E1668C	N	mg/kg	0.0119			
RA_SE_PestPCBs	PCB-42	36559-22-5	E1668C	N	mg/kg	0.00579			
RA_SE_PestPCBs	PCB-43	70362-46-8	E1668C	N	mg/kg	0.000906			
RA_SE_PestPCBs	PCB-44	41464-39-5	E1668C	N	mg/kg	0.0226			
RA_SE_PestPCBs	PCB-45	70362-45-7	E1668C	N	mg/kg	0.00408			
RA_SE_PestPCBs	PCB-46	41464-47-5	E1668C	N	mg/kg	0.00151			
RA_SE_PestPCBs	PCB-47	2437-79-8	E1668C	N	mg/kg	0.0226			
RA_SE_PestPCBs	PCB-48	70362-47-9	E1668C	N	mg/kg	0.00479			
RA_SE_PestPCBs	PCB-49	41464-40-8	E1668C	N	mg/kg	0.014			



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				loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background
				sys_loc_code	SEDBACK1	SEDBACK11	SEDBACK12	SEDBACK12	SEDBACK13
				sys_sample_code	SEDBACK100N	SEDBACK1100N	SEDBACK1200N	SEDBACK1200R	SEDBACK1300N
				sample_date	12/3/2013	11/15/2013	11/14/2013	11/14/2013	11/14/2013
				sample_type_code	N	N	N	FD	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-5	16605-91-7	E1668C	N	mg/kg	5.71E-05	JN		
RA_SE_PestPCBs	PCB-50	62796-65-0	E1668C	N	mg/kg	0.00316			
RA_SE_PestPCBs	PCB-51	68194-04-7	E1668C	N	mg/kg	0.00408			
RA_SE_PestPCBs	PCB-52	35693-99-3	E1668C	N	mg/kg	0.0287			
RA_SE_PestPCBs	PCB-53	41464-41-9	E1668C	N	mg/kg	0.00316			
RA_SE_PestPCBs	PCB-54	15968-05-5	E1668C	N	mg/kg	2.61E-05	U		
RA_SE_PestPCBs	PCB-55	74338-24-2	E1668C	N	mg/kg	0.000422	JN		
RA_SE_PestPCBs	PCB-56	41464-43-1	E1668C	N	mg/kg	0.00946			
RA_SE_PestPCBs	PCB-57	70424-67-8	E1668C	N	mg/kg	0.000137	J		
RA_SE_PestPCBs	PCB-58	41464-49-7	E1668C	N	mg/kg	7.36E-05	JN		
RA_SE_PestPCBs	PCB-59	74472-33-6	E1668C	N	mg/kg	0.00219			
RA_SE_PestPCBs	PCB-6	25569-80-6	E1668C	N	mg/kg	0.000719	JN		
RA_SE_PestPCBs	PCB-60	33025-41-1	E1668C	N	mg/kg	0.00201			
RA_SE_PestPCBs	PCB-61	33284-53-6	E1668C	N	mg/kg	0.0387			
RA_SE_PestPCBs	PCB-62	54230-22-7	E1668C	N	mg/kg	0.00219			
RA_SE_PestPCBs	PCB-63	74472-34-7	E1668C	N	mg/kg	0.000912	JN		
RA_SE_PestPCBs	PCB-64	52663-58-8	E1668C	N	mg/kg	0.00956			
RA_SE_PestPCBs	PCB-65	33284-54-7	E1668C	N	mg/kg	0.0226			
RA_SE_PestPCBs	PCB-66	32598-10-0	E1668C	N	mg/kg	0.0242			
RA_SE_PestPCBs	PCB-67	73575-53-8	E1668C	N	mg/kg	0.00067			
RA_SE_PestPCBs	PCB-68	73575-52-7	E1668C	N	mg/kg	0.000155	JN		
RA_SE_PestPCBs	PCB-69	60233-24-1	E1668C	N	mg/kg	0.014			
RA_SE_PestPCBs	PCB-7	33284-50-3	E1668C	N	mg/kg	0.00021	JN		
RA_SE_PestPCBs	PCB-70	32598-11-1	E1668C	N	mg/kg	0.0387			
RA_SE_PestPCBs	PCB-71	41464-46-4	E1668C	N	mg/kg	0.0119			
RA_SE_PestPCBs	PCB-72	41464-42-0	E1668C	N	mg/kg	0.000254	J		
RA_SE_PestPCBs	PCB-73	74338-23-1	E1668C	N	mg/kg	0.000906			
RA_SE_PestPCBs	PCB-74	32690-93-0	E1668C	N	mg/kg	0.0387			
RA_SE_PestPCBs	PCB-75	32598-12-2	E1668C	N	mg/kg	0.00219			
RA_SE_PestPCBs	PCB-76	70362-48-0	E1668C	N	mg/kg	0.0387			
RA_SE_PestPCBs	PCB-77	32598-13-3	E1668C	N	mg/kg	0.00199			
RA_SE_PestPCBs	PCB-78	70362-49-1	E1668C	N	mg/kg	3.86E-05	J		
RA_SE_PestPCBs	PCB-79	41464-48-6	E1668C	N	mg/kg	0.000285	JN		
RA_SE_PestPCBs	PCB-8	34883-43-7	E1668C	N	mg/kg	0.00337			
RA_SE_PestPCBs	PCB-80	33284-52-5	E1668C	N	mg/kg	1.66E-05	U		
RA_SE_PestPCBs	PCB-81	70362-50-4	E1668C	N	mg/kg	0.000109	J		
RA_SE_PestPCBs	PCB-82	52663-62-4	E1668C	N	mg/kg	0.00451			
RA_SE_PestPCBs	PCB-83	60145-20-2	E1668C	N	mg/kg	0.0184			
RA_SE_PestPCBs	PCB-84	52663-60-2	E1668C	N	mg/kg	0.00839			
RA_SE_PestPCBs	PCB-85	65510-45-4	E1668C	N	mg/kg	0.00584			
RA_SE_PestPCBs	PCB-86	55312-69-1	E1668C	N	mg/kg	0.0222			
RA_SE_PestPCBs	PCB-87	38380-02-8	E1668C	N	mg/kg	0.0222			
RA_SE_PestPCBs	PCB-88	55215-17-3	E1668C	N	mg/kg	0.00446			

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				loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background
				sys_loc_code	SEDBACK1	SEDBACK11	SEDBACK12	SEDBACK12	SEDBACK13
				sys_sample_code	SEDBACK100N	SEDBACK1100N	SEDBACK1200N	SEDBACK1200R	SEDBACK1300N
				sample_date	12/3/2013	11/15/2013	11/14/2013	11/14/2013	11/14/2013
				sample_type_code	N	N	N	FD	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-89	73575-57-2	E1668C	N	mg/kg	0.000431	JN		
RA_SE_PestPCBs	PCB-9	34883-39-1	E1668C	N	mg/kg	0.000235	JN		
RA_SE_PestPCBs	PCB-90	68194-07-0	E1668C	N	mg/kg	0.0384			
RA_SE_PestPCBs	PCB-91	68194-05-8	E1668C	N	mg/kg	0.00446			
RA_SE_PestPCBs	PCB-92	52663-61-3	E1668C	N	mg/kg	0.00636			
RA_SE_PestPCBs	PCB-93	73575-56-1	E1668C	N	mg/kg	0.000276	JN		
RA_SE_PestPCBs	PCB-94	73575-55-0	E1668C	N	mg/kg	0.000197	J		
RA_SE_PestPCBs	PCB-95	38379-99-6	E1668C	N	mg/kg	0.03			
RA_SE_PestPCBs	PCB-96	73575-54-9	E1668C	N	mg/kg	0.000227	J		
RA_SE_PestPCBs	PCB-97	41464-51-1	E1668C	N	mg/kg	0.0222			
RA_SE_PestPCBs	PCB-98	60233-25-2	E1668C	N	mg/kg	0.00104	JN		
RA_SE_PestPCBs	PCB-99	38380-01-7	E1668C	N	mg/kg	0.0184			
RA_SE_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	N	mg/kg	0.229	JN		
RA_SE_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	N	mg/kg	0.189	JN		
RA_SE_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	N	mg/kg	0.0095	U	0.046	U
RA_SE_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	N	mg/kg	0.00017	J	0.016	U
RA_SE_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	N	mg/kg	0.0935	JN		
RA_SE_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	N	mg/kg	0.095	U	0.46	U
RA_SE_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	N	mg/kg	0.095	U	0.46	UJ
RA_SE_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	N	mg/kg	0.019	U	0.093	U
RA_SE_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	N	mg/kg	0.095	U	0.46	U
RA_SE_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	N	mg/kg	0.095	U	0.46	U
RA_SE_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	N	mg/kg	0.095	U	0.46	U
RA_SE_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	N	mg/kg	0.019	U	0.093	U
RA_SE_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	N	mg/kg	0.095	U	0.46	U
RA_SE_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	N	mg/kg	0.49	U	2.3	UJ
RA_SE_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	N	mg/kg	0.095	U	0.46	U
RA_SE_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	N	mg/kg	0.095	U	0.46	U
RA_SE_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	N	mg/kg	0.019	U	0.093	U
RA_SE_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	N	mg/kg	0.095	U	0.46	U
RA_SE_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	N	mg/kg	0.019	U	0.02	J
RA_SE_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	N	mg/kg	0.095	U	0.46	U
RA_SE_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	N	mg/kg	0.49	U	2.3	U
RA_SE_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	N	mg/kg	0.095	U	0.46	U
RA_SE_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	N	mg/kg	0.095	U	0.46	U
RA_SE_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	N	mg/kg	0.49	U	2.3	U
RA_SE_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	N	mg/kg	0.49	U	2.3	UJ
RA_SE_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	N	mg/kg	0.095	U	0.46	U
RA_SE_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	N	mg/kg	0.095	U	0.46	U
RA_SE_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	N	mg/kg	0.095	U	0.46	U
RA_SE_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	N	mg/kg	0.095	U	0.46	U
RA_SE_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	N	mg/kg	0.095	U	0.46	U
RA_SE_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	N	mg/kg	0.49	U	2.3	U



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	loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background
RA_SE_SVOCs	sys_loc_code	SED	SED	SED	SED	SED	SED	SED	SED	SED	SED	SED	SED
	sys_sample_code	BACK1	BACK11	BACK12	BACK1200N	BACK12	BACK1200R	BACK1300N	BACK12	BACK1200R	BACK1300N	BACK12	BACK1300N
	sample_date	12/3/2013	11/15/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013
	sample_type_code	N	N	N	N	N	N	N	N	N	N	N	N
	task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
	start_depth	0	0	0	0	0	0	0	0	0	0	0	0
	end_depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	depth_unit	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft
	validated_yn	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
RA_SE_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	N	mg/kg	0.49	U		2.3	UJ	2.4	UJ	
RA_SE_SVOCs	Acenaphthene	83-32-9	SW8270D LL	N	mg/kg	0.019	U	0.12	0.031	J	0.04	J	0.025
RA_SE_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	N	mg/kg	0.019	U	0.099	0.076	J	0.076	J	0.054
RA_SE_SVOCs	Acetophenone	98-86-2	SW8270D LL	N	mg/kg	0.095	U		0.46	U	0.47	U	
RA_SE_SVOCs	Anthracene	120-12-7	SW8270D LL	N	mg/kg	0.019	U	0.13	0.1		0.12		0.075
RA_SE_SVOCs	Atrazine	1912-24-9	SW8270D LL	N	mg/kg	0.095	U		0.46	U	0.47	U	
RA_SE_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	N	mg/kg	0.095	UJ			R		R	
RA_SE_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	N	mg/kg	0.019	U	0.7	0.55		0.64		0.39
RA_SE_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	N	mg/kg	0.019	U	0.8	0.74	J	0.78		0.47
RA_SE_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	N	mg/kg	0.019	U	1.4	1.3	J	1.3		0.71
RA_SE_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	N	mg/kg	0.019	U	0.44	0.42	J	0.49		0.43
RA_SE_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	N	mg/kg	0.019	U	0.45	0.27	J	0.51	J	0.25
RA_SE_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	N	mg/kg	0.095	U		0.46	U	0.47	U	
RA_SE_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	N	mg/kg	0.019	U		0.093	U	0.095	U	
RA_SE_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	N	mg/kg	0.19	U		3		3.1		
RA_SE_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	N	mg/kg	0.095	U		0.1	J	0.47	UJ	
RA_SE_SVOCs	Caprolactam	105-60-2	SW8270D LL	N	mg/kg	0.49	U		2.3	U	2.4	U	
RA_SE_SVOCs	Carbazole	86-74-8	SW8270D LL	N	mg/kg	0.019	U		0.11		0.098		
RA_SE_SVOCs	Chrysene	218-01-9	SW8270D LL	N	mg/kg	0.019	U	1.4	1.1		1.1		0.62
RA_SE_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	N	mg/kg	0.019	U	0.14	0.1	J	0.15		0.092
RA_SE_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	N	mg/kg	0.095	U		0.46	U	0.47	U	
RA_SE_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	N	mg/kg	0.029	J		0.054	J	0.099	J	
RA_SE_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	N	mg/kg	0.095	U		0.46	U	0.47	U	
RA_SE_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	N	mg/kg	0.095	U		0.46	U	0.47	U	
RA_SE_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	N	mg/kg	0.095	U		0.46	U	0.47	U	
RA_SE_SVOCs	Fluoranthene	206-44-0	SW8270D LL	N	mg/kg	0.0035	J	1.7	1.2		1.4		0.81
RA_SE_SVOCs	Fluorene	86-73-7	SW8270D LL	N	mg/kg	0.019	U	0.12	0.044	J	0.041	J	0.033
RA_SE_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	N	mg/kg	0.019	U		0.093	U	0.095	U	
RA_SE_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	N	mg/kg	0.019	U		0.093	UJ	0.095	UJ	
RA_SE_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	N	mg/kg	0.095	U		0.46	UJ	0.47	UJ	
RA_SE_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	N	mg/kg	0.095	U		0.46	U	0.47	U	
RA_SE_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	N	mg/kg	0.019	U	0.46	0.44	J	0.43		0.38
RA_SE_SVOCs	Isophorone	78-59-1	SW8270D LL	N	mg/kg	0.095	U		0.46	U	0.47	U	
RA_SE_SVOCs	Naphthalene	91-20-3	SW8270D LL	N	mg/kg	0.019	U	0.038	0.093	U	0.095	U	0.021
RA_SE_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	N	mg/kg	0.19	U		0.92	U	0.94	U	
RA_SE_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	N	mg/kg	0.019	U		0.093	U	0.095	U	
RA_SE_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	N	mg/kg	0.095	U		0.46	U	0.47	U	
RA_SE_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	N	mg/kg	0.095	U		0.46	U	0.47	U	
RA_SE_SVOCs	Phenanthrene	85-01-8	SW8270D LL	N	mg/kg	0.019	U	0.77	0.44		0.46		0.29
RA_SE_SVOCs	Phenol	108-95-2	SW8270D LL	N	mg/kg	0.019	U		0.093	U	0.095	U	
RA_SE_SVOCs	Pyrene	129-00-0	SW8270D LL	N	mg/kg	0.019	U	1.4	1.1		1.2		0.75
RA_SE_SVOCs	Total High-molecular-weight PAHs	TOT-PAH-HMW	SW8270D LL	N	mg/kg	0.0035		8.9	7.2		8		4.9
RA_SE_SVOCs	Total Low-molecular-weight PAHs	TOT-PAH-LMW	SW8270D LL	N	mg/kg	0.019	U	1.3	0.69		0.74		0.5

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				loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	
				sys_loc_code	SEDBACK1	SEDBACK11	SEDBACK12	SEDBACK12	SEDBACK13	
				sys_sample_code	SEDBACK100N	SEDBACK1100N	SEDBACK1200N	SEDBACK1200R	SEDBACK1300N	
				sample_date	12/3/2013	11/15/2013	11/14/2013	11/14/2013	11/14/2013	
				sample_type_code	N	N	N	FD	N	
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
				start_depth	0	0	0	0	0	
				end_depth	0.5	0.5	0.5	0.5	0.5	
				depth_unit	ft	ft	ft	ft	ft	
				validated_yn	Y	Y	Y	Y	Y	
RA_SE_VOCs	Total PAHs (sum 16)	TOT-PAH	SW8270D LL	N	mg/kg	0.0035	10	7.9	8.7	5.4
RA_SE_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	1,4-Dioxane	123-91-1	SW8260B	N	mg/kg	0.9		3.9	3.5	
RA_SE_VOCs	2-Butanone	78-93-3	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	2-Hexanone	591-78-6	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	Acetone	67-64-1	SW8260B	N	mg/kg	0.018		0.078	0.07	
RA_SE_VOCs	Benzene	71-43-2	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	Bromochloromethane	74-97-5	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	Bromodichloromethane	75-27-4	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	Bromoform	75-25-2	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	Bromomethane	74-83-9	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	Carbon Disulfide	75-15-0	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	Chlorobenzene	108-90-7	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	Chloroethane	75-00-3	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	Chloroform	67-66-3	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	Chloromethane	74-87-3	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	Cyclohexane	110-82-7	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	Dibromochloromethane	124-48-1	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	Ethylbenzene	100-41-4	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	Isopropylbenzene	98-82-8	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	m, p-Xylene	XYLMP	SW8260B	N	mg/kg	0.009		0.039	0.035	
RA_SE_VOCs	Methyl Acetate	79-20-9	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	N	mg/kg	0.0045		0.02	0.018	
RA_SE_VOCs	Methylcyclohexane	108-87-2	SW8260B	N	mg/kg	0.0045		0.02	0.018	



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		loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background			
		sys_loc_code	SEDBACK1	SEDBACK11	SEDBACK12	SEDBACK12	SEDBACK12	SEDBACK12	SEDBACK12	SEDBACK13			
		sys_sample_code	SEDBACK100N	SEDBACK1100N	SEDBACK1200N	SEDBACK1200R	SEDBACK1200R	SEDBACK1200R	SEDBACK1200R	SEDBACK1300N			
		sample_date	12/3/2013	11/15/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013			
		sample_type_code	N	N	N	N	N	N	N	N			
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
		start_depth	0	0	0	0	0	0	0	0			
		end_depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5			
		depth_unit	ft	ft	ft	ft	ft	ft	ft	ft			
		validated_yn	Y	Y	Y	Y	Y	Y	Y	Y			
RA_SE_VOCs	Methylene Chloride	75-09-2	SW8260B	N	mg/kg	0.0046	U		0.02	U	0.018	U	
RA_SE_VOCs	o-Xylene	95-47-6	SW8260B	N	mg/kg	0.0045	U		0.02	U	0.018	U	
RA_SE_VOCs	Styrene	100-42-5	SW8260B	N	mg/kg	0.0045	U		0.02	U	0.018	U	
RA_SE_VOCs	Tetrachloroethylene	127-18-4	SW8260B	N	mg/kg	0.0045	U		0.02	U	0.018	U	
RA_SE_VOCs	Toluene	108-88-3	SW8260B	N	mg/kg	0.0045	U		0.02	U	0.018	U	
RA_SE_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	N	mg/kg	0.0045	U		0.02	U	0.018	U	
RA_SE_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	N	mg/kg	0.0045	U		0.02	U	0.018	U	
RA_SE_VOCs	Trichloroethene	79-01-6	SW8260B	N	mg/kg	0.0045	U		0.02	U	0.018	U	
RA_SE_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	N	mg/kg	0.0045	U		0.02	U	0.018	U	
RA_SE_VOCs	Vinyl Chloride	75-01-4	SW8260B	N	mg/kg	0.0045	U		0.02	U	0.018	U	
RA_SE_VOCs	Xylenes (total)	1330-20-7	SW8260B	N	mg/kg	0.009	U		0.039	U	0.035	U	

		loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background								
		sys_loc_code	SEDBACK15	SEDBACK2	SEDBACK2	SEDBACK3	SEDBACK4								
		sys_sample_code	SEDBACK1500N	SEDBACK200N	SEDBACK200R	SEDBACK300N	SEDBACK400N								
		sample_date	11/12/2013	12/3/2013	12/3/2013	11/15/2013	11/14/2013								
		sample_type_code	N	N	FD	N	N								
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013								
		start_depth	0	0	0	0	0								
		end_depth	0.5	0.5	0.5	0.5	0.5								
		depth_unit	ft	ft	ft	ft	ft								
		validated_yn	Y	Y	Y	Y	Y								
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	
RA_SE_DioxinsFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	N	mg/kg	2.3E-05	JN	2.37E-06	J	2.25E-06	J		2.6E-05		
RA_SE_DioxinsFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	N	mg/kg	5.9E-06	JN	4.85E-07	JN	5.76E-07	JN		6.56E-06	JN	
RA_SE_DioxinsFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	N	mg/kg	6.87E-07	JN	1.62E-07	U	2.18E-07	U		4.1E-07	J	
RA_SE_DioxinsFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	N	mg/kg	7.69E-07	JN	1.19E-07	U	2.11E-07	U		4.91E-07	JN	
RA_SE_DioxinsFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	N	mg/kg	7.05E-07	JN	8.99E-08	U	1.14E-07	U		8.71E-07	J	
RA_SE_DioxinsFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	N	mg/kg	1.61E-06	J	1.2E-07	U	2.13E-07	U		1.24E-06	J	
RA_SE_DioxinsFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	N	mg/kg	1.2E-06	JN	8.19E-08	U	1.25E-07	U		1.41E-06	JN	
RA_SE_DioxinsFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	N	mg/kg	1.85E-06	J	1.12E-07	U	1.99E-07	U		1.43E-06	JN	
RA_SE_DioxinsFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	N	mg/kg	1.15E-07	JN	1.02E-07	U	1.36E-07	U		1.54E-07	JN	
RA_SE_DioxinsFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	N	mg/kg	6.08E-07	J	1.17E-07	U	2.01E-07	U		4.25E-07	JN	
RA_SE_DioxinsFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	N	mg/kg	2.87E-07	JN	9.66E-08	U	1.38E-07	U		4.34E-08	U	
RA_SE_DioxinsFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	N	mg/kg	6.15E-07	JN	8.95E-08	U	1.31E-07	U		4.59E-07	J	
RA_SE_DioxinsFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	N	mg/kg	6.15E-07	JN	8.33E-08	U	1.21E-07	U		4.25E-07	JN	
RA_SE_DioxinsFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	N	mg/kg	6.43E-08	J	2.23E-07	U	3.04E-07	U		2.23E-08	U	
RA_SE_DioxinsFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	N	mg/kg	9.8E-07		1.63E-07	U	2.2E-07	U		5.75E-07	JN	
RA_SE_DioxinsFurans	OCDD	3268-87-9	SW8290A	N	mg/kg	0.00046		8.49E-05	J	8.24E-05			0.000692		
RA_SE_DioxinsFurans	OCDF	39001-02-0	SW8290A	N	mg/kg	9.29E-06	JN	6.2E-07	J	7.48E-07	JN		1.02E-05		
RA_SE_DioxinsFurans	TCDD TEQ Bird	DFTEQ-Bird	SW8290A	N	mg/kg	2.93E-06		1.58E-08		1.63E-08			2.06E-06		
RA_SE_DioxinsFurans	TCDD TEQ Fish	DFTEQ-Fish	SW8290A	N	mg/kg	1.86E-06		1.58E-08		1.63E-08			1.39E-06		
RA_SE_DioxinsFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	N	mg/kg	2.09E-06		5.42E-08		5.32E-08			1.76E-06		
RA_SE_DioxinsFurans	Total HpCDD	37871-00-4	SW8290A	N	mg/kg	5.29E-05		4.89E-06	J	4.8E-06	J		6.29E-05		
RA_SE_DioxinsFurans	Total HpCDF	38998-75-3	SW8290A	N	mg/kg	1.42E-05	JN	9.22E-07	JN	1.1E-06	JN		1.59E-05	JN	
RA_SE_DioxinsFurans	Total HxCDD	34465-46-8	SW8290A	N	mg/kg	1.58E-05	JN	7.92E-07	J	8.79E-07	JN		1.25E-05	JN	
RA_SE_DioxinsFurans	Total HxCDF	55684-94-1	SW8290A	N	mg/kg	2.12E-05	JN	1.4E-06	JN	1.22E-06	J		2.22E-05	JN	
RA_SE_DioxinsFurans	Total PeCDD	36088-22-9	SW8290A	N	mg/kg	4.13E-05	JN	1.17E-07	U	2.01E-07	U		2.25E-05	JN	
RA_SE_DioxinsFurans	Total PeCDF	30402-15-4	SW8290A	N	mg/kg	3.57E-05	JN	2.08E-06	JN	1.23E-06	JN		2.79E-05	JN	
RA_SE_DioxinsFurans	Total TCDD	41903-57-5	SW8290A	N	mg/kg	5.51E-06	JN	2.23E-07	U	4.69E-07	J		2.85E-06	JN	
RA_SE_DioxinsFurans	Total TCDF	55722-27-5	SW8290A	N	mg/kg	7.11E-05	JN	1.45E-06	JN	1.01E-06	JN		4.24E-05	JN	
RA_SE_DioxinsFurans	Total TEQ	TTEQ	SW8290A	N	mg/kg	2.09E-06		5.42E-08		5.32E-08			1.76E-06		
RA_SE_Metals	Aluminum	7429-90-5	SW6020A	T	mg/kg	2100		750		1000		870	3800		
RA_SE_Metals	Antimony	7440-36-0	SW6020A	T	mg/kg	0.18	J-	0.042	J	0.035	J	0.13	U	0.19	J-
RA_SE_Metals	Arsenic	7440-38-2	SW6020A	T	mg/kg	1.5	J-	0.42	J-	0.23	J-	0.34	J-	1.6	J-
RA_SE_Metals	Barium	7440-39-3	SW6020A	T	mg/kg	31		5.3		7.9		6.6	37		
RA_SE_Metals	Beryllium	7440-41-7	SW6020A	T	mg/kg	0.27		0.14		0.19		0.17	0.45		
RA_SE_Metals	Cadmium	7440-43-9	SW6020A	T	mg/kg	0.23		0.035	J	0.044	J	0.043	J	0.33	
RA_SE_Metals	Calcium	7440-70-2	SW6020A	T	mg/kg	63000		260	J	1600	J	260	J	1700	J-
RA_SE_Metals	Chromium	7440-47-3	SW6020A	T	mg/kg	13	J+	4.3	J	5.5	J	5	J	17	
RA_SE_Metals	Cobalt	7440-48-4	SW6020A	T	mg/kg	8.6		1.7	J	2.7	J	2.2	J	7.8	
RA_SE_Metals	Copper	7440-50-8	SW6020A	T	mg/kg	18		2.7		3.7		3.5	J	18	
RA_SE_Metals	Iron	7439-89-6	SW6020A	T	mg/kg	10000		4500		3500		3800	J	10000	
RA_SE_Metals	Lead	7439-92-1	SW6020A	T	mg/kg	26		3	J	2.7	J	3.1		24	

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					loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background					
					sys_loc_code	SEDBACK15	SEDBACK2	SEDBACK2	SEDBACK3	SEDBACK4					
					sys_sample_code	SEDBACK1500N	SEDBACK200N	SEDBACK200R	SEDBACK300N	SEDBACK400N					
					sample_date	11/12/2013	12/3/2013	12/3/2013	11/15/2013	11/14/2013					
					sample_type_code	N	N	FD	N	N					
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
					start_depth	0	0	0	0	0					
					end_depth	0.5	0.5	0.5	0.5	0.5					
					depth_unit	ft	ft	ft	ft	ft					
					validated_yn	Y	Y	Y	Y	Y					
RA_SE_Metals	Magnesium	7439-95-4	SW6020A	T	mg/kg	6100		620	J	1300	J	980		1300	
RA_SE_Metals	Manganese	7439-96-5	SW6020A	T	mg/kg	200	J+	68	J	87	J	37		180	
RA_SE_Metals	Mercury	7439-97-6	SW7471B	T	mg/kg	0.053	J	0.019	U	0.019	U	0.02		0.059	J+
RA_SE_Metals	Nickel	7440-02-0	SW6020A	T	mg/kg	46		6.6	J	7.9	J	10	J	14	
RA_SE_Metals	Potassium	7440-09-7	SW6020A	T	mg/kg	290		190		250		210		640	
RA_SE_Metals	Selenium	7782-49-2	SW6020A	T	mg/kg	0.37	J-	0.048	J	0.077	J	0.32	U	0.98	J-
RA_SE_Metals	Silver	7440-22-4	SW6020A	T	mg/kg	0.056	J	0.0055	J	0.0073	J	0.013	J	0.071	J
RA_SE_Metals	Sodium	7440-23-5	SW6020A	T	mg/kg	84		21		38		31		110	J-
RA_SE_Metals	Thallium	7440-28-0	SW6020A	T	mg/kg	0.066		0.06	U	0.06	U	0.024	J	0.095	J-
RA_SE_Metals	Vanadium	7440-62-2	SW6020A	T	mg/kg	15		4.5	J	2.5	J	2.7	J	14	
RA_SE_Metals	Zinc	7440-66-6	SW6020A	T	mg/kg	67	J	11	J-	13	J-	17	J	82	
RA_SE_Other	Arsenic	7440-38-2	SW6010	SEM	umol/g	0.011	J	0.0028	J	0.0023	J	0.0021	J	0.007	
RA_SE_Other	Cadmium	7440-43-9	SW6010	SEM	umol/g	0.0012	J	8.8E-05	J	0.00022	J	0.00023	J	0.0027	
RA_SE_Other	Chromium	7440-47-3	SW6010	SEM	umol/g	0.39		0.059		0.061		0.081	J	0.25	
RA_SE_Other	Copper	7440-50-8	SW6010	SEM	umol/g	0.14		0.031		0.039		0.031	J	0.3	
RA_SE_Other	Lead	7439-92-1	SW6010	SEM	umol/g	0.17		0.013	J	0.015		0.043	J	0.13	
RA_SE_Other	Mercury	7439-97-6	SW7470A	SEM	umol/g	3E-05	J	7.7E-05	U	1.1E-05	J	8.8E-06	J	3.3E-05	J
RA_SE_Other	Nickel	7440-02-0	SW6010	SEM	umol/g	0.56		0.12	J	0.12		0.071	J	0.23	
RA_SE_Other	Silver	7440-22-4	SW6010	SEM	umol/g	0.0015	UJ	0.0014	UJ	0.0014	U	0.0015	U	0.0024	U
RA_SE_Other	Sulfide	18496-25-8	SW9034	SEM	umol/g	2.1		0.58	UJ	0.57	UJ	0.6	UJ	3.3	J
RA_SE_Other	Total Organic Carbon	7440-44-0	LKTOC	T	mg/kg	27000		2300		2300		2700		47000	
RA_SE_Other	Zinc	7440-66-6	SW6010	SEM	umol/g	0.91		0.21		0.24		0.24	J	1.5	
RA_SE_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	N	mg/kg	0.0068		0.00019	J	0.00015	J			0.0041	
RA_SE_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	N	mg/kg	0.0099		0.00017	J	0.00016	J			0.0028	
RA_SE_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	N	mg/kg	0.0044		6.5E-05	J	0.00019	J			0.005	
RA_SE_PestPCBs	Aldrin	309-00-2	SW8081B LL	N	mg/kg	0.0002	J	0.00026	U	0.00025	U			0.00061	J
RA_SE_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	N	mg/kg	0.00027	U	0.00026	U	0.00025	U			0.00085	U
RA_SE_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	N	mg/kg	0.0054	U	0.0051	U	0.0051	U	0.0054	U	0.0085	U
RA_SE_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	N	mg/kg	0.0054	U	0.0051	U	0.0051	U	0.0054	U	0.0085	U
RA_SE_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	N	mg/kg	0.0054	U	0.0051	U	0.0051	U	0.0054	U	0.0085	U
RA_SE_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	N	mg/kg	0.0054	U	0.0051	U	0.0051	U	0.0054	U	0.0085	U
RA_SE_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	N	mg/kg	0.0054	U	0.0051	U	0.0051	U	0.0054	U	0.028	J
RA_SE_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	N	mg/kg	0.0054	U	0.0051	U	0.0051	U	0.0054	U	0.0085	U
RA_SE_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	N	mg/kg	0.018		0.0051	U	0.0051	U	0.0054	U	0.018	J
RA_SE_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	N	mg/kg	0.0054	U	0.0051	U	0.0051	U	0.0054	U	0.0085	U
RA_SE_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	N	mg/kg	0.0054	U	0.0051	U	0.0051	U	0.0054	U	0.0085	U
RA_SE_PestPCBs	beta-BHC	319-85-7	SW8081B LL	N	mg/kg	0.00036	J	0.00026	U	0.00025	U			0.00085	U
RA_SE_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	N	mg/kg	0.0041	J	0.00095		0.0011				0.0083	
RA_SE_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	N	mg/kg										
RA_SE_PestPCBs	delta-BHC	319-86-8	SW8081B LL	N	mg/kg	0.00027	U	0.00026	U	0.00025	U			0.00028	J
RA_SE_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	N	mg/kg										
RA_SE_PestPCBs	Dieldrin	60-57-1	SW8081B LL	N	mg/kg	0.00066	J	0.00025	J	0.00034				0.0014	J
RA_SE_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	N	mg/kg	0.00027	U	0.00026	U	0.00025	U			0.00085	U

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				loc_group		RA_Background		RA_Background		RA_Background		RA_Background		RA_Background	
				sys_loc_code		SEDBACK15		SEDBACK2		SEDBACK2		SEDBACK3		SEDBACK4	
				sys_sample_code		SEDBACK1500N		SEDBACK200N		SEDBACK200R		SEDBACK300N		SEDBACK400N	
				sample_date		11/12/2013		12/3/2013		12/3/2013		11/15/2013		11/14/2013	
				sample_type_code		N		N		FD		N		N	
				task_code		Phase2-2013		Phase2-2013		Phase2-2013		Phase2-2013		Phase2-2013	
				start_depth		0		0		0		0		0	
				end_depth		0.5		0.5		0.5		0.5		0.5	
				depth_unit		ft		ft		ft		ft		ft	
				validated_yn		Y		Y		Y		Y		Y	
RA_SE_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	N	mg/kg	8.7E-05	J	0.00026	U	0.00025	U			0.00015	J
RA_SE_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	N	mg/kg	0.00013	J	0.00026	U	4.7E-05	J			0.00085	U
RA_SE_PestPCBs	Endrin	72-20-8	SW8081B LL	N	mg/kg	0.00059	J	0.00026	U	0.00059	J			0.001	J
RA_SE_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	N	mg/kg	0.00023	J	0.00026	U	0.00025	U			0.00085	U
RA_SE_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	N	mg/kg	0.00094	J	0.00026	U	7.2E-05	J			0.00098	J
RA_SE_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	N	mg/kg	0.0001	J	0.00026	U	0.00025	U			0.00016	J
RA_SE_PestPCBs	Heptachlor	76-44-8	SW8081B LL	N	mg/kg	0.00092	J	7.8E-05	J	9.6E-05	J			0.0016	J
RA_SE_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	N	mg/kg	0.00027	J	0.00013	J	0.00014	J			0.00049	J
RA_SE_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	N	mg/kg										
RA_SE_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	N	mg/kg										
RA_SE_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	N	mg/kg	0.0027	J	0.00051	U	0.00058	J			0.0092	J
RA_SE_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	N	mg/kg										
RA_SE_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	N	mg/kg										
RA_SE_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB TEQ Bird	PCBTEQ-Bird	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB, TOTAL	PCB	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	N	mg/kg	0.018	J	0.0051	U	0.0051	U	0.0054	U	0.046	J
RA_SE_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	N	mg/kg	0.018	J	0.0051	U	0.0051	U	0.0054	U	0.045	J
RA_SE_PestPCBs	PCB-1	2051-60-7	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB-10	33146-45-1	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB-100	39485-83-1	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB-101	37680-73-2	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB-102	68194-06-9	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB-103	60145-21-3	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB-104	56558-16-8	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB-105	32598-14-4	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB-106	70424-69-0	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB-107	70424-68-9	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB-108	70362-41-3	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB-109	74472-35-8	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB-11	2050-67-1	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB-110	38380-03-9	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB-111	39635-32-0	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB-112	74472-36-9	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB-113	68194-10-5	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB-114	74472-37-0	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB-115	74472-38-1	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB-116	18259-05-7	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB-117	68194-11-6	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB-118	31508-00-6	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB-119	56558-17-9	E1668C	N	mg/kg										
RA_SE_PestPCBs	PCB-12	2974-92-7	E1668C	N	mg/kg										



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				loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background
				sys_loc_code	SEDBACK15	SEDBACK2	SEDBACK2	SEDBACK3	SEDBACK4
				sys_sample_code	SEDBACK1500N	SEDBACK200N	SEDBACK200R	SEDBACK300N	SEDBACK400N
				sample_date	11/12/2013	12/3/2013	12/3/2013	11/15/2013	11/14/2013
				sample_type_code	N	N	FD	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-120	68194-12-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-121	56558-18-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-122	76842-07-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-123	65510-44-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-124	70424-70-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-125	74472-39-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-126	57465-28-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-127	39635-33-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-128	38380-07-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-129	55215-18-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-13	2974-90-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-130	52663-66-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-131	61798-70-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-132	38380-05-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-133	35694-04-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-134	52704-70-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-135	52744-13-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-136	38411-22-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-137	35694-06-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-138	35065-28-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-139	56030-56-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-14	34883-41-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-140	59291-64-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-141	52712-04-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-142	41411-61-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-143	68194-15-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-144	68194-14-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-145	74472-40-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-146	51908-16-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-147	68194-13-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-148	74472-41-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-149	38380-04-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-15	2050-68-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-150	68194-08-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-151	52663-63-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-152	68194-09-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-153	35065-27-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-154	60145-22-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-155	33979-03-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-156	38380-08-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-157	69782-90-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-158	74472-42-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-159	39635-35-3	E1668C	N	mg/kg				



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				loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background
				sys_loc_code	SEDBACK15	SEDBACK2	SEDBACK2	SEDBACK3	SEDBACK4
				sys_sample_code	SEDBACK1500N	SEDBACK200N	SEDBACK200R	SEDBACK300N	SEDBACK400N
				sample_date	11/12/2013	12/3/2013	12/3/2013	11/15/2013	11/14/2013
				sample_type_code	N	N	FD	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-16	38444-78-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-160	41411-62-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-161	74472-43-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-162	39635-34-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-163	74472-44-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-164	74472-45-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-165	74472-46-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-166	41411-63-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-167	52663-72-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-168	59291-65-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-169	32774-16-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-17	37680-66-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-170	35065-30-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-171	52663-71-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-172	52663-74-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-173	68194-16-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-174	38411-25-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-175	40186-70-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-176	52663-65-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-177	52663-70-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-178	52663-67-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-179	52663-64-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-18	37680-65-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-180	35065-29-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-181	74472-47-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-182	60145-23-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-183	52663-69-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-184	74472-48-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-185	52712-05-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-186	74472-49-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-187	52663-68-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-188	74487-85-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-189	39635-31-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-19	38444-73-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-190	41411-64-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-191	74472-50-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-192	74472-51-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-193	69782-91-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-194	35694-08-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-195	52663-78-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-196	42740-50-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-197	33091-17-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-198	68194-17-2	E1668C	N	mg/kg				





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				loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background
				sys_loc_code	SEDBACK15	SEDBACK2	SEDBACK2	SEDBACK3	SEDBACK4
				sys_sample_code	SEDBACK1500N	SEDBACK200N	SEDBACK200R	SEDBACK300N	SEDBACK400N
				sample_date	11/12/2013	12/3/2013	12/3/2013	11/15/2013	11/14/2013
				sample_type_code	N	N	FD	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-199	52663-75-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-2	2051-61-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-20	38444-84-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-200	52663-73-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-201	40186-71-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-202	2136-99-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-203	52663-76-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-204	74472-52-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-205	74472-53-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-206	40186-72-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-207	52663-79-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-208	52663-77-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-21	55702-46-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-22	38444-85-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-23	55720-44-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-24	55702-45-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-25	55712-37-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-26	38444-81-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-27	38444-76-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-28	7012-37-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-29	15862-07-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-3	2051-62-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-30	35693-92-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-31	16606-02-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-32	38444-77-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-33	38444-86-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-34	37680-68-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-35	37680-69-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-36	38444-87-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-37	38444-90-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-38	53555-66-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-39	38444-88-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-4	13029-08-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-40	38444-93-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-41	52663-59-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-42	36559-22-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-43	70362-46-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-44	41464-39-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-45	70362-45-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-46	41464-47-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-47	2437-79-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-48	70362-47-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-49	41464-40-8	E1668C	N	mg/kg				



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				loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background
				sys_loc_code	SEDBACK15	SEDBACK2	SEDBACK2	SEDBACK3	SEDBACK4
				sys_sample_code	SEDBACK1500N	SEDBACK200N	SEDBACK200R	SEDBACK300N	SEDBACK400N
				sample_date	11/12/2013	12/3/2013	12/3/2013	11/15/2013	11/14/2013
				sample_type_code	N	N	FD	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-5	16605-91-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-50	62796-65-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-51	68194-04-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-52	35693-99-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-53	41464-41-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-54	15968-05-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-55	74338-24-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-56	41464-43-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-57	70424-67-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-58	41464-49-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-59	74472-33-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-6	25569-80-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-60	33025-41-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-61	33284-53-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-62	54230-22-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-63	74472-34-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-64	52663-58-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-65	33284-54-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-66	32598-10-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-67	73575-53-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-68	73575-52-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-69	60233-24-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-7	33284-50-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-70	32598-11-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-71	41464-46-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-72	41464-42-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-73	74338-23-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-74	32690-93-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-75	32598-12-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-76	70362-48-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-77	32598-13-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-78	70362-49-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-79	41464-48-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-8	34883-43-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-80	33284-52-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-81	70362-50-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-82	52663-62-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-83	60145-20-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-84	52663-60-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-85	65510-45-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-86	55312-69-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-87	38380-02-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-88	55215-17-3	E1668C	N	mg/kg				

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				loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	
				sys_loc_code	SEDBACK15	SEDBACK2	SEDBACK2	SEDBACK2	SEDBACK3	SEDBACK4	
				sys_sample_code	SEDBACK1500N	SEDBACK200N	SEDBACK200R	SEDBACK200R	SEDBACK300N	SEDBACK400N	
				sample_date	11/12/2013	12/3/2013	12/3/2013	12/3/2013	11/15/2013	11/14/2013	
				sample_type_code	N	N	FD	FD	N	N	
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
				start_depth	0	0	0	0	0	0	
				end_depth	0.5	0.5	0.5	0.5	0.5	0.5	
				depth_unit	ft	ft	ft	ft	ft	ft	
				validated_yn	Y	Y	Y	Y	Y	Y	
RA_SE_PestPCBs	PCB-89	73575-57-2	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-9	34883-39-1	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-90	68194-07-0	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-91	68194-05-8	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-92	52663-61-3	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-93	73575-56-1	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-94	73575-55-0	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-95	38379-99-6	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-96	73575-54-9	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-97	41464-51-1	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-98	60233-25-2	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-99	38380-01-7	E1668C	N	mg/kg						
RA_SE_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	N	mg/kg						
RA_SE_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	N	mg/kg						
RA_SE_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	N	mg/kg	0.011	U	0.01	U	0.034	U
RA_SE_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	N	mg/kg	0.0073		0.00094		0.0083	
RA_SE_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	N	mg/kg						
RA_SE_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.34	U
RA_SE_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.34	U
RA_SE_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	N	mg/kg	0.17	U	0.021	U	0.069	U
RA_SE_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.34	U
RA_SE_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.34	U
RA_SE_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.34	U
RA_SE_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	N	mg/kg	0.17	U	0.021	U	0.069	U
RA_SE_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.34	U
RA_SE_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	N	mg/kg	4.4	U	0.52	U	1.7	U
RA_SE_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.34	U
RA_SE_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.34	U
RA_SE_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	N	mg/kg	0.17	U	0.021	U	0.069	U
RA_SE_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.34	U
RA_SE_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	N	mg/kg	0.17	U	0.021	U	0.18	U
RA_SE_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.34	U
RA_SE_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	N	mg/kg	4.4	U	0.52	U	1.7	U
RA_SE_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.34	U
RA_SE_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.34	U
RA_SE_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	N	mg/kg	4.4	U	0.52	U	1.7	U
RA_SE_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	N	mg/kg	4.4	U	0.52	U	1.7	U
RA_SE_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.34	U
RA_SE_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.34	U
RA_SE_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.34	U
RA_SE_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.34	U
RA_SE_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.034	J
RA_SE_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	N	mg/kg	4.4	U	0.52	U	1.7	U

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	loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background				
	sys_loc_code	SEDBACK15	SEDBACK2	SEDBACK2	SEDBACK200R	SEDBACK3	SEDBACK300N	SEDBACK4	SEDBACK400N	SEDBACK400N				
	sys_sample_code	SEDBACK1500N	SEDBACK200N	SEDBACK200R	SEDBACK200R	SEDBACK300N	SEDBACK300N	SEDBACK400N	SEDBACK400N	SEDBACK400N				
	sample_date	11/12/2013	12/3/2013	12/3/2013	12/3/2013	11/15/2013	11/15/2013	11/14/2013	11/14/2013	11/14/2013				
	sample_type_code	N	N	FD	FD	N	N	N	N	N				
	task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
	start_depth	0	0	0	0	0	0	0	0	0				
	end_depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5				
	depth_unit	ft	ft	ft	ft	ft	ft	ft	ft	ft				
	validated_yn	Y	Y	Y	Y	Y	Y	Y	Y	Y				
RA_SE_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	N	mg/kg	4.4	U	0.52	U	0.52	U		1.7	U
RA_SE_SVOCs	Acenaphthene	83-32-9	SW8270D LL	N	mg/kg	0.031	J	0.021	U	0.02	U	0.022	U	0.32
RA_SE_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	N	mg/kg	0.05	J	0.021	U	0.02	U	0.061		0.027
RA_SE_SVOCs	Acetophenone	98-86-2	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.1	U			0.34
RA_SE_SVOCs	Anthracene	120-12-7	SW8270D LL	N	mg/kg	0.15	J	0.011	J	0.005	J	0.075		0.93
RA_SE_SVOCs	Atrazine	1912-24-9	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.1	U			0.34
RA_SE_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	N	mg/kg		R	0.1	UJ	0.1	UJ			0.094
RA_SE_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	N	mg/kg	0.77		0.057		0.018	J	0.2		2.7
RA_SE_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	N	mg/kg	0.72		0.067		0.019	J	0.19		2.6
RA_SE_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	N	mg/kg	0.85		0.1		0.026		0.21		2.8
RA_SE_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	N	mg/kg	0.53	J	0.068		0.019	J	0.16		1.8
RA_SE_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	N	mg/kg	0.38		0.045		0.013	J	0.1		1.4
RA_SE_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.1	U			0.34
RA_SE_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	N	mg/kg	0.17	U	0.021	U	0.02	U			0.069
RA_SE_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	N	mg/kg	0.84	J	0.035	J	0.031	J			0.8
RA_SE_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	N	mg/kg	0.85	U	0.017	J	0.1	U			0.34
RA_SE_SVOCs	Caprolactam	105-60-2	SW8270D LL	N	mg/kg	4.4	U	0.52	U	0.52	U			1.7
RA_SE_SVOCs	Carbazole	86-74-8	SW8270D LL	N	mg/kg	0.17	U	0.011	J	0.02	U			0.46
RA_SE_SVOCs	Chrysene	218-01-9	SW8270D LL	N	mg/kg	0.91		0.093		0.026		0.22		3.3
RA_SE_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	N	mg/kg	0.19		0.015	J	0.02	U	0.042		0.4
RA_SE_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.1	U			0.083
RA_SE_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	N	mg/kg	0.85	U	0.052	J	0.042	J			0.061
RA_SE_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.1	U			0.34
RA_SE_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.1	U			0.34
RA_SE_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.1	U			0.34
RA_SE_SVOCs	Fluoranthene	206-44-0	SW8270D LL	N	mg/kg	1.2		0.18	J	0.048	J	0.49		6.2
RA_SE_SVOCs	Fluorene	86-73-7	SW8270D LL	N	mg/kg	0.045	J	0.021	U	0.02	U	0.036		0.28
RA_SE_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	N	mg/kg	0.17	U	0.021	U	0.02	U			0.069
RA_SE_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	N	mg/kg	0.17	U	0.021	U	0.02	U			0.069
RA_SE_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.1	U			0.34
RA_SE_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.1	U			0.34
RA_SE_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	N	mg/kg	0.42		0.058		0.016	J	0.15		1.5
RA_SE_SVOCs	Isophorone	78-59-1	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.1	U			0.34
RA_SE_SVOCs	Naphthalene	91-20-3	SW8270D LL	N	mg/kg	0.17	U	0.021	U	0.02	U	0.022	U	0.076
RA_SE_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	N	mg/kg	1.7	U	0.21	U	0.2	U			0.68
RA_SE_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	N	mg/kg	0.17	U	0.021	U	0.02	U			0.069
RA_SE_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.1	U			0.34
RA_SE_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	N	mg/kg	0.85	U	0.1	U	0.1	U			0.34
RA_SE_SVOCs	Phenanthrene	85-01-8	SW8270D LL	N	mg/kg	0.74		0.058		0.022		0.32		5.6
RA_SE_SVOCs	Phenol	108-95-2	SW8270D LL	N	mg/kg	0.17	U	0.021	U	0.02	U			0.069
RA_SE_SVOCs	Pyrene	129-00-0	SW8270D LL	N	mg/kg	1.4		0.1		0.028		0.33		5.2
RA_SE_SVOCs	Total High-molecular-weight PAHs	TOT-PAH-HMW	SW8270D LL	N	mg/kg	7.4		0.78		0.21		2.1		28
RA_SE_SVOCs	Total Low-molecular-weight PAHs	TOT-PAH-LMW	SW8270D LL	N	mg/kg	1		0.069		0.027		0.49		7.2

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				loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background				
RA_SE_SVOCs	Total PAHs (sum 16)	TOT-PAH	SW8270D LL	N	mg/kg	8.4	0.85	0.24	2.6	35			
RA_SE_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	1,4-Dioxane	123-91-1	SW8260B	N	mg/kg	1.1	U	1.1	U	0.99	U	1.9	U
RA_SE_VOCs	2-Butanone	78-93-3	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	2-Hexanone	591-78-6	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	Acetone	67-64-1	SW8260B	N	mg/kg	0.022	U	0.022	U	0.02	U	0.038	U
RA_SE_VOCs	Benzene	71-43-2	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	Bromochloromethane	74-97-5	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	Bromodichloromethane	75-27-4	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	Bromoform	75-25-2	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	Bromomethane	74-83-9	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	Carbon Disulfide	75-15-0	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	Chlorobenzene	108-90-7	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	Chloroethane	75-00-3	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	Chloroform	67-66-3	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	Chloromethane	74-87-3	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	Cyclohexane	110-82-7	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	Dibromochloromethane	124-48-1	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	Ethylbenzene	100-41-4	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	Isopropylbenzene	98-82-8	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	m, p-Xylene	XYLMP	SW8260B	N	mg/kg	0.011	U	0.011	U	0.0099	U	0.019	U
RA_SE_VOCs	Methyl Acetate	79-20-9	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U
RA_SE_VOCs	Methylcyclohexane	108-87-2	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U	0.0095	U



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		loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background				
		sys_loc_code	SEDBACK15	SEDBACK2	SEDBACK2	SEDBACK2	SEDBACK3	SEDBACK4	SEDBACK1500N	SEDBACK200R				
		sys_sample_code	SEDBACK1500N	SEDBACK200N	SEDBACK200R	SEDBACK200R	SEDBACK300N	SEDBACK400N	11/12/2013	12/3/2013				
		sample_date	11/12/2013	12/3/2013	12/3/2013	11/15/2013	11/14/2013							
		sample_type_code	N	N	FD	N	N							
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013						
		start_depth	0	0	0	0	0	0						
		end_depth	0.5	0.5	0.5	0.5	0.5	0.5						
		depth_unit	ft	ft	ft	ft	ft	ft						
		validated_yn	Y	Y	Y	Y	Y	Y						
RA_SE_VOCs	Methylene Chloride	75-09-2	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U		0.0095	U
RA_SE_VOCs	o-Xylene	95-47-6	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U		0.0095	U
RA_SE_VOCs	Styrene	100-42-5	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U		0.0095	U
RA_SE_VOCs	Tetrachloroethylene	127-18-4	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U		0.0095	U
RA_SE_VOCs	Toluene	108-88-3	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U		0.0095	U
RA_SE_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U		0.0095	U
RA_SE_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U		0.0095	U
RA_SE_VOCs	Trichloroethene	79-01-6	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U		0.0095	U
RA_SE_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U		0.0095	U
RA_SE_VOCs	Vinyl Chloride	75-01-4	SW8260B	N	mg/kg	0.0056	U	0.0054	U	0.0049	U		0.0095	U
RA_SE_VOCs	Xylenes (total)	1330-20-7	SW8260B	N	mg/kg	0.011	U	0.011	U	0.0099	U		0.019	U

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				loc_group	RA_Background	RA_Background	RA_Background	RA_Waterside_Area	RA_Waterside_Area				
				sys_loc_code	SEDBACK5	SEDBACK5	SEDBACK6	SED1.5B	SED10A				
				sys_sample_code	SEDBACK500N	SEDBACK500R	SEDBACK600N	SED1.5B00N	SED10A00N				
				sample_date	11/14/2013	11/14/2013	11/15/2013	11/6/2013	11/11/2013				
				sample_type_code	N	FD	N	N	N				
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
				start_depth	0	0	0	0	0				
				end_depth	0.5	0.5	0.5	0.5	0.5				
				depth_unit	ft	ft	ft	ft	ft				
				validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SE_DioxinsFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	N	mg/kg	1.3E-05	J	3.11E-05	J	1.93E-05			
RA_SE_DioxinsFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	N	mg/kg	1.86E-06	JN	4.9E-06		3.31E-06	J		
RA_SE_DioxinsFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	N	mg/kg	3.7E-07	JN	5.72E-07	JN	5.13E-07	JN		
RA_SE_DioxinsFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	N	mg/kg	2.85E-07	J	3.75E-07	JN	4.23E-07	J		
RA_SE_DioxinsFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	N	mg/kg	3.33E-07	JN	6.65E-07	JN	4.03E-07	JN		
RA_SE_DioxinsFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	N	mg/kg	6.66E-07	J	1.3E-06	JN	9.89E-07	J		
RA_SE_DioxinsFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	N	mg/kg	8.63E-07	JN	9E-07	JN	9.09E-07	JN		
RA_SE_DioxinsFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	N	mg/kg	6.62E-07	J	1.19E-06	J	8.54E-07	JN		
RA_SE_DioxinsFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	N	mg/kg	5.66E-08	JN	1.05E-07	JN	7.91E-08	JN		
RA_SE_DioxinsFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	N	mg/kg	2.19E-07	JN	2.08E-07	JN	3.46E-07	JN		
RA_SE_DioxinsFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	N	mg/kg	1.37E-07	JN	2.42E-07	JN	2.48E-07	JN		
RA_SE_DioxinsFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	N	mg/kg	2.75E-07	JN	3.97E-07	JN	3.92E-07	J		
RA_SE_DioxinsFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	N	mg/kg	2.79E-07	JN	4.83E-07	JN	4.3E-07	JN		
RA_SE_DioxinsFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	N	mg/kg	1.24E-08	U	5.66E-08	JN	9.37E-08	J		
RA_SE_DioxinsFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	N	mg/kg	1.78E-07	JN	5.06E-07	J	1.57E-07	JN		
RA_SE_DioxinsFurans	OCDD	3268-87-9	SW8290A	N	mg/kg	0.000359	J	0.000999	J	0.000537			
RA_SE_DioxinsFurans	OCDF	39001-02-0	SW8290A	N	mg/kg	4.67E-06	JN	9.34E-06	J	5.56E-06	JN		
RA_SE_DioxinsFurans	TCDD TEQ Bird	DFTEQ-Bird	SW8290A	N	mg/kg	1E-06		1.82E-06		1.46E-06			
RA_SE_DioxinsFurans	TCDD TEQ Fish	DFTEQ-Fish	SW8290A	N	mg/kg	7.54E-07		1.15E-06		1.19E-06			
RA_SE_DioxinsFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	N	mg/kg	9E-07		1.63E-06		1.39E-06			
RA_SE_DioxinsFurans	Total HpCDD	37871-00-4	SW8290A	N	mg/kg	2.93E-05	J	6.9E-05	J	4.48E-05			
RA_SE_DioxinsFurans	Total HpCDF	38998-75-3	SW8290A	N	mg/kg	5.99E-06	JN	1.22E-05	JN	8.55E-06	JN		
RA_SE_DioxinsFurans	Total HxCDD	34465-46-8	SW8290A	N	mg/kg	7.22E-06	JN	1.35E-05	JN	9.5E-06	JN		
RA_SE_DioxinsFurans	Total HxCDF	55684-94-1	SW8290A	N	mg/kg	1.44E-05	JN	1.63E-05	JN	1.51E-05	JN		
RA_SE_DioxinsFurans	Total PeCDD	36088-22-9	SW8290A	N	mg/kg	1.74E-05	JN	3.07E-05	JN	2.45E-05	JN		
RA_SE_DioxinsFurans	Total PeCDF	30402-15-4	SW8290A	N	mg/kg	2.46E-05	JN	2.19E-05	JN	2.17E-05	JN		
RA_SE_DioxinsFurans	Total TCDD	41903-57-5	SW8290A	N	mg/kg	1.55E-06	JN	2.53E-06	JN	2.14E-06	JN		
RA_SE_DioxinsFurans	Total TCDF	55722-27-5	SW8290A	N	mg/kg	3.24E-05	JN	3.48E-05	JN	3.28E-05	JN		
RA_SE_DioxinsFurans	Total TEQ	TTEQ	SW8290A	N	mg/kg	9E-07		1.63E-06		1.39E-06			
RA_SE_Metals	Aluminum	7429-90-5	SW6020A	T	mg/kg	3300		3000		11000		10000	6900
RA_SE_Metals	Antimony	7440-36-0	SW6020A	T	mg/kg	0.19	J-	0.17	J-	0.67	J-	0.48	J-
RA_SE_Metals	Arsenic	7440-38-2	SW6020A	T	mg/kg	2.1	J-	2.2	J-	3.6	J-	4.1	J-
RA_SE_Metals	Barium	7440-39-3	SW6020A	T	mg/kg	37		32		100		98	79
RA_SE_Metals	Beryllium	7440-41-7	SW6020A	T	mg/kg	0.57		0.53		1.6		1.3	1.2
RA_SE_Metals	Cadmium	7440-43-9	SW6020A	T	mg/kg	0.44		0.42		1.1		1.4	0.33
RA_SE_Metals	Calcium	7440-70-2	SW6020A	T	mg/kg	1500	J-	1400	J-	2800	J	3500	1300
RA_SE_Metals	Chromium	7440-47-3	SW6020A	T	mg/kg	15		14		47	J	47	J+
RA_SE_Metals	Cobalt	7440-48-4	SW6020A	T	mg/kg	7.8		7.2		22		20	13
RA_SE_Metals	Copper	7440-50-8	SW6020A	T	mg/kg	22		20		66	J	53	J+
RA_SE_Metals	Iron	7439-89-6	SW6020A	T	mg/kg	13000		11000		31000	J	27000	17000
RA_SE_Metals	Lead	7439-92-1	SW6020A	T	mg/kg	21		21		75		99	11

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				loc_group	RA_Background	RA_Background	RA_Background	RA_Waterside_Area	RA_Waterside_Area	
				sys_loc_code	SEDBACK5	SEDBACK5	SEDBACK6	SED1.5B	SED10A	
				sys_sample_code	SEDBACK500N	SEDBACK500R	SEDBACK600N	SED1.5B00N	SED10A00N	
				sample_date	11/14/2013	11/14/2013	11/15/2013	11/6/2013	11/11/2013	
				sample_type_code	N	FD	N	N	N	
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
				start_depth	0	0	0	0	0	
				end_depth	0.5	0.5	0.5	0.5	0.5	
				depth_unit	ft	ft	ft	ft	ft	
				validated_yn	Y	Y	Y	Y	Y	
RA_SE_Metals	Magnesium	7439-95-4	SW6020A	T	mg/kg	1100	980	3400	3600	1400
RA_SE_Metals	Manganese	7439-96-5	SW6020A	T	mg/kg	200	180	370	470	480
RA_SE_Metals	Mercury	7439-97-6	SW7471B	T	mg/kg	0.056	J+	0.064	J+	0.17
RA_SE_Metals	Nickel	7440-02-0	SW6020A	T	mg/kg	14	12	40	J	38
RA_SE_Metals	Potassium	7440-09-7	SW6020A	T	mg/kg	480	440	1300	1200	560
RA_SE_Metals	Selenium	7782-49-2	SW6020A	T	mg/kg	0.75	J-	0.93	J-	1.4
RA_SE_Metals	Silver	7440-22-4	SW6020A	T	mg/kg	0.1	0.083	J	0.42	0.48
RA_SE_Metals	Sodium	7440-23-5	SW6020A	T	mg/kg	60	J-	47	J-	180
RA_SE_Metals	Thallium	7440-28-0	SW6020A	T	mg/kg	0.077	J-	0.069	J-	0.28
RA_SE_Metals	Vanadium	7440-62-2	SW6020A	T	mg/kg	16	16	36	J	39
RA_SE_Metals	Zinc	7440-66-6	SW6020A	T	mg/kg	100	99	280	J	250
RA_SE_Other	Arsenic	7440-38-2	SW6010	SEM	umol/g	0.0062	0.0072	0.011	J	0.0086
RA_SE_Other	Cadmium	7440-43-9	SW6010	SEM	umol/g	0.0035	0.0028	0.0072	J	0.0071
RA_SE_Other	Chromium	7440-47-3	SW6010	SEM	umol/g	0.18	0.16	0.37	J	0.22
RA_SE_Other	Copper	7440-50-8	SW6010	SEM	umol/g	0.26	0.25	0.64	J	0.37
RA_SE_Other	Lead	7439-92-1	SW6010	SEM	umol/g	0.1	0.094	0.24	J	0.26
RA_SE_Other	Mercury	7439-97-6	SW7470A	SEM	umol/g	1.6E-05	J	3.4E-05	J	9.2E-05
RA_SE_Other	Nickel	7440-02-0	SW6010	SEM	umol/g	0.18	0.16	0.35	J	0.22
RA_SE_Other	Silver	7440-22-4	SW6010	SEM	umol/g	0.002	U	0.002	U	0.00048
RA_SE_Other	Sulfide	18496-25-8	SW9034	SEM	umol/g	0.8	UJ	0.65	J	2.3
RA_SE_Other	Total Organic Carbon	7440-44-0	LKTOC	T	mg/kg	20000	26000	39000	37000	55000
RA_SE_Other	Zinc	7440-66-6	SW6010	SEM	umol/g	1.5	1.4	3.1	J	2.5
RA_SE_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	N	mg/kg	0.0015	0.0013	J	0.0044	J
RA_SE_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	N	mg/kg	0.0013	0.0011	J	0.0094	J
RA_SE_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	N	mg/kg	0.002	J	0.0032	0.0056	J
RA_SE_PestPCBs	Aldrin	309-00-2	SW8081B LL	N	mg/kg	0.00035	J	0.0011	J	0.0018
RA_SE_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	N	mg/kg	0.00071	U	0.00071	U	0.0011
RA_SE_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	N	mg/kg	0.0071	U	0.0071	U	0.011
RA_SE_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	N	mg/kg	0.0071	U	0.0071	U	0.011
RA_SE_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	N	mg/kg	0.0071	U	0.0071	U	0.011
RA_SE_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	N	mg/kg	0.0071	U	0.0071	U	0.011
RA_SE_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	N	mg/kg	0.05	J	0.052	J	0.1
RA_SE_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	N	mg/kg	0.0071	U	0.0071	U	0.011
RA_SE_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	N	mg/kg	0.028	J	0.019	J	0.043
RA_SE_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	N	mg/kg	0.0071	U	0.0071	U	0.011
RA_SE_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	N	mg/kg	0.0071	U	0.0071	U	0.011
RA_SE_PestPCBs	beta-BHC	319-85-7	SW8081B LL	N	mg/kg	0.00034	J	0.00071	U	0.0011
RA_SE_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	N	mg/kg	0.0037	0.0054	0.012	J	
RA_SE_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	N	mg/kg	0.000179		0.000567		
RA_SE_PestPCBs	delta-BHC	319-86-8	SW8081B LL	N	mg/kg	0.00046	J	0.0003	J	0.00088
RA_SE_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	N	mg/kg	0.00405	JN	0.00498	JN	
RA_SE_PestPCBs	Dieldrin	60-57-1	SW8081B LL	N	mg/kg	0.0013	0.0019	0.0022	J	
RA_SE_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	N	mg/kg	0.00071	U	0.00071	U	0.0011



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				loc_group		RA_Background	RA_Background	RA_Background	RA_Waterside_Area	RA_Waterside_Area			
				sys_loc_code		SEDBACK5	SEDBACK5	SEDBACK6	SED1.5B	SED10A			
				sys_sample_code		SEDBACK500N	SEDBACK500R	SEDBACK600N	SED1.5B00N	SED10A00N			
				sample_date		11/14/2013	11/14/2013	11/15/2013	11/6/2013	11/11/2013			
				sample_type_code		N	FD	N	N	N			
				task_code		Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth		0	0	0	0	0			
				end_depth		0.5	0.5	0.5	0.5	0.5			
				depth_unit		ft	ft	ft	ft	ft			
				validated_yn		Y	Y	Y	Y	Y			
RA_SE_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	N	mg/kg	0.00071	U	0.00016	J	0.00056	J		
RA_SE_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	N	mg/kg	0.00027	J	0.00044	J	0.0014	J		
RA_SE_PestPCBs	Endrin	72-20-8	SW8081B LL	N	mg/kg	0.001		0.0015		0.0035	J		
RA_SE_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	N	mg/kg	0.00071	U	0.00032	J	0.0005	J		
RA_SE_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	N	mg/kg	0.00071	J	0.0013	J	0.0059	J		
RA_SE_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	N	mg/kg	0.00071	U	0.00019	J	0.00097	J		
RA_SE_PestPCBs	Heptachlor	76-44-8	SW8081B LL	N	mg/kg	0.0002	J	0.00037	J	0.00035	J		
RA_SE_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	N	mg/kg	0.00055	J	0.00094	J	0.0011	J		
RA_SE_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	N	mg/kg	0.00855	JN			0.0186	JN		
RA_SE_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	N	mg/kg	0.0215	JN			0.055	JN		
RA_SE_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	N	mg/kg	0.0035	J	0.005	J	0.018			
RA_SE_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	N	mg/kg	0.000171				0.000494	JN		
RA_SE_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	N	mg/kg	0.000514	JN			0.00143			
RA_SE_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	N	mg/kg	0.00259	JN			0.00635			
RA_SE_PestPCBs	PCB TEQ Bird	PCBTEQ-Bird	E1668C	N	mg/kg	2.18E-05				3.32E-05			
RA_SE_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	N	mg/kg	6.19E-06				1.17E-05			
RA_SE_PestPCBs	PCB, TOTAL	PCB	E1668C	N	mg/kg	0.127				0.219			
RA_SE_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	N	mg/kg	0.078		0.071		0.14		0.23	0.0031
RA_SE_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	N	mg/kg	0.07		0.071		0.14		0.23	0.0031
RA_SE_PestPCBs	PCB-1	2051-60-7	E1668C	N	mg/kg	9.87E-05				0.000319			J
RA_SE_PestPCBs	PCB-10	33146-45-1	E1668C	N	mg/kg	5.18E-05				4.68E-05	JN		
RA_SE_PestPCBs	PCB-100	39485-83-1	E1668C	N	mg/kg	4.53E-05	JN			9.34E-05	JN		
RA_SE_PestPCBs	PCB-101	37680-73-2	E1668C	N	mg/kg	0.00368				0.00621			
RA_SE_PestPCBs	PCB-102	68194-06-9	E1668C	N	mg/kg	0.000217				0.000307			
RA_SE_PestPCBs	PCB-103	60145-21-3	E1668C	N	mg/kg	3.8E-05	JN			7.67E-05			
RA_SE_PestPCBs	PCB-104	56558-16-8	E1668C	N	mg/kg	5.43E-06	J			4.2E-06	U		
RA_SE_PestPCBs	PCB-105	32598-14-4	E1668C	N	mg/kg	0.00221				0.0033			
RA_SE_PestPCBs	PCB-106	70424-69-0	E1668C	N	mg/kg	4.91E-06	U			7.9E-06	U		
RA_SE_PestPCBs	PCB-107	70424-68-9	E1668C	N	mg/kg	0.000338				0.00066	JN		
RA_SE_PestPCBs	PCB-108	70362-41-3	E1668C	N	mg/kg	0.000202				0.000318	JN		
RA_SE_PestPCBs	PCB-109	74472-35-8	E1668C	N	mg/kg	0.00281				0.00417			
RA_SE_PestPCBs	PCB-11	2050-67-1	E1668C	N	mg/kg	0.000241				0.000321			
RA_SE_PestPCBs	PCB-110	38380-03-9	E1668C	N	mg/kg	0.00508				0.00721			
RA_SE_PestPCBs	PCB-111	39635-32-0	E1668C	N	mg/kg	8.34E-06	JN			6.18E-06	JN		
RA_SE_PestPCBs	PCB-112	74472-36-9	E1668C	N	mg/kg	3.79E-06	U			4.29E-06	U		
RA_SE_PestPCBs	PCB-113	68194-10-5	E1668C	N	mg/kg	0.00368				0.00621			
RA_SE_PestPCBs	PCB-114	74472-37-0	E1668C	N	mg/kg	0.000129				0.000205			
RA_SE_PestPCBs	PCB-115	74472-38-1	E1668C	N	mg/kg	0.00508				0.00721			
RA_SE_PestPCBs	PCB-116	18259-05-7	E1668C	N	mg/kg	0.00101				0.00122			
RA_SE_PestPCBs	PCB-117	68194-11-6	E1668C	N	mg/kg	0.00101				0.00122			
RA_SE_PestPCBs	PCB-118	31508-00-6	E1668C	N	mg/kg	0.00429				0.00798			
RA_SE_PestPCBs	PCB-119	56558-17-9	E1668C	N	mg/kg	0.00281				0.00417			
RA_SE_PestPCBs	PCB-12	2974-92-7	E1668C	N	mg/kg	0.000131				0.000181			

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				loc_group		RA_Background		RA_Background		RA_Background		RA_Waterside_Area		RA_Waterside_Area
				sys_loc_code		SEDBACK5		SEDBACK5		SEDBACK6		SED1.5B		SED10A
				sys_sample_code		SEDBACK500N		SEDBACK500R		SEDBACK600N		SED1.5B00N		SED10A00N
				sample_date		11/14/2013		11/14/2013		11/15/2013		11/6/2013		11/11/2013
				sample_type_code		N		FD		N		N		N
				task_code		Phase2-2013		Phase2-2013		Phase2-2013		Phase2-2013		Phase2-2013
				start_depth		0		0		0		0		0
				end_depth		0.5		0.5		0.5		0.5		0.5
				depth_unit		ft		ft		ft		ft		ft
				validated_yn		Y		Y		Y		Y		Y
RA_SE_PestPCBs	PCB-120	68194-12-7	E1668C	N	mg/kg	3.59E-06	U			4.06E-06	U			
RA_SE_PestPCBs	PCB-121	56558-18-0	E1668C	N	mg/kg	3.62E-06	U			4.09E-06	U			
RA_SE_PestPCBs	PCB-122	76842-07-4	E1668C	N	mg/kg	0.000111				0.000154				
RA_SE_PestPCBs	PCB-123	65510-44-3	E1668C	N	mg/kg	0.000141				8.08E-05	JN			
RA_SE_PestPCBs	PCB-124	70424-70-3	E1668C	N	mg/kg	0.000202				0.000318	JN			
RA_SE_PestPCBs	PCB-125	74472-39-2	E1668C	N	mg/kg	0.00281				0.00417				
RA_SE_PestPCBs	PCB-126	57465-28-8	E1668C	N	mg/kg	4.55E-05	J			3.96E-05	JN			
RA_SE_PestPCBs	PCB-127	39635-33-1	E1668C	N	mg/kg	1.38E-05	JN			1.33E-05	JN			
RA_SE_PestPCBs	PCB-128	38380-07-3	E1668C	N	mg/kg	0.000807				0.00168				
RA_SE_PestPCBs	PCB-129	55215-18-4	E1668C	N	mg/kg	0.00524				0.0125				
RA_SE_PestPCBs	PCB-13	2974-90-5	E1668C	N	mg/kg	0.000131				0.000181				
RA_SE_PestPCBs	PCB-130	52663-66-8	E1668C	N	mg/kg	0.000321				0.000694				
RA_SE_PestPCBs	PCB-131	61798-70-7	E1668C	N	mg/kg	7.27E-05				0.000157	JN			
RA_SE_PestPCBs	PCB-132	38380-05-1	E1668C	N	mg/kg	0.00162				0.00417				
RA_SE_PestPCBs	PCB-133	35694-04-3	E1668C	N	mg/kg	7.69E-05				0.000222				
RA_SE_PestPCBs	PCB-134	52704-70-8	E1668C	N	mg/kg	0.000294				0.000792				
RA_SE_PestPCBs	PCB-135	52744-13-5	E1668C	N	mg/kg	0.00126				0.00279				
RA_SE_PestPCBs	PCB-136	38411-22-2	E1668C	N	mg/kg	0.00046				0.00101				
RA_SE_PestPCBs	PCB-137	35694-06-5	E1668C	N	mg/kg	0.00022				0.000458				
RA_SE_PestPCBs	PCB-138	35065-28-2	E1668C	N	mg/kg	0.00524				0.0125				
RA_SE_PestPCBs	PCB-139	56030-56-9	E1668C	N	mg/kg	8.96E-05				0.000269				
RA_SE_PestPCBs	PCB-14	34883-41-5	E1668C	N	mg/kg	3.32E-06	U			5.08E-06	JN			
RA_SE_PestPCBs	PCB-140	59291-64-4	E1668C	N	mg/kg	8.96E-05				0.000269				
RA_SE_PestPCBs	PCB-141	52712-04-6	E1668C	N	mg/kg	0.000929				0.00232				
RA_SE_PestPCBs	PCB-142	41411-61-4	E1668C	N	mg/kg	1.25E-05	U			1.79E-05	U			
RA_SE_PestPCBs	PCB-143	68194-15-0	E1668C	N	mg/kg	0.000294				0.000792				
RA_SE_PestPCBs	PCB-144	68194-14-9	E1668C	N	mg/kg	0.00016				0.000342				
RA_SE_PestPCBs	PCB-145	74472-40-5	E1668C	N	mg/kg	4.9E-06	U			4.23E-06	U			
RA_SE_PestPCBs	PCB-146	51908-16-8	E1668C	N	mg/kg	0.000685				0.00187				
RA_SE_PestPCBs	PCB-147	68194-13-8	E1668C	N	mg/kg	0.00367				0.0113				
RA_SE_PestPCBs	PCB-148	74472-41-6	E1668C	N	mg/kg	6.85E-06	U			5.91E-06	U			
RA_SE_PestPCBs	PCB-149	38380-04-0	E1668C	N	mg/kg	0.00367				0.0113				
RA_SE_PestPCBs	PCB-15	2050-68-2	E1668C	N	mg/kg	0.000826				0.00121				
RA_SE_PestPCBs	PCB-150	68194-08-1	E1668C	N	mg/kg	4.77E-06	U			1.41E-05	JN			
RA_SE_PestPCBs	PCB-151	52663-63-5	E1668C	N	mg/kg	0.00126				0.00279				
RA_SE_PestPCBs	PCB-152	68194-09-2	E1668C	N	mg/kg	7.41E-06	JN			6.25E-06	J			
RA_SE_PestPCBs	PCB-153	35065-27-1	E1668C	N	mg/kg	0.00383				0.0106				
RA_SE_PestPCBs	PCB-154	60145-22-4	E1668C	N	mg/kg	3.16E-05	JN			7.18E-05	JN			
RA_SE_PestPCBs	PCB-155	33979-03-2	E1668C	N	mg/kg	4.64E-06	U			4.01E-06	U			
RA_SE_PestPCBs	PCB-156	38380-08-4	E1668C	N	mg/kg	0.000541				0.000995				
RA_SE_PestPCBs	PCB-157	69782-90-7	E1668C	N	mg/kg	0.000541				0.000995				
RA_SE_PestPCBs	PCB-158	74472-42-7	E1668C	N	mg/kg	0.000531				0.00113				
RA_SE_PestPCBs	PCB-159	39635-35-3	E1668C	N	mg/kg	4.26E-05	JN			0.000177				

Attachment A  
Surface Sediment Data  
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				loc_group		RA_Background	RA_Background	RA_Background	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code		SEDBACK5	SEDBACK5	SEDBACK6	SED1.5B	SED10A
				sys_sample_code		SEDBACK500N	SEDBACK500R	SEDBACK600N	SED1.5B00N	SED10A00N
				sample_date		11/14/2013	11/14/2013	11/15/2013	11/6/2013	11/11/2013
				sample_type_code		N	FD	N	N	N
				task_code		Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth		0	0	0	0	0
				end_depth		0.5	0.5	0.5	0.5	0.5
				depth_unit		ft	ft	ft	ft	ft
				validated_yn		Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-16	38444-78-9	E1668C	N	mg/kg	0.00113		0.000948		
RA_SE_PestPCBs	PCB-160	41411-62-5	E1668C	N	mg/kg	0.00524		0.0125		
RA_SE_PestPCBs	PCB-161	74472-43-8	E1668C	N	mg/kg	8.26E-06	U	1.18E-05	U	
RA_SE_PestPCBs	PCB-162	39635-34-2	E1668C	N	mg/kg	2.47E-05	JN	3.46E-05	JN	
RA_SE_PestPCBs	PCB-163	74472-44-9	E1668C	N	mg/kg	0.00524		0.0125		
RA_SE_PestPCBs	PCB-164	74472-45-0	E1668C	N	mg/kg	0.000349		0.000823		
RA_SE_PestPCBs	PCB-165	74472-46-1	E1668C	N	mg/kg	9.08E-06	U	1.3E-05	U	
RA_SE_PestPCBs	PCB-166	41411-63-6	E1668C	N	mg/kg	0.000807		0.00168		
RA_SE_PestPCBs	PCB-167	52663-72-6	E1668C	N	mg/kg	0.000193		0.000358		
RA_SE_PestPCBs	PCB-168	59291-65-5	E1668C	N	mg/kg	0.00383		0.0106		
RA_SE_PestPCBs	PCB-169	32774-16-6	E1668C	N	mg/kg	4.59E-05	JN	0.000244	JN	
RA_SE_PestPCBs	PCB-17	37680-66-3	E1668C	N	mg/kg	0.00158		0.0016		
RA_SE_PestPCBs	PCB-170	35065-30-6	E1668C	N	mg/kg	0.00113		0.00249		
RA_SE_PestPCBs	PCB-171	52663-71-5	E1668C	N	mg/kg	0.000339		0.000655		
RA_SE_PestPCBs	PCB-172	52663-74-8	E1668C	N	mg/kg	0.00018		0.000329		
RA_SE_PestPCBs	PCB-173	68194-16-1	E1668C	N	mg/kg	0.000339		0.000655		
RA_SE_PestPCBs	PCB-174	38411-25-5	E1668C	N	mg/kg	0.00106		0.00229		
RA_SE_PestPCBs	PCB-175	40186-70-7	E1668C	N	mg/kg	5.63E-05		0.000103		
RA_SE_PestPCBs	PCB-176	52663-65-7	E1668C	N	mg/kg	0.00014		0.000293		
RA_SE_PestPCBs	PCB-177	52663-70-4	E1668C	N	mg/kg	0.000545		0.00134		
RA_SE_PestPCBs	PCB-178	52663-67-9	E1668C	N	mg/kg	0.00025		0.000507		
RA_SE_PestPCBs	PCB-179	52663-64-6	E1668C	N	mg/kg	0.000523		0.00119		
RA_SE_PestPCBs	PCB-18	37680-65-2	E1668C	N	mg/kg	0.00261		0.00237		
RA_SE_PestPCBs	PCB-180	35065-29-3	E1668C	N	mg/kg	0.00202		0.0043		
RA_SE_PestPCBs	PCB-181	74472-47-2	E1668C	N	mg/kg	7.32E-06	U	8.98E-06	U	
RA_SE_PestPCBs	PCB-182	60145-23-5	E1668C	N	mg/kg	7.12E-06	U	2.04E-05	JN	
RA_SE_PestPCBs	PCB-183	52663-69-1	E1668C	N	mg/kg	0.000703		0.00157		
RA_SE_PestPCBs	PCB-184	74472-48-3	E1668C	N	mg/kg	6.04E-06	U	7.41E-06	U	
RA_SE_PestPCBs	PCB-185	52712-05-7	E1668C	N	mg/kg	0.000703		0.00157		
RA_SE_PestPCBs	PCB-186	74472-49-4	E1668C	N	mg/kg	5.87E-06	U	7.2E-06	U	
RA_SE_PestPCBs	PCB-187	52663-68-0	E1668C	N	mg/kg	0.00133		0.00296		
RA_SE_PestPCBs	PCB-188	74487-85-7	E1668C	N	mg/kg	4.78E-06	U	5.74E-06	U	
RA_SE_PestPCBs	PCB-189	39635-31-9	E1668C	N	mg/kg	4.87E-05	J	0.000125		
RA_SE_PestPCBs	PCB-19	38444-73-4	E1668C	N	mg/kg	0.000545		0.000502		
RA_SE_PestPCBs	PCB-190	41411-64-7	E1668C	N	mg/kg	0.000189		0.000377		
RA_SE_PestPCBs	PCB-191	74472-50-7	E1668C	N	mg/kg	3.81E-05	JN	8.31E-05		
RA_SE_PestPCBs	PCB-192	74472-51-8	E1668C	N	mg/kg	6.23E-06	U	7.64E-06	U	
RA_SE_PestPCBs	PCB-193	69782-91-8	E1668C	N	mg/kg	0.00202		0.0043		
RA_SE_PestPCBs	PCB-194	35694-08-7	E1668C	N	mg/kg	0.000717		0.00171		
RA_SE_PestPCBs	PCB-195	52663-78-2	E1668C	N	mg/kg	0.000301	JN	0.000727		
RA_SE_PestPCBs	PCB-196	42740-50-1	E1668C	N	mg/kg	0.000256		0.00065		
RA_SE_PestPCBs	PCB-197	33091-17-7	E1668C	N	mg/kg	1.69E-05	JN	5.33E-05		
RA_SE_PestPCBs	PCB-198	68194-17-2	E1668C	N	mg/kg	0.000621		0.00154		



Attachment A  
 Surface Sediment Data  
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				loc_group		RA_Background		RA_Background		RA_Background		RA_Waterside_Area		RA_Waterside_Area
				sys_loc_code		SEDBACK5		SEDBACK5		SEDBACK6		SED1.5B		SED10A
				sys_sample_code		SEDBACK500N		SEDBACK500R		SEDBACK600N		SED1.5B00N		SED10A00N
				sample_date		11/14/2013		11/14/2013		11/15/2013		11/6/2013		11/11/2013
				sample_type_code		N		FD		N		N		N
				task_code		Phase2-2013		Phase2-2013		Phase2-2013		Phase2-2013		Phase2-2013
				start_depth		0		0		0		0		0
				end_depth		0.5		0.5		0.5		0.5		0.5
				depth_unit		ft		ft		ft		ft		ft
				validated_yn		Y		Y		Y		Y		Y
RA_SE_PestPCBs	PCB-199	52663-75-9	E1668C	N	mg/kg	0.000621				0.00154				
RA_SE_PestPCBs	PCB-2	2051-61-8	E1668C	N	mg/kg	1.37E-05	J			6.02E-05	JN			
RA_SE_PestPCBs	PCB-20	38444-84-7	E1668C	N	mg/kg	0.00515				0.00643				
RA_SE_PestPCBs	PCB-200	52663-73-7	E1668C	N	mg/kg	7.25E-05	JN			0.00018				
RA_SE_PestPCBs	PCB-201	40186-71-8	E1668C	N	mg/kg	7.73E-05				0.00017				
RA_SE_PestPCBs	PCB-202	2136-99-4	E1668C	N	mg/kg	0.000131				0.000333				
RA_SE_PestPCBs	PCB-203	52663-76-0	E1668C	N	mg/kg	0.000358				0.000889				
RA_SE_PestPCBs	PCB-204	74472-52-9	E1668C	N	mg/kg	5.53E-06	U			7.2E-06	U			
RA_SE_PestPCBs	PCB-205	74472-53-0	E1668C	N	mg/kg	4.31E-05	JN			9.72E-05				
RA_SE_PestPCBs	PCB-206	40186-72-9	E1668C	N	mg/kg	0.000403				0.00104				
RA_SE_PestPCBs	PCB-207	52663-79-3	E1668C	N	mg/kg	3.09E-05	J			0.000105				
RA_SE_PestPCBs	PCB-208	52663-77-1	E1668C	N	mg/kg	8.04E-05	JN			0.000284				
RA_SE_PestPCBs	PCB-21	55702-46-0	E1668C	N	mg/kg	0.0022				0.00213				
RA_SE_PestPCBs	PCB-22	38444-85-8	E1668C	N	mg/kg	0.00145				0.00165				
RA_SE_PestPCBs	PCB-23	55720-44-0	E1668C	N	mg/kg	3.73E-06	U			3.84E-06	U			
RA_SE_PestPCBs	PCB-24	55702-45-9	E1668C	N	mg/kg	4.8E-05	JN			3.44E-05	JN			
RA_SE_PestPCBs	PCB-25	55712-37-3	E1668C	N	mg/kg	0.000542				0.000624				
RA_SE_PestPCBs	PCB-26	38444-81-4	E1668C	N	mg/kg	0.000941				0.00109				
RA_SE_PestPCBs	PCB-27	38444-76-7	E1668C	N	mg/kg	0.000376				0.000419				
RA_SE_PestPCBs	PCB-28	7012-37-5	E1668C	N	mg/kg	0.00515				0.00643				
RA_SE_PestPCBs	PCB-29	15862-07-4	E1668C	N	mg/kg	0.000941				0.00109				
RA_SE_PestPCBs	PCB-3	2051-62-9	E1668C	N	mg/kg	5.87E-05				0.000114				
RA_SE_PestPCBs	PCB-30	35693-92-6	E1668C	N	mg/kg	0.00261				0.00237				
RA_SE_PestPCBs	PCB-31	16606-02-3	E1668C	N	mg/kg	0.00404				0.00469				
RA_SE_PestPCBs	PCB-32	38444-77-8	E1668C	N	mg/kg	0.00128				0.00127				
RA_SE_PestPCBs	PCB-33	38444-86-9	E1668C	N	mg/kg	0.0022				0.00213				
RA_SE_PestPCBs	PCB-34	37680-68-5	E1668C	N	mg/kg	2.83E-05	J			4.33E-05	J			
RA_SE_PestPCBs	PCB-35	37680-69-6	E1668C	N	mg/kg	5E-05				9.56E-05				
RA_SE_PestPCBs	PCB-36	38444-87-0	E1668C	N	mg/kg	3.65E-06	U			3.76E-06	U			
RA_SE_PestPCBs	PCB-37	38444-90-5	E1668C	N	mg/kg	0.00105				0.0016				
RA_SE_PestPCBs	PCB-38	53555-66-1	E1668C	N	mg/kg	8.06E-06	JN			9.72E-06	JN			
RA_SE_PestPCBs	PCB-39	38444-88-1	E1668C	N	mg/kg	3.34E-05	J			3.62E-05	JN			
RA_SE_PestPCBs	PCB-4	13029-08-8	E1668C	N	mg/kg	0.000878				0.000896				
RA_SE_PestPCBs	PCB-40	38444-93-8	E1668C	N	mg/kg	0.00262				0.00419				
RA_SE_PestPCBs	PCB-41	52663-59-9	E1668C	N	mg/kg	0.00262				0.00419				
RA_SE_PestPCBs	PCB-42	36559-22-5	E1668C	N	mg/kg	0.00125				0.00193				
RA_SE_PestPCBs	PCB-43	70362-46-8	E1668C	N	mg/kg	0.0002				0.000294				
RA_SE_PestPCBs	PCB-44	41464-39-5	E1668C	N	mg/kg	0.00526				0.00832				
RA_SE_PestPCBs	PCB-45	70362-45-7	E1668C	N	mg/kg	0.0012				0.00164				
RA_SE_PestPCBs	PCB-46	41464-47-5	E1668C	N	mg/kg	0.000374				0.000511				
RA_SE_PestPCBs	PCB-47	2437-79-8	E1668C	N	mg/kg	0.00526				0.00832				
RA_SE_PestPCBs	PCB-48	70362-47-9	E1668C	N	mg/kg	0.000886				0.00136				
RA_SE_PestPCBs	PCB-49	41464-40-8	E1668C	N	mg/kg	0.00321				0.00517				



Attachment A  
Surface Sediment Data  
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				loc_group		RA_Background	RA_Background	RA_Background	RA_Waterside_Area	RA_Waterside_Area		
				sys_loc_code		SEDBACK5	SEDBACK5	SEDBACK6	SED1.5B00N	SED10A		
				sys_sample_code		SEDBACK500N	SEDBACK500R	SEDBACK600N	SED1.5B00N	SED10A00N		
				sample_date		11/14/2013	11/14/2013	11/15/2013	11/6/2013	11/11/2013		
				sample_type_code		N	FD	N	N	N		
				task_code		Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth		0	0	0	0	0		
				end_depth		0.5	0.5	0.5	0.5	0.5		
				depth_unit		ft	ft	ft	ft	ft		
				validated_yn		Y	Y	Y	Y	Y		
RA_SE_PestPCBs	PCB-5	16605-91-7	E1668C	N	mg/kg	2.14E-05	JN		2.25E-05	JN		
RA_SE_PestPCBs	PCB-50	62796-65-0	E1668C	N	mg/kg	0.000943			0.0014			
RA_SE_PestPCBs	PCB-51	68194-04-7	E1668C	N	mg/kg	0.0012			0.00164			
RA_SE_PestPCBs	PCB-52	35693-99-3	E1668C	N	mg/kg	0.00549			0.00923			
RA_SE_PestPCBs	PCB-53	41464-41-9	E1668C	N	mg/kg	0.000943			0.0014			
RA_SE_PestPCBs	PCB-54	15968-05-5	E1668C	N	mg/kg	4.48E-05	J		4.96E-05			
RA_SE_PestPCBs	PCB-55	74338-24-2	E1668C	N	mg/kg	0.000132			0.000213			
RA_SE_PestPCBs	PCB-56	41464-43-1	E1668C	N	mg/kg	0.00152			0.00255			
RA_SE_PestPCBs	PCB-57	70424-67-8	E1668C	N	mg/kg	3.26E-05	J		6.03E-05			
RA_SE_PestPCBs	PCB-58	41464-49-7	E1668C	N	mg/kg	1.03E-05	JN		2.59E-05	JN		
RA_SE_PestPCBs	PCB-59	74472-33-6	E1668C	N	mg/kg	0.000423			0.000694			
RA_SE_PestPCBs	PCB-6	25569-80-6	E1668C	N	mg/kg	0.000315			0.000334			
RA_SE_PestPCBs	PCB-60	33025-41-1	E1668C	N	mg/kg	0.000831			0.00121			
RA_SE_PestPCBs	PCB-61	33284-53-6	E1668C	N	mg/kg	0.00563			0.01			
RA_SE_PestPCBs	PCB-62	54230-22-7	E1668C	N	mg/kg	0.000423			0.000694			
RA_SE_PestPCBs	PCB-63	74472-34-7	E1668C	N	mg/kg	0.000163			0.000284			
RA_SE_PestPCBs	PCB-64	52663-58-8	E1668C	N	mg/kg	0.00197			0.00327			
RA_SE_PestPCBs	PCB-65	33284-54-7	E1668C	N	mg/kg	0.00526			0.00832			
RA_SE_PestPCBs	PCB-66	32598-10-0	E1668C	N	mg/kg	0.00373			0.00654			
RA_SE_PestPCBs	PCB-67	73575-53-8	E1668C	N	mg/kg	0.000111			0.000177			
RA_SE_PestPCBs	PCB-68	73575-52-7	E1668C	N	mg/kg	2.88E-05	JN		7.11E-05			
RA_SE_PestPCBs	PCB-69	60233-24-1	E1668C	N	mg/kg	0.00321			0.00517			
RA_SE_PestPCBs	PCB-7	33284-50-3	E1668C	N	mg/kg	6.37E-05	JN		0.000105			
RA_SE_PestPCBs	PCB-70	32598-11-1	E1668C	N	mg/kg	0.00563			0.01			
RA_SE_PestPCBs	PCB-71	41464-46-4	E1668C	N	mg/kg	0.00262			0.00419			
RA_SE_PestPCBs	PCB-72	41464-42-0	E1668C	N	mg/kg	4.65E-05	J		9.06E-05			
RA_SE_PestPCBs	PCB-73	74338-23-1	E1668C	N	mg/kg	0.0002			0.000294			
RA_SE_PestPCBs	PCB-74	32690-93-0	E1668C	N	mg/kg	0.00563			0.01			
RA_SE_PestPCBs	PCB-75	32598-12-2	E1668C	N	mg/kg	0.000423			0.000694			
RA_SE_PestPCBs	PCB-76	70362-48-0	E1668C	N	mg/kg	0.00563			0.01			
RA_SE_PestPCBs	PCB-77	32598-13-3	E1668C	N	mg/kg	0.0003			0.000513			
RA_SE_PestPCBs	PCB-78	70362-49-1	E1668C	N	mg/kg	4.07E-06	JN		4.39E-06	U		
RA_SE_PestPCBs	PCB-79	41464-48-6	E1668C	N	mg/kg	3.15E-05	JN		7.03E-05	JN		
RA_SE_PestPCBs	PCB-8	34883-43-7	E1668C	N	mg/kg	0.00144			0.00177			
RA_SE_PestPCBs	PCB-80	33284-52-5	E1668C	N	mg/kg	3.98E-06	U		3.76E-06	U		
RA_SE_PestPCBs	PCB-81	70362-50-4	E1668C	N	mg/kg	1.87E-05	J		2.85E-05	JN		
RA_SE_PestPCBs	PCB-82	52663-62-4	E1668C	N	mg/kg	0.00073			0.000825			
RA_SE_PestPCBs	PCB-83	60145-20-2	E1668C	N	mg/kg	0.0025			0.0038			
RA_SE_PestPCBs	PCB-84	52663-60-2	E1668C	N	mg/kg	0.00113			0.00169			
RA_SE_PestPCBs	PCB-85	65510-45-4	E1668C	N	mg/kg	0.00101			0.00122			
RA_SE_PestPCBs	PCB-86	55312-69-1	E1668C	N	mg/kg	0.00281			0.00417			
RA_SE_PestPCBs	PCB-87	38380-02-8	E1668C	N	mg/kg	0.00281			0.00417			
RA_SE_PestPCBs	PCB-88	55215-17-3	E1668C	N	mg/kg	0.000838			0.00115			

				loc_group	RA_Background	RA_Background	RA_Background	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SEDBACK5	SEDBACK5	SEDBACK6	SED1.5B	SED10A
				sys_sample_code	SEDBACK500N	SEDBACK500R	SEDBACK600N	SED1.5B00N	SED10A00N
				sample_date	11/14/2013	11/14/2013	11/15/2013	11/6/2013	11/11/2013
				sample_type_code	N	FD	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-89	73575-57-2	E1668C	N	mg/kg	0.0001		0.000111	
RA_SE_PestPCBs	PCB-9	34883-39-1	E1668C	N	mg/kg	8.66E-05	JN	9.45E-05	
RA_SE_PestPCBs	PCB-90	68194-07-0	E1668C	N	mg/kg	0.00368		0.00621	
RA_SE_PestPCBs	PCB-91	68194-05-8	E1668C	N	mg/kg	0.000838		0.00115	
RA_SE_PestPCBs	PCB-92	52663-61-3	E1668C	N	mg/kg	0.000719		0.00119	
RA_SE_PestPCBs	PCB-93	73575-56-1	E1668C	N	mg/kg	4.53E-05	JN	9.34E-05	JN
RA_SE_PestPCBs	PCB-94	73575-55-0	E1668C	N	mg/kg	5.72E-05	JN	8.83E-05	
RA_SE_PestPCBs	PCB-95	38379-99-6	E1668C	N	mg/kg	0.0032		0.00547	
RA_SE_PestPCBs	PCB-96	73575-54-9	E1668C	N	mg/kg	6.4E-05	JN	9.47E-05	
RA_SE_PestPCBs	PCB-97	41464-51-1	E1668C	N	mg/kg	0.00281		0.00417	
RA_SE_PestPCBs	PCB-98	60233-25-2	E1668C	N	mg/kg	0.000217		0.000307	
RA_SE_PestPCBs	PCB-99	38380-01-7	E1668C	N	mg/kg	0.0025		0.0038	
RA_SE_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	N	mg/kg	0.0297	JN	0.0465	JN
RA_SE_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	N	mg/kg	0.0365	JN	0.0599	JN
RA_SE_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	N	mg/kg	0.029	U	0.042	U
RA_SE_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	N	mg/kg	0.0037	U	0.018	U
RA_SE_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	N	mg/kg	0.0231	JN	0.0255	JN
RA_SE_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	N	mg/kg	0.28	U	0.42	U
RA_SE_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	N	mg/kg	0.28	U	0.42	UJ
RA_SE_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	N	mg/kg	0.057	U	0.085	U
RA_SE_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	N	mg/kg	0.28	U	0.42	UJ
RA_SE_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	N	mg/kg	0.28	U	0.42	U
RA_SE_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	N	mg/kg	0.28	U	0.42	U
RA_SE_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	N	mg/kg	0.057	U	0.085	U
RA_SE_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	N	mg/kg	0.28	U	0.42	U
RA_SE_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	N	mg/kg	1.5	U	2.2	UJ
RA_SE_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	N	mg/kg	0.28	U	0.42	U
RA_SE_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	N	mg/kg	0.28	U	0.42	U
RA_SE_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	N	mg/kg	0.057	U	0.085	U
RA_SE_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	N	mg/kg	0.28	U	0.42	U
RA_SE_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	N	mg/kg	0.057	U	0.012	J
RA_SE_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	N	mg/kg	0.28	U	0.42	U
RA_SE_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	N	mg/kg	1.5	U	2.2	U
RA_SE_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	N	mg/kg	0.28	U	0.42	U
RA_SE_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	N	mg/kg	0.28	U	0.42	U
RA_SE_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	N	mg/kg	1.5	U	2.2	U
RA_SE_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	N	mg/kg	1.5	U	2.2	U
RA_SE_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	N	mg/kg	0.28	U	0.42	U
RA_SE_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	N	mg/kg	0.28	U	0.42	U
RA_SE_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	N	mg/kg	0.28	U	0.42	U
RA_SE_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	N	mg/kg	0.28	U	0.42	UJ
RA_SE_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	N	mg/kg	0.28	U	0.42	U
RA_SE_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	N	mg/kg	1.5	U	2.2	U

Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

	loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Waterside_Area	RA_Waterside_Area						
	sys_loc_code	SEDBACK5	SEDBACK5	SEDBACK6	SEDBACK600N	SED1.5B	SED10A						
	sys_sample_code	SEDBACK500N	SEDBACK500R	SEDBACK600N	SEDBACK600N	SED1.5B00N	SED10A00N						
	sample_date	11/14/2013	11/14/2013	11/15/2013	11/15/2013	11/6/2013	11/11/2013						
	sample_type_code	N	FD	N	N	N	N						
	task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013						
	start_depth	0	0	0	0	0	0						
	end_depth	0.5	0.5	0.5	0.5	0.5	0.5						
	depth_unit	ft	ft	ft	ft	ft	ft						
	validated_yn	Y	Y	Y	Y	Y	Y						
RA_SE_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	N	mg/kg	1.5	U	1.5	U	2.2	U		
RA_SE_SVOCs	Acenaphthene	83-32-9	SW8270D LL	N	mg/kg	0.017	J	0.016	J	0.018	J	0.059	J
RA_SE_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	N	mg/kg	0.02	J	0.015	J	0.064	J	0.06	J
RA_SE_SVOCs	Acetophenone	98-86-2	SW8270D LL	N	mg/kg	0.28	U	0.28	U	0.044	J		
RA_SE_SVOCs	Anthracene	120-12-7	SW8270D LL	N	mg/kg	0.053	J	0.037	J	0.1		0.22	
RA_SE_SVOCs	Atrazine	1912-24-9	SW8270D LL	N	mg/kg	0.28	U	0.28	U	0.42	U		
RA_SE_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	N	mg/kg	0.057	J	0.045	J	0.15	J		
RA_SE_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	N	mg/kg	0.32		0.27		0.57		1	
RA_SE_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	N	mg/kg	0.37		0.32		0.73		1.1	
RA_SE_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	N	mg/kg	0.6		0.55		1.2		1.7	
RA_SE_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	N	mg/kg	0.33		0.31		0.88		1.2	
RA_SE_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	N	mg/kg	0.23		0.21		0.44		0.54	
RA_SE_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	N	mg/kg	0.28	U	0.28	U	0.42	U		
RA_SE_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	N	mg/kg	0.057	U	0.057	U	0.085	U		
RA_SE_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	N	mg/kg	1		1.2		2.8	J		
RA_SE_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	N	mg/kg	0.42		0.28	U	0.42	UJ		
RA_SE_SVOCs	Caprolactam	105-60-2	SW8270D LL	N	mg/kg	1.5	U	1.5	U	2.2	UJ		
RA_SE_SVOCs	Carbazole	86-74-8	SW8270D LL	N	mg/kg	0.056	J	0.043	J	0.086			
RA_SE_SVOCs	Chrysene	218-01-9	SW8270D LL	N	mg/kg	0.58		0.52		1.1		1.5	
RA_SE_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	N	mg/kg	0.067		0.075		0.085	U	0.21	
RA_SE_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	N	mg/kg	0.28	U	0.28	U	0.42	U		
RA_SE_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	N	mg/kg	0.031	J	0.28	U	0.42	U		
RA_SE_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	N	mg/kg	0.28	U	0.28	U	0.42	U		
RA_SE_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	N	mg/kg	0.28	U	0.28	U	0.42	U		
RA_SE_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	N	mg/kg	0.28	U	0.28	U	0.42	UJ		
RA_SE_SVOCs	Fluoranthene	206-44-0	SW8270D LL	N	mg/kg	0.82		0.71		1.1		2.8	
RA_SE_SVOCs	Fluorene	86-73-7	SW8270D LL	N	mg/kg	0.024	J	0.024	J	0.085	U	0.11	J
RA_SE_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	N	mg/kg	0.057	U	0.057	U	0.085	U		
RA_SE_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	N	mg/kg	0.057	U	0.057	U	0.085	UJ		
RA_SE_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	N	mg/kg	0.28	U	0.28	U	0.42	UJ		
RA_SE_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	N	mg/kg	0.28	U	0.28	U	0.42	U		
RA_SE_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	N	mg/kg	0.3		0.27		0.8		1.2	
RA_SE_SVOCs	Isophorone	78-59-1	SW8270D LL	N	mg/kg	0.28	U	0.28	U	0.42	U		
RA_SE_SVOCs	Naphthalene	91-20-3	SW8270D LL	N	mg/kg	0.057	U	0.057	U	0.085	U	0.21	U
RA_SE_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	N	mg/kg	0.57	U	0.57	U	0.85	U		
RA_SE_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	N	mg/kg	0.057	U	0.057	U	0.085	U		
RA_SE_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	N	mg/kg	0.28	U	0.28	U	0.42	U		
RA_SE_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	N	mg/kg	0.28	U	0.28	U	0.42	UJ		
RA_SE_SVOCs	Phenanthrene	85-01-8	SW8270D LL	N	mg/kg	0.29		0.25		0.41		1	
RA_SE_SVOCs	Phenol	108-95-2	SW8270D LL	N	mg/kg	0.057	U	0.057	U	0.085	U		
RA_SE_SVOCs	Pyrene	129-00-0	SW8270D LL	N	mg/kg	0.66		0.59		1.2		1.8	
RA_SE_SVOCs	Total High-molecular-weight PAHs	TOT-PAH-HMW	SW8270D LL	N	mg/kg	4.3		3.8		8		13	
RA_SE_SVOCs	Total Low-molecular-weight PAHs	TOT-PAH-LMW	SW8270D LL	N	mg/kg	0.4		0.34		0.59		1.4	

				loc_group	RA_Background	RA_Background	RA_Background	RA_Background	RA_Background	RA_Waterside_Area	RA_Waterside_Area	
				sys_loc_code	SEDBACK5	SEDBACK5	SEDBACK6	SEDBACK6	SEDBACK6	SED1.5B	SED10A	
				sys_sample_code	SEDBACK500N	SEDBACK500R	SEDBACK600N	SEDBACK600N	SEDBACK600N	SED1.5B00N	SED10A00N	
				sample_date	11/14/2013	11/14/2013	11/15/2013	11/15/2013	11/15/2013	11/6/2013	11/11/2013	
				sample_type_code	N	FD	N	N	N	N	N	
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
				start_depth	0	0	0	0	0	0	0	
				end_depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
				depth_unit	ft	ft	ft	ft	ft	ft	ft	
				validated_yn	Y	Y	Y	Y	Y	Y	Y	
RA_SE_SVOCs	Total PAHs (sum 16)	TOT-PAH	SW8270D LL	N	mg/kg	4.7		4.2		8.6	14	0.25
RA_SE_SVOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	1,1-Dichloroethane	75-34-3	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	1,1-Dichloroethene	75-35-4	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	1,2-Dibromoethane	106-93-4	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	1,2-Dichloroethane	107-06-2	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	1,2-Dichloropropane	78-87-5	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	1,4-Dioxane	123-91-1	SW8260B	N	mg/kg	1.8	U	1.9	U	3.2	U	
RA_SE_SVOCs	2-Butanone	78-93-3	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	2-Hexanone	591-78-6	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	Acetone	67-64-1	SW8260B	N	mg/kg	0.037	U	0.038	U	0.063	U	
RA_SE_SVOCs	Benzene	71-43-2	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	Bromochloromethane	74-97-5	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	Bromodichloromethane	75-27-4	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	Bromoform	75-25-2	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	Bromomethane	74-83-9	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	Carbon Disulfide	75-15-0	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	Carbon Tetrachloride	56-23-5	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	Chlorobenzene	108-90-7	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	Chloroethane	75-00-3	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	Chloroform	67-66-3	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	Chloromethane	74-87-3	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	Cyclohexane	110-82-7	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	Dibromochloromethane	124-48-1	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	Dichlorodifluoromethane	75-71-8	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	Ethylbenzene	100-41-4	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	Isopropylbenzene	98-82-8	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	m, p-Xylene	XYLMP	SW8260B	N	mg/kg	0.018	U	0.019	U	0.032	U	
RA_SE_SVOCs	Methyl Acetate	79-20-9	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	
RA_SE_SVOCs	Methylcyclohexane	108-87-2	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U	





Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		loc_group	RA_Background	RA_Background	RA_Background	RA_Waterside_Area	RA_Waterside_Area						
		sys_loc_code	SEDBACK5	SEDBACK5	SEDBACK6	SED1.5B	SED10A						
		sys_sample_code	SEDBACK500N	SEDBACK500R	SEDBACK600N	SED1.5B00N	SED10A00N						
		sample_date	11/14/2013	11/14/2013	11/15/2013	11/6/2013	11/11/2013						
		sample_type_code	N	FD	N	N	N						
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013						
		start_depth	0	0	0	0	0						
		end_depth	0.5	0.5	0.5	0.5	0.5						
		depth_unit	ft	ft	ft	ft	ft						
		validated_yn	Y	Y	Y	Y	Y						
RA_SE_VOCs	Methylene Chloride	75-09-2	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U		
RA_SE_VOCs	o-Xylene	95-47-6	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U		
RA_SE_VOCs	Styrene	100-42-5	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U		
RA_SE_VOCs	Tetrachloroethylene	127-18-4	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U		
RA_SE_VOCs	Toluene	108-88-3	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U		
RA_SE_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U		
RA_SE_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U		
RA_SE_VOCs	Trichloroethene	79-01-6	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U		
RA_SE_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U		
RA_SE_VOCs	Vinyl Chloride	75-01-4	SW8260B	N	mg/kg	0.0091	U	0.0095	U	0.016	U		
RA_SE_VOCs	Xylenes (total)	1330-20-7	SW8260B	N	mg/kg	0.018	U	0.019	U	0.032	U		

		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area						
		sys_loc_code	SED10B	SED10C	SED1A	SED1B	SED1C							
		sys_sample_code	SED10B00N	SED10C00N	SED1A00N	SED1B00N	SED1C00N							
		sample_date	11/11/2013	11/11/2013	11/6/2013	11/6/2013	11/7/2013							
		sample_type_code	N	N	N	N	N							
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013							
		start_depth	0	0	0	0	0							
		end_depth	0.5	0.5	0.5	0.5	0.5							
		depth_unit	ft	ft	ft	ft	ft							
		validated_yn	Y	Y	Y	Y	Y							
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SE_DioxinsFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	N	mg/kg	2.49E-05						8.42E-06		
RA_SE_DioxinsFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	N	mg/kg	4.33E-06	J					2.37E-07	J	
RA_SE_DioxinsFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	N	mg/kg	5.92E-07	J					8E-08	JN	
RA_SE_DioxinsFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	N	mg/kg	4.79E-07	JN					1.58E-07	JN	
RA_SE_DioxinsFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	N	mg/kg	5.74E-07	JN					9.02E-08	JN	
RA_SE_DioxinsFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	N	mg/kg	1.18E-06	J					2.65E-07	J	
RA_SE_DioxinsFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	N	mg/kg	1.13E-06	JN					1.05E-07	JN	
RA_SE_DioxinsFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	N	mg/kg	1.33E-06	J					2.09E-07	JN	
RA_SE_DioxinsFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	N	mg/kg	6.05E-08	JN					1.48E-08	U	
RA_SE_DioxinsFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	N	mg/kg	4.8E-07	JN					4.26E-08	JN	
RA_SE_DioxinsFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	N	mg/kg	1.93E-07	JN					1.77E-08	U	
RA_SE_DioxinsFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	N	mg/kg	5.2E-07	J					7.37E-08	JN	
RA_SE_DioxinsFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	N	mg/kg	4.8E-07	J					1.56E-08	U	
RA_SE_DioxinsFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	N	mg/kg	5.93E-08	JN					1.31E-08	U	
RA_SE_DioxinsFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	N	mg/kg	2.88E-07	JN					1.18E-08	U	
RA_SE_DioxinsFurans	OCDD	3268-87-9	SW8290A	N	mg/kg	0.000683	J					0.000343		
RA_SE_DioxinsFurans	OCDF	39001-02-0	SW8290A	N	mg/kg	9.87E-06	J					5.14E-07	JN	
RA_SE_DioxinsFurans	TCDD TEQ Bird	DFTEQ-Bird	SW8290A	N	mg/kg	1.87E-06						1.47E-07		
RA_SE_DioxinsFurans	TCDD TEQ Fish	DFTEQ-Fish	SW8290A	N	mg/kg	1.44E-06						1.99E-07		
RA_SE_DioxinsFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	N	mg/kg	1.75E-06						3.23E-07		
RA_SE_DioxinsFurans	Total HpCDD	37871-00-4	SW8290A	N	mg/kg	5.86E-05						1.75E-05		
RA_SE_DioxinsFurans	Total HpCDF	38998-75-3	SW8290A	N	mg/kg	1.19E-05	JN					6.26E-07	JN	
RA_SE_DioxinsFurans	Total HxCDD	34465-46-8	SW8290A	N	mg/kg	1.19E-05	JN					2.86E-06	JN	
RA_SE_DioxinsFurans	Total HxCDF	55684-94-1	SW8290A	N	mg/kg	1.93E-05	JN					1.29E-06	JN	
RA_SE_DioxinsFurans	Total PeCDD	36088-22-9	SW8290A	N	mg/kg	4.57E-06	JN					4.51E-07	JN	
RA_SE_DioxinsFurans	Total PeCDF	30402-15-4	SW8290A	N	mg/kg	2.97E-05	JN					1.16E-06	JN	
RA_SE_DioxinsFurans	Total TCDD	41903-57-5	SW8290A	N	mg/kg	2.6E-06	JN					7.11E-07	JN	
RA_SE_DioxinsFurans	Total TCDF	55722-27-5	SW8290A	N	mg/kg	4.22E-05	JN					1.39E-06	JN	
RA_SE_DioxinsFurans	Total TEQ	TTEQ	SW8290A	N	mg/kg	1.75E-06						3.23E-07		
RA_SE_Metals	Aluminum	7429-90-5	SW6020A	T	mg/kg	3300		5300		11000		18000		5200
RA_SE_Metals	Antimony	7440-36-0	SW6020A	T	mg/kg	0.2	J-	0.31	J-	0.62	J-	0.29		0.39
RA_SE_Metals	Arsenic	7440-38-2	SW6020A	T	mg/kg	1.3	J-	2.1	J-	4		3.9		2
RA_SE_Metals	Barium	7440-39-3	SW6020A	T	mg/kg	38		63		110		140		53
RA_SE_Metals	Beryllium	7440-41-7	SW6020A	T	mg/kg	0.53		0.85		1.5		1.5		0.63
RA_SE_Metals	Cadmium	7440-43-9	SW6020A	T	mg/kg	0.37		0.6		1		0.62		0.58
RA_SE_Metals	Calcium	7440-70-2	SW6020A	T	mg/kg	1700		2700		3600		2500		1900
RA_SE_Metals	Chromium	7440-47-3	SW6020A	T	mg/kg	16	J+	24	J+	49	J+	37		24
RA_SE_Metals	Cobalt	7440-48-4	SW6020A	T	mg/kg	8.9		16		21		15		11
RA_SE_Metals	Copper	7440-50-8	SW6020A	T	mg/kg	22		40		65	J+	50		28
RA_SE_Metals	Iron	7439-89-6	SW6020A	T	mg/kg	12000		17000		31000		30000		14000
RA_SE_Metals	Lead	7439-92-1	SW6020A	T	mg/kg	31		44		73		50		37

Attachment A  
Surface Sediment Data  
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3400 Benning Rd, N.E., Washington DC 20019

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area					
				sys_loc_code	SED10B	SED10C	SED1A	SED1B	SED1C					
				sys_sample_code	SED10B00N	SED10C00N	SED1A00N	SED1B00N	SED1C00N					
				sample_date	11/11/2013	11/11/2013	11/6/2013	11/6/2013	11/7/2013					
				sample_type_code	N	N	N	N	N					
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
				start_depth	0	0	0	0	0					
				end_depth	0.5	0.5	0.5	0.5	0.5					
				depth_unit	ft	ft	ft	ft	ft					
				validated_yn	Y	Y	Y	Y	Y					
RA_SE_Metals	Magnesium	7439-95-4	SW6020A	T	mg/kg	1600		2500		3800		3200		2600
RA_SE_Metals	Manganese	7439-96-5	SW6020A	T	mg/kg	190	J+	210	J+	460		470		160
RA_SE_Metals	Mercury	7439-97-6	SW7471B	T	mg/kg	0.099	J	0.1	J	0.23		0.23		0.11
RA_SE_Metals	Nickel	7440-02-0	SW6020A	T	mg/kg	16		26		39		23		19
RA_SE_Metals	Potassium	7440-09-7	SW6020A	T	mg/kg	580		1000		1300		1300		1000
RA_SE_Metals	Selenium	7782-49-2	SW6020A	T	mg/kg	0.42	J-	0.76	J-	1.4		1.4		0.53
RA_SE_Metals	Silver	7440-22-4	SW6020A	T	mg/kg	0.1		0.18		0.36		0.25		0.15
RA_SE_Metals	Sodium	7440-23-5	SW6020A	T	mg/kg	63		100		160		130		110
RA_SE_Metals	Thallium	7440-28-0	SW6020A	T	mg/kg	0.1		0.17		0.25		0.29		0.15
RA_SE_Metals	Vanadium	7440-62-2	SW6020A	T	mg/kg	14		23		44		38		21
RA_SE_Metals	Zinc	7440-66-6	SW6020A	T	mg/kg	99	J	160	J	240		150		140
RA_SE_Other	Arsenic	7440-38-2	SW6010	SEM	umol/g	0.011	J	0.012	J	0.012	J	0.011	J	0.0053
RA_SE_Other	Cadmium	7440-43-9	SW6010	SEM	umol/g	0.0022		0.0029		0.0055		0.0043	U	0.0036
RA_SE_Other	Chromium	7440-47-3	SW6010	SEM	umol/g	0.17	J	0.2		0.24		0.14		0.12
RA_SE_Other	Copper	7440-50-8	SW6010	SEM	umol/g	0.26	J	0.34		0.72		0.36		0.23
RA_SE_Other	Lead	7439-92-1	SW6010	SEM	umol/g	0.16	J	0.17		0.24		0.12		0.14
RA_SE_Other	Mercury	7439-97-6	SW7470A	SEM	umol/g	4.9E-05	J	5.2E-05	J	3.4E-05	J	0.00012	U	1.9E-05
RA_SE_Other	Nickel	7440-02-0	SW6010	SEM	umol/g	0.22		0.26		0.26		0.1		0.13
RA_SE_Other	Silver	7440-22-4	SW6010	SEM	umol/g	0.00036	J	0.00062	J	0.0031	UJ	0.0045	UJ	0.0019
RA_SE_Other	Sulfide	18496-25-8	SW9034	SEM	umol/g	1.2	U	2.3		2	J	1.9	J	1.7
RA_SE_Other	Total Organic Carbon	7440-44-0	LKTOC	T	mg/kg	24000		37000		51000		23000		25000
RA_SE_Other	Zinc	7440-66-6	SW6010	SEM	umol/g	1.5		1.8		2.9		1.2		1.7
RA_SE_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	N	mg/kg	0.0022	J					0.00076	J	
RA_SE_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	N	mg/kg	0.0038	J					0.0014		
RA_SE_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	N	mg/kg	0.0017	J					0.00037	J	
RA_SE_PestPCBs	Aldrin	309-00-2	SW8081B LL	N	mg/kg	0.00035	J					7.4E-05	J	
RA_SE_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	N	mg/kg	0.00038	U					0.0004	U	
RA_SE_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	N	mg/kg	0.0076	U	0.0078	U	0.011	U	0.0081	U	0.0069
RA_SE_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	N	mg/kg	0.0076	U	0.0078	U	0.011	U	0.0081	U	0.0069
RA_SE_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	N	mg/kg	0.0076	U	0.0078	U	0.011	U	0.0081	U	0.0069
RA_SE_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	N	mg/kg	0.0076	U	0.0078	U	0.011	U	0.0081	U	0.0069
RA_SE_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	N	mg/kg	0.035	J	0.046	J	0.095	J	0.05	J	0.071
RA_SE_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	N	mg/kg	0.0076	U	0.0078	U	0.011	U	0.0081	U	0.0069
RA_SE_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	N	mg/kg	0.031	J	0.031	J	0.051	J	0.028	J	0.038
RA_SE_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	N	mg/kg	0.0076	U	0.0078	U	0.011	U	0.0081	U	0.0069
RA_SE_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	N	mg/kg	0.0076	U	0.0078	U	0.011	U	0.0081	U	0.0069
RA_SE_PestPCBs	beta-BHC	319-85-7	SW8081B LL	N	mg/kg	0.00029	J					0.0004	U	
RA_SE_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	N	mg/kg	0.0036	J					0.0014	J	
RA_SE_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	N	mg/kg									
RA_SE_PestPCBs	delta-BHC	319-86-8	SW8081B LL	N	mg/kg	0.00038	UJ					0.0004	U	
RA_SE_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	N	mg/kg									
RA_SE_PestPCBs	Dieldrin	60-57-1	SW8081B LL	N	mg/kg	0.00081	J					0.00026	J	
RA_SE_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	N	mg/kg	0.00038	U					0.0004	U	

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area			
				sys_loc_code	SED10B	SED10C	SED1A	SED1B	SED1C			
				sys_sample_code	SED10B00N	SED10C00N	SED1A00N	SED1B00N	SED1C00N			
				sample_date	11/11/2013	11/11/2013	11/6/2013	11/6/2013	11/7/2013			
				sample_type_code	N	N	N	N	N			
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth	0	0	0	0	0			
				end_depth	0.5	0.5	0.5	0.5	0.5			
				depth_unit	ft	ft	ft	ft	ft			
				validated_yn	Y	Y	Y	Y	Y			
RA_SE_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	N	mg/kg	0.00019	J		0.00021	J		
RA_SE_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	N	mg/kg	0.0006	J		0.00017	J		
RA_SE_PestPCBs	Endrin	72-20-8	SW8081B LL	N	mg/kg	0.0019	J		0.00031	J		
RA_SE_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	N	mg/kg	0.00016	J		0.0004	U		
RA_SE_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	N	mg/kg	0.0015	J		0.00052			
RA_SE_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	N	mg/kg	0.00028	J		7.7E-05	J		
RA_SE_PestPCBs	Heptachlor	76-44-8	SW8081B LL	N	mg/kg	0.0005	J		0.00022	J		
RA_SE_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	N	mg/kg	0.00045	J		0.00012	J		
RA_SE_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	N	mg/kg							
RA_SE_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	N	mg/kg							
RA_SE_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	N	mg/kg	0.0057			0.0017	J		
RA_SE_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	N	mg/kg							
RA_SE_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	N	mg/kg							
RA_SE_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB TEQ Bird	PCBTEQ-Bird	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB, TOTAL	PCB	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	N	mg/kg	0.066		0.077	0.15		0.078	0.11
RA_SE_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	N	mg/kg	0.066		0.077	0.14		0.073	0.11
RA_SE_PestPCBs	PCB-1	2051-60-7	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB-10	33146-45-1	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB-100	39485-83-1	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB-101	37680-73-2	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB-102	68194-06-9	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB-103	60145-21-3	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB-104	56558-16-8	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB-105	32598-14-4	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB-106	70424-69-0	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB-107	70424-68-9	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB-108	70362-41-3	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB-109	74472-35-8	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB-11	2050-67-1	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB-110	38380-03-9	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB-111	39635-32-0	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB-112	74472-36-9	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB-113	68194-10-5	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB-114	74472-37-0	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB-115	74472-38-1	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB-116	18259-05-7	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB-117	68194-11-6	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB-118	31508-00-6	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB-119	56558-17-9	E1668C	N	mg/kg							
RA_SE_PestPCBs	PCB-12	2974-92-7	E1668C	N	mg/kg							

Attachment A  
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		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
		sys_loc_code	SED10B	SED10C	SED1A	SED1B	SED1C	SED10B00N	SED10C00N	SED1A00N	SED1B00N	SED1C00N	SED1C00N
		sample_date	11/11/2013	11/11/2013	11/6/2013	11/6/2013	11/7/2013						
		sample_type_code	N	N	N	N	N						
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013						
		start_depth	0	0	0	0	0						
		end_depth	0.5	0.5	0.5	0.5	0.5						
		depth_unit	ft	ft	ft	ft	ft						
		validated_yn	Y	Y	Y	Y	Y						
RA_SE_PestPCBs	PCB-120	68194-12-7	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-121	56558-18-0	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-122	76842-07-4	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-123	65510-44-3	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-124	70424-70-3	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-125	74472-39-2	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-126	57465-28-8	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-127	39635-33-1	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-128	38380-07-3	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-129	55215-18-4	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-13	2974-90-5	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-130	52663-66-8	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-131	61798-70-7	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-132	38380-05-1	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-133	35694-04-3	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-134	52704-70-8	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-135	52744-13-5	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-136	38411-22-2	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-137	35694-06-5	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-138	35065-28-2	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-139	56030-56-9	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-14	34883-41-5	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-140	59291-64-4	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-141	52712-04-6	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-142	41411-61-4	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-143	68194-15-0	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-144	68194-14-9	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-145	74472-40-5	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-146	51908-16-8	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-147	68194-13-8	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-148	74472-41-6	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-149	38380-04-0	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-15	2050-68-2	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-150	68194-08-1	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-151	52663-63-5	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-152	68194-09-2	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-153	35065-27-1	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-154	60145-22-4	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-155	33979-03-2	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-156	38380-08-4	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-157	69782-90-7	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-158	74472-42-7	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-159	39635-35-3	E1668C	N	mg/kg								



Attachment A  
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		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
		sys_loc_code	SED10B	SED10C	SED1A	SED1B	SED1C	
		sys_sample_code	SED10B00N	SED10C00N	SED1A00N	SED1B00N	SED1C00N	
		sample_date	11/11/2013	11/11/2013	11/6/2013	11/6/2013	11/7/2013	
		sample_type_code	N	N	N	N	N	
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
		start_depth	0	0	0	0	0	
		end_depth	0.5	0.5	0.5	0.5	0.5	
		depth_unit	ft	ft	ft	ft	ft	
		validated_yn	Y	Y	Y	Y	Y	
RA_SE_PestPCBs	PCB-16	38444-78-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-160	41411-62-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-161	74472-43-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-162	39635-34-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-163	74472-44-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-164	74472-45-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-165	74472-46-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-166	41411-63-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-167	52663-72-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-168	59291-65-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-169	32774-16-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-17	37680-66-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-170	35065-30-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-171	52663-71-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-172	52663-74-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-173	68194-16-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-174	38411-25-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-175	40186-70-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-176	52663-65-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-177	52663-70-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-178	52663-67-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-179	52663-64-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-18	37680-65-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-180	35065-29-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-181	74472-47-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-182	60145-23-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-183	52663-69-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-184	74472-48-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-185	52712-05-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-186	74472-49-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-187	52663-68-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-188	74487-85-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-189	39635-31-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-19	38444-73-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-190	41411-64-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-191	74472-50-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-192	74472-51-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-193	69782-91-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-194	35694-08-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-195	52663-78-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-196	42740-50-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-197	33091-17-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-198	68194-17-2	E1668C	N	mg/kg			



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				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED10B	SED10C	SED1A	SED1B	SED1C
				sys_sample_code	SED10B00N	SED10C00N	SED1A00N	SED1B00N	SED1C00N
				sample_date	11/11/2013	11/11/2013	11/6/2013	11/6/2013	11/7/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-199	52663-75-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-2	2051-61-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-20	38444-84-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-200	52663-73-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-201	40186-71-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-202	2136-99-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-203	52663-76-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-204	74472-52-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-205	74472-53-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-206	40186-72-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-207	52663-79-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-208	52663-77-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-21	55702-46-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-22	38444-85-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-23	55720-44-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-24	55702-45-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-25	55712-37-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-26	38444-81-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-27	38444-76-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-28	7012-37-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-29	15862-07-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-3	2051-62-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-30	35693-92-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-31	16606-02-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-32	38444-77-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-33	38444-86-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-34	37680-68-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-35	37680-69-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-36	38444-87-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-37	38444-90-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-38	53555-66-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-39	38444-88-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-4	13029-08-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-40	38444-93-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-41	52663-59-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-42	36559-22-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-43	70362-46-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-44	41464-39-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-45	70362-45-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-46	41464-47-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-47	2437-79-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-48	70362-47-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-49	41464-40-8	E1668C	N	mg/kg				



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				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED10B	SED10C	SED1A	SED1B	SED1C
				sys_sample_code	SED10B00N	SED10C00N	SED1A00N	SED1B00N	SED1C00N
				sample_date	11/11/2013	11/11/2013	11/6/2013	11/6/2013	11/7/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-5	16605-91-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-50	62796-65-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-51	68194-04-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-52	35693-99-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-53	41464-41-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-54	15968-05-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-55	74338-24-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-56	41464-43-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-57	70424-67-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-58	41464-49-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-59	74472-33-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-6	25569-80-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-60	33025-41-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-61	33284-53-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-62	54230-22-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-63	74472-34-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-64	52663-58-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-65	33284-54-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-66	32598-10-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-67	73575-53-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-68	73575-52-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-69	60233-24-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-7	33284-50-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-70	32598-11-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-71	41464-46-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-72	41464-42-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-73	74338-23-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-74	32690-93-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-75	32598-12-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-76	70362-48-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-77	32598-13-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-78	70362-49-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-79	41464-48-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-8	34883-43-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-80	33284-52-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-81	70362-50-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-82	52663-62-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-83	60145-20-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-84	52663-60-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-85	65510-45-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-86	55312-69-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-87	38380-02-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-88	55215-17-3	E1668C	N	mg/kg				



				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED10B	SED10C	SED1A	SED1B	SED1C
				sys_sample_code	SED10B00N	SED10C00N	SED1A00N	SED1B00N	SED1C00N
				sample_date	11/11/2013	11/11/2013	11/6/2013	11/6/2013	11/7/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-89	73575-57-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-9	34883-39-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-90	68194-07-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-91	68194-05-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-92	52663-61-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-93	73575-56-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-94	73575-55-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-95	38379-99-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-96	73575-54-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-97	41464-51-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-98	60233-25-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-99	38380-01-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	N	mg/kg	0.015	U	0.016	U
RA_SE_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	N	mg/kg	0.0056	J	0.0021	
RA_SE_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	N	mg/kg				
RA_SE_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	N	mg/kg	0.3	U	0.16	U
RA_SE_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	N	mg/kg	0.3	U	0.16	U
RA_SE_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	N	mg/kg	0.061	U	0.033	U
RA_SE_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	N	mg/kg	0.3	U	0.16	U
RA_SE_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	N	mg/kg	0.3	U	0.16	U
RA_SE_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	N	mg/kg	0.3	U	0.16	U
RA_SE_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	N	mg/kg	0.061	U	0.033	U
RA_SE_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	N	mg/kg	0.3	U	0.16	U
RA_SE_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	N	mg/kg	1.6	U	0.83	U
RA_SE_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	N	mg/kg	0.3	U	0.16	U
RA_SE_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	N	mg/kg	0.3	U	0.16	U
RA_SE_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	N	mg/kg	0.061	U	0.033	U
RA_SE_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	N	mg/kg	0.3	U	0.16	U
RA_SE_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	N	mg/kg	0.011	J	0.021	J
RA_SE_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	N	mg/kg	0.3	U	0.16	U
RA_SE_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	N	mg/kg	1.6	U	0.83	U
RA_SE_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	N	mg/kg	0.3	U	0.16	U
RA_SE_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	N	mg/kg	0.3	U	0.16	U
RA_SE_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	N	mg/kg	1.6	U	0.83	U
RA_SE_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	N	mg/kg	1.6	U	0.83	U
RA_SE_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	N	mg/kg	0.3	U	0.16	U
RA_SE_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	N	mg/kg	0.3	U	0.16	U
RA_SE_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	N	mg/kg	0.3	U	0.16	U
RA_SE_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	N	mg/kg	0.3	U	0.16	U
RA_SE_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	N	mg/kg	0.3	U	0.16	U
RA_SE_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	N	mg/kg	1.6	U	0.83	U

	loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area							
RA_SE_SVOCs	sys_loc_code	SED10B	SED10C	SED1A	SED1B	SED1C	SED1C00N	SED1C00N							
	sys_sample_code	SED10B00N	SED10C00N	SED1A00N	SED1B00N	SED1C00N	SED1C00N	SED1C00N							
	sample_date	11/11/2013	11/11/2013	11/6/2013	11/6/2013	11/7/2013	11/7/2013	11/7/2013							
	sample_type_code	N	N	N	N	N	N	N							
	task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013							
	start_depth	0	0	0	0	0	0	0							
	end_depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5							
	depth_unit	ft	ft	ft	ft	ft	ft	ft							
	validated_yn	Y	Y	Y	Y	Y	Y	Y							
RA_SE_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	N	mg/kg	1.6	U		0.83	U					
RA_SE_SVOCs	Acenaphthene	83-32-9	SW8270D LL	N	mg/kg	0.018	J	0.024	J	0.27	U	0.019	J	0.22	U
RA_SE_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	N	mg/kg	0.061	U	0.033	J	0.27	U	0.031	J	0.22	U
RA_SE_SVOCs	Acetophenone	98-86-2	SW8270D LL	N	mg/kg	0.3	U					0.015	J		
RA_SE_SVOCs	Anthracene	120-12-7	SW8270D LL	N	mg/kg	0.061		0.082		0.076	J	0.069		0.082	J
RA_SE_SVOCs	Atrazine	1912-24-9	SW8270D LL	N	mg/kg	0.3	U					0.16	U		
RA_SE_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	N	mg/kg	0.25	J					0.15	J		
RA_SE_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	N	mg/kg	0.38		0.48		0.36		0.26		0.49	
RA_SE_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	N	mg/kg	0.48		0.48		0.46		0.3		0.55	
RA_SE_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	N	mg/kg	0.7		0.84		0.92		0.44		0.73	
RA_SE_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	N	mg/kg	0.43	J	0.49	J	0.56		0.33		0.47	
RA_SE_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	N	mg/kg	0.29		0.35		0.25	J	0.21		0.4	
RA_SE_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	N	mg/kg	0.3	U					0.16	U		
RA_SE_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	N	mg/kg	0.061	U					0.033	U		
RA_SE_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	N	mg/kg	1.1						0.52			
RA_SE_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	N	mg/kg	0.11	J					0.16	U		
RA_SE_SVOCs	Caprolactam	105-60-2	SW8270D LL	N	mg/kg	1.6						0.83	U		
RA_SE_SVOCs	Carbazole	86-74-8	SW8270D LL	N	mg/kg	0.058	J					0.023	J		
RA_SE_SVOCs	Chrysene	218-01-9	SW8270D LL	N	mg/kg	0.58		0.7		0.69		0.4		0.71	
RA_SE_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	N	mg/kg	0.11		0.14		0.13	J	0.065		0.11	J
RA_SE_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	N	mg/kg	0.3	U					0.027	J		
RA_SE_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	N	mg/kg	0.3	U					0.16	U		
RA_SE_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	N	mg/kg	0.3	U					0.16	U		
RA_SE_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	N	mg/kg	0.3	U					0.16	U		
RA_SE_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	N	mg/kg	0.3	U					0.16	U		
RA_SE_SVOCs	Fluoranthene	206-44-0	SW8270D LL	N	mg/kg	0.88		1.1		0.94		0.58		1	
RA_SE_SVOCs	Fluorene	86-73-7	SW8270D LL	N	mg/kg	0.023	J	0.026	J	0.27	U	0.036		0.22	U
RA_SE_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	N	mg/kg	0.061	U					0.033	U		
RA_SE_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	N	mg/kg	0.061	U					0.033	U		
RA_SE_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	N	mg/kg	0.3	U					0.16	U		
RA_SE_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	N	mg/kg	0.3	U					0.16	U		
RA_SE_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	N	mg/kg	0.38		0.42		0.44		0.27		0.4	
RA_SE_SVOCs	Isophorone	78-59-1	SW8270D LL	N	mg/kg	0.3	U					0.16	U		
RA_SE_SVOCs	Naphthalene	91-20-3	SW8270D LL	N	mg/kg	0.061	U	0.013	J	0.27	U	0.027	J	0.22	U
RA_SE_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	N	mg/kg	0.61	U					0.32	U		
RA_SE_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	N	mg/kg	0.061	U					0.033	U		
RA_SE_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	N	mg/kg	0.3	U					0.16	U		
RA_SE_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	N	mg/kg	0.3	U					0.16	U		
RA_SE_SVOCs	Phenanthrene	85-01-8	SW8270D LL	N	mg/kg	0.29		0.38		0.29		0.26		0.37	
RA_SE_SVOCs	Phenol	108-95-2	SW8270D LL	N	mg/kg	0.061	U					0.033	U		
RA_SE_SVOCs	Pyrene	129-00-0	SW8270D LL	N	mg/kg	0.72		0.83		0.73		0.48		0.96	
RA_SE_SVOCs	Total High-molecular-weight PAHs	TOT-PAH-HMW	SW8270D LL	N	mg/kg	5		5.9		5.5		3.3		5.8	
RA_SE_SVOCs	Total Low-molecular-weight PAHs	TOT-PAH-LMW	SW8270D LL	N	mg/kg	0.39		0.56		0.37		0.44		0.45	

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
RA_SE_SVOCs	Total PAHs (sum 16)	TOT-PAH	SW8270D LL	N	mg/kg	5.3	6.5	5.8	3.8
RA_SE_SVOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	1,1-Dichloroethane	75-34-3	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	1,1-Dichloroethene	75-35-4	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	1,2-Dibromoethane	106-93-4	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	1,2-Dichloroethane	107-06-2	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	1,2-Dichloropropane	78-87-5	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	1,4-Dioxane	123-91-1	SW8260B	N	mg/kg	2.3	U		2.4
RA_SE_SVOCs	2-Butanone	78-93-3	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	2-Hexanone	591-78-6	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	Acetone	67-64-1	SW8260B	N	mg/kg	0.047	U		0.047
RA_SE_SVOCs	Benzene	71-43-2	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	Bromochloromethane	74-97-5	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	Bromodichloromethane	75-27-4	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	Bromoform	75-25-2	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	Bromomethane	74-83-9	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	Carbon Disulfide	75-15-0	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	Carbon Tetrachloride	56-23-5	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	Chlorobenzene	108-90-7	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	Chloroethane	75-00-3	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	Chloroform	67-66-3	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	Chloromethane	74-87-3	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	Cyclohexane	110-82-7	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	Dibromochloromethane	124-48-1	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	Dichlorodifluoromethane	75-71-8	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	Ethylbenzene	100-41-4	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	Isopropylbenzene	98-82-8	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	m, p-Xylene	XYLMP	SW8260B	N	mg/kg	0.023	U		0.024
RA_SE_SVOCs	Methyl Acetate	79-20-9	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	N	mg/kg	0.012	U		0.012
RA_SE_SVOCs	Methylcyclohexane	108-87-2	SW8260B	N	mg/kg	0.012	U		0.012



Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area					
		sys_loc_code	SED10B	SED10C	SED1A	SED1B	SED1C					
		sys_sample_code	SED10B00N	SED10C00N	SED1A00N	SED1B00N	SED1C00N					
		sample_date	11/11/2013	11/11/2013	11/6/2013	11/6/2013	11/7/2013					
		sample_type_code	N	N	N	N	N					
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
		start_depth	0	0	0	0	0					
		end_depth	0.5	0.5	0.5	0.5	0.5					
		depth_unit	ft	ft	ft	ft	ft					
		validated_yn	Y	Y	Y	Y	Y					
RA_SE_VOCs	Methylene Chloride	75-09-2	SW8260B	N	mg/kg	0.012	U					
RA_SE_VOCs	o-Xylene	95-47-6	SW8260B	N	mg/kg	0.012	U					
RA_SE_VOCs	Styrene	100-42-5	SW8260B	N	mg/kg	0.012	U					
RA_SE_VOCs	Tetrachloroethylene	127-18-4	SW8260B	N	mg/kg	0.012	U					
RA_SE_VOCs	Toluene	108-88-3	SW8260B	N	mg/kg	0.012	U					
RA_SE_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	N	mg/kg	0.012	U					
RA_SE_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	N	mg/kg	0.012	U					
RA_SE_VOCs	Trichloroethene	79-01-6	SW8260B	N	mg/kg	0.012	U					
RA_SE_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	N	mg/kg	0.012	U					
RA_SE_VOCs	Vinyl Chloride	75-01-4	SW8260B	N	mg/kg	0.012	U					
RA_SE_VOCs	Xylenes (total)	1330-20-7	SW8260B	N	mg/kg	0.023	U					

		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area								
		sys_loc_code	SED2.5B00N	SED2A	SED2B	SED2C	SED3.5B	SED3.5B00N								
		sys_sample_code	SED2.5B00N	SED2A00N	SED2B00N	SED2C00N	SED3.5B00N	SED3.5B00N								
		sample_date	11/7/2013	11/6/2013	11/5/2013	11/6/2013	11/12/2013	11/12/2013								
		sample_type_code	N	N	N	N	N	N								
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013								
		start_depth	0	0	0	0	0	0								
		end_depth	0.5	0.5	0.5	0.5	0.5	0.5								
		depth_unit	ft	ft	ft	ft	ft	ft								
		validated_yn	Y	Y	Y	Y	Y	Y								
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers		
RA_SE_DioxinsFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	N	mg/kg							0.000181				
RA_SE_DioxinsFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	N	mg/kg							0.000155				
RA_SE_DioxinsFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	N	mg/kg							4.83E-06	JN			
RA_SE_DioxinsFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	N	mg/kg							1.28E-05				
RA_SE_DioxinsFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	N	mg/kg							0.000128	J			
RA_SE_DioxinsFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	N	mg/kg							1.79E-05				
RA_SE_DioxinsFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	N	mg/kg							3.58E-05	JN			
RA_SE_DioxinsFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	N	mg/kg							3.32E-05	J			
RA_SE_DioxinsFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	N	mg/kg							7.98E-07	JN			
RA_SE_DioxinsFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	N	mg/kg							1.05E-05				
RA_SE_DioxinsFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	N	mg/kg							1.71E-05				
RA_SE_DioxinsFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	N	mg/kg							2.66E-05	JN			
RA_SE_DioxinsFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	N	mg/kg							2.83E-05				
RA_SE_DioxinsFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	N	mg/kg							2.08E-06	JN			
RA_SE_DioxinsFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	N	mg/kg							9.98E-06				
RA_SE_DioxinsFurans	OCDD	3268-87-9	SW8290A	N	mg/kg							0.00318				
RA_SE_DioxinsFurans	OCDF	39001-02-0	SW8290A	N	mg/kg							3.9E-05				
RA_SE_DioxinsFurans	TCDD TEQ Bird	DFTEQ-Bird	SW8290A	N	mg/kg							7.79E-05				
RA_SE_DioxinsFurans	TCDD TEQ Fish	DFTEQ-Fish	SW8290A	N	mg/kg							5.62E-05				
RA_SE_DioxinsFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	N	mg/kg							5.25E-05				
RA_SE_DioxinsFurans	Total HpCDD	37871-00-4	SW8290A	N	mg/kg							0.000373				
RA_SE_DioxinsFurans	Total HpCDF	38998-75-3	SW8290A	N	mg/kg							0.000211	JN			
RA_SE_DioxinsFurans	Total HxCDD	34465-46-8	SW8290A	N	mg/kg							0.000203				
RA_SE_DioxinsFurans	Total HxCDF	55684-94-1	SW8290A	N	mg/kg							0.000472	JN			
RA_SE_DioxinsFurans	Total PeCDD	36088-22-9	SW8290A	N	mg/kg							0.00031	JN			
RA_SE_DioxinsFurans	Total PeCDF	30402-15-4	SW8290A	N	mg/kg							0.000591	JN			
RA_SE_DioxinsFurans	Total TCDD	41903-57-5	SW8290A	N	mg/kg							7.13E-05	JN			
RA_SE_DioxinsFurans	Total TCDF	55722-27-5	SW8290A	N	mg/kg							0.000593	JN			
RA_SE_DioxinsFurans	Total TEQ	TTEQ	SW8290A	N	mg/kg							5.25E-05				
RA_SE_Metals	Aluminum	7429-90-5	SW6020A	T	mg/kg	6500		8300			7600	6200		2000		
RA_SE_Metals	Antimony	7440-36-0	SW6020A	T	mg/kg	0.39		0.53	J-		0.48	J-	0.5	J-	0.15	J-
RA_SE_Metals	Arsenic	7440-38-2	SW6020A	T	mg/kg	1.9		3.6			2.9		2.6		0.96	J-
RA_SE_Metals	Barium	7440-39-3	SW6020A	T	mg/kg	60		86			76		61		30	
RA_SE_Metals	Beryllium	7440-41-7	SW6020A	T	mg/kg	0.8		1.1			0.89		0.82		0.36	
RA_SE_Metals	Cadmium	7440-43-9	SW6020A	T	mg/kg	0.52		0.99			0.81		0.92		0.36	
RA_SE_Metals	Calcium	7440-70-2	SW6020A	T	mg/kg	2300		5100			2500		2500		1100	
RA_SE_Metals	Chromium	7440-47-3	SW6020A	T	mg/kg	30		37	J+		38	J+	29	J+	11	J+
RA_SE_Metals	Cobalt	7440-48-4	SW6020A	T	mg/kg	12		18			16		18		6.7	
RA_SE_Metals	Copper	7440-50-8	SW6020A	T	mg/kg	33		54	J+		45	J+	40	J+	17	
RA_SE_Metals	Iron	7439-89-6	SW6020A	T	mg/kg	17000		25000			22000		19000		8300	
RA_SE_Metals	Lead	7439-92-1	SW6020A	T	mg/kg	44		72			63		61		19	

Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED2.5B	SED2A	SED2B	SED2C	SED3.5B	
				sys_sample_code	SED2.5B00N	SED2A00N	SED2B00N	SED2C00N	SED3.5B00N	
				sample_date	11/7/2013	11/6/2013	11/5/2013	11/6/2013	11/12/2013	
				sample_type_code	N	N	N	N	N	
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
				start_depth	0	0	0	0	0	
				end_depth	0.5	0.5	0.5	0.5	0.5	
				depth_unit	ft	ft	ft	ft	ft	
				validated_yn	Y	Y	Y	Y	Y	
RA_SE_Metals	Magnesium	7439-95-4	SW6020A	T	mg/kg	2800	3400	2600	2800	840
RA_SE_Metals	Manganese	7439-96-5	SW6020A	T	mg/kg	210	420	310	200	120
RA_SE_Metals	Mercury	7439-97-6	SW7471B	T	mg/kg	0.086	0.16	0.13	0.15	0.067
RA_SE_Metals	Nickel	7440-02-0	SW6020A	T	mg/kg	22	37	30	29	11
RA_SE_Metals	Potassium	7440-09-7	SW6020A	T	mg/kg	1100	1000	1000	1000	410
RA_SE_Metals	Selenium	7782-49-2	SW6020A	T	mg/kg	0.62	1.2	0.95	0.84	0.31
RA_SE_Metals	Silver	7440-22-4	SW6020A	T	mg/kg	0.16	0.3	0.34	0.27	0.064
RA_SE_Metals	Sodium	7440-23-5	SW6020A	T	mg/kg	120	180	110	140	47
RA_SE_Metals	Thallium	7440-28-0	SW6020A	T	mg/kg	0.16	0.19	0.18	0.19	0.065
RA_SE_Metals	Vanadium	7440-62-2	SW6020A	T	mg/kg	22	32	29	27	9.6
RA_SE_Metals	Zinc	7440-66-6	SW6020A	T	mg/kg	130	190	180	200	68
RA_SE_Other	Arsenic	7440-38-2	SW6010	SEM	umol/g	0.0066	J	0.017	J	0.0065
RA_SE_Other	Cadmium	7440-43-9	SW6010	SEM	umol/g	0.0028	0.0048	0.0027	0.0068	0.0018
RA_SE_Other	Chromium	7440-47-3	SW6010	SEM	umol/g	0.14	0.25	0.11	0.19	0.12
RA_SE_Other	Copper	7440-50-8	SW6010	SEM	umol/g	0.23	0.47	0.19	0.33	0.15
RA_SE_Other	Lead	7439-92-1	SW6010	SEM	umol/g	0.14	0.2	0.12	0.37	0.094
RA_SE_Other	Mercury	7439-97-6	SW7470A	SEM	umol/g	1.2E-05	J	4.2E-05	J	0.0013
RA_SE_Other	Nickel	7440-02-0	SW6010	SEM	umol/g	0.14	0.25	0.16	0.24	0.12
RA_SE_Other	Silver	7440-22-4	SW6010	SEM	umol/g	0.002	UJ	0.003	UJ	0.0023
RA_SE_Other	Sulfide	18496-25-8	SW9034	SEM	umol/g	1.9	J	1.6	J	7.3
RA_SE_Other	Total Organic Carbon	7440-44-0	LKTOC	T	mg/kg	23000	48000	33000	35000	8400
RA_SE_Other	Zinc	7440-66-6	SW6010	SEM	umol/g	1.5	2.3	1.6	J	2.8
RA_SE_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	N	mg/kg				0.0041	J
RA_SE_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	N	mg/kg				0.0065	J
RA_SE_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	N	mg/kg				0.0028	J
RA_SE_PestPCBs	Aldrin	309-00-2	SW8081B LL	N	mg/kg				0.00046	J
RA_SE_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	N	mg/kg				0.00083	U
RA_SE_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	N	mg/kg	0.0074	U	0.0054	U	0.0045
RA_SE_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	N	mg/kg	0.0074	U	0.0054	U	0.0045
RA_SE_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	N	mg/kg	0.0074	U	0.0054	U	0.0045
RA_SE_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	N	mg/kg	0.0074	U	0.0054	U	0.0045
RA_SE_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	N	mg/kg	0.053	J	0.15	J	0.076
RA_SE_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	N	mg/kg	0.0074	U	0.0054	U	0.0045
RA_SE_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	N	mg/kg	0.023	J	0.081	J	0.033
RA_SE_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	N	mg/kg	0.0074	U	0.0054	U	0.0045
RA_SE_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	N	mg/kg	0.0074	U	0.0054	U	0.0045
RA_SE_PestPCBs	beta-BHC	319-85-7	SW8081B LL	N	mg/kg				0.00058	J
RA_SE_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	N	mg/kg				0.0064	J
RA_SE_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	N	mg/kg		0.000527			
RA_SE_PestPCBs	delta-BHC	319-86-8	SW8081B LL	N	mg/kg				0.00083	U
RA_SE_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	N	mg/kg		0.00863	JN		
RA_SE_PestPCBs	Dieldrin	60-57-1	SW8081B LL	N	mg/kg				0.0015	J
RA_SE_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	N	mg/kg				0.00083	U

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED2.5B00N	SED2A	SED2B	SED2C	SED3.5B00N
				sys_sample_code	SED2.5B00N	SED2A00N	SED2B00N	SED2C00N	SED3.5B00N
				sample_date	11/7/2013	11/6/2013	11/5/2013	11/6/2013	11/12/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	N	mg/kg				0.0012
RA_SE_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	N	mg/kg				0.0015
RA_SE_PestPCBs	Endrin	72-20-8	SW8081B LL	N	mg/kg				0.0053
RA_SE_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	N	mg/kg				0.0006 J
RA_SE_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	N	mg/kg				0.0024 J
RA_SE_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	N	mg/kg				0.0002 J
RA_SE_PestPCBs	Heptachlor	76-44-8	SW8081B LL	N	mg/kg				0.0013 J
RA_SE_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	N	mg/kg				0.00072 J
RA_SE_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	N	mg/kg	0.0413	JN		
RA_SE_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	N	mg/kg	0.0673	JN		
RA_SE_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	N	mg/kg				0.013 J
RA_SE_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	N	mg/kg	0.000421	JN		
RA_SE_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	N	mg/kg	0.0016			
RA_SE_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	N	mg/kg	0.0118	JN		
RA_SE_PestPCBs	PCB TEQ Bird	PCBTEQ-Bird	E1668C	N	mg/kg	4.34E-05			
RA_SE_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	N	mg/kg	1E-05			
RA_SE_PestPCBs	PCB, TOTAL	PCB	E1668C	N	mg/kg	0.294			
RA_SE_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	N	mg/kg	0.076	0.23	0.11	0.23
RA_SE_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	N	mg/kg	0.076	0.23	0.11	0.23
RA_SE_PestPCBs	PCB-1	2051-60-7	E1668C	N	mg/kg	0.000233			
RA_SE_PestPCBs	PCB-10	33146-45-1	E1668C	N	mg/kg	4.47E-05	JN		
RA_SE_PestPCBs	PCB-100	39485-83-1	E1668C	N	mg/kg	5.94E-05	JN		
RA_SE_PestPCBs	PCB-101	37680-73-2	E1668C	N	mg/kg	0.00766			
RA_SE_PestPCBs	PCB-102	68194-06-9	E1668C	N	mg/kg	0.000282	JN		
RA_SE_PestPCBs	PCB-103	60145-21-3	E1668C	N	mg/kg	0.000128			
RA_SE_PestPCBs	PCB-104	56558-16-8	E1668C	N	mg/kg	1.13E-05	JN		
RA_SE_PestPCBs	PCB-105	32598-14-4	E1668C	N	mg/kg	0.00327			
RA_SE_PestPCBs	PCB-106	70424-69-0	E1668C	N	mg/kg	7.53E-06	U		
RA_SE_PestPCBs	PCB-107	70424-68-9	E1668C	N	mg/kg	0.000629			
RA_SE_PestPCBs	PCB-108	70362-41-3	E1668C	N	mg/kg	0.00034	JN		
RA_SE_PestPCBs	PCB-109	74472-35-8	E1668C	N	mg/kg	0.0044			
RA_SE_PestPCBs	PCB-11	2050-67-1	E1668C	N	mg/kg	0.000366			
RA_SE_PestPCBs	PCB-110	38380-03-9	E1668C	N	mg/kg	0.00797			
RA_SE_PestPCBs	PCB-111	39635-32-0	E1668C	N	mg/kg	4.54E-06	U		
RA_SE_PestPCBs	PCB-112	74472-36-9	E1668C	N	mg/kg	4.93E-06	U		
RA_SE_PestPCBs	PCB-113	68194-10-5	E1668C	N	mg/kg	0.00766			
RA_SE_PestPCBs	PCB-114	74472-37-0	E1668C	N	mg/kg	0.000192			
RA_SE_PestPCBs	PCB-115	74472-38-1	E1668C	N	mg/kg	0.00797			
RA_SE_PestPCBs	PCB-116	18259-05-7	E1668C	N	mg/kg	0.0013			
RA_SE_PestPCBs	PCB-117	68194-11-6	E1668C	N	mg/kg	0.0013			
RA_SE_PestPCBs	PCB-118	31508-00-6	E1668C	N	mg/kg	0.00774			
RA_SE_PestPCBs	PCB-119	56558-17-9	E1668C	N	mg/kg	0.0044			
RA_SE_PestPCBs	PCB-12	2974-92-7	E1668C	N	mg/kg	0.000363			



Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED2.5B	SED2A	SED2B	SED2C	SED3.5B
				sys_sample_code	SED2.5B00N	SED2A00N	SED2B00N	SED2C00N	SED3.5B00N
				sample_date	11/7/2013	11/6/2013	11/5/2013	11/6/2013	11/12/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-120	68194-12-7	E1668C	N	mg/kg		3.07E-05	JN	
RA_SE_PestPCBs	PCB-121	56558-18-0	E1668C	N	mg/kg		4.71E-06	U	
RA_SE_PestPCBs	PCB-122	76842-07-4	E1668C	N	mg/kg		0.000137	JN	
RA_SE_PestPCBs	PCB-123	65510-44-3	E1668C	N	mg/kg		9.85E-05	JN	
RA_SE_PestPCBs	PCB-124	70424-70-3	E1668C	N	mg/kg		0.00034	JN	
RA_SE_PestPCBs	PCB-125	74472-39-2	E1668C	N	mg/kg		0.0044		
RA_SE_PestPCBs	PCB-126	57465-28-8	E1668C	N	mg/kg		4.56E-05	JN	
RA_SE_PestPCBs	PCB-127	39635-33-1	E1668C	N	mg/kg		3.02E-05	J	
RA_SE_PestPCBs	PCB-128	38380-07-3	E1668C	N	mg/kg		0.00175		
RA_SE_PestPCBs	PCB-129	55215-18-4	E1668C	N	mg/kg		0.0151		
RA_SE_PestPCBs	PCB-13	2974-90-5	E1668C	N	mg/kg		0.000363		
RA_SE_PestPCBs	PCB-130	52663-66-8	E1668C	N	mg/kg		0.000802		
RA_SE_PestPCBs	PCB-131	61798-70-7	E1668C	N	mg/kg		0.000174		
RA_SE_PestPCBs	PCB-132	38380-05-1	E1668C	N	mg/kg		0.00454		
RA_SE_PestPCBs	PCB-133	35694-04-3	E1668C	N	mg/kg		0.000206	JN	
RA_SE_PestPCBs	PCB-134	52704-70-8	E1668C	N	mg/kg		0.00081		
RA_SE_PestPCBs	PCB-135	52744-13-5	E1668C	N	mg/kg		0.00418		
RA_SE_PestPCBs	PCB-136	38411-22-2	E1668C	N	mg/kg		0.0014		
RA_SE_PestPCBs	PCB-137	35694-06-5	E1668C	N	mg/kg		0.000404		
RA_SE_PestPCBs	PCB-138	35065-28-2	E1668C	N	mg/kg		0.0151		
RA_SE_PestPCBs	PCB-139	56030-56-9	E1668C	N	mg/kg		0.000206		
RA_SE_PestPCBs	PCB-14	34883-41-5	E1668C	N	mg/kg		8.77E-06	JN	
RA_SE_PestPCBs	PCB-140	59291-64-4	E1668C	N	mg/kg		0.000206		
RA_SE_PestPCBs	PCB-141	52712-04-6	E1668C	N	mg/kg		0.00328		
RA_SE_PestPCBs	PCB-142	41411-61-4	E1668C	N	mg/kg		1.89E-05	U	
RA_SE_PestPCBs	PCB-143	68194-15-0	E1668C	N	mg/kg		0.00081		
RA_SE_PestPCBs	PCB-144	68194-14-9	E1668C	N	mg/kg		0.000554	JN	
RA_SE_PestPCBs	PCB-145	74472-40-5	E1668C	N	mg/kg		6.4E-06	U	
RA_SE_PestPCBs	PCB-146	51908-16-8	E1668C	N	mg/kg		0.00233		
RA_SE_PestPCBs	PCB-147	68194-13-8	E1668C	N	mg/kg		0.0127		
RA_SE_PestPCBs	PCB-148	74472-41-6	E1668C	N	mg/kg		8.94E-06	U	
RA_SE_PestPCBs	PCB-149	38380-04-0	E1668C	N	mg/kg		0.0127		
RA_SE_PestPCBs	PCB-15	2050-68-2	E1668C	N	mg/kg		0.00247		
RA_SE_PestPCBs	PCB-150	68194-08-1	E1668C	N	mg/kg		2.86E-05	JN	
RA_SE_PestPCBs	PCB-151	52663-63-5	E1668C	N	mg/kg		0.00418		
RA_SE_PestPCBs	PCB-152	68194-09-2	E1668C	N	mg/kg		1.5E-05	J	
RA_SE_PestPCBs	PCB-153	35065-27-1	E1668C	N	mg/kg		0.014		
RA_SE_PestPCBs	PCB-154	60145-22-4	E1668C	N	mg/kg		0.000108	JN	
RA_SE_PestPCBs	PCB-155	33979-03-2	E1668C	N	mg/kg		6.06E-06	U	
RA_SE_PestPCBs	PCB-156	38380-08-4	E1668C	N	mg/kg		0.00125		
RA_SE_PestPCBs	PCB-157	69782-90-7	E1668C	N	mg/kg		0.00125		
RA_SE_PestPCBs	PCB-158	74472-42-7	E1668C	N	mg/kg		0.00135		
RA_SE_PestPCBs	PCB-159	39635-35-3	E1668C	N	mg/kg		0.000238		



		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
		sys_loc_code	SED2.5B	SED2A	SED2B	SED2C	SED3.5B	SED3.5B
		sys_sample_code	SED2.5B00N	SED2A00N	SED2B00N	SED2C00N	SED3.5B00N	SED3.5B00N
		sample_date	11/7/2013	11/6/2013	11/5/2013	11/6/2013	11/12/2013	11/12/2013
		sample_type_code	N	N	N	N	N	N
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
		start_depth	0	0	0	0	0	0
		end_depth	0.5	0.5	0.5	0.5	0.5	0.5
		depth_unit	ft	ft	ft	ft	ft	ft
		validated_yn	Y	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-16	38444-78-9	E1668C	N	mg/kg	0.00152		
RA_SE_PestPCBs	PCB-160	41411-62-5	E1668C	N	mg/kg	0.0151		
RA_SE_PestPCBs	PCB-161	74472-43-8	E1668C	N	mg/kg	1.25E-05	U	
RA_SE_PestPCBs	PCB-162	39635-34-2	E1668C	N	mg/kg	4.26E-05	JN	
RA_SE_PestPCBs	PCB-163	74472-44-9	E1668C	N	mg/kg	0.0151		
RA_SE_PestPCBs	PCB-164	74472-45-0	E1668C	N	mg/kg	0.00104		
RA_SE_PestPCBs	PCB-165	74472-46-1	E1668C	N	mg/kg	2.65E-05	JN	
RA_SE_PestPCBs	PCB-166	41411-63-6	E1668C	N	mg/kg	0.00175		
RA_SE_PestPCBs	PCB-167	52663-72-6	E1668C	N	mg/kg	0.00054		
RA_SE_PestPCBs	PCB-168	59291-65-5	E1668C	N	mg/kg	0.014		
RA_SE_PestPCBs	PCB-169	32774-16-6	E1668C	N	mg/kg	0.000166	JN	
RA_SE_PestPCBs	PCB-17	37680-66-3	E1668C	N	mg/kg	0.00256		
RA_SE_PestPCBs	PCB-170	35065-30-6	E1668C	N	mg/kg	0.00556		
RA_SE_PestPCBs	PCB-171	52663-71-5	E1668C	N	mg/kg	0.00133		
RA_SE_PestPCBs	PCB-172	52663-74-8	E1668C	N	mg/kg	0.000911		
RA_SE_PestPCBs	PCB-173	68194-16-1	E1668C	N	mg/kg	0.00133		
RA_SE_PestPCBs	PCB-174	38411-25-5	E1668C	N	mg/kg	0.00505		
RA_SE_PestPCBs	PCB-175	40186-70-7	E1668C	N	mg/kg	0.000205		
RA_SE_PestPCBs	PCB-176	52663-65-7	E1668C	N	mg/kg	0.000606		
RA_SE_PestPCBs	PCB-177	52663-70-4	E1668C	N	mg/kg	0.00279		
RA_SE_PestPCBs	PCB-178	52663-67-9	E1668C	N	mg/kg	0.00108		
RA_SE_PestPCBs	PCB-179	52663-64-6	E1668C	N	mg/kg	0.00223		
RA_SE_PestPCBs	PCB-18	37680-65-2	E1668C	N	mg/kg	0.00389		
RA_SE_PestPCBs	PCB-180	35065-29-3	E1668C	N	mg/kg	0.0106		
RA_SE_PestPCBs	PCB-181	74472-47-2	E1668C	N	mg/kg	2.61E-05	JN	
RA_SE_PestPCBs	PCB-182	60145-23-5	E1668C	N	mg/kg	3.53E-05	JN	
RA_SE_PestPCBs	PCB-183	52663-69-1	E1668C	N	mg/kg	0.00346		
RA_SE_PestPCBs	PCB-184	74472-48-3	E1668C	N	mg/kg	7.44E-06	U	
RA_SE_PestPCBs	PCB-185	52712-05-7	E1668C	N	mg/kg	0.00346		
RA_SE_PestPCBs	PCB-186	74472-49-4	E1668C	N	mg/kg	7.22E-06	U	
RA_SE_PestPCBs	PCB-187	52663-68-0	E1668C	N	mg/kg	0.00612		
RA_SE_PestPCBs	PCB-188	74487-85-7	E1668C	N	mg/kg	5.95E-06	U	
RA_SE_PestPCBs	PCB-189	39635-31-9	E1668C	N	mg/kg	0.000234		
RA_SE_PestPCBs	PCB-19	38444-73-4	E1668C	N	mg/kg	0.000719		
RA_SE_PestPCBs	PCB-190	41411-64-7	E1668C	N	mg/kg	0.000863		
RA_SE_PestPCBs	PCB-191	74472-50-7	E1668C	N	mg/kg	0.000176	JN	
RA_SE_PestPCBs	PCB-192	74472-51-8	E1668C	N	mg/kg	7.66E-06	U	
RA_SE_PestPCBs	PCB-193	69782-91-8	E1668C	N	mg/kg	0.0106		
RA_SE_PestPCBs	PCB-194	35694-08-7	E1668C	N	mg/kg	0.00322		
RA_SE_PestPCBs	PCB-195	52663-78-2	E1668C	N	mg/kg	0.00114	JN	
RA_SE_PestPCBs	PCB-196	42740-50-1	E1668C	N	mg/kg	0.00132		
RA_SE_PestPCBs	PCB-197	33091-17-7	E1668C	N	mg/kg	9.21E-05	JN	
RA_SE_PestPCBs	PCB-198	68194-17-2	E1668C	N	mg/kg	0.003		

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED2.5B00N	SED2A	SED2B	SED2C	SED3.5B
				sys_sample_code	SED2.5B00N	SED2A00N	SED2B00N	SED2C00N	SED3.5B00N
				sample_date	11/7/2013	11/6/2013	11/5/2013	11/6/2013	11/12/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-199	52663-75-9	E1668C	N	mg/kg	0.003			
RA_SE_PestPCBs	PCB-2	2051-61-8	E1668C	N	mg/kg	4.05E-05	JN		
RA_SE_PestPCBs	PCB-20	38444-84-7	E1668C	N	mg/kg	0.0107			
RA_SE_PestPCBs	PCB-200	52663-73-7	E1668C	N	mg/kg	0.000337			
RA_SE_PestPCBs	PCB-201	40186-71-8	E1668C	N	mg/kg	0.000338			
RA_SE_PestPCBs	PCB-202	2136-99-4	E1668C	N	mg/kg	0.000532			
RA_SE_PestPCBs	PCB-203	52663-76-0	E1668C	N	mg/kg	0.00172			
RA_SE_PestPCBs	PCB-204	74472-52-9	E1668C	N	mg/kg	5.89E-06	U		
RA_SE_PestPCBs	PCB-205	74472-53-0	E1668C	N	mg/kg	0.000127	JN		
RA_SE_PestPCBs	PCB-206	40186-72-9	E1668C	N	mg/kg	0.00115			
RA_SE_PestPCBs	PCB-207	52663-79-3	E1668C	N	mg/kg	0.00014			
RA_SE_PestPCBs	PCB-208	52663-77-1	E1668C	N	mg/kg	0.000313			
RA_SE_PestPCBs	PCB-21	55702-46-0	E1668C	N	mg/kg	0.00365			
RA_SE_PestPCBs	PCB-22	38444-85-8	E1668C	N	mg/kg	0.00273			
RA_SE_PestPCBs	PCB-23	55720-44-0	E1668C	N	mg/kg	9.7E-06	JN		
RA_SE_PestPCBs	PCB-24	55702-45-9	E1668C	N	mg/kg	6.92E-05			
RA_SE_PestPCBs	PCB-25	55712-37-3	E1668C	N	mg/kg	0.00118			
RA_SE_PestPCBs	PCB-26	38444-81-4	E1668C	N	mg/kg	0.00201			
RA_SE_PestPCBs	PCB-27	38444-76-7	E1668C	N	mg/kg	0.000568			
RA_SE_PestPCBs	PCB-28	7012-37-5	E1668C	N	mg/kg	0.0107			
RA_SE_PestPCBs	PCB-29	15862-07-4	E1668C	N	mg/kg	0.00201			
RA_SE_PestPCBs	PCB-3	2051-62-9	E1668C	N	mg/kg	0.000148			
RA_SE_PestPCBs	PCB-30	35693-92-6	E1668C	N	mg/kg	0.00389			
RA_SE_PestPCBs	PCB-31	16606-02-3	E1668C	N	mg/kg	0.00771			
RA_SE_PestPCBs	PCB-32	38444-77-8	E1668C	N	mg/kg	0.00196			
RA_SE_PestPCBs	PCB-33	38444-86-9	E1668C	N	mg/kg	0.00365			
RA_SE_PestPCBs	PCB-34	37680-68-5	E1668C	N	mg/kg	4.04E-05	JN		
RA_SE_PestPCBs	PCB-35	37680-69-6	E1668C	N	mg/kg	0.000174			
RA_SE_PestPCBs	PCB-36	38444-87-0	E1668C	N	mg/kg	4.79E-06	U		
RA_SE_PestPCBs	PCB-37	38444-90-5	E1668C	N	mg/kg	0.00347			
RA_SE_PestPCBs	PCB-38	53555-66-1	E1668C	N	mg/kg	1.59E-05	JN		
RA_SE_PestPCBs	PCB-39	38444-88-1	E1668C	N	mg/kg	5.67E-05			
RA_SE_PestPCBs	PCB-4	13029-08-8	E1668C	N	mg/kg	0.00132			
RA_SE_PestPCBs	PCB-40	38444-93-8	E1668C	N	mg/kg	0.00471			
RA_SE_PestPCBs	PCB-41	52663-59-9	E1668C	N	mg/kg	0.00471			
RA_SE_PestPCBs	PCB-42	36559-22-5	E1668C	N	mg/kg	0.00217			
RA_SE_PestPCBs	PCB-43	70362-46-8	E1668C	N	mg/kg	0.000316			
RA_SE_PestPCBs	PCB-44	41464-39-5	E1668C	N	mg/kg	0.00948			
RA_SE_PestPCBs	PCB-45	70362-45-7	E1668C	N	mg/kg	0.00248			
RA_SE_PestPCBs	PCB-46	41464-47-5	E1668C	N	mg/kg	0.000584			
RA_SE_PestPCBs	PCB-47	2437-79-8	E1668C	N	mg/kg	0.00948			
RA_SE_PestPCBs	PCB-48	70362-47-9	E1668C	N	mg/kg	0.0015			
RA_SE_PestPCBs	PCB-49	41464-40-8	E1668C	N	mg/kg	0.00584			



Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED2.5B00N	SED2A	SED2B	SED2C	SED3.5B
				sys_sample_code	SED2.5B00N	SED2A00N	SED2B00N	SED2C00N	SED3.5B00N
				sample_date	11/7/2013	11/6/2013	11/5/2013	11/6/2013	11/12/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-5	16605-91-7	E1668C	N	mg/kg		3.5E-05	J	
RA_SE_PestPCBs	PCB-50	62796-65-0	E1668C	N	mg/kg		0.00177		
RA_SE_PestPCBs	PCB-51	68194-04-7	E1668C	N	mg/kg		0.00248		
RA_SE_PestPCBs	PCB-52	35693-99-3	E1668C	N	mg/kg		0.0105		
RA_SE_PestPCBs	PCB-53	41464-41-9	E1668C	N	mg/kg		0.00177		
RA_SE_PestPCBs	PCB-54	15968-05-5	E1668C	N	mg/kg		9.6E-05		
RA_SE_PestPCBs	PCB-55	74338-24-2	E1668C	N	mg/kg		0.000213	JN	
RA_SE_PestPCBs	PCB-56	41464-43-1	E1668C	N	mg/kg		0.00297		
RA_SE_PestPCBs	PCB-57	70424-67-8	E1668C	N	mg/kg		6.97E-05		
RA_SE_PestPCBs	PCB-58	41464-49-7	E1668C	N	mg/kg		1.98E-05	JN	
RA_SE_PestPCBs	PCB-59	74472-33-6	E1668C	N	mg/kg		0.000756		
RA_SE_PestPCBs	PCB-6	25569-80-6	E1668C	N	mg/kg		0.000788		
RA_SE_PestPCBs	PCB-60	33025-41-1	E1668C	N	mg/kg		0.00154		
RA_SE_PestPCBs	PCB-61	33284-53-6	E1668C	N	mg/kg		0.0116		
RA_SE_PestPCBs	PCB-62	54230-22-7	E1668C	N	mg/kg		0.000756		
RA_SE_PestPCBs	PCB-63	74472-34-7	E1668C	N	mg/kg		0.000291		
RA_SE_PestPCBs	PCB-64	52663-58-8	E1668C	N	mg/kg		0.00338		
RA_SE_PestPCBs	PCB-65	33284-54-7	E1668C	N	mg/kg		0.00948		
RA_SE_PestPCBs	PCB-66	32598-10-0	E1668C	N	mg/kg		0.00718		
RA_SE_PestPCBs	PCB-67	73575-53-8	E1668C	N	mg/kg		0.000257		
RA_SE_PestPCBs	PCB-68	73575-52-7	E1668C	N	mg/kg		5.78E-05	JN	
RA_SE_PestPCBs	PCB-69	60233-24-1	E1668C	N	mg/kg		0.00584		
RA_SE_PestPCBs	PCB-7	33284-50-3	E1668C	N	mg/kg		0.000131	JN	
RA_SE_PestPCBs	PCB-70	32598-11-1	E1668C	N	mg/kg		0.0116		
RA_SE_PestPCBs	PCB-71	41464-46-4	E1668C	N	mg/kg		0.00471		
RA_SE_PestPCBs	PCB-72	41464-42-0	E1668C	N	mg/kg		9.28E-05		
RA_SE_PestPCBs	PCB-73	74338-23-1	E1668C	N	mg/kg		0.000316		
RA_SE_PestPCBs	PCB-74	32690-93-0	E1668C	N	mg/kg		0.0116		
RA_SE_PestPCBs	PCB-75	32598-12-2	E1668C	N	mg/kg		0.000756		
RA_SE_PestPCBs	PCB-76	70362-48-0	E1668C	N	mg/kg		0.0116		
RA_SE_PestPCBs	PCB-77	32598-13-3	E1668C	N	mg/kg		0.000716		
RA_SE_PestPCBs	PCB-78	70362-49-1	E1668C	N	mg/kg		5.19E-06	JN	
RA_SE_PestPCBs	PCB-79	41464-48-6	E1668C	N	mg/kg		9.53E-05		
RA_SE_PestPCBs	PCB-8	34883-43-7	E1668C	N	mg/kg		0.00293		
RA_SE_PestPCBs	PCB-80	33284-52-5	E1668C	N	mg/kg		5.82E-06	U	
RA_SE_PestPCBs	PCB-81	70362-50-4	E1668C	N	mg/kg		2.27E-05	JN	
RA_SE_PestPCBs	PCB-82	52663-62-4	E1668C	N	mg/kg		0.000861		
RA_SE_PestPCBs	PCB-83	60145-20-2	E1668C	N	mg/kg		0.00399		
RA_SE_PestPCBs	PCB-84	52663-60-2	E1668C	N	mg/kg		0.00175		
RA_SE_PestPCBs	PCB-85	65510-45-4	E1668C	N	mg/kg		0.0013		
RA_SE_PestPCBs	PCB-86	55312-69-1	E1668C	N	mg/kg		0.0044		
RA_SE_PestPCBs	PCB-87	38380-02-8	E1668C	N	mg/kg		0.0044		
RA_SE_PestPCBs	PCB-88	55215-17-3	E1668C	N	mg/kg		0.00136		

Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED2.5B00N	SED2A	SED2B	SED2C	SED3.5B
				sys_sample_code	SED2.5B00N	SED2A00N	SED2B00N	SED2C00N	SED3.5B00N
				sample_date	11/7/2013	11/6/2013	11/5/2013	11/6/2013	11/12/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-89	73575-57-2	E1668C	N	mg/kg	0.000106	JN		
RA_SE_PestPCBs	PCB-9	34883-39-1	E1668C	N	mg/kg	0.000169	JN		
RA_SE_PestPCBs	PCB-90	68194-07-0	E1668C	N	mg/kg	0.00766			
RA_SE_PestPCBs	PCB-91	68194-05-8	E1668C	N	mg/kg	0.00136			
RA_SE_PestPCBs	PCB-92	52663-61-3	E1668C	N	mg/kg	0.00145			
RA_SE_PestPCBs	PCB-93	73575-56-1	E1668C	N	mg/kg	5.94E-05	JN		
RA_SE_PestPCBs	PCB-94	73575-55-0	E1668C	N	mg/kg	0.00017			
RA_SE_PestPCBs	PCB-95	38379-99-6	E1668C	N	mg/kg	0.00661			
RA_SE_PestPCBs	PCB-96	73575-54-9	E1668C	N	mg/kg	0.000115	JN		
RA_SE_PestPCBs	PCB-97	41464-51-1	E1668C	N	mg/kg	0.0044			
RA_SE_PestPCBs	PCB-98	60233-25-2	E1668C	N	mg/kg	0.000282	JN		
RA_SE_PestPCBs	PCB-99	38380-01-7	E1668C	N	mg/kg	0.00399			
RA_SE_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	N	mg/kg	0.0507	JN		
RA_SE_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	N	mg/kg	0.0687	JN		
RA_SE_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	N	mg/kg			0.033	U
RA_SE_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	N	mg/kg			0.011	
RA_SE_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	N	mg/kg	0.0431	JN		
RA_SE_SVOCS	1,1'-Biphenyl	92-52-4	SW8270D LL	N	mg/kg			1.3	U
RA_SE_SVOCS	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	N	mg/kg			1.3	U
RA_SE_SVOCS	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	N	mg/kg			0.27	U
RA_SE_SVOCS	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	N	mg/kg			1.3	U
RA_SE_SVOCS	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	N	mg/kg			1.3	U
RA_SE_SVOCS	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	N	mg/kg			1.3	U
RA_SE_SVOCS	2,4-Dichlorophenol	120-83-2	SW8270D LL	N	mg/kg			0.27	U
RA_SE_SVOCS	2,4-Dimethylphenol	105-67-9	SW8270D LL	N	mg/kg			1.3	U
RA_SE_SVOCS	2,4-Dinitrophenol	51-28-5	SW8270D LL	N	mg/kg			6.8	U
RA_SE_SVOCS	2,4-Dinitrotoluene	121-14-2	SW8270D LL	N	mg/kg			1.3	U
RA_SE_SVOCS	2,6-Dinitrotoluene	606-20-2	SW8270D LL	N	mg/kg			1.3	U
RA_SE_SVOCS	2-Chloronaphthalene	91-58-7	SW8270D LL	N	mg/kg			0.27	U
RA_SE_SVOCS	2-Chlorophenol	95-57-8	SW8270D LL	N	mg/kg			1.3	U
RA_SE_SVOCS	2-Methylnaphthalene	91-57-6	SW8270D LL	N	mg/kg			0.27	U
RA_SE_SVOCS	2-Methylphenol	95-48-7	SW8270D LL	N	mg/kg			1.3	U
RA_SE_SVOCS	2-Nitroaniline	88-74-4	SW8270D LL	N	mg/kg			6.8	U
RA_SE_SVOCS	2-Nitrophenol	88-75-5	SW8270D LL	N	mg/kg			1.3	U
RA_SE_SVOCS	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	N	mg/kg			1.3	U
RA_SE_SVOCS	3-Nitroaniline	99-09-2	SW8270D LL	N	mg/kg			6.8	U
RA_SE_SVOCS	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	N	mg/kg			6.8	U
RA_SE_SVOCS	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	N	mg/kg			1.3	U
RA_SE_SVOCS	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	N	mg/kg			1.3	U
RA_SE_SVOCS	4-Chloroaniline	106-47-8	SW8270D LL	N	mg/kg			1.3	U
RA_SE_SVOCS	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	N	mg/kg			1.3	U
RA_SE_SVOCS	4-Methylphenol	106-44-5	SW8270D LL	N	mg/kg			1.3	U
RA_SE_SVOCS	4-Nitroaniline	100-01-6	SW8270D LL	N	mg/kg			6.8	U

			loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area							
			sys_loc_code	SED2.5B	SED2A	SED2B	SED2C	SED3.5B							
			sys_sample_code	SED2.5B00N	SED2A00N	SED2B00N	SED2C00N	SED3.5B00N							
			sample_date	11/7/2013	11/6/2013	11/5/2013	11/6/2013	11/12/2013							
			sample_type_code	N	N	N	N	N							
			task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013							
			start_depth	0	0	0	0	0							
			end_depth	0.5	0.5	0.5	0.5	0.5							
			depth_unit	ft	ft	ft	ft	ft							
			validated_yn	Y	Y	Y	Y	Y							
RA_SE_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	N	mg/kg						6.8	U			
RA_SE_SVOCs	Acenaphthene	83-32-9	SW8270D LL	N	mg/kg	0.24	U	0.26	U	0.11	U	0.27	U	0.0077	J
RA_SE_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	N	mg/kg	0.24	U	0.062	J	0.051	J	0.067	J	0.016	J
RA_SE_SVOCs	Acetophenone	98-86-2	SW8270D LL	N	mg/kg							1.3	U		
RA_SE_SVOCs	Anthracene	120-12-7	SW8270D LL	N	mg/kg	0.12	J	0.12	J	0.097	J	0.13	J	0.02	J
RA_SE_SVOCs	Atrazine	1912-24-9	SW8270D LL	N	mg/kg							1.3	U		
RA_SE_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	N	mg/kg							1.3	UJ		
RA_SE_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	N	mg/kg	0.61		0.42		0.39		0.59		0.11	
RA_SE_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	N	mg/kg	0.71		0.37		0.45		0.67		0.13	
RA_SE_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	N	mg/kg	1		0.82		0.64		0.73		0.21	
RA_SE_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	N	mg/kg	0.76		0.74		0.52		0.73		0.11	
RA_SE_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	N	mg/kg	0.47		0.28		0.24		0.56		0.066	
RA_SE_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	N	mg/kg							1.3	U		
RA_SE_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	N	mg/kg							0.27	U		
RA_SE_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	N	mg/kg							1.5	J		
RA_SE_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	N	mg/kg							1.3	U		
RA_SE_SVOCs	Caprolactam	105-60-2	SW8270D LL	N	mg/kg							6.8	U		
RA_SE_SVOCs	Carbazole	86-74-8	SW8270D LL	N	mg/kg							0.067	J		
RA_SE_SVOCs	Chrysene	218-01-9	SW8270D LL	N	mg/kg	0.94		0.76		0.62		0.9		0.19	
RA_SE_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	N	mg/kg	0.17	J	0.17	J	0.1	J	0.2	J	0.024	J
RA_SE_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	N	mg/kg							1.3	U		
RA_SE_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	N	mg/kg							1.3	U		
RA_SE_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	N	mg/kg							1.3	U		
RA_SE_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	N	mg/kg							1.3	U		
RA_SE_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	N	mg/kg							1.3	U		
RA_SE_SVOCs	Fluoranthene	206-44-0	SW8270D LL	N	mg/kg	1.4		0.99		1.1		1.3		0.27	
RA_SE_SVOCs	Fluorene	86-73-7	SW8270D LL	N	mg/kg	0.24	U	0.26	U	0.11	U	0.27	U	0.012	J
RA_SE_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	N	mg/kg							0.27	U		
RA_SE_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	N	mg/kg							0.27	U		
RA_SE_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	N	mg/kg							1.3	U		
RA_SE_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	N	mg/kg							1.3	U		
RA_SE_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	N	mg/kg	0.61		0.14	J	0.41		0.58		0.088	
RA_SE_SVOCs	Isophorone	78-59-1	SW8270D LL	N	mg/kg							1.3	U		
RA_SE_SVOCs	Naphthalene	91-20-3	SW8270D LL	N	mg/kg	0.24	U	0.26	U	0.11	U	0.27	U	0.0049	J
RA_SE_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	N	mg/kg							2.7	U		
RA_SE_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	N	mg/kg							0.27	U		
RA_SE_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	N	mg/kg							1.3	U		
RA_SE_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	N	mg/kg							1.3	U		
RA_SE_SVOCs	Phenanthrene	85-01-8	SW8270D LL	N	mg/kg	0.55		0.31		0.37		0.38		0.092	
RA_SE_SVOCs	Phenol	108-95-2	SW8270D LL	N	mg/kg							0.27	U		
RA_SE_SVOCs	Pyrene	129-00-0	SW8270D LL	N	mg/kg	1.2		0.8		0.64		1		0.19	
RA_SE_SVOCs	Total High-molecular-weight PAHs	TOT-PAH-HMW	SW8270D LL	N	mg/kg	7.9		5.5		5.1		7.3		1.4	
RA_SE_SVOCs	Total Low-molecular-weight PAHs	TOT-PAH-LMW	SW8270D LL	N	mg/kg	0.67		0.49		0.52		0.58		0.15	

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
RA_SE_SVOCs	Total PAHs (sum 16)	TOT-PAH	SW8270D LL	N	mg/kg	8.5	6	5.6	7.8
RA_SE_SVOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	1,1-Dichloroethane	75-34-3	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	1,1-Dichloroethene	75-35-4	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	1,2-Dibromoethane	106-93-4	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	1,2-Dichloroethane	107-06-2	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	1,2-Dichloropropane	78-87-5	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	1,4-Dioxane	123-91-1	SW8260B	N	mg/kg				1.6
RA_SE_SVOCs	2-Butanone	78-93-3	SW8260B	N	mg/kg				0.012
RA_SE_SVOCs	2-Hexanone	591-78-6	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	Acetone	67-64-1	SW8260B	N	mg/kg				0.055
RA_SE_SVOCs	Benzene	71-43-2	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	Bromochloromethane	74-97-5	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	Bromodichloromethane	75-27-4	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	Bromoform	75-25-2	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	Bromomethane	74-83-9	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	Carbon Disulfide	75-15-0	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	Carbon Tetrachloride	56-23-5	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	Chlorobenzene	108-90-7	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	Chloroethane	75-00-3	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	Chloroform	67-66-3	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	Chloromethane	74-87-3	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	Cyclohexane	110-82-7	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	Dibromochloromethane	124-48-1	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	Dichlorodifluoromethane	75-71-8	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	Ethylbenzene	100-41-4	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	Isopropylbenzene	98-82-8	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	m, p-Xylene	XYLMP	SW8260B	N	mg/kg				0.016
RA_SE_SVOCs	Methyl Acetate	79-20-9	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	N	mg/kg				0.0082
RA_SE_SVOCs	Methylcyclohexane	108-87-2	SW8260B	N	mg/kg				0.0082



Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
		sys_loc_code	SED2.5B	SED2A	SED2B	SED2C	SED3.5B
		sys_sample_code	SED2.5B00N	SED2A00N	SED2B00N	SED2C00N	SED3.5B00N
		sample_date	11/7/2013	11/6/2013	11/5/2013	11/6/2013	11/12/2013
		sample_type_code	N	N	N	N	N
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
		start_depth	0	0	0	0	0
		end_depth	0.5	0.5	0.5	0.5	0.5
		depth_unit	ft	ft	ft	ft	ft
		validated_yn	Y	Y	Y	Y	Y
RA_SE_VOCs	Methylene Chloride	75-09-2	SW8260B	N	mg/kg	0.0082	U
RA_SE_VOCs	o-Xylene	95-47-6	SW8260B	N	mg/kg	0.0082	U
RA_SE_VOCs	Styrene	100-42-5	SW8260B	N	mg/kg	0.0082	U
RA_SE_VOCs	Tetrachloroethylene	127-18-4	SW8260B	N	mg/kg	0.0082	U
RA_SE_VOCs	Toluene	108-88-3	SW8260B	N	mg/kg	0.0082	U
RA_SE_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	N	mg/kg	0.0082	U
RA_SE_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	N	mg/kg	0.0082	U
RA_SE_VOCs	Trichloroethene	79-01-6	SW8260B	N	mg/kg	0.0082	U
RA_SE_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	N	mg/kg	0.0082	U
RA_SE_VOCs	Vinyl Chloride	75-01-4	SW8260B	N	mg/kg	0.0082	U
RA_SE_VOCs	Xylenes (total)	1330-20-7	SW8260B	N	mg/kg	0.016	U

Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SE_DioxinsFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	N	mg/kg					3.21E-05	J	5.78E-05	J		
RA_SE_DioxinsFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	N	mg/kg					6.61E-06	JN	1.37E-05	JN		
RA_SE_DioxinsFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	N	mg/kg					7.05E-07	JN	1.27E-06	JN		
RA_SE_DioxinsFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	N	mg/kg					6.63E-07	J	1.16E-06	J		
RA_SE_DioxinsFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	N	mg/kg					1.32E-06	JN	2.07E-06	JN		
RA_SE_DioxinsFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	N	mg/kg					1.31E-06	JN	2.8E-06	J		
RA_SE_DioxinsFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	N	mg/kg					1.61E-06	JN	2.05E-06	JN		
RA_SE_DioxinsFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	N	mg/kg					1.58E-06	JN	3.09E-06	J		
RA_SE_DioxinsFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	N	mg/kg					7.05E-08	JN	1.21E-07	JN		
RA_SE_DioxinsFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	N	mg/kg					4E-07	JN	1.23E-06	JN		
RA_SE_DioxinsFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	N	mg/kg					4.5E-07	JN	7.36E-07	JN		
RA_SE_DioxinsFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	N	mg/kg					6.1E-07	J	1.19E-06	JN		
RA_SE_DioxinsFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	N	mg/kg					9.98E-07	JN	1.65E-06	JN		
RA_SE_DioxinsFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	N	mg/kg					2.41E-08	U	3.34E-07	JN		
RA_SE_DioxinsFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	N	mg/kg					4.68E-07	JN	8.25E-07	JN		
RA_SE_DioxinsFurans	OCDD	3268-87-9	SW8290A	N	mg/kg					0.000617	J	0.00142	J		
RA_SE_DioxinsFurans	OCDF	39001-02-0	SW8290A	N	mg/kg					1.38E-05		2.17E-05			
RA_SE_DioxinsFurans	TCDD TEQ Bird	DFTEQ-Bird	SW8290A	N	mg/kg					2.64E-06		5.4E-06			
RA_SE_DioxinsFurans	TCDD TEQ Fish	DFTEQ-Fish	SW8290A	N	mg/kg					1.83E-06		4E-06			
RA_SE_DioxinsFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	N	mg/kg					2.06E-06		4.57E-06			
RA_SE_DioxinsFurans	Total HpCDD	37871-00-4	SW8290A	N	mg/kg					7.7E-05	J	0.00013	J		
RA_SE_DioxinsFurans	Total HpCDF	38998-75-3	SW8290A	N	mg/kg					1.95E-05	JN	3.35E-05	JN		
RA_SE_DioxinsFurans	Total HxCDD	34465-46-8	SW8290A	N	mg/kg					1.51E-05	JN	2.97E-05	JN		
RA_SE_DioxinsFurans	Total HxCDF	55684-94-1	SW8290A	N	mg/kg					2.45E-05	JN	4.11E-05	JN		
RA_SE_DioxinsFurans	Total PeCDD	36088-22-9	SW8290A	N	mg/kg					5.81E-06	JN	9.73E-05	JN		
RA_SE_DioxinsFurans	Total PeCDF	30402-15-4	SW8290A	N	mg/kg					3.8E-05	JN	6.21E-05	JN		
RA_SE_DioxinsFurans	Total TCDD	41903-57-5	SW8290A	N	mg/kg					3.84E-06	JN	7.53E-06	JN		
RA_SE_DioxinsFurans	Total TCDF	55722-27-5	SW8290A	N	mg/kg					6.34E-05	JN	0.000102	JN		
RA_SE_DioxinsFurans	Total TEQ	TTEQ	SW8290A	N	mg/kg					2.06E-06		4.57E-06			
RA_SE_Metals	Aluminum	7429-90-5	SW6020A	T	mg/kg	14000		1900		5900		5300		13000	
RA_SE_Metals	Antimony	7440-36-0	SW6020A	T	mg/kg	0.2	U	0.17		0.52		0.4		0.87	
RA_SE_Metals	Arsenic	7440-38-2	SW6020A	T	mg/kg	1.8		0.79		2.3		2.6		4.1	
RA_SE_Metals	Barium	7440-39-3	SW6020A	T	mg/kg	180		29		61		55		120	
RA_SE_Metals	Beryllium	7440-41-7	SW6020A	T	mg/kg	1.9		0.32		0.76		0.69		1.6	
RA_SE_Metals	Cadmium	7440-43-9	SW6020A	T	mg/kg	0.59		0.24		0.55		0.5		1	
RA_SE_Metals	Calcium	7440-70-2	SW6020A	T	mg/kg	1100		7700		2400	J-	2200		4300	J-
RA_SE_Metals	Chromium	7440-47-3	SW6020A	T	mg/kg	24		11	J+	25		23		54	J+
RA_SE_Metals	Cobalt	7440-48-4	SW6020A	T	mg/kg	16		4.8		13		12		23	
RA_SE_Metals	Copper	7440-50-8	SW6020A	T	mg/kg	17		9.6		29		28		68	
RA_SE_Metals	Iron	7439-89-6	SW6020A	T	mg/kg	16000		8300		16000		14000		32000	
RA_SE_Metals	Lead	7439-92-1	SW6020A	T	mg/kg	16		20		36		33		80	



Attachment A  
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				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	
				sys_loc_code	SED3A	SED3B	SED3C	SED3C	SED4.5B	
				sys_sample_code	SED3A00N	SED3B00N	SED3C00N	SED3C00R	SED4.5B00N	
				sample_date	11/7/2013	11/8/2013	11/7/2013	11/7/2013	11/8/2013	
				sample_type_code	N	N	N	FD	N	
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
				start_depth	0	0	0	0	0	
				end_depth	0.5	0.5	0.5	0.5	0.5	
				depth_unit	ft	ft	ft	ft	ft	
				validated_yn	Y	Y	Y	Y	Y	
RA_SE_Metals	Magnesium	7439-95-4	SW6020A	T	mg/kg	2600	870	2600	2300	4500
RA_SE_Metals	Manganese	7439-96-5	SW6020A	T	mg/kg	300	120	200	190	560
RA_SE_Metals	Mercury	7439-97-6	SW7471B	T	mg/kg	0.064	0.033	0.091	0.16	0.2
RA_SE_Metals	Nickel	7440-02-0	SW6020A	T	mg/kg	26	8	23	21	40
RA_SE_Metals	Potassium	7440-09-7	SW6020A	T	mg/kg	880	500	1100	960	1500
RA_SE_Metals	Selenium	7782-49-2	SW6020A	T	mg/kg	1.2	0.23	0.65	0.66	1.3
RA_SE_Metals	Silver	7440-22-4	SW6020A	T	mg/kg	0.097	0.044	0.14	0.16	0.41
RA_SE_Metals	Sodium	7440-23-5	SW6020A	T	mg/kg	65	75	110	110	150
RA_SE_Metals	Thallium	7440-28-0	SW6020A	T	mg/kg	0.18	0.057	0.18	0.15	0.28
RA_SE_Metals	Vanadium	7440-62-2	SW6020A	T	mg/kg	26	8.5	26	30	42
RA_SE_Metals	Zinc	7440-66-6	SW6020A	T	mg/kg	73	60	130	120	280
RA_SE_Other	Arsenic	7440-38-2	SW6010	SEM	umol/g	0.01	0.004	0.0052	0.0069	0.011
RA_SE_Other	Cadmium	7440-43-9	SW6010	SEM	umol/g	0.0045	0.0017	0.0031	0.0032	0.0058
RA_SE_Other	Chromium	7440-47-3	SW6010	SEM	umol/g	0.061	0.1	0.13	0.11	0.24
RA_SE_Other	Copper	7440-50-8	SW6010	SEM	umol/g	0.14	0.086	0.19	0.21	0.58
RA_SE_Other	Lead	7439-92-1	SW6010	SEM	umol/g	0.042	0.085	0.12	0.12	0.25
RA_SE_Other	Mercury	7439-97-6	SW7470A	SEM	umol/g	0.00013	8.5E-05	0.00013	0.00014	2.4E-05
RA_SE_Other	Nickel	7440-02-0	SW6010	SEM	umol/g	0.12	0.06	0.16	0.15	0.27
RA_SE_Other	Silver	7440-22-4	SW6010	SEM	umol/g	0.0047	0.0016	0.0024	0.0025	0.0028
RA_SE_Other	Sulfide	18496-25-8	SW9034	SEM	umol/g	0.95	0.64	3	3.7	1.1
RA_SE_Other	Total Organic Carbon	7440-44-0	LKTOC	T	mg/kg	46000	6300	37000	43000	43000
RA_SE_Other	Zinc	7440-66-6	SW6010	SEM	umol/g	0.77	0.81	1.4	1.4	2.9
RA_SE_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	N	mg/kg			0.0023	0.0033	
RA_SE_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	N	mg/kg			0.0028	0.0034	
RA_SE_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	N	mg/kg			0.0007	0.0048	
RA_SE_PestPCBs	Aldrin	309-00-2	SW8081B LL	N	mg/kg			0.00037	0.00048	
RA_SE_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	N	mg/kg			0.00044	0.00045	
RA_SE_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	N	mg/kg	0.0084	0.0057	0.0087	0.0091	0.01
RA_SE_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	N	mg/kg	0.0084	0.0057	0.0087	0.0091	0.01
RA_SE_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	N	mg/kg	0.0084	0.0057	0.0087	0.0091	0.01
RA_SE_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	N	mg/kg	0.0084	0.0057	0.0087	0.0091	0.01
RA_SE_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	N	mg/kg	0.0084	0.032	0.13	0.11	0.13
RA_SE_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	N	mg/kg	0.0084	0.0057	0.0087	0.0091	0.01
RA_SE_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	N	mg/kg	0.0084	0.01	0.059	0.051	0.06
RA_SE_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	N	mg/kg	0.0084	0.0057	0.0087	0.0091	0.01
RA_SE_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	N	mg/kg	0.0084	0.0057	0.0087	0.0091	0.01
RA_SE_PestPCBs	beta-BHC	319-85-7	SW8081B LL	N	mg/kg			0.00044	0.00045	
RA_SE_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	N	mg/kg			0.0043	0.0055	
RA_SE_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	N	mg/kg					
RA_SE_PestPCBs	delta-BHC	319-86-8	SW8081B LL	N	mg/kg			0.00044	0.00045	
RA_SE_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	N	mg/kg					
RA_SE_PestPCBs	Dieldrin	60-57-1	SW8081B LL	N	mg/kg			0.00062	0.00082	
RA_SE_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	N	mg/kg			0.00044	0.00045	

				loc_group		RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area			
				sys_loc_code		SED3A	SED3B	SED3C	SED3C	SED4.5B			
				sys_sample_code		SED3A00N	SED3B00N	SED3C00N	SED3C00R	SED4.5B00N			
				sample_date		11/7/2013	11/8/2013	11/7/2013	11/7/2013	11/8/2013			
				sample_type_code		N	N	N	FD	N			
				task_code		Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth		0	0	0	0	0			
				end_depth		0.5	0.5	0.5	0.5	0.5			
				depth_unit		ft	ft	ft	ft	ft			
				validated_yn		Y	Y	Y	Y	Y			
RA_SE_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	N	mg/kg			0.00013	J	0.00052	J		
RA_SE_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	N	mg/kg			0.00022	J	0.00084	J		
RA_SE_PestPCBs	Endrin	72-20-8	SW8081B LL	N	mg/kg			0.0013	J	0.0015	J		
RA_SE_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	N	mg/kg			0.00044	U	0.00056			
RA_SE_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	N	mg/kg			0.0023		0.0023			
RA_SE_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	N	mg/kg			0.00021	J	0.00023	J		
RA_SE_PestPCBs	Heptachlor	76-44-8	SW8081B LL	N	mg/kg			0.0012		0.0014			
RA_SE_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	N	mg/kg			0.00042	J	0.00047	J		
RA_SE_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	N	mg/kg								
RA_SE_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	N	mg/kg								
RA_SE_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	N	mg/kg			0.0078		0.0085			
RA_SE_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	N	mg/kg								
RA_SE_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	N	mg/kg								
RA_SE_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB TEQ Bird	PCBTEQ-Bird	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB, TOTAL	PCB	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	N	mg/kg	0.0084	U	0.042		0.19		0.16	0.19
RA_SE_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	N	mg/kg	0.0084	U	0.041		0.27		0.16	0.18
RA_SE_PestPCBs	PCB-1	2051-60-7	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-10	33146-45-1	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-100	39485-83-1	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-101	37680-73-2	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-102	68194-06-9	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-103	60145-21-3	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-104	56558-16-8	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-105	32598-14-4	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-106	70424-69-0	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-107	70424-68-9	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-108	70362-41-3	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-109	74472-35-8	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-11	2050-67-1	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-110	38380-03-9	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-111	39635-32-0	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-112	74472-36-9	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-113	68194-10-5	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-114	74472-37-0	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-115	74472-38-1	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-116	18259-05-7	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-117	68194-11-6	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-118	31508-00-6	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-119	56558-17-9	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-12	2974-92-7	E1668C	N	mg/kg								



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				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED3A	SED3B	SED3C	SED3C	SED3C	SED3C	SED3C	SED3C	SED3C	SED3C
				sys_sample_code	SED3A00N	SED3B00N	SED3C00N	SED3C00N	SED3C00R	SED3C00R	SED3C00R	SED3C00R	SED3C00R	SED3C00N
				sample_date	11/7/2013	11/8/2013	11/7/2013	11/7/2013	11/7/2013	11/7/2013	11/7/2013	11/7/2013	11/7/2013	11/8/2013
				sample_type_code	N	N	N	N	FD	FD	FD	FD	FD	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-120	68194-12-7	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-121	56558-18-0	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-122	76842-07-4	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-123	65510-44-3	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-124	70424-70-3	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-125	74472-39-2	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-126	57465-28-8	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-127	39635-33-1	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-128	38380-07-3	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-129	55215-18-4	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-13	2974-90-5	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-130	52663-66-8	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-131	61798-70-7	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-132	38380-05-1	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-133	35694-04-3	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-134	52704-70-8	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-135	52744-13-5	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-136	38411-22-2	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-137	35694-06-5	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-138	35065-28-2	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-139	56030-56-9	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-14	34883-41-5	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-140	59291-64-4	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-141	52712-04-6	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-142	41411-61-4	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-143	68194-15-0	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-144	68194-14-9	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-145	74472-40-5	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-146	51908-16-8	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-147	68194-13-8	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-148	74472-41-6	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-149	38380-04-0	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-15	2050-68-2	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-150	68194-08-1	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-151	52663-63-5	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-152	68194-09-2	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-153	35065-27-1	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-154	60145-22-4	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-155	33979-03-2	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-156	38380-08-4	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-157	69782-90-7	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-158	74472-42-7	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-159	39635-35-3	E1668C	N	mg/kg									



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				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED3A	SED3B	SED3C	SED3C	SED4.5B
				sys_sample_code	SED3A00N	SED3B00N	SED3C00N	SED3C00R	SED4.5B00N
				sample_date	11/7/2013	11/8/2013	11/7/2013	11/7/2013	11/8/2013
				sample_type_code	N	N	N	FD	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-16	38444-78-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-160	41411-62-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-161	74472-43-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-162	39635-34-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-163	74472-44-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-164	74472-45-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-165	74472-46-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-166	41411-63-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-167	52663-72-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-168	59291-65-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-169	32774-16-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-17	37680-66-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-170	35065-30-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-171	52663-71-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-172	52663-74-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-173	68194-16-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-174	38411-25-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-175	40186-70-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-176	52663-65-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-177	52663-70-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-178	52663-67-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-179	52663-64-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-18	37680-65-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-180	35065-29-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-181	74472-47-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-182	60145-23-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-183	52663-69-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-184	74472-48-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-185	52712-05-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-186	74472-49-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-187	52663-68-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-188	74487-85-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-189	39635-31-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-19	38444-73-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-190	41411-64-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-191	74472-50-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-192	74472-51-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-193	69782-91-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-194	35694-08-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-195	52663-78-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-196	42740-50-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-197	33091-17-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-198	68194-17-2	E1668C	N	mg/kg				



Attachment A  
Surface Sediment Data  
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				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED3A	SED3B	SED3C	SED3C	SED4.5B
				sys_sample_code	SED3A00N	SED3B00N	SED3C00N	SED3C00R	SED4.5B00N
				sample_date	11/7/2013	11/8/2013	11/7/2013	11/7/2013	11/8/2013
				sample_type_code	N	N	N	FD	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-199	52663-75-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-2	2051-61-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-20	38444-84-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-200	52663-73-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-201	40186-71-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-202	2136-99-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-203	52663-76-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-204	74472-52-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-205	74472-53-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-206	40186-72-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-207	52663-79-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-208	52663-77-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-21	55702-46-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-22	38444-85-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-23	55720-44-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-24	55702-45-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-25	55712-37-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-26	38444-81-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-27	38444-76-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-28	7012-37-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-29	15862-07-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-3	2051-62-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-30	35693-92-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-31	16606-02-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-32	38444-77-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-33	38444-86-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-34	37680-68-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-35	37680-69-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-36	38444-87-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-37	38444-90-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-38	53555-66-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-39	38444-88-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-4	13029-08-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-40	38444-93-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-41	52663-59-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-42	36559-22-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-43	70362-46-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-44	41464-39-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-45	70362-45-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-46	41464-47-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-47	2437-79-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-48	70362-47-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-49	41464-40-8	E1668C	N	mg/kg				



Attachment A  
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				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED3A	SED3B	SED3C	SED3C	SED3C	SED3C	SED3C	SED3C	SED3C
				sys_sample_code	SED3A00N	SED3B00N	SED3C00N	SED3C00N	SED3C00R	SED3C00R	SED3C00R	SED3C00R	SED4.5B00N
				sample_date	11/7/2013	11/8/2013	11/7/2013	11/7/2013	11/7/2013	11/7/2013	11/7/2013	11/7/2013	11/8/2013
				sample_type_code	N	N	N	N	FD	FD	FD	FD	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-5	16605-91-7	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-50	62796-65-0	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-51	68194-04-7	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-52	35693-99-3	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-53	41464-41-9	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-54	15968-05-5	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-55	74338-24-2	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-56	41464-43-1	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-57	70424-67-8	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-58	41464-49-7	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-59	74472-33-6	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-6	25569-80-6	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-60	33025-41-1	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-61	33284-53-6	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-62	54230-22-7	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-63	74472-34-7	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-64	52663-58-8	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-65	33284-54-7	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-66	32598-10-0	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-67	73575-53-8	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-68	73575-52-7	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-69	60233-24-1	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-7	33284-50-3	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-70	32598-11-1	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-71	41464-46-4	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-72	41464-42-0	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-73	74338-23-1	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-74	32690-93-0	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-75	32598-12-2	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-76	70362-48-0	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-77	32598-13-3	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-78	70362-49-1	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-79	41464-48-6	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-8	34883-43-7	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-80	33284-52-5	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-81	70362-50-4	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-82	52663-62-4	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-83	60145-20-2	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-84	52663-60-2	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-85	65510-45-4	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-86	55312-69-1	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-87	38380-02-8	E1668C	N	mg/kg								
RA_SE_PestPCBs	PCB-88	55215-17-3	E1668C	N	mg/kg								

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED3A	SED3B	SED3C	SED3C	SED4.5B
				sys_sample_code	SED3A00N	SED3B00N	SED3C00N	SED3C00R	SED4.5B00N
				sample_date	11/7/2013	11/8/2013	11/7/2013	11/7/2013	11/8/2013
				sample_type_code	N	N	N	FD	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-89	73575-57-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-9	34883-39-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-90	68194-07-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-91	68194-05-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-92	52663-61-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-93	73575-56-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-94	73575-55-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-95	38379-99-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-96	73575-54-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-97	41464-51-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-98	60233-25-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-99	38380-01-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	N	mg/kg		0.017	U	0.018
RA_SE_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	N	mg/kg		0.0071		0.0083
RA_SE_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	N	mg/kg				
RA_SE_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	N	mg/kg		0.34	U	0.36
RA_SE_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	N	mg/kg		0.34	U	0.36
RA_SE_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	N	mg/kg		0.07	U	0.073
RA_SE_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	N	mg/kg		0.34	U	0.36
RA_SE_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	N	mg/kg		0.34	U	0.36
RA_SE_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	N	mg/kg		0.34	U	0.36
RA_SE_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	N	mg/kg		0.07	U	0.073
RA_SE_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	N	mg/kg		0.34	U	0.36
RA_SE_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	N	mg/kg		1.8	U	1.9
RA_SE_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	N	mg/kg		0.34	U	0.36
RA_SE_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	N	mg/kg		0.34	U	0.36
RA_SE_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	N	mg/kg		0.07	U	0.073
RA_SE_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	N	mg/kg		0.34	U	0.36
RA_SE_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	N	mg/kg		0.015	J	0.073
RA_SE_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	N	mg/kg		0.34	U	0.36
RA_SE_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	N	mg/kg		1.8	U	1.9
RA_SE_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	N	mg/kg		0.34	U	0.36
RA_SE_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	N	mg/kg		0.34	U	0.36
RA_SE_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	N	mg/kg		1.8	U	1.9
RA_SE_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	N	mg/kg		1.8	U	1.9
RA_SE_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	N	mg/kg		0.34	U	0.36
RA_SE_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	N	mg/kg		0.34	U	0.36
RA_SE_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	N	mg/kg		0.34	U	0.36
RA_SE_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	N	mg/kg		0.34	U	0.36
RA_SE_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	N	mg/kg		0.071	J	0.36
RA_SE_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	N	mg/kg		1.8	U	1.9

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	loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area					
RA_SE_SVOCs	sys_loc_code	SED3A	SED3B	SED3C	SED3C	SED3C	SED3C	SED4.5B	SED4.5B					
	sys_sample_code	SED3A00N	SED3B00N	SED3C00N	SED3C00N	SED3C00R	SED3C00R	SED4.5B00N	SED4.5B00N					
	sample_date	11/7/2013	11/8/2013	11/7/2013	11/7/2013	11/7/2013	11/7/2013	11/8/2013	11/8/2013					
	sample_type_code	N	N	N	N	FD	FD	N	N					
	task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
	start_depth	0	0	0	0	0	0	0	0					
	end_depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5					
	depth_unit	ft	ft	ft	ft	ft	ft	ft	ft					
	validated_yn	Y	Y	Y	Y	Y	Y	Y	Y					
RA_SE_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	N	mg/kg				1.8	U		1.9	U	
RA_SE_SVOCs	Acenaphthene	83-32-9	SW8270D LL	N	mg/kg	0.0067	U	0.01	J	0.061	J	0.034	J	0.028
RA_SE_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	N	mg/kg	0.0067	U	0.023	U	0.084	J	0.065	J	0.081
RA_SE_SVOCs	Acetophenone	98-86-2	SW8270D LL	N	mg/kg					0.03	J	0.36	U	
RA_SE_SVOCs	Anthracene	120-12-7	SW8270D LL	N	mg/kg	0.0067	U	0.016	J	0.17		0.1		0.095
RA_SE_SVOCs	Atrazine	1912-24-9	SW8270D LL	N	mg/kg					0.34	U	0.36	U	
RA_SE_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	N	mg/kg					0.32	J	0.32	J	
RA_SE_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	N	mg/kg	0.0067	U	0.11		0.62		0.41		0.5
RA_SE_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	N	mg/kg	0.0067	U	0.13		0.7		0.49		0.58
RA_SE_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	N	mg/kg	0.0067	U	0.21		1		0.71		0.95
RA_SE_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	N	mg/kg	0.0067	U	0.14		0.76		0.58		0.68
RA_SE_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	N	mg/kg	0.0067	U	0.09		0.32		0.25		0.38
RA_SE_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	N	mg/kg					0.34	U	0.36	U	
RA_SE_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	N	mg/kg					0.07	U	0.073	U	
RA_SE_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	N	mg/kg					0.84		0.64	J	
RA_SE_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	N	mg/kg					0.078	J	0.36	U	
RA_SE_SVOCs	Caprolactam	105-60-2	SW8270D LL	N	mg/kg					1.8	U	1.9	U	
RA_SE_SVOCs	Carbazole	86-74-8	SW8270D LL	N	mg/kg					0.095		0.063	J	
RA_SE_SVOCs	Chrysene	218-01-9	SW8270D LL	N	mg/kg	0.0067	U	0.19		0.93		0.65		1
RA_SE_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	N	mg/kg	0.0067	U	0.032		0.17		0.13		0.14
RA_SE_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	N	mg/kg					0.34	U	0.36	U	
RA_SE_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	N	mg/kg					0.34	U	0.36	U	
RA_SE_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	N	mg/kg					0.34	U	0.36	U	
RA_SE_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	N	mg/kg					0.34	U	0.36	U	
RA_SE_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	N	mg/kg					0.042	J	0.36	U	
RA_SE_SVOCs	Fluoranthene	206-44-0	SW8270D LL	N	mg/kg	0.0067	U	0.29		1.8		1.2		1.3
RA_SE_SVOCs	Fluorene	86-73-7	SW8270D LL	N	mg/kg	0.0067	U	0.013	J	0.081		0.073	U	0.03
RA_SE_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	N	mg/kg					0.07	U	0.073	U	
RA_SE_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	N	mg/kg					0.07	U	0.073	U	
RA_SE_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	N	mg/kg					0.34	U	0.36	U	
RA_SE_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	N	mg/kg					0.34	U	0.36	U	
RA_SE_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	N	mg/kg	0.0067	U	0.11		0.6		0.44		0.55
RA_SE_SVOCs	Isophorone	78-59-1	SW8270D LL	N	mg/kg					0.34	U	0.36	U	
RA_SE_SVOCs	Naphthalene	91-20-3	SW8270D LL	N	mg/kg	0.0067	U	0.023	U	0.07	U	0.073	U	0.081
RA_SE_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	N	mg/kg					0.7	U	0.73	U	
RA_SE_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	N	mg/kg					0.07	U	0.073	U	
RA_SE_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	N	mg/kg					0.34	U	0.36	U	
RA_SE_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	N	mg/kg					0.34	U	0.36	U	
RA_SE_SVOCs	Phenanthrene	85-01-8	SW8270D LL	N	mg/kg	0.0067	U	0.19		0.64	J	0.36	J	0.44
RA_SE_SVOCs	Phenol	108-95-2	SW8270D LL	N	mg/kg					0.07	U	0.073	U	
RA_SE_SVOCs	Pyrene	129-00-0	SW8270D LL	N	mg/kg	0.0067	U	0.27		0.91		0.64		1.1
RA_SE_SVOCs	Total High-molecular-weight PAHs	TOT-PAH-HMW	SW8270D LL	N	mg/kg	0.0067	U	1.6		7.8		5.5		7.2
RA_SE_SVOCs	Total Low-molecular-weight PAHs	TOT-PAH-LMW	SW8270D LL	N	mg/kg	0.0067	U	0.23		1		0.56		0.59



				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area			
				sys_loc_code	SED3A	SED3B	SED3C	SED3C	SED4.5B			
				sys_sample_code	SED3A00N	SED3B00N	SED3C00N	SED3C00R	SED4.5B00N			
				sample_date	11/7/2013	11/8/2013	11/7/2013	11/7/2013	11/8/2013			
				sample_type_code	N	N	N	FD	N			
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth	0	0	0	0	0			
				end_depth	0.5	0.5	0.5	0.5	0.5			
				depth_unit	ft	ft	ft	ft	ft			
				validated_yn	Y	Y	Y	Y	Y			
RA_SE_VOCs	Total PAHs (sum 16)	TOT-PAH	SW8270D LL	N	mg/kg	0.0067	U	1.8	8.8	6.1	7.8	
RA_SE_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	1,4-Dioxane	123-91-1	SW8260B	N	mg/kg				3.4	U	2.1	U
RA_SE_VOCs	2-Butanone	78-93-3	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	2-Hexanone	591-78-6	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	Acetone	67-64-1	SW8260B	N	mg/kg				0.067	U	0.041	U
RA_SE_VOCs	Benzene	71-43-2	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	Bromochloromethane	74-97-5	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	Bromodichloromethane	75-27-4	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	Bromoform	75-25-2	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	Bromomethane	74-83-9	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	Carbon Disulfide	75-15-0	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	Chlorobenzene	108-90-7	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	Chloroethane	75-00-3	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	Chloroform	67-66-3	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	Chloromethane	74-87-3	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	Cyclohexane	110-82-7	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	Dibromochloromethane	124-48-1	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	Ethylbenzene	100-41-4	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	Isopropylbenzene	98-82-8	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	m, p-Xylene	XYLMP	SW8260B	N	mg/kg				0.034	U	0.021	U
RA_SE_VOCs	Methyl Acetate	79-20-9	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	N	mg/kg				0.017	U	0.01	U
RA_SE_VOCs	Methylcyclohexane	108-87-2	SW8260B	N	mg/kg				0.017	U	0.01	U



Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area				
		sys_loc_code	SED3A	SED3B	SED3C	SED3C	SED4.5B				
		sys_sample_code	SED3A00N	SED3B00N	SED3C00N	SED3C00R	SED4.5B00N				
		sample_date	11/7/2013	11/8/2013	11/7/2013	11/7/2013	11/8/2013				
		sample_type_code	N	N	N	FD	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	0	0	0	0	0				
		end_depth	0.5	0.5	0.5	0.5	0.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
RA_SE_VOCs	Methylene Chloride	75-09-2	SW8260B	N	mg/kg	0.017	U	0.01	U		
RA_SE_VOCs	o-Xylene	95-47-6	SW8260B	N	mg/kg	0.017	U	0.01	U		
RA_SE_VOCs	Styrene	100-42-5	SW8260B	N	mg/kg	0.017	U	0.01	U		
RA_SE_VOCs	Tetrachloroethylene	127-18-4	SW8260B	N	mg/kg	0.017	U	0.01	U		
RA_SE_VOCs	Toluene	108-88-3	SW8260B	N	mg/kg	0.017	U	0.01	U		
RA_SE_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	N	mg/kg	0.017	U	0.01	U		
RA_SE_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	N	mg/kg	0.017	U	0.01	U		
RA_SE_VOCs	Trichloroethene	79-01-6	SW8260B	N	mg/kg	0.017	U	0.01	U		
RA_SE_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	N	mg/kg	0.017	U	0.01	U		
RA_SE_VOCs	Vinyl Chloride	75-01-4	SW8260B	N	mg/kg	0.017	U	0.01	U		
RA_SE_VOCs	Xylenes (total)	1330-20-7	SW8260B	N	mg/kg	0.034	U	0.021	U		



Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area					
		sys_loc_code	SED4A	SED4B	SED4B	SED4C	SED4C	SED5.5B	SED5.5B					
		sys_sample_code	SED4A00N	SED4B00N	SED4B00R	SED4C00N	SED4C00N	SED5.5B00N	SED5.5B00N					
		sample_date	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013					
		sample_type_code	N	N	FD	N	N	N	N					
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
		start_depth	0	0	0	0	0	0	0					
		end_depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5					
		depth_unit	ft	ft	ft	ft	ft	ft	ft					
		validated_yn	Y	Y	Y	Y	Y	Y	Y					
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SE_DioxinsFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	N	mg/kg		0.000149	J	5.03E-05	J				
RA_SE_DioxinsFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	N	mg/kg		3.44E-05	J	1.1E-05	J				
RA_SE_DioxinsFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	N	mg/kg		2.74E-06	J	1.05E-06	J				
RA_SE_DioxinsFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	N	mg/kg		2.38E-06	J	9.3E-07	J				
RA_SE_DioxinsFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	N	mg/kg		7.26E-06	JN	2.29E-06	JN				
RA_SE_DioxinsFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	N	mg/kg		6.81E-06		3.06E-06	J				
RA_SE_DioxinsFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	N	mg/kg		1.14E-05	JN	5.05E-06	JN				
RA_SE_DioxinsFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	N	mg/kg		5.99E-06		2.59E-06	J				
RA_SE_DioxinsFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	N	mg/kg		2.95E-07	J	2.12E-07	JN				
RA_SE_DioxinsFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	N	mg/kg		3.91E-06	JN	7.86E-07	JN				
RA_SE_DioxinsFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	N	mg/kg		1.95E-06	J	7.47E-07	JN				
RA_SE_DioxinsFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	N	mg/kg		4.78E-06		1.81E-06	JN				
RA_SE_DioxinsFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	N	mg/kg		5.61E-06	JN	2.05E-06	JN				
RA_SE_DioxinsFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	N	mg/kg		2.71E-06	JN	7.39E-07	J				
RA_SE_DioxinsFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	N	mg/kg		6.38E-06	JN	1.84E-06	JN				
RA_SE_DioxinsFurans	OCDD	3268-87-9	SW8290A	N	mg/kg		0.006	J	0.00181	J				
RA_SE_DioxinsFurans	OCDF	39001-02-0	SW8290A	N	mg/kg		5.08E-05	J	1.85E-05	J				
RA_SE_DioxinsFurans	TCDD TEQ Bird	DFTEQ-Bird	SW8290A	N	mg/kg		2.31E-05		7.12E-06					
RA_SE_DioxinsFurans	TCDD TEQ Fish	DFTEQ-Fish	SW8290A	N	mg/kg		1.47E-05		4.49E-06					
RA_SE_DioxinsFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	N	mg/kg		1.66E-05		5.11E-06					
RA_SE_DioxinsFurans	Total HpCDD	37871-00-4	SW8290A	N	mg/kg		0.00032	J	0.000109	J				
RA_SE_DioxinsFurans	Total HpCDF	38998-75-3	SW8290A	N	mg/kg		9.09E-05	J	3.13E-05	JN				
RA_SE_DioxinsFurans	Total HxCDD	34465-46-8	SW8290A	N	mg/kg		7.37E-05	JN	2.82E-05	JN				
RA_SE_DioxinsFurans	Total HxCDF	55684-94-1	SW8290A	N	mg/kg		0.000245	JN	9.86E-05	JN				
RA_SE_DioxinsFurans	Total PeCDD	36088-22-9	SW8290A	N	mg/kg		0.000387	JN	0.000124	JN				
RA_SE_DioxinsFurans	Total PeCDF	30402-15-4	SW8290A	N	mg/kg		0.00054	JN	0.00023	JN				
RA_SE_DioxinsFurans	Total TCDD	41903-57-5	SW8290A	N	mg/kg		2.51E-05	JN	8.17E-06	JN				
RA_SE_DioxinsFurans	Total TCDF	55722-27-5	SW8290A	N	mg/kg		0.000965	JN	0.000402	JN				
RA_SE_DioxinsFurans	Total TEQ	TTEQ	SW8290A	N	mg/kg		1.66E-05		5.11E-06					
RA_SE_Metals	Aluminum	7429-90-5	SW6020A	T	mg/kg	9400	4800		6000		10000		11000	
RA_SE_Metals	Antimony	7440-36-0	SW6020A	T	mg/kg	0.47	0.15	J-	0.15	J-	0.64	J-	0.56	J-
RA_SE_Metals	Arsenic	7440-38-2	SW6020A	T	mg/kg	3.6	2.7	J-	3	J-	3.4	J-	4.2	J-
RA_SE_Metals	Barium	7440-39-3	SW6020A	T	mg/kg	120	76		98		110		130	
RA_SE_Metals	Beryllium	7440-41-7	SW6020A	T	mg/kg	1.5	0.73		0.85		1.4		1.5	
RA_SE_Metals	Cadmium	7440-43-9	SW6020A	T	mg/kg	0.97	0.77		1.2		1.1		1.4	
RA_SE_Metals	Calcium	7440-70-2	SW6020A	T	mg/kg	8400	1300		1600		3500		3300	
RA_SE_Metals	Chromium	7440-47-3	SW6020A	T	mg/kg	45	44	J+	73	J+	45		140	
RA_SE_Metals	Cobalt	7440-48-4	SW6020A	T	mg/kg	23	10		11		19		22	
RA_SE_Metals	Copper	7440-50-8	SW6020A	T	mg/kg	66	27		38		66		65	
RA_SE_Metals	Iron	7439-89-6	SW6020A	T	mg/kg	29000	14000		16000		27000		29000	
RA_SE_Metals	Lead	7439-92-1	SW6020A	T	mg/kg	72	100		140		80		90	

Attachment A  
Surface Sediment Data  
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		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area						
		sys_loc_code	SED4A	SED4B	SED4B	SED4C	SED5.5B							
		sys_sample_code	SED4A00N	SED4B00N	SED4B00R	SED4C00N	SED5.5B00N							
		sample_date	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013							
		sample_type_code	N	N	FD	N	N							
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013							
		start_depth	0	0	0	0	0							
		end_depth	0.5	0.5	0.5	0.5	0.5							
		depth_unit	ft	ft	ft	ft	ft							
		validated_yn	Y	Y	Y	Y	Y							
RA_SE_Metals	Magnesium	7439-95-4	SW6020A	T	mg/kg	3300		1300		1700		3600		3100
RA_SE_Metals	Manganese	7439-96-5	SW6020A	T	mg/kg	570	J+	160	J+	170	J+	390		530
RA_SE_Metals	Mercury	7439-97-6	SW7471B	T	mg/kg	0.25	J	0.12	J	0.25	J	0.24		0.28
RA_SE_Metals	Nickel	7440-02-0	SW6020A	T	mg/kg	39		16		20		37		33
RA_SE_Metals	Potassium	7440-09-7	SW6020A	T	mg/kg	1200		790		900		1200		1200
RA_SE_Metals	Selenium	7782-49-2	SW6020A	T	mg/kg	1.4	J-	0.58	J-	0.77	J-	1.3	J-	1.4
RA_SE_Metals	Silver	7440-22-4	SW6020A	T	mg/kg	0.38		0.4		0.63		0.43		1.4
RA_SE_Metals	Sodium	7440-23-5	SW6020A	T	mg/kg	260		54		63		160		140
RA_SE_Metals	Thallium	7440-28-0	SW6020A	T	mg/kg	0.25		0.15		0.19		0.25		0.27
RA_SE_Metals	Vanadium	7440-62-2	SW6020A	T	mg/kg	38		23		27		41		43
RA_SE_Metals	Zinc	7440-66-6	SW6020A	T	mg/kg	250	J	140	J	200	J	260	J-	250
RA_SE_Other	Arsenic	7440-38-2	SW6010	SEM	umol/g	0.023	J	0.014	J	0.0098	J	0.016	J	0.015
RA_SE_Other	Cadmium	7440-43-9	SW6010	SEM	umol/g	0.0044		0.0058		0.0057		0.0073	J	0.0094
RA_SE_Other	Chromium	7440-47-3	SW6010	SEM	umol/g	0.32		0.51		0.62		0.49	J	1.3
RA_SE_Other	Copper	7440-50-8	SW6010	SEM	umol/g	0.54		0.27		0.19		0.75		0.75
RA_SE_Other	Lead	7439-92-1	SW6010	SEM	umol/g	0.26		0.47		0.31		0.29	J	0.31
RA_SE_Other	Mercury	7439-97-6	SW7470A	SEM	umol/g	0.00013	J	9.3E-05	U	9E-05	U	0.00018	J	0.0002
RA_SE_Other	Nickel	7440-02-0	SW6010	SEM	umol/g	0.36		0.18		0.14		0.43		0.36
RA_SE_Other	Silver	7440-22-4	SW6010	SEM	umol/g	0.00067	J	0.00058	J	0.0035	J	0.00065	J	0.0065
RA_SE_Other	Sulfide	18496-25-8	SW9034	SEM	umol/g	1.4	U	1.8		4.7		2.7	J	5.1
RA_SE_Other	Total Organic Carbon	7440-44-0	LKTOC	T	mg/kg	47000		17000		20000		56000		58000
RA_SE_Other	Zinc	7440-66-6	SW6010	SEM	umol/g	2.6		1.8		1.5		3.5		3.3
RA_SE_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	N	mg/kg			0.068	J	0.036	J			
RA_SE_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	N	mg/kg			0.024	J	0.026	J			
RA_SE_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	N	mg/kg			1.5	J	0.0014	J			
RA_SE_PestPCBs	Aldrin	309-00-2	SW8081B LL	N	mg/kg			0.0016	U	0.00034	J			
RA_SE_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	N	mg/kg			0.0016	U	0.00024	J			
RA_SE_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	N	mg/kg	0.011	U	0.0062	U	0.006	U	0.011	U	0.011
RA_SE_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	N	mg/kg	0.011	U	0.0062	U	0.006	U	0.011	U	0.011
RA_SE_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	N	mg/kg	0.011	U	0.0062	U	0.006	U	0.011	U	0.011
RA_SE_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	N	mg/kg	0.011	U	0.0062	U	0.006	U	0.011	U	0.011
RA_SE_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	N	mg/kg	0.1	J	0.21	J	0.57	J	0.28	J	0.011
RA_SE_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	N	mg/kg	0.011	U	0.0062	U	0.006	U	0.011	U	0.011
RA_SE_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	N	mg/kg	0.048	J	0.097	J	0.3	J	0.11	J	0.16
RA_SE_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	N	mg/kg	0.011	U	0.0062	U	0.006	U	0.011	U	0.011
RA_SE_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	N	mg/kg	0.011	U	0.0062	U	0.006	U	0.011	U	0.011
RA_SE_PestPCBs	beta-BHC	319-85-7	SW8081B LL	N	mg/kg			0.0011	J	0.0011	J			
RA_SE_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	N	mg/kg			0.0061	J	0.0044	J			
RA_SE_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	N	mg/kg									
RA_SE_PestPCBs	delta-BHC	319-86-8	SW8081B LL	N	mg/kg			0.0016	U	0.0015	J			
RA_SE_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	N	mg/kg									
RA_SE_PestPCBs	Dieldrin	60-57-1	SW8081B LL	N	mg/kg			0.0012	J	0.0019	J			
RA_SE_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	N	mg/kg			0.0016	U	0.0015	U			

				loc_group		RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code		SED4A	SED4B	SED4B	SED4C	SED5.5B
				sys_sample_code		SED4A00N	SED4B00N	SED4B00R	SED4C00N	SED5.5B00N
				sample_date		11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013
				sample_type_code		N	N	FD	N	N
				task_code		Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth		0	0	0	0	0
				end_depth		0.5	0.5	0.5	0.5	0.5
				depth_unit		ft	ft	ft	ft	ft
				validated_yn		Y	Y	Y	Y	Y
RA_SE_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	N	mg/kg		0.00099	J	0.0015	
RA_SE_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	N	mg/kg		0.00079	J	0.0027	
RA_SE_PestPCBs	Endrin	72-20-8	SW8081B LL	N	mg/kg		0.0031	J	0.0044	J
RA_SE_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	N	mg/kg		0.00083	J	0.0015	U
RA_SE_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	N	mg/kg		0.00091	J	0.0019	J
RA_SE_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	N	mg/kg		0.0016	U	0.00051	J
RA_SE_PestPCBs	Heptachlor	76-44-8	SW8081B LL	N	mg/kg		0.0033		0.003	
RA_SE_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	N	mg/kg		0.0015	J	0.0013	J
RA_SE_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	N	mg/kg					
RA_SE_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	N	mg/kg					
RA_SE_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	N	mg/kg		0.011	J	0.012	J
RA_SE_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	N	mg/kg					
RA_SE_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	N	mg/kg					
RA_SE_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB TEQ Bird	PCBTEQ-Bird	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB, TOTAL	PCB	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	N	mg/kg	0.15	0.31		0.87	0.39
RA_SE_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	N	mg/kg	0.15	0.31		0.87	0.39
RA_SE_PestPCBs	PCB-1	2051-60-7	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-10	33146-45-1	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-100	39485-83-1	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-101	37680-73-2	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-102	68194-06-9	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-103	60145-21-3	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-104	56558-16-8	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-105	32598-14-4	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-106	70424-69-0	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-107	70424-68-9	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-108	70362-41-3	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-109	74472-35-8	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-11	2050-67-1	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-110	38380-03-9	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-111	39635-32-0	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-112	74472-36-9	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-113	68194-10-5	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-114	74472-37-0	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-115	74472-38-1	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-116	18259-05-7	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-117	68194-11-6	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-118	31508-00-6	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-119	56558-17-9	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-12	2974-92-7	E1668C	N	mg/kg					

Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

			loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
			sys_loc_code	SED4A	SED4B	SED4B	SED4C	SED5.5B
			sys_sample_code	SED4A00N	SED4B00N	SED4B00R	SED4C00N	SED5.5B00N
			sample_date	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013
			sample_type_code	N	N	FD	N	N
			task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
			start_depth	0	0	0	0	0
			end_depth	0.5	0.5	0.5	0.5	0.5
			depth_unit	ft	ft	ft	ft	ft
			validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-120	68194-12-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-121	56558-18-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-122	76842-07-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-123	65510-44-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-124	70424-70-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-125	74472-39-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-126	57465-28-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-127	39635-33-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-128	38380-07-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-129	55215-18-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-13	2974-90-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-130	52663-66-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-131	61798-70-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-132	38380-05-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-133	35694-04-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-134	52704-70-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-135	52744-13-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-136	38411-22-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-137	35694-06-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-138	35065-28-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-139	56030-56-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-14	34883-41-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-140	59291-64-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-141	52712-04-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-142	41411-61-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-143	68194-15-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-144	68194-14-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-145	74472-40-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-146	51908-16-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-147	68194-13-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-148	74472-41-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-149	38380-04-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-15	2050-68-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-150	68194-08-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-151	52663-63-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-152	68194-09-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-153	35065-27-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-154	60145-22-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-155	33979-03-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-156	38380-08-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-157	69782-90-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-158	74472-42-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-159	39635-35-3	E1668C	N	mg/kg			



Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
		sys_loc_code	SED4A	SED4B	SED4B	SED4C	SED5.5B	SED5.5B00N
		sys_sample_code	SED4A00N	SED4B00N	SED4B00R	SED4C00N	SED5.5B00N	SED5.5B00N
		sample_date	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013
		sample_type_code	N	N	FD	N	N	N
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
		start_depth	0	0	0	0	0	0
		end_depth	0.5	0.5	0.5	0.5	0.5	0.5
		depth_unit	ft	ft	ft	ft	ft	ft
		validated_yn	Y	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-16	38444-78-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-160	41411-62-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-161	74472-43-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-162	39635-34-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-163	74472-44-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-164	74472-45-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-165	74472-46-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-166	41411-63-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-167	52663-72-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-168	59291-65-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-169	32774-16-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-17	37680-66-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-170	35065-30-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-171	52663-71-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-172	52663-74-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-173	68194-16-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-174	38411-25-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-175	40186-70-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-176	52663-65-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-177	52663-70-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-178	52663-67-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-179	52663-64-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-18	37680-65-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-180	35065-29-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-181	74472-47-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-182	60145-23-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-183	52663-69-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-184	74472-48-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-185	52712-05-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-186	74472-49-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-187	52663-68-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-188	74487-85-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-189	39635-31-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-19	38444-73-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-190	41411-64-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-191	74472-50-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-192	74472-51-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-193	69782-91-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-194	35694-08-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-195	52663-78-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-196	42740-50-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-197	33091-17-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-198	68194-17-2	E1668C	N	mg/kg			



Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED4A	SED4B	SED4B	SED4C	SED5.5B
				sys_sample_code	SED4A00N	SED4B00N	SED4B00R	SED4C00N	SED5.5B00N
				sample_date	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013
				sample_type_code	N	N	FD	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-199	52663-75-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-2	2051-61-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-20	38444-84-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-200	52663-73-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-201	40186-71-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-202	2136-99-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-203	52663-76-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-204	74472-52-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-205	74472-53-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-206	40186-72-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-207	52663-79-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-208	52663-77-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-21	55702-46-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-22	38444-85-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-23	55720-44-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-24	55702-45-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-25	55712-37-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-26	38444-81-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-27	38444-76-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-28	7012-37-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-29	15862-07-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-3	2051-62-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-30	35693-92-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-31	16606-02-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-32	38444-77-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-33	38444-86-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-34	37680-68-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-35	37680-69-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-36	38444-87-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-37	38444-90-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-38	53555-66-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-39	38444-88-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-4	13029-08-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-40	38444-93-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-41	52663-59-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-42	36559-22-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-43	70362-46-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-44	41464-39-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-45	70362-45-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-46	41464-47-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-47	2437-79-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-48	70362-47-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-49	41464-40-8	E1668C	N	mg/kg				





Attachment A  
Surface Sediment Data  
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		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
		sys_loc_code	SED4A	SED4B	SED4B	SED4C	SED5.5B	
		sys_sample_code	SED4A00N	SED4B00N	SED4B00R	SED4C00N	SED5.5B00N	
		sample_date	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013	
		sample_type_code	N	N	FD	N	N	
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
		start_depth	0	0	0	0	0	
		end_depth	0.5	0.5	0.5	0.5	0.5	
		depth_unit	ft	ft	ft	ft	ft	
		validated_yn	Y	Y	Y	Y	Y	
RA_SE_PestPCBs	PCB-5	16605-91-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-50	62796-65-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-51	68194-04-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-52	35693-99-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-53	41464-41-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-54	15968-05-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-55	74338-24-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-56	41464-43-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-57	70424-67-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-58	41464-49-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-59	74472-33-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-6	25569-80-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-60	33025-41-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-61	33284-53-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-62	54230-22-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-63	74472-34-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-64	52663-58-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-65	33284-54-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-66	32598-10-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-67	73575-53-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-68	73575-52-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-69	60233-24-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-7	33284-50-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-70	32598-11-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-71	41464-46-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-72	41464-42-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-73	74338-23-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-74	32690-93-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-75	32598-12-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-76	70362-48-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-77	32598-13-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-78	70362-49-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-79	41464-48-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-8	34883-43-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-80	33284-52-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-81	70362-50-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-82	52663-62-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-83	60145-20-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-84	52663-60-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-85	65510-45-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-86	55312-69-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-87	38380-02-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-88	55215-17-3	E1668C	N	mg/kg			

Attachment A  
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				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED4A	SED4B	SED4B	SED4C	SED5.5B
				sys_sample_code	SED4A00N	SED4B00N	SED4B00R	SED4C00N	SED5.5B00N
				sample_date	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013
				sample_type_code	N	N	FD	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-89	73575-57-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-9	34883-39-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-90	68194-07-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-91	68194-05-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-92	52663-61-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-93	73575-56-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-94	73575-55-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-95	38379-99-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-96	73575-54-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-97	41464-51-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-98	60233-25-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-99	38380-01-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	N	mg/kg	0.062	U	0.06	U
RA_SE_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	N	mg/kg	0.01		0.008	
RA_SE_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	N	mg/kg				
RA_SE_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	N	mg/kg	0.12	U	0.018	J
RA_SE_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	N	mg/kg	0.12	U	0.12	U
RA_SE_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	N	mg/kg	0.025	U	0.024	U
RA_SE_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	N	mg/kg	0.12	U	0.12	U
RA_SE_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	N	mg/kg	0.12	U	0.12	U
RA_SE_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	N	mg/kg	0.12	U	0.12	U
RA_SE_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	N	mg/kg	0.025	U	0.024	U
RA_SE_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	N	mg/kg	0.12	U	0.027	J
RA_SE_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	N	mg/kg	0.63	U	0.61	U
RA_SE_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	N	mg/kg	0.12	U	0.12	U
RA_SE_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	N	mg/kg	0.12	U	0.12	U
RA_SE_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	N	mg/kg	0.025	U	0.024	U
RA_SE_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	N	mg/kg	0.12	U	0.12	U
RA_SE_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	N	mg/kg	0.041		0.082	
RA_SE_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	N	mg/kg	0.12	U	0.12	U
RA_SE_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	N	mg/kg	0.63	U	0.61	U
RA_SE_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	N	mg/kg	0.12	U	0.12	U
RA_SE_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	N	mg/kg	0.12	U	0.12	U
RA_SE_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	N	mg/kg	0.63	U	0.61	U
RA_SE_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	N	mg/kg	0.63	U	0.61	U
RA_SE_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	N	mg/kg	0.12	U	0.12	U
RA_SE_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	N	mg/kg	0.12	U	0.12	U
RA_SE_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	N	mg/kg	0.12	U	0.12	U
RA_SE_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	N	mg/kg	0.12	U	0.12	U
RA_SE_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	N	mg/kg	0.015	J	0.027	J
RA_SE_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	N	mg/kg	0.63	U	0.61	U

Attachment A  
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				loc_group		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area
RA_SE_SVOCs				sys_loc_code		SED4A		SED4B		SED4B		SED4C		SED5.5B
				sys_sample_code		SED4A00N		SED4B00N		SED4B00R		SED4C00N		SED5.5B00N
				sample_date		11/12/2013		11/12/2013		11/12/2013		11/12/2013		11/12/2013
				sample_type_code		N		N		FD		N		N
				task_code		Phase2-2013		Phase2-2013		Phase2-2013		Phase2-2013		Phase2-2013
				start_depth		0		0		0		0		0
				end_depth		0.5		0.5		0.5		0.5		0.5
				depth_unit		ft		ft		ft		ft		ft
				validated_yn		Y		Y		Y		Y		Y
RA_SE_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	N	mg/kg			0.63	U	0.61	U			
RA_SE_SVOCs	Acenaphthene	83-32-9	SW8270D LL	N	mg/kg	0.034	J	0.049	J	0.19	J	0.022	J	0.033
RA_SE_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	N	mg/kg	0.073	J	0.09		0.12		0.08	J	0.085
RA_SE_SVOCs	Acetophenone	98-86-2	SW8270D LL	N	mg/kg			0.12	U	0.12	U			
RA_SE_SVOCs	Anthracene	120-12-7	SW8270D LL	N	mg/kg	0.1		0.096	J	0.35	J	0.087	J	0.11
RA_SE_SVOCs	Atrazine	1912-24-9	SW8270D LL	N	mg/kg			0.12	U	0.12	U			
RA_SE_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	N	mg/kg				R		R			
RA_SE_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	N	mg/kg	0.41		0.35	J	1	J	0.47		0.41
RA_SE_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	N	mg/kg	0.53		0.34	J	0.93	J	0.55		0.51
RA_SE_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	N	mg/kg	0.87		0.4	J	0.91	J	0.94		0.78
RA_SE_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	N	mg/kg	0.74		0.29	J	0.74	J	0.74		0.63
RA_SE_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	N	mg/kg	0.3		0.15	J	0.49	J	0.32		0.29
RA_SE_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	N	mg/kg			0.12	U	0.12	U			
RA_SE_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	N	mg/kg			0.025	U	0.024	U			
RA_SE_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	N	mg/kg			0.19	J	0.21	J			
RA_SE_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	N	mg/kg			0.12	U	0.12	U			
RA_SE_SVOCs	Caprolactam	105-60-2	SW8270D LL	N	mg/kg			0.63	U	0.61	U			
RA_SE_SVOCs	Carbazole	86-74-8	SW8270D LL	N	mg/kg			0.029		0.11				
RA_SE_SVOCs	Chrysene	218-01-9	SW8270D LL	N	mg/kg	0.8		0.41	J	1.1	J	0.83		0.8
RA_SE_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	N	mg/kg	0.16		0.068		0.17		0.16		0.11
RA_SE_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	N	mg/kg			0.12	U	0.07	J			
RA_SE_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	N	mg/kg			0.12	U	0.12	U			
RA_SE_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	N	mg/kg			0.12	U	0.12	U			
RA_SE_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	N	mg/kg			0.12	U	0.12	U			
RA_SE_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	N	mg/kg			0.12	U	0.12	UJ			
RA_SE_SVOCs	Fluoranthene	206-44-0	SW8270D LL	N	mg/kg	0.99		0.64	J	2.5	J	1		0.91
RA_SE_SVOCs	Fluorene	86-73-7	SW8270D LL	N	mg/kg	0.035	J	0.057	J	0.19	J	0.039	J	0.054
RA_SE_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	N	mg/kg			0.025	U	0.024	U			
RA_SE_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	N	mg/kg			0.025	U	0.024	U			
RA_SE_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	N	mg/kg			0.12	U	0.12	U			
RA_SE_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	N	mg/kg			0.12	U	0.12	U			
RA_SE_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	N	mg/kg	0.53		0.22	J	0.6	J	0.59		0.41
RA_SE_SVOCs	Isophorone	78-59-1	SW8270D LL	N	mg/kg			0.12	U	0.12	U			
RA_SE_SVOCs	Naphthalene	91-20-3	SW8270D LL	N	mg/kg	0.024	J	0.036		0.061		0.022	J	0.036
RA_SE_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	N	mg/kg			0.25	U	0.24	U			
RA_SE_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	N	mg/kg			0.025	U	0.024	U			
RA_SE_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	N	mg/kg			0.12	U	0.12	U			
RA_SE_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	N	mg/kg			0.12	U	0.12	U			
RA_SE_SVOCs	Phenanthrene	85-01-8	SW8270D LL	N	mg/kg	0.32		0.45	J	1.9	J	0.32		0.4
RA_SE_SVOCs	Phenol	108-95-2	SW8270D LL	N	mg/kg			0.025	U	0.024	U			
RA_SE_SVOCs	Pyrene	129-00-0	SW8270D LL	N	mg/kg	0.76		0.65	J	1.8	J	0.84		0.87
RA_SE_SVOCs	Total High-molecular-weight PAHs	TOT-PAH-HMW	SW8270D LL	N	mg/kg	6.1		3.5		10		6.4		5.7
RA_SE_SVOCs	Total Low-molecular-weight PAHs	TOT-PAH-LMW	SW8270D LL	N	mg/kg	0.59		0.78		2.8		0.57		0.72

		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area			
		sys_loc_code	SED4A	SED4B	SED4B	SED4C	SED5.5B				
		sys_sample_code	SED4A00N	SED4B00N	SED4B00R	SED4C00N	SED5.5B00N				
		sample_date	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013				
		sample_type_code	N	N	FD	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	0	0	0	0	0				
		end_depth	0.5	0.5	0.5	0.5	0.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
RA_SE_SVOCs	Total PAHs (sum 16)	TOT-PAH	SW8270D LL	N	mg/kg	6.7		4.3	13	7	6.4
RA_SE_SVOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	1,1-Dichloroethane	75-34-3	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	1,1-Dichloroethene	75-35-4	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	1,2-Dibromoethane	106-93-4	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	1,2-Dichloroethane	107-06-2	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	1,2-Dichloropropane	78-87-5	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	1,4-Dioxane	123-91-1	SW8260B	N	mg/kg			1.5	U	1.4	U
RA_SE_SVOCs	2-Butanone	78-93-3	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	2-Hexanone	591-78-6	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	Acetone	67-64-1	SW8260B	N	mg/kg			0.03	U	0.027	U
RA_SE_SVOCs	Benzene	71-43-2	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	Bromochloromethane	74-97-5	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	Bromodichloromethane	75-27-4	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	Bromoform	75-25-2	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	Bromomethane	74-83-9	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	Carbon Disulfide	75-15-0	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	Carbon Tetrachloride	56-23-5	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	Chlorobenzene	108-90-7	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	Chloroethane	75-00-3	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	Chloroform	67-66-3	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	Chloromethane	74-87-3	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	Cyclohexane	110-82-7	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	Dibromochloromethane	124-48-1	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	Dichlorodifluoromethane	75-71-8	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	Ethylbenzene	100-41-4	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	Isopropylbenzene	98-82-8	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	m, p-Xylene	XYLMP	SW8260B	N	mg/kg			0.015	U	0.014	U
RA_SE_SVOCs	Methyl Acetate	79-20-9	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	N	mg/kg			0.0074	U	0.0068	U
RA_SE_SVOCs	Methylcyclohexane	108-87-2	SW8260B	N	mg/kg			0.0074	U	0.0068	U



Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
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		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area				
		sys_loc_code	SED4A	SED4B	SED4B	SED4C	SED5.5B					
		sys_sample_code	SED4A00N	SED4B00N	SED4B00R	SED4C00N	SED5.5B00N					
		sample_date	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013					
		sample_type_code	N	N	FD	N	N					
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
		start_depth	0	0	0	0	0					
		end_depth	0.5	0.5	0.5	0.5	0.5					
		depth_unit	ft	ft	ft	ft	ft					
		validated_yn	Y	Y	Y	Y	Y					
RA_SE_VOCs	Methylene Chloride	75-09-2	SW8260B	N	mg/kg	0.0074	U	0.0068	U			
RA_SE_VOCs	o-Xylene	95-47-6	SW8260B	N	mg/kg	0.0074	U	0.0068	U			
RA_SE_VOCs	Styrene	100-42-5	SW8260B	N	mg/kg	0.0074	U	0.0068	U			
RA_SE_VOCs	Tetrachloroethylene	127-18-4	SW8260B	N	mg/kg	0.0074	U	0.0068	U			
RA_SE_VOCs	Toluene	108-88-3	SW8260B	N	mg/kg	0.0074	U	0.0068	U			
RA_SE_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	N	mg/kg	0.0074	U	0.0068	U			
RA_SE_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	N	mg/kg	0.0074	U	0.0068	U			
RA_SE_VOCs	Trichloroethene	79-01-6	SW8260B	N	mg/kg	0.0074	U	0.0068	U			
RA_SE_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	N	mg/kg	0.0074	U	0.0068	U			
RA_SE_VOCs	Vinyl Chloride	75-01-4	SW8260B	N	mg/kg	0.0074	U	0.0068	U			
RA_SE_VOCs	Xylenes (total)	1330-20-7	SW8260B	N	mg/kg	0.015	U	0.014	U			

Attachment A  
Surface Sediment Data  
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		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area						
		sys_loc_code	SED5A	SED5B	SED5C	SED6.5D	SED6.5E	SED6.5E	SED6.5E						
		sys_sample_code	SED5A00N	SED5B00N	SED5C00N	SED6.5D00N	SED6.5E00N	SED6.5E00N	SED6.5E00N						
		sample_date	11/8/2013	11/8/2013	11/11/2013	11/25/2013	11/25/2013	11/25/2013	11/25/2013						
		sample_type_code	N	N	N	N	N	N	N						
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013						
		start_depth	0	0	0	0	0	0	0						
		end_depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5						
		depth_unit	ft	ft	ft	ft	ft	ft	ft						
		validated_yn	Y	Y	Y	Y	Y	Y	Y						
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SE_DioxinsFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	N	mg/kg									0.00108	
RA_SE_DioxinsFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	N	mg/kg									0.000307	
RA_SE_DioxinsFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	N	mg/kg									4.16E-05	
RA_SE_DioxinsFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	N	mg/kg									8.35E-05	
RA_SE_DioxinsFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	N	mg/kg									0.000158	JN
RA_SE_DioxinsFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	N	mg/kg									0.000131	
RA_SE_DioxinsFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	N	mg/kg									8.54E-05	
RA_SE_DioxinsFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	N	mg/kg									0.000196	
RA_SE_DioxinsFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	N	mg/kg									6.56E-06	
RA_SE_DioxinsFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	N	mg/kg									7.6E-05	
RA_SE_DioxinsFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	N	mg/kg									4.59E-05	
RA_SE_DioxinsFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	N	mg/kg									8.13E-05	JN
RA_SE_DioxinsFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	N	mg/kg									6.65E-05	
RA_SE_DioxinsFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	N	mg/kg									1.37E-05	
RA_SE_DioxinsFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	N	mg/kg									2.56E-05	JN
RA_SE_DioxinsFurans	OCDD	3268-87-9	SW8290A	N	mg/kg									0.00861	J
RA_SE_DioxinsFurans	OCDF	39001-02-0	SW8290A	N	mg/kg									0.000289	
RA_SE_DioxinsFurans	TCDD TEQ Bird	DFTEQ-Bird	SW8290A	N	mg/kg									0.00025	
RA_SE_DioxinsFurans	TCDD TEQ Fish	DFTEQ-Fish	SW8290A	N	mg/kg									0.00021	
RA_SE_DioxinsFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	N	mg/kg									0.000205	
RA_SE_DioxinsFurans	Total HpCDD	37871-00-4	SW8290A	N	mg/kg									0.00204	
RA_SE_DioxinsFurans	Total HpCDF	38998-75-3	SW8290A	N	mg/kg									0.000597	
RA_SE_DioxinsFurans	Total HxCDD	34465-46-8	SW8290A	N	mg/kg									0.0015	
RA_SE_DioxinsFurans	Total HxCDF	55684-94-1	SW8290A	N	mg/kg									0.000885	JN
RA_SE_DioxinsFurans	Total PeCDD	36088-22-9	SW8290A	N	mg/kg									0.00216	JN
RA_SE_DioxinsFurans	Total PeCDF	30402-15-4	SW8290A	N	mg/kg									0.00097	JN
RA_SE_DioxinsFurans	Total TCDD	41903-57-5	SW8290A	N	mg/kg									0.000512	JN
RA_SE_DioxinsFurans	Total TCDF	55722-27-5	SW8290A	N	mg/kg									0.000849	JN
RA_SE_DioxinsFurans	Total TEQ	TTEQ	SW8290A	N	mg/kg									0.000205	
RA_SE_Metals	Aluminum	7429-90-5	SW6020A	T	mg/kg	11000		15000		8000		13000		6000	
RA_SE_Metals	Antimony	7440-36-0	SW6020A	T	mg/kg	0.59		0.8		0.27	J-	0.77	J-	1.4	J-
RA_SE_Metals	Arsenic	7440-38-2	SW6020A	T	mg/kg	3.5		4.6		5.3	J-	14	J-	5.9	J-
RA_SE_Metals	Barium	7440-39-3	SW6020A	T	mg/kg	97		130		87	J+	120	J-	79	
RA_SE_Metals	Beryllium	7440-41-7	SW6020A	T	mg/kg	1.3		1.7		0.89		1.8		0.73	
RA_SE_Metals	Cadmium	7440-43-9	SW6020A	T	mg/kg	0.81		1.1		1		2.8	J-	3.8	J-
RA_SE_Metals	Calcium	7440-70-2	SW6020A	T	mg/kg	3200	J-	4000	J-	1800	J-	1400	J-	3000	
RA_SE_Metals	Chromium	7440-47-3	SW6020A	T	mg/kg	44	J+	57	J+	57	J+	47	J-	31	
RA_SE_Metals	Cobalt	7440-48-4	SW6020A	T	mg/kg	18		23		12	J	17	J-	16	
RA_SE_Metals	Copper	7440-50-8	SW6020A	T	mg/kg	51		70		40		130		96	
RA_SE_Metals	Iron	7439-89-6	SW6020A	T	mg/kg	27000		33000		23000		17000		16000	
RA_SE_Metals	Lead	7439-92-1	SW6020A	T	mg/kg	63		84		120	J	140		130	

Attachment A  
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				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area				
				sys_loc_code	SED5A	SED5B	SED5C	SED6.5D	SED6.5E				
				sys_sample_code	SED5A00N	SED5B00N	SED5C00N	SED6.5D00N	SED6.5E00N				
				sample_date	11/8/2013	11/8/2013	11/11/2013	11/25/2013	11/25/2013				
				sample_type_code	N	N	N	N	N				
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
				start_depth	0	0	0	0	0				
				end_depth	0.5	0.5	0.5	0.5	0.5				
				depth_unit	ft	ft	ft	ft	ft				
				validated_yn	Y	Y	Y	Y	Y				
RA_SE_Metals	Magnesium	7439-95-4	SW6020A	T	mg/kg	3700		1800		1800		2400	
RA_SE_Metals	Manganese	7439-96-5	SW6020A	T	mg/kg	430	J-	560	J-	300		130	J-
RA_SE_Metals	Mercury	7439-97-6	SW7471B	T	mg/kg	0.14		0.2		0.38		0.27	J
RA_SE_Metals	Nickel	7440-02-0	SW6020A	T	mg/kg	33		41		20		91	J-
RA_SE_Metals	Potassium	7440-09-7	SW6020A	T	mg/kg	1300		1500		850		590	
RA_SE_Metals	Selenium	7782-49-2	SW6020A	T	mg/kg	1.1		1.4		0.56		1.5	J-
RA_SE_Metals	Silver	7440-22-4	SW6020A	T	mg/kg	0.32		0.43		0.9		0.8	
RA_SE_Metals	Sodium	7440-23-5	SW6020A	T	mg/kg	120		170		71		140	
RA_SE_Metals	Thallium	7440-28-0	SW6020A	T	mg/kg	0.23		0.28		0.27		0.53	J-
RA_SE_Metals	Vanadium	7440-62-2	SW6020A	T	mg/kg	36	J+	49	J+	61	J+	250	J+
RA_SE_Metals	Zinc	7440-66-6	SW6020A	T	mg/kg	220		290		160	J+	300	J-
RA_SE_Other	Arsenic	7440-38-2	SW6010	SEM	umol/g	0.022	J	0.026	J	0.031	J	0.057	
RA_SE_Other	Cadmium	7440-43-9	SW6010	SEM	umol/g	0.0036		0.0048		0.0084		0.033	
RA_SE_Other	Chromium	7440-47-3	SW6010	SEM	umol/g	0.3		0.36		0.74	J	0.51	
RA_SE_Other	Copper	7440-50-8	SW6010	SEM	umol/g	0.47		0.64		0.67		1.5	
RA_SE_Other	Lead	7439-92-1	SW6010	SEM	umol/g	0.23		0.3		0.58		0.62	
RA_SE_Other	Mercury	7439-97-6	SW7470A	SEM	umol/g	0.0001	J	0.0001	J	3E-05	J	1.3E-05	J
RA_SE_Other	Nickel	7440-02-0	SW6010	SEM	umol/g	0.32		0.42		0.57	J	1	
RA_SE_Other	Silver	7440-22-4	SW6010	SEM	umol/g	0.00092	J	0.0012	J	0.0044	J	0.0016	J
RA_SE_Other	Sulfide	18496-25-8	SW9034	SEM	umol/g	1.8	J	2.1	J	3.4	J	4.6	J
RA_SE_Other	Total Organic Carbon	7440-44-0	LKTOC	T	mg/kg	35000		39000		31000		50000	
RA_SE_Other	Zinc	7440-66-6	SW6010	SEM	umol/g	2.3		3.1		3.3		6.1	
RA_SE_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	N	mg/kg								0.0024
RA_SE_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	N	mg/kg								0.0035
RA_SE_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	N	mg/kg								0.0019
RA_SE_PestPCBs	Aldrin	309-00-2	SW8081B LL	N	mg/kg								0.00025
RA_SE_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	N	mg/kg								0.00076
RA_SE_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	N	mg/kg	0.009	U	0.011	U	0.0093	U	0.008	U
RA_SE_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	N	mg/kg	0.009	U	0.011	U	0.0093	U	0.008	U
RA_SE_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	N	mg/kg	0.009	U	0.011	U	0.0093	U	0.008	U
RA_SE_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	N	mg/kg	0.009	U	0.011	U	0.0093	U	0.008	U
RA_SE_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	N	mg/kg	0.082	J	0.13	J	0.51	J	0.77	J
RA_SE_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	N	mg/kg	0.009	U	0.011	U	0.0093	U	0.008	U
RA_SE_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	N	mg/kg	0.043	J	0.095	J	0.24	J	1	J
RA_SE_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	N	mg/kg	0.009	U	0.011	U	0.0093	U	0.008	U
RA_SE_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	N	mg/kg	0.009	U	0.011	U	0.0093	U	0.008	U
RA_SE_PestPCBs	beta-BHC	319-85-7	SW8081B LL	N	mg/kg								0.00094
RA_SE_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	N	mg/kg								0.0058
RA_SE_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	N	mg/kg								
RA_SE_PestPCBs	delta-BHC	319-86-8	SW8081B LL	N	mg/kg								0.0017
RA_SE_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	N	mg/kg								
RA_SE_PestPCBs	Dieldrin	60-57-1	SW8081B LL	N	mg/kg								0.0013
RA_SE_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	N	mg/kg								0.00076

			loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	
			sys_loc_code	SED5A	SED5B	SED5C	SED6.5D	SED6.5E		
			sys_sample_code	SED5A00N	SED5B00N	SED5C00N	SED6.5D00N	SED6.5E00N		
			sample_date	11/8/2013	11/8/2013	11/11/2013	11/25/2013	11/25/2013		
			sample_type_code	N	N	N	N	N		
			task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
			start_depth	0	0	0	0	0		
			end_depth	0.5	0.5	0.5	0.5	0.5		
			depth_unit	ft	ft	ft	ft	ft		
			validated_yn	Y	Y	Y	Y	Y		
RA_SE_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	N	mg/kg				0.0015	J
RA_SE_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	N	mg/kg				0.0029	J
RA_SE_PestPCBs	Endrin	72-20-8	SW8081B LL	N	mg/kg				0.0055	J
RA_SE_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	N	mg/kg				0.00049	J
RA_SE_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	N	mg/kg				0.0027	J
RA_SE_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	N	mg/kg				0.0004	J
RA_SE_PestPCBs	Heptachlor	76-44-8	SW8081B LL	N	mg/kg				0.0008	J
RA_SE_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	N	mg/kg				0.0021	J
RA_SE_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	N	mg/kg					
RA_SE_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	N	mg/kg					
RA_SE_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	N	mg/kg				0.007	J
RA_SE_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	N	mg/kg					
RA_SE_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	N	mg/kg					
RA_SE_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB TEQ Bird	PCBTEQ-Bird	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB, TOTAL	PCB	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	N	mg/kg	0.13	0.23	0.75	1.8	0.4
RA_SE_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	N	mg/kg	0.17	0.23	0.75	1.8	0.4
RA_SE_PestPCBs	PCB-1	2051-60-7	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-10	33146-45-1	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-100	39485-83-1	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-101	37680-73-2	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-102	68194-06-9	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-103	60145-21-3	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-104	56558-16-8	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-105	32598-14-4	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-106	70424-69-0	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-107	70424-68-9	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-108	70362-41-3	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-109	74472-35-8	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-11	2050-67-1	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-110	38380-03-9	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-111	39635-32-0	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-112	74472-36-9	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-113	68194-10-5	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-114	74472-37-0	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-115	74472-38-1	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-116	18259-05-7	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-117	68194-11-6	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-118	31508-00-6	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-119	56558-17-9	E1668C	N	mg/kg					
RA_SE_PestPCBs	PCB-12	2974-92-7	E1668C	N	mg/kg					





Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
	sys_loc_code	SED5A	SED5B	SED5C	SED6.5D	SED6.5E	
	sys_sample_code	SED5A00N	SED5B00N	SED5C00N	SED6.5D00N	SED6.5E00N	
	sample_date	11/8/2013	11/8/2013	11/11/2013	11/25/2013	11/25/2013	
	sample_type_code	N	N	N	N	N	
	task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
	start_depth	0	0	0	0	0	
	end_depth	0.5	0.5	0.5	0.5	0.5	
	depth_unit	ft	ft	ft	ft	ft	
	validated_yn	Y	Y	Y	Y	Y	
RA_SE_PestPCBs	PCB-120	68194-12-7	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-121	56558-18-0	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-122	76842-07-4	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-123	65510-44-3	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-124	70424-70-3	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-125	74472-39-2	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-126	57465-28-8	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-127	39635-33-1	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-128	38380-07-3	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-129	55215-18-4	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-13	2974-90-5	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-130	52663-66-8	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-131	61798-70-7	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-132	38380-05-1	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-133	35694-04-3	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-134	52704-70-8	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-135	52744-13-5	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-136	38411-22-2	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-137	35694-06-5	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-138	35065-28-2	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-139	56030-56-9	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-14	34883-41-5	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-140	59291-64-4	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-141	52712-04-6	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-142	41411-61-4	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-143	68194-15-0	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-144	68194-14-9	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-145	74472-40-5	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-146	51908-16-8	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-147	68194-13-8	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-148	74472-41-6	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-149	38380-04-0	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-15	2050-68-2	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-150	68194-08-1	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-151	52663-63-5	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-152	68194-09-2	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-153	35065-27-1	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-154	60145-22-4	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-155	33979-03-2	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-156	38380-08-4	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-157	69782-90-7	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-158	74472-42-7	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-159	39635-35-3	E1668C	N	mg/kg		



Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
	sys_loc_code	SED5A	SED5B	SED5C	SED6.5D	SED6.5E		
	sys_sample_code	SED5A00N	SED5B00N	SED5C00N	SED6.5D00N	SED6.5E00N		
	sample_date	11/8/2013	11/8/2013	11/11/2013	11/25/2013	11/25/2013		
	sample_type_code	N	N	N	N	N		
	task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
	start_depth	0	0	0	0	0		
	end_depth	0.5	0.5	0.5	0.5	0.5		
	depth_unit	ft	ft	ft	ft	ft		
	validated_yn	Y	Y	Y	Y	Y		
RA_SE_PestPCBs	PCB-16	38444-78-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-160	41411-62-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-161	74472-43-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-162	39635-34-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-163	74472-44-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-164	74472-45-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-165	74472-46-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-166	41411-63-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-167	52663-72-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-168	59291-65-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-169	32774-16-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-17	37680-66-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-170	35065-30-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-171	52663-71-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-172	52663-74-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-173	68194-16-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-174	38411-25-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-175	40186-70-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-176	52663-65-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-177	52663-70-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-178	52663-67-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-179	52663-64-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-18	37680-65-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-180	35065-29-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-181	74472-47-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-182	60145-23-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-183	52663-69-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-184	74472-48-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-185	52712-05-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-186	74472-49-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-187	52663-68-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-188	74487-85-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-189	39635-31-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-19	38444-73-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-190	41411-64-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-191	74472-50-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-192	74472-51-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-193	69782-91-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-194	35694-08-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-195	52663-78-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-196	42740-50-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-197	33091-17-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-198	68194-17-2	E1668C	N	mg/kg			



Attachment A  
Surface Sediment Data  
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				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED5A	SED5B	SED5C	SED6.5D	SED6.5E
				sys_sample_code	SED5A00N	SED5B00N	SED5C00N	SED6.5D00N	SED6.5E00N
				sample_date	11/8/2013	11/8/2013	11/11/2013	11/25/2013	11/25/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-199	52663-75-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-2	2051-61-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-20	38444-84-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-200	52663-73-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-201	40186-71-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-202	2136-99-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-203	52663-76-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-204	74472-52-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-205	74472-53-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-206	40186-72-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-207	52663-79-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-208	52663-77-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-21	55702-46-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-22	38444-85-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-23	55720-44-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-24	55702-45-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-25	55712-37-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-26	38444-81-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-27	38444-76-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-28	7012-37-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-29	15862-07-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-3	2051-62-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-30	35693-92-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-31	16606-02-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-32	38444-77-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-33	38444-86-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-34	37680-68-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-35	37680-69-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-36	38444-87-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-37	38444-90-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-38	53555-66-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-39	38444-88-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-4	13029-08-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-40	38444-93-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-41	52663-59-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-42	36559-22-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-43	70362-46-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-44	41464-39-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-45	70362-45-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-46	41464-47-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-47	2437-79-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-48	70362-47-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-49	41464-40-8	E1668C	N	mg/kg				



Attachment A  
Surface Sediment Data  
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3400 Benning Rd, N.E., Washington DC 20019

		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
		sys_loc_code	SED5A	SED5B	SED5C	SED6.5D	SED6.5E	
		sys_sample_code	SED5A00N	SED5B00N	SED5C00N	SED6.5D00N	SED6.5E00N	
		sample_date	11/8/2013	11/8/2013	11/11/2013	11/25/2013	11/25/2013	
		sample_type_code	N	N	N	N	N	
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
		start_depth	0	0	0	0	0	
		end_depth	0.5	0.5	0.5	0.5	0.5	
		depth_unit	ft	ft	ft	ft	ft	
		validated_yn	Y	Y	Y	Y	Y	
RA_SE_PestPCBs	PCB-5	16605-91-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-50	62796-65-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-51	68194-04-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-52	35693-99-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-53	41464-41-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-54	15968-05-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-55	74338-24-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-56	41464-43-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-57	70424-67-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-58	41464-49-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-59	74472-33-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-6	25569-80-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-60	33025-41-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-61	33284-53-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-62	54230-22-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-63	74472-34-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-64	52663-58-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-65	33284-54-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-66	32598-10-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-67	73575-53-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-68	73575-52-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-69	60233-24-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-7	33284-50-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-70	32598-11-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-71	41464-46-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-72	41464-42-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-73	74338-23-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-74	32690-93-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-75	32598-12-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-76	70362-48-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-77	32598-13-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-78	70362-49-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-79	41464-48-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-8	34883-43-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-80	33284-52-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-81	70362-50-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-82	52663-62-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-83	60145-20-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-84	52663-60-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-85	65510-45-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-86	55312-69-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-87	38380-02-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-88	55215-17-3	E1668C	N	mg/kg			

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED5A	SED5B	SED5C	SED6.5D	SED6.5E
				sys_sample_code	SED5A00N	SED5B00N	SED5C00N	SED6.5D00N	SED6.5E00N
				sample_date	11/8/2013	11/8/2013	11/11/2013	11/25/2013	11/25/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-89	73575-57-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-9	34883-39-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-90	68194-07-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-91	68194-05-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-92	52663-61-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-93	73575-56-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-94	73575-55-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-95	38379-99-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-96	73575-54-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-97	41464-51-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-98	60233-25-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-99	38380-01-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	N	mg/kg				0.031 U
RA_SE_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	N	mg/kg				0.0077
RA_SE_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	N	mg/kg				
RA_SE_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	N	mg/kg				0.3 U
RA_SE_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	N	mg/kg				0.3 U
RA_SE_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	N	mg/kg				0.061 U
RA_SE_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	N	mg/kg				0.3 U
RA_SE_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	N	mg/kg				0.3 U
RA_SE_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	N	mg/kg				0.3 U
RA_SE_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	N	mg/kg				0.061 U
RA_SE_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	N	mg/kg				0.3 U
RA_SE_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	N	mg/kg				1.6 U
RA_SE_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	N	mg/kg				0.3 U
RA_SE_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	N	mg/kg				0.3 U
RA_SE_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	N	mg/kg				0.061 U
RA_SE_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	N	mg/kg				0.3 U
RA_SE_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	N	mg/kg				0.074
RA_SE_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	N	mg/kg				0.3 U
RA_SE_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	N	mg/kg				1.6 U
RA_SE_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	N	mg/kg				0.3 U
RA_SE_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	N	mg/kg				0.3 U
RA_SE_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	N	mg/kg				1.6 U
RA_SE_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	N	mg/kg				1.6 U
RA_SE_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	N	mg/kg				0.3 U
RA_SE_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	N	mg/kg				0.3 U
RA_SE_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	N	mg/kg				0.3 U
RA_SE_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	N	mg/kg				0.3 U
RA_SE_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	N	mg/kg				0.055 J
RA_SE_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	N	mg/kg				1.6 U

				loc_group		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area	
				sys_loc_code		SED5A		SED5B		SED5C		SED6.5D		SED6.5E	
				sys_sample_code		SED5A00N		SED5B00N		SED5C00N		SED6.5D00N		SED6.5E00N	
				sample_date		11/8/2013		11/8/2013		11/11/2013		11/25/2013		11/25/2013	
				sample_type_code		N		N		N		N		N	
				task_code		Phase2-2013		Phase2-2013		Phase2-2013		Phase2-2013		Phase2-2013	
				start_depth		0		0		0		0		0	
				end_depth		0.5		0.5		0.5		0.5		0.5	
				depth_unit		ft		ft		ft		ft		ft	
				validated_yn		Y		Y		Y		Y		Y	
RA_SE_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	N	mg/kg									1.6	U
RA_SE_SVOCs	Acenaphthene	83-32-9	SW8270D LL	N	mg/kg	0.031	J	0.018	J	0.08		0.057	J	0.061	U
RA_SE_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	N	mg/kg	0.072	U	0.087	U	0.17		0.035	J	0.048	J
RA_SE_SVOCs	Acetophenone	98-86-2	SW8270D LL	N	mg/kg									0.044	J
RA_SE_SVOCs	Anthracene	120-12-7	SW8270D LL	N	mg/kg	0.071	J	0.058	J	0.21		0.06	J	0.089	
RA_SE_SVOCs	Atrazine	1912-24-9	SW8270D LL	N	mg/kg									0.3	U
RA_SE_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	N	mg/kg									0.064	J
RA_SE_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	N	mg/kg	0.37		0.37		0.63		0.19		0.4	
RA_SE_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	N	mg/kg	0.45		0.44		0.78		0.19		0.46	
RA_SE_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	N	mg/kg	0.73		0.8		1.1		0.32		0.73	
RA_SE_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	N	mg/kg	0.64		0.63		0.83		0.19		0.53	
RA_SE_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	N	mg/kg	0.29		0.25		0.39		0.096	J	0.25	
RA_SE_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	N	mg/kg									0.3	U
RA_SE_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	N	mg/kg									0.061	U
RA_SE_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	N	mg/kg									1.3	
RA_SE_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	N	mg/kg									0.3	U
RA_SE_SVOCs	Caprolactam	105-60-2	SW8270D LL	N	mg/kg									1.6	U
RA_SE_SVOCs	Carbazole	86-74-8	SW8270D LL	N	mg/kg									0.06	J
RA_SE_SVOCs	Chrysene	218-01-9	SW8270D LL	N	mg/kg	0.75		0.72		0.96		0.32		0.74	
RA_SE_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	N	mg/kg	0.14		0.096		0.17		0.052	J	0.14	
RA_SE_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	N	mg/kg									0.3	U
RA_SE_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	N	mg/kg									0.3	U
RA_SE_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	N	mg/kg									0.3	U
RA_SE_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	N	mg/kg									0.041	J
RA_SE_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	N	mg/kg									0.3	U
RA_SE_SVOCs	Fluoranthene	206-44-0	SW8270D LL	N	mg/kg	0.84		0.8		1.1		0.37		1	
RA_SE_SVOCs	Fluorene	86-73-7	SW8270D LL	N	mg/kg	0.045	J	0.041	J	0.07	J	0.063	J	0.05	J
RA_SE_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	N	mg/kg									0.061	U
RA_SE_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	N	mg/kg									0.061	U
RA_SE_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	N	mg/kg									0.3	U
RA_SE_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	N	mg/kg									0.3	U
RA_SE_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	N	mg/kg	0.5		0.48		0.62		0.14	J	0.42	
RA_SE_SVOCs	Isophorone	78-59-1	SW8270D LL	N	mg/kg									0.3	U
RA_SE_SVOCs	Naphthalene	91-20-3	SW8270D LL	N	mg/kg	0.072	U	0.087	U	0.075	U	0.052	J	0.033	J
RA_SE_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	N	mg/kg									0.61	U
RA_SE_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	N	mg/kg									0.061	U
RA_SE_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	N	mg/kg									0.3	U
RA_SE_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	N	mg/kg									0.3	U
RA_SE_SVOCs	Phenanthrene	85-01-8	SW8270D LL	N	mg/kg	0.3		0.26		0.56		0.19		0.37	
RA_SE_SVOCs	Phenol	108-95-2	SW8270D LL	N	mg/kg									0.061	U
RA_SE_SVOCs	Pyrene	129-00-0	SW8270D LL	N	mg/kg	0.78		0.73		1.1		0.41		0.91	
RA_SE_SVOCs	Total High-molecular-weight PAHs	TOT-PAH-HMW	SW8270D LL	N	mg/kg	5.5		5.3		7.7		2.3		5.6	
RA_SE_SVOCs	Total Low-molecular-weight PAHs	TOT-PAH-LMW	SW8270D LL	N	mg/kg	0.45		0.38		1.1		0.46		0.59	

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area		
				sys_loc_code	SED5A	SED5B	SED5C	SED6.5D	SED6.5E		
				sys_sample_code	SED5A00N	SED5B00N	SED5C00N	SED6.5D00N	SED6.5E00N		
				sample_date	11/8/2013	11/8/2013	11/11/2013	11/25/2013	11/25/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	0	0	0	0	0		
				end_depth	0.5	0.5	0.5	0.5	0.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
RA_SE_SVOCs	Total PAHs (sum 16)	TOT-PAH	SW8270D LL	N	mg/kg	5.9	5.7	8.8	2.7	6.2	
RA_SE_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	1,4-Dioxane	123-91-1	SW8260B	N	mg/kg					2.1	U
RA_SE_VOCs	2-Butanone	78-93-3	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	2-Hexanone	591-78-6	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	Acetone	67-64-1	SW8260B	N	mg/kg					0.043	U
RA_SE_VOCs	Benzene	71-43-2	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	Bromochloromethane	74-97-5	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	Bromodichloromethane	75-27-4	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	Bromoform	75-25-2	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	Bromomethane	74-83-9	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	Carbon Disulfide	75-15-0	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	Chlorobenzene	108-90-7	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	Chloroethane	75-00-3	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	Chloroform	67-66-3	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	Chloromethane	74-87-3	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	Cyclohexane	110-82-7	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	Dibromochloromethane	124-48-1	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	Ethylbenzene	100-41-4	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	Isopropylbenzene	98-82-8	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	m, p-Xylene	XYLMP	SW8260B	N	mg/kg					0.021	U
RA_SE_VOCs	Methyl Acetate	79-20-9	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	N	mg/kg					0.011	U
RA_SE_VOCs	Methylcyclohexane	108-87-2	SW8260B	N	mg/kg					0.011	U



Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	
		sys_loc_code	SED5A	SED5B	SED5C	SED6.5D	SED6.5E		
		sys_sample_code	SED5A00N	SED5B00N	SED5C00N	SED6.5D00N	SED6.5E00N		
		sample_date	11/8/2013	11/8/2013	11/11/2013	11/25/2013	11/25/2013		
		sample_type_code	N	N	N	N	N		
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
		start_depth	0	0	0	0	0		
		end_depth	0.5	0.5	0.5	0.5	0.5		
		depth_unit	ft	ft	ft	ft	ft		
		validated_yn	Y	Y	Y	Y	Y		
RA_SE_VOCs	Methylene Chloride	75-09-2	SW8260B	N	mg/kg			0.011	U
RA_SE_VOCs	o-Xylene	95-47-6	SW8260B	N	mg/kg			0.011	U
RA_SE_VOCs	Styrene	100-42-5	SW8260B	N	mg/kg			0.011	U
RA_SE_VOCs	Tetrachloroethylene	127-18-4	SW8260B	N	mg/kg			0.011	U
RA_SE_VOCs	Toluene	108-88-3	SW8260B	N	mg/kg			0.011	U
RA_SE_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	N	mg/kg			0.011	U
RA_SE_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	N	mg/kg			0.011	U
RA_SE_VOCs	Trichloroethene	79-01-6	SW8260B	N	mg/kg			0.011	U
RA_SE_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	N	mg/kg			0.011	U
RA_SE_VOCs	Vinyl Chloride	75-01-4	SW8260B	N	mg/kg			0.011	U
RA_SE_VOCs	Xylenes (total)	1330-20-7	SW8260B	N	mg/kg			0.021	U



		loc_group		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area	
		sys_loc_code		SED6A		SED6B		SED6B		SED6C		SED7.5D	
		sys_sample_code		SED6A00N		SED6B00N		SED6B00R		SED6C00N		SED7.5D00N	
		sample_date		11/13/2013		11/13/2013		11/13/2013		11/14/2013		11/25/2013	
		sample_type_code		N		N		FD		N		N	
		task_code		Phase2-2013		Phase2-2013		Phase2-2013		Phase2-2013		Phase2-2013	
		start_depth		0		0		0		0		0	
		end_depth		0.5		0.5		0.5		0.5		0.5	
		depth_unit		ft		ft		ft		ft		ft	
		validated_yn		Y		Y		Y		Y		Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result_value	report_result_unit	interpreted_qualifiers	report_result_value	report_result_unit	interpreted_qualifiers	report_result_value	report_result_unit	interpreted_qualifiers
RA_SE_DioxinsFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	N	mg/kg			4.72E-05	J		0.000105	J	
RA_SE_DioxinsFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	N	mg/kg			1.63E-05	JN		2.1E-05	JN	
RA_SE_DioxinsFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	N	mg/kg			8.09E-07	J		1.64E-06	JN	
RA_SE_DioxinsFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	N	mg/kg			8.61E-07	J		1.19E-06	JN	
RA_SE_DioxinsFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	N	mg/kg			1.57E-06	J		1.67E-06	J	
RA_SE_DioxinsFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	N	mg/kg			2.08E-06	JN		3.42E-06	J	
RA_SE_DioxinsFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	N	mg/kg			1.93E-06	JN		2.75E-06	JN	
RA_SE_DioxinsFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	N	mg/kg			2.42E-06	JN		2.53E-06	J	
RA_SE_DioxinsFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	N	mg/kg			1.09E-07	JN		1.41E-07	JN	
RA_SE_DioxinsFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	N	mg/kg			8.59E-07	JN		9.97E-07	JN	
RA_SE_DioxinsFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	N	mg/kg			3.7E-07	JN		3.6E-07	JN	
RA_SE_DioxinsFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	N	mg/kg			8.88E-07	JN		9E-07	J	
RA_SE_DioxinsFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	N	mg/kg			9.88E-07	JN		1.01E-06	JN	
RA_SE_DioxinsFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	N	mg/kg			2.64E-07	JN		2.56E-07	JN	
RA_SE_DioxinsFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	N	mg/kg			9.6E-07	J		1.22E-06		
RA_SE_DioxinsFurans	OCDD	3268-87-9	SW8290A	N	mg/kg			0.00144			0.00206		
RA_SE_DioxinsFurans	OCDF	39001-02-0	SW8290A	N	mg/kg			1.87E-05	J		4.64E-05	JN	
RA_SE_DioxinsFurans	TCDD TEQ Bird	DFTEQ-Bird	SW8290A	N	mg/kg			4.23E-06			4.95E-06		
RA_SE_DioxinsFurans	TCDD TEQ Fish	DFTEQ-Fish	SW8290A	N	mg/kg			2.97E-06			3.58E-06		
RA_SE_DioxinsFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	N	mg/kg			3.59E-06			4.86E-06		
RA_SE_DioxinsFurans	Total HpCDD	37871-00-4	SW8290A	N	mg/kg			0.000111	J		0.00021	J	
RA_SE_DioxinsFurans	Total HpCDF	38998-75-3	SW8290A	N	mg/kg			3.09E-05	JN		5.76E-05	JN	
RA_SE_DioxinsFurans	Total HxCDD	34465-46-8	SW8290A	N	mg/kg			2.34E-05	JN		2.8E-05	JN	
RA_SE_DioxinsFurans	Total HxCDF	55684-94-1	SW8290A	N	mg/kg			3.76E-05	JN		6.04E-05	JN	
RA_SE_DioxinsFurans	Total PeCDD	36088-22-9	SW8290A	N	mg/kg			0.000189	JN		6.53E-05	JN	
RA_SE_DioxinsFurans	Total PeCDF	30402-15-4	SW8290A	N	mg/kg			6.28E-05	JN		6.48E-05	JN	
RA_SE_DioxinsFurans	Total TCDD	41903-57-5	SW8290A	N	mg/kg			5.06E-06	JN		5.03E-06	JN	
RA_SE_DioxinsFurans	Total TCDF	55722-27-5	SW8290A	N	mg/kg			8.77E-05	JN		0.0001	JN	
RA_SE_DioxinsFurans	Total TEQ	TTEQ	SW8290A	N	mg/kg			3.59E-06			4.86E-06		
RA_SE_Metals	Aluminum	7429-90-5	SW6020A	T	mg/kg	2000		5500			5600		9800
RA_SE_Metals	Antimony	7440-36-0	SW6020A	T	mg/kg	0.13	J-	0.35	J-		0.35	J-	0.49
RA_SE_Metals	Arsenic	7440-38-2	SW6020A	T	mg/kg	1.2	J-	1.8	J-		2	J-	3.6
RA_SE_Metals	Barium	7440-39-3	SW6020A	T	mg/kg	29		60			74		89
RA_SE_Metals	Beryllium	7440-41-7	SW6020A	T	mg/kg	0.37		0.77			0.86		1.3
RA_SE_Metals	Cadmium	7440-43-9	SW6020A	T	mg/kg	0.33		0.5			0.54		1.2
RA_SE_Metals	Calcium	7440-70-2	SW6020A	T	mg/kg	870		2100			2500		2800
RA_SE_Metals	Chromium	7440-47-3	SW6020A	T	mg/kg	14		25			45		80
RA_SE_Metals	Cobalt	7440-48-4	SW6020A	T	mg/kg	5.3		12			14		19
RA_SE_Metals	Copper	7440-50-8	SW6020A	T	mg/kg	13		34			35		65
RA_SE_Metals	Iron	7439-89-6	SW6020A	T	mg/kg	8200		18000			18000		26000
RA_SE_Metals	Lead	7439-92-1	SW6020A	T	mg/kg	51		47			40		71
													150

Attachment A  
Surface Sediment Data  
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				loc_group		RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	
				sys_loc_code		SED6A	SED6B	SED6B	SED6C	SED7.5D	
				sys_sample_code		SED6A00N	SED6B00N	SED6B00R	SED6C00N	SED7.5D00N	
				sample_date		11/13/2013	11/13/2013	11/13/2013	11/14/2013	11/25/2013	
				sample_type_code		N	N	FD	N	N	
				task_code		Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
				start_depth		0	0	0	0	0	
				end_depth		0.5	0.5	0.5	0.5	0.5	
				depth_unit		ft	ft	ft	ft	ft	
				validated_yn		Y	Y	Y	Y	Y	
RA_SE_Metals	Magnesium	7439-95-4	SW6020A	T	mg/kg	640	2200	2300	2500	1800	
RA_SE_Metals	Manganese	7439-96-5	SW6020A	T	mg/kg	100	260	300	390	180	J-
RA_SE_Metals	Mercury	7439-97-6	SW7471B	T	mg/kg	0.045	J- 0.095	J- 0.096	J- 0.23	J+ 0.28	J
RA_SE_Metals	Nickel	7440-02-0	SW6020A	T	mg/kg	7.7	22	24	36	59	J-
RA_SE_Metals	Potassium	7440-09-7	SW6020A	T	mg/kg	380	950	950	1100	650	
RA_SE_Metals	Selenium	7782-49-2	SW6020A	T	mg/kg	0.33	J- 0.7	J- 0.74	J- 1.3	J- 1	J-
RA_SE_Metals	Silver	7440-22-4	SW6020A	T	mg/kg	0.12	0.17	0.17	0.58	0.89	
RA_SE_Metals	Sodium	7440-23-5	SW6020A	T	mg/kg	25	80	93	120	110	J-
RA_SE_Metals	Thallium	7440-28-0	SW6020A	T	mg/kg	0.07	0.13	0.16	0.23	0.35	J-
RA_SE_Metals	Vanadium	7440-62-2	SW6020A	T	mg/kg	11	20	22	37	180	J+
RA_SE_Metals	Zinc	7440-66-6	SW6020A	T	mg/kg	57	J- 140	J- 150	J- 260	J- 280	J-
RA_SE_Other	Arsenic	7440-38-2	SW6010	SEM	umol/g	0.0099	J 0.0082	UJ 0.0094	J 0.012	0.055	
RA_SE_Other	Cadmium	7440-43-9	SW6010	SEM	umol/g	0.0042	0.0031	0.0034	0.0078	0.0097	
RA_SE_Other	Chromium	7440-47-3	SW6010	SEM	umol/g	0.42	0.27	0.28	0.44	1.4	
RA_SE_Other	Copper	7440-50-8	SW6010	SEM	umol/g	0.25	0.35	0.36	0.74	2.9	
RA_SE_Other	Lead	7439-92-1	SW6010	SEM	umol/g	0.31	0.15	0.15	0.28	0.69	
RA_SE_Other	Mercury	7439-97-6	SW7470A	SEM	umol/g	4.4E-05	J 9.4E-05	J 9.3E-05	J 7.6E-05	J 5E-05	J
RA_SE_Other	Nickel	7440-02-0	SW6010	SEM	umol/g	0.16	0.24	0.25	0.39	0.71	
RA_SE_Other	Silver	7440-22-4	SW6010	SEM	umol/g	0.00071	J 0.0012	J 0.0021	UJ 0.0011	J 0.0013	J
RA_SE_Other	Sulfide	18496-25-8	SW9034	SEM	umol/g	1.9	J 1	UJ 1	UJ 0.92	J 5.3	J
RA_SE_Other	Total Organic Carbon	7440-44-0	LKTOC	T	mg/kg	11000	20000	28000	44000	40000	
RA_SE_Other	Zinc	7440-66-6	SW6010	SEM	umol/g	1.6	1.8	1.9	3.2	5.1	
RA_SE_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	N	mg/kg		0.0037	0.0049			
RA_SE_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	N	mg/kg		0.0043	0.005			
RA_SE_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	N	mg/kg		0.0037	0.0051	J		
RA_SE_PestPCBs	Aldrin	309-00-2	SW8081B LL	N	mg/kg		0.00072	0.001	J		
RA_SE_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	N	mg/kg		0.00072	U 0.00076	U		
RA_SE_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	N	mg/kg	0.0055	U 0.0072	U 0.0076	U 0.011	U 0.0077	U
RA_SE_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	N	mg/kg	0.0055	U 0.0072	U 0.0076	U 0.011	U 0.0077	U
RA_SE_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	N	mg/kg	0.0055	U 0.0072	U 0.0076	U 0.011	U 0.0077	U
RA_SE_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	N	mg/kg	0.0055	U 0.0072	U 0.0076	U 0.011	U 0.0077	U
RA_SE_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	N	mg/kg	0.11	J 0.063	J 0.063	J 0.13	J 0.39	J
RA_SE_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	N	mg/kg	0.0055	U 0.0072	U 0.0076	U 0.011	U 0.0077	U
RA_SE_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	N	mg/kg	0.033	J 0.059	J 0.027	J 0.11	J 0.48	J
RA_SE_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	N	mg/kg	0.0055	U 0.0072	U 0.0076	U 0.011	U 0.0077	U
RA_SE_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	N	mg/kg	0.0055	U 0.0072	U 0.0076	U 0.011	U 0.0077	U
RA_SE_PestPCBs	beta-BHC	319-85-7	SW8081B LL	N	mg/kg		0.00072	U 0.00076	U		
RA_SE_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	N	mg/kg		0.0051	J 0.0087	J		
RA_SE_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	N	mg/kg						
RA_SE_PestPCBs	delta-BHC	319-86-8	SW8081B LL	N	mg/kg		0.00027	J 0.00076	J		
RA_SE_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	N	mg/kg						
RA_SE_PestPCBs	Dieldrin	60-57-1	SW8081B LL	N	mg/kg		0.0014	J 0.0014	J		
RA_SE_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	N	mg/kg		0.00072	U 0.00064	J		

Attachment A  
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				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area		
				sys_loc_code	SED6A	SED6B	SED6B	SED6C	SED7.5D		
				sys_sample_code	SED6A00N	SED6B00N	SED6B00R	SED6C00N	SED7.5D00N		
				sample_date	11/13/2013	11/13/2013	11/13/2013	11/14/2013	11/25/2013		
				sample_type_code	N	N	FD	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	0	0	0	0	0		
				end_depth	0.5	0.5	0.5	0.5	0.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
RA_SE_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	N	mg/kg	0.00023	J	0.00017	J		
RA_SE_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	N	mg/kg	0.00093	J	0.00044	J		
RA_SE_PestPCBs	Endrin	72-20-8	SW8081B LL	N	mg/kg	0.0013	J	0.0029	J		
RA_SE_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	N	mg/kg	0.00023	J	0.00076	U		
RA_SE_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	N	mg/kg	0.0023	J	0.0022	J		
RA_SE_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	N	mg/kg	0.0011	J	0.00083	J		
RA_SE_PestPCBs	Heptachlor	76-44-8	SW8081B LL	N	mg/kg	0.00067	J	0.00072	J		
RA_SE_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	N	mg/kg	0.00055	J	0.0014	J		
RA_SE_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	N	mg/kg						
RA_SE_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	N	mg/kg						
RA_SE_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	N	mg/kg	0.012	J	0.0076			
RA_SE_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	N	mg/kg						
RA_SE_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	N	mg/kg						
RA_SE_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB TEQ Bird	PCBTEQ-Bird	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB, TOTAL	PCB	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	N	mg/kg	0.14		0.09		0.24	0.87
RA_SE_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	N	mg/kg	0.14		0.09		0.32	0.87
RA_SE_PestPCBs	PCB-1	2051-60-7	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-10	33146-45-1	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-100	39485-83-1	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-101	37680-73-2	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-102	68194-06-9	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-103	60145-21-3	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-104	56558-16-8	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-105	32598-14-4	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-106	70424-69-0	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-107	70424-68-9	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-108	70362-41-3	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-109	74472-35-8	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-11	2050-67-1	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-110	38380-03-9	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-111	39635-32-0	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-112	74472-36-9	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-113	68194-10-5	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-114	74472-37-0	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-115	74472-38-1	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-116	18259-05-7	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-117	68194-11-6	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-118	31508-00-6	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-119	56558-17-9	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-12	2974-92-7	E1668C	N	mg/kg						



Attachment A  
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		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
		sys_loc_code	SED6A	SED6B	SED6B	SED6C	SED7.5D
		sys_sample_code	SED6A00N	SED6B00N	SED6B00R	SED6C00N	SED7.5D00N
		sample_date	11/13/2013	11/13/2013	11/13/2013	11/14/2013	11/25/2013
		sample_type_code	N	N	FD	N	N
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
		start_depth	0	0	0	0	0
		end_depth	0.5	0.5	0.5	0.5	0.5
		depth_unit	ft	ft	ft	ft	ft
		validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-120	68194-12-7	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-121	56558-18-0	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-122	76842-07-4	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-123	65510-44-3	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-124	70424-70-3	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-125	74472-39-2	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-126	57465-28-8	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-127	39635-33-1	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-128	38380-07-3	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-129	55215-18-4	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-13	2974-90-5	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-130	52663-66-8	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-131	61798-70-7	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-132	38380-05-1	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-133	35694-04-3	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-134	52704-70-8	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-135	52744-13-5	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-136	38411-22-2	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-137	35694-06-5	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-138	35065-28-2	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-139	56030-56-9	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-14	34883-41-5	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-140	59291-64-4	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-141	52712-04-6	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-142	41411-61-4	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-143	68194-15-0	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-144	68194-14-9	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-145	74472-40-5	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-146	51908-16-8	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-147	68194-13-8	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-148	74472-41-6	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-149	38380-04-0	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-15	2050-68-2	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-150	68194-08-1	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-151	52663-63-5	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-152	68194-09-2	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-153	35065-27-1	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-154	60145-22-4	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-155	33979-03-2	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-156	38380-08-4	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-157	69782-90-7	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-158	74472-42-7	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-159	39635-35-3	E1668C	N	mg/kg		



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	loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
	sys_loc_code	SED6A	SED6B	SED6B	SED6C	SED7.5D
	sys_sample_code	SED6A00N	SED6B00N	SED6B00R	SED6C00N	SED7.5D00N
	sample_date	11/13/2013	11/13/2013	11/13/2013	11/14/2013	11/25/2013
	sample_type_code	N	N	FD	N	N
	task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
	start_depth	0	0	0	0	0
	end_depth	0.5	0.5	0.5	0.5	0.5
	depth_unit	ft	ft	ft	ft	ft
	validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-16	38444-78-9	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-160	41411-62-5	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-161	74472-43-8	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-162	39635-34-2	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-163	74472-44-9	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-164	74472-45-0	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-165	74472-46-1	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-166	41411-63-6	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-167	52663-72-6	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-168	59291-65-5	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-169	32774-16-6	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-17	37680-66-3	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-170	35065-30-6	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-171	52663-71-5	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-172	52663-74-8	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-173	68194-16-1	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-174	38411-25-5	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-175	40186-70-7	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-176	52663-65-7	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-177	52663-70-4	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-178	52663-67-9	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-179	52663-64-6	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-18	37680-65-2	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-180	35065-29-3	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-181	74472-47-2	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-182	60145-23-5	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-183	52663-69-1	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-184	74472-48-3	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-185	52712-05-7	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-186	74472-49-4	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-187	52663-68-0	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-188	74487-85-7	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-189	39635-31-9	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-19	38444-73-4	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-190	41411-64-7	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-191	74472-50-7	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-192	74472-51-8	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-193	69782-91-8	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-194	35694-08-7	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-195	52663-78-2	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-196	42740-50-1	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-197	33091-17-7	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-198	68194-17-2	E1668C	N	mg/kg	



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				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED6A	SED6B	SED6B	SED6C	SED7.5D
				sys_sample_code	SED6A00N	SED6B00N	SED6B00R	SED6C00N	SED7.5D00N
				sample_date	11/13/2013	11/13/2013	11/13/2013	11/14/2013	11/25/2013
				sample_type_code	N	N	FD	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-199	52663-75-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-2	2051-61-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-20	38444-84-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-200	52663-73-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-201	40186-71-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-202	2136-99-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-203	52663-76-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-204	74472-52-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-205	74472-53-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-206	40186-72-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-207	52663-79-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-208	52663-77-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-21	55702-46-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-22	38444-85-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-23	55720-44-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-24	55702-45-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-25	55712-37-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-26	38444-81-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-27	38444-76-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-28	7012-37-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-29	15862-07-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-3	2051-62-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-30	35693-92-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-31	16606-02-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-32	38444-77-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-33	38444-86-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-34	37680-68-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-35	37680-69-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-36	38444-87-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-37	38444-90-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-38	53555-66-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-39	38444-88-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-4	13029-08-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-40	38444-93-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-41	52663-59-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-42	36559-22-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-43	70362-46-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-44	41464-39-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-45	70362-45-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-46	41464-47-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-47	2437-79-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-48	70362-47-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-49	41464-40-8	E1668C	N	mg/kg				



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		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
		sys_loc_code	SED6A	SED6B	SED6B	SED6C	SED7.5D	
		sys_sample_code	SED6A00N	SED6B00N	SED6B00R	SED6C00N	SED7.5D00N	
		sample_date	11/13/2013	11/13/2013	11/13/2013	11/14/2013	11/25/2013	
		sample_type_code	N	N	FD	N	N	
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
		start_depth	0	0	0	0	0	
		end_depth	0.5	0.5	0.5	0.5	0.5	
		depth_unit	ft	ft	ft	ft	ft	
		validated_yn	Y	Y	Y	Y	Y	
RA_SE_PestPCBs	PCB-5	16605-91-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-50	62796-65-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-51	68194-04-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-52	35693-99-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-53	41464-41-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-54	15968-05-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-55	74338-24-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-56	41464-43-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-57	70424-67-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-58	41464-49-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-59	74472-33-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-6	25569-80-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-60	33025-41-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-61	33284-53-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-62	54230-22-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-63	74472-34-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-64	52663-58-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-65	33284-54-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-66	32598-10-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-67	73575-53-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-68	73575-52-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-69	60233-24-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-7	33284-50-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-70	32598-11-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-71	41464-46-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-72	41464-42-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-73	74338-23-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-74	32690-93-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-75	32598-12-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-76	70362-48-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-77	32598-13-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-78	70362-49-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-79	41464-48-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-8	34883-43-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-80	33284-52-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-81	70362-50-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-82	52663-62-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-83	60145-20-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-84	52663-60-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-85	65510-45-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-86	55312-69-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-87	38380-02-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-88	55215-17-3	E1668C	N	mg/kg			

		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
		sys_loc_code	SED6A	SED6B	SED6B	SED6C	SED7.5D	
		sys_sample_code	SED6A00N	SED6B00N	SED6B00R	SED6C00N	SED7.5D00N	
		sample_date	11/13/2013	11/13/2013	11/13/2013	11/14/2013	11/25/2013	
		sample_type_code	N	N	FD	N	N	
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
		start_depth	0	0	0	0	0	
		end_depth	0.5	0.5	0.5	0.5	0.5	
		depth_unit	ft	ft	ft	ft	ft	
		validated_yn	Y	Y	Y	Y	Y	
RA_SE_PestPCBs	PCB-89		73575-57-2	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-9		34883-39-1	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-90		68194-07-0	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-91		68194-05-8	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-92		52663-61-3	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-93		73575-56-1	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-94		73575-55-0	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-95		38379-99-6	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-96		73575-54-9	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-97		41464-51-1	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-98		60233-25-2	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-99		38380-01-7	E1668C	N	mg/kg		
RA_SE_PestPCBs	Pentachlorobiphenyl		25429-29-2	E1668C	N	mg/kg		
RA_SE_PestPCBs	Tetrachlorobiphenyl		26914-33-0	E1668C	N	mg/kg		
RA_SE_PestPCBs	Toxaphene		8001-35-2	SW8081B LL	N	mg/kg	0.029	U
RA_SE_PestPCBs	trans-Chlordane		5103-74-2	SW8081B LL	N	mg/kg	0.0078	0.0094
RA_SE_PestPCBs	Trichlorobiphenyl		25323-68-6	E1668C	N	mg/kg		
RA_SE_SVOCs	1,1'-Biphenyl		92-52-4	SW8270D LL	N	mg/kg	0.29	U
RA_SE_SVOCs	1,2,4,5-Tetrachlorobenzene		95-94-3	SW8270D LL	N	mg/kg	0.29	U
RA_SE_SVOCs	2,2'-oxybis(1-Chloropropane)		108-60-1	SW8270D LL	N	mg/kg	0.058	U
RA_SE_SVOCs	2,3,4,6-Tetrachlorophenol		58-90-2	SW8270D LL	N	mg/kg	0.29	U
RA_SE_SVOCs	2,4,5-Trichlorophenol		95-95-4	SW8270D LL	N	mg/kg	0.29	U
RA_SE_SVOCs	2,4,6-Trichlorophenol		88-06-2	SW8270D LL	N	mg/kg	0.29	U
RA_SE_SVOCs	2,4-Dichlorophenol		120-83-2	SW8270D LL	N	mg/kg	0.058	U
RA_SE_SVOCs	2,4-Dimethylphenol		105-67-9	SW8270D LL	N	mg/kg	0.29	U
RA_SE_SVOCs	2,4-Dinitrophenol		51-28-5	SW8270D LL	N	mg/kg	1.5	U
RA_SE_SVOCs	2,4-Dinitrotoluene		121-14-2	SW8270D LL	N	mg/kg	0.29	U
RA_SE_SVOCs	2,6-Dinitrotoluene		606-20-2	SW8270D LL	N	mg/kg	0.29	U
RA_SE_SVOCs	2-Chloronaphthalene		91-58-7	SW8270D LL	N	mg/kg	0.058	U
RA_SE_SVOCs	2-Chlorophenol		95-57-8	SW8270D LL	N	mg/kg	0.29	U
RA_SE_SVOCs	2-Methylnaphthalene		91-57-6	SW8270D LL	N	mg/kg	0.019	J
RA_SE_SVOCs	2-Methylphenol		95-48-7	SW8270D LL	N	mg/kg	0.29	U
RA_SE_SVOCs	2-Nitroaniline		88-74-4	SW8270D LL	N	mg/kg	1.5	U
RA_SE_SVOCs	2-Nitrophenol		88-75-5	SW8270D LL	N	mg/kg	0.29	U
RA_SE_SVOCs	3,3'-Dichlorobenzidine		91-94-1	SW8270D LL	N	mg/kg	0.29	U
RA_SE_SVOCs	3-Nitroaniline		99-09-2	SW8270D LL	N	mg/kg	1.5	U
RA_SE_SVOCs	4,6-Dinitro-2-methylphenol		534-52-1	SW8270D LL	N	mg/kg	1.5	U
RA_SE_SVOCs	4-Bromophenyl-phenylether		101-55-3	SW8270D LL	N	mg/kg	0.29	U
RA_SE_SVOCs	4-Chloro-3-methylphenol		59-50-7	SW8270D LL	N	mg/kg	0.29	U
RA_SE_SVOCs	4-Chloroaniline		106-47-8	SW8270D LL	N	mg/kg	0.29	U
RA_SE_SVOCs	4-Chlorophenyl-phenylether		7005-72-3	SW8270D LL	N	mg/kg	0.29	U
RA_SE_SVOCs	4-Methylphenol		106-44-5	SW8270D LL	N	mg/kg	0.29	U
RA_SE_SVOCs	4-Nitroaniline		100-01-6	SW8270D LL	N	mg/kg	1.5	U



Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				loc_group		RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area			
RA_SE_SVOCs				sys_loc_code		SED6A	SED6B	SED6B	SED6C	SED7.5D			
				sys_sample_code		SED6A00N	SED6B00N	SED6B00R	SED6C00N	SED7.5D00N			
				sample_date		11/13/2013	11/13/2013	11/13/2013	11/14/2013	11/25/2013			
				sample_type_code		N	N	FD	N	N			
				task_code		Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth		0	0	0	0	0			
				end_depth		0.5	0.5	0.5	0.5	0.5			
				depth_unit		ft	ft	ft	ft	ft			
				validated_yn		Y	Y	Y	Y	Y			
RA_SE_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	N	mg/kg		1.5	U	1.6	U			
RA_SE_SVOCs	Acenaphthene	83-32-9	SW8270D LL	N	mg/kg	0.084	0.035	J	0.032	J	0.019	J	0.035
RA_SE_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	N	mg/kg	0.084	0.064		0.059	J	0.061	J	0.028
RA_SE_SVOCs	Acetophenone	98-86-2	SW8270D LL	N	mg/kg		0.29	U	0.3	U			
RA_SE_SVOCs	Anthracene	120-12-7	SW8270D LL	N	mg/kg	0.13	0.12		0.12		0.061	J	0.047
RA_SE_SVOCs	Atrazine	1912-24-9	SW8270D LL	N	mg/kg		0.29	U	0.3	U			
RA_SE_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	N	mg/kg		0.25	J	0.25	J			
RA_SE_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	N	mg/kg	0.39	0.48		0.52		0.42	J	0.16
RA_SE_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	N	mg/kg	0.43	0.61		0.65		0.53	J	0.16
RA_SE_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	N	mg/kg	0.47	0.85		0.91		0.85	J	0.29
RA_SE_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	N	mg/kg	0.37	0.62		0.62		0.35	J	0.17
RA_SE_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	N	mg/kg	0.16	0.31		0.33		0.33	J	0.1
RA_SE_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	N	mg/kg		0.29	U	0.3	U			
RA_SE_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	N	mg/kg		0.058	U	0.061	U			
RA_SE_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	N	mg/kg		1.1		1.1				
RA_SE_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	N	mg/kg		0.061	J	0.068	J			
RA_SE_SVOCs	Caprolactam	105-60-2	SW8270D LL	N	mg/kg		1.5	U	1.6	U			
RA_SE_SVOCs	Carbazole	86-74-8	SW8270D LL	N	mg/kg		0.081		0.078				
RA_SE_SVOCs	Chrysene	218-01-9	SW8270D LL	N	mg/kg	0.47	0.8		0.84		0.85	J	0.27
RA_SE_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	N	mg/kg	0.088	0.14		0.15		0.089	J	0.04
RA_SE_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	N	mg/kg		0.29	U	0.3	U			
RA_SE_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	N	mg/kg		0.29	U	0.3	U			
RA_SE_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	N	mg/kg		0.29	U	0.3	U			
RA_SE_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	N	mg/kg		0.2	J	0.3	U			
RA_SE_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	N	mg/kg		0.1	J	0.043	J			
RA_SE_SVOCs	Fluoranthene	206-44-0	SW8270D LL	N	mg/kg	1	1.4		1.4		1.1	J	0.32
RA_SE_SVOCs	Fluorene	86-73-7	SW8270D LL	N	mg/kg	0.07	0.041	J	0.051	J	0.044	J	0.044
RA_SE_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	N	mg/kg		0.058	U	0.061	U			
RA_SE_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	N	mg/kg		0.058	U	0.061	U			
RA_SE_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	N	mg/kg		0.29	U	0.3	U			
RA_SE_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	N	mg/kg		0.29	U	0.3	U			
RA_SE_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	N	mg/kg	0.29	0.53		0.55		0.35	J	0.12
RA_SE_SVOCs	Isophorone	78-59-1	SW8270D LL	N	mg/kg		0.29	U	0.3	U			
RA_SE_SVOCs	Naphthalene	91-20-3	SW8270D LL	N	mg/kg	0.018	0.017	J	0.017	J	0.022	J	0.047
RA_SE_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	N	mg/kg		0.58	U	0.61	U			
RA_SE_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	N	mg/kg		0.058	U	0.061	U			
RA_SE_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	N	mg/kg		0.29	U	0.3	U			
RA_SE_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	N	mg/kg		0.29	U	0.3	U			
RA_SE_SVOCs	Phenanthrene	85-01-8	SW8270D LL	N	mg/kg	0.61	0.53		0.48		0.3	J	0.2
RA_SE_SVOCs	Phenol	108-95-2	SW8270D LL	N	mg/kg		0.058	U	0.061	U			
RA_SE_SVOCs	Pyrene	129-00-0	SW8270D LL	N	mg/kg	0.75	0.9		0.89		0.86	J	0.34
RA_SE_SVOCs	Total High-molecular-weight PAHs	TOT-PAH-HMW	SW8270D LL	N	mg/kg	4.4	6.6		6.9		5.7		2
RA_SE_SVOCs	Total Low-molecular-weight PAHs	TOT-PAH-LMW	SW8270D LL	N	mg/kg	1	0.81		0.76		0.51		0.4

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	
				sys_loc_code	SED6A	SED6B	SED6B	SED6C	SED7.5D	
				sys_sample_code	SED6A00N	SED6B00N	SED6B00R	SED6C00N	SED7.5D00N	
				sample_date	11/13/2013	11/13/2013	11/13/2013	11/14/2013	11/25/2013	
				sample_type_code	N	N	FD	N	N	
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
				start_depth	0	0	0	0	0	
				end_depth	0.5	0.5	0.5	0.5	0.5	
				depth_unit	ft	ft	ft	ft	ft	
				validated_yn	Y	Y	Y	Y	Y	
RA_SE_SVOcs	Total PAHs (sum 16)	TOT-PAH	SW8270D LL	N	mg/kg	5.4	7.4	7.6	6.2	2.4
RA_SE_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	1,4-Dioxane	123-91-1	SW8260B	N	mg/kg		1.8	U	1.7	U
RA_SE_VOCs	2-Butanone	78-93-3	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	2-Hexanone	591-78-6	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	Acetone	67-64-1	SW8260B	N	mg/kg		0.036	U	0.02	J
RA_SE_VOCs	Benzene	71-43-2	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	Bromochloromethane	74-97-5	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	Bromodichloromethane	75-27-4	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	Bromoform	75-25-2	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	Bromomethane	74-83-9	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	Carbon Disulfide	75-15-0	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	Chlorobenzene	108-90-7	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	Chloroethane	75-00-3	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	Chloroform	67-66-3	SW8260B	N	mg/kg		0.0011	J	0.0083	U
RA_SE_VOCs	Chloromethane	74-87-3	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	Cyclohexane	110-82-7	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	Dibromochloromethane	124-48-1	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	Ethylbenzene	100-41-4	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	Isopropylbenzene	98-82-8	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	m, p-Xylene	XYLMP	SW8260B	N	mg/kg		0.018	U	0.017	U
RA_SE_VOCs	Methyl Acetate	79-20-9	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	N	mg/kg		0.0089	U	0.0083	U
RA_SE_VOCs	Methylcyclohexane	108-87-2	SW8260B	N	mg/kg		0.0089	U	0.0083	U



Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area					
		sys_loc_code	SED6A	SED6B	SED6B	SED6C	SED7.5D					
		sys_sample_code	SED6A00N	SED6B00N	SED6B00R	SED6C00N	SED7.5D00N					
		sample_date	11/13/2013	11/13/2013	11/13/2013	11/14/2013	11/25/2013					
		sample_type_code	N	N	FD	N	N					
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
		start_depth	0	0	0	0	0					
		end_depth	0.5	0.5	0.5	0.5	0.5					
		depth_unit	ft	ft	ft	ft	ft					
		validated_yn	Y	Y	Y	Y	Y					
RA_SE_VOCs	Methylene Chloride	75-09-2	SW8260B	N	mg/kg	0.0089	U	0.0083	U			
RA_SE_VOCs	o-Xylene	95-47-6	SW8260B	N	mg/kg	0.0089	U	0.0083	U			
RA_SE_VOCs	Styrene	100-42-5	SW8260B	N	mg/kg	0.0089	U	0.0083	U			
RA_SE_VOCs	Tetrachloroethylene	127-18-4	SW8260B	N	mg/kg	0.0089	U	0.0083	U			
RA_SE_VOCs	Toluene	108-88-3	SW8260B	N	mg/kg	0.0089	U	0.0083	U			
RA_SE_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	N	mg/kg	0.0089	U	0.0083	U			
RA_SE_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	N	mg/kg	0.0089	U	0.0083	U			
RA_SE_VOCs	Trichloroethene	79-01-6	SW8260B	N	mg/kg	0.0089	U	0.0083	U			
RA_SE_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	N	mg/kg	0.0089	U	0.0083	U			
RA_SE_VOCs	Vinyl Chloride	75-01-4	SW8260B	N	mg/kg	0.0089	U	0.0083	U			
RA_SE_VOCs	Xylenes (total)	1330-20-7	SW8260B	N	mg/kg	0.018	U	0.017	U			

Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area					
				sys_loc_code	SED7.5E00N	SED7A	SED7B	SED7B	SED7D					
				sys_sample_code	SED7.5E00N	SED7A00N	SED7B00N	SED7B00R	SED7D00N					
				sample_date	11/25/2013	11/13/2013	11/13/2013	11/13/2013	11/25/2013					
				sample_type_code	N	N	N	FD	N					
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
				start_depth	0	0	0	0	0					
				end_depth	0.5	0.5	0.5	0.5	0.5					
				depth_unit	ft	ft	ft	ft	ft					
				validated_yn	Y	Y	Y	Y	Y					
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers		
RA_SE_DioxinsFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	N	mg/kg				2.09E-05		3.65E-05	J		
RA_SE_DioxinsFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	N	mg/kg				3.84E-06	J	6.8E-06			
RA_SE_DioxinsFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	N	mg/kg				5.35E-07	JN	7.67E-07	JN		
RA_SE_DioxinsFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	N	mg/kg				3.05E-07	JN	5.35E-07	J		
RA_SE_DioxinsFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	N	mg/kg				7.5E-07	JN	9.2E-07	JN		
RA_SE_DioxinsFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	N	mg/kg				8.91E-07	JN	1.52E-06	JN		
RA_SE_DioxinsFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	N	mg/kg				1.46E-06	JN	2.56E-06	JN		
RA_SE_DioxinsFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	N	mg/kg				7.83E-07	J	1.25E-06	J		
RA_SE_DioxinsFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	N	mg/kg				5.9E-08	J	8.71E-08	JN		
RA_SE_DioxinsFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	N	mg/kg				4.23E-07	JN	4.62E-07	JN		
RA_SE_DioxinsFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	N	mg/kg				2.33E-07	JN	2.78E-07	JN		
RA_SE_DioxinsFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	N	mg/kg				5.09E-07	JN	8.06E-07	J		
RA_SE_DioxinsFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	N	mg/kg				4.9E-07	JN	5.82E-07	JN		
RA_SE_DioxinsFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	N	mg/kg				1.94E-08	U	2.27E-08	U		
RA_SE_DioxinsFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	N	mg/kg				5.27E-07	JN	6.19E-07	JN		
RA_SE_DioxinsFurans	OCDD	3268-87-9	SW8290A	N	mg/kg				0.000628		0.000927			
RA_SE_DioxinsFurans	OCDF	39001-02-0	SW8290A	N	mg/kg				7.01E-06	J	1.62E-05			
RA_SE_DioxinsFurans	TCDD TEQ Bird	DFTEQ-Bird	SW8290A	N	mg/kg				1.97E-06		2.5E-06			
RA_SE_DioxinsFurans	TCDD TEQ Fish	DFTEQ-Fish	SW8290A	N	mg/kg				1.28E-06		1.74E-06			
RA_SE_DioxinsFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	N	mg/kg				1.55E-06		2.2E-06			
RA_SE_DioxinsFurans	Total HpCDD	37871-00-4	SW8290A	N	mg/kg				4.47E-05		7.88E-05	J		
RA_SE_DioxinsFurans	Total HpCDF	38998-75-3	SW8290A	N	mg/kg				1.17E-05	JN	2.01E-05	JN		
RA_SE_DioxinsFurans	Total HxCDD	34465-46-8	SW8290A	N	mg/kg				9.9E-06	JN	1.36E-05	JN		
RA_SE_DioxinsFurans	Total HxCDF	55684-94-1	SW8290A	N	mg/kg				3.31E-05	JN	4.52E-05	JN		
RA_SE_DioxinsFurans	Total PeCDD	36088-22-9	SW8290A	N	mg/kg				3.96E-05	JN	5.33E-05	JN		
RA_SE_DioxinsFurans	Total PeCDF	30402-15-4	SW8290A	N	mg/kg				6.25E-05	JN	9.83E-05	JN		
RA_SE_DioxinsFurans	Total TCDD	41903-57-5	SW8290A	N	mg/kg				1.8E-06	JN	2.22E-06	JN		
RA_SE_DioxinsFurans	Total TCDF	55722-27-5	SW8290A	N	mg/kg				0.000114	JN	0.000163	JN		
RA_SE_DioxinsFurans	Total TEQ	TTEQ	SW8290A	N	mg/kg				1.55E-06		2.2E-06			
RA_SE_Metals	Aluminum	7429-90-5	SW6020A	T	mg/kg	15000		5900	8900		9300		7300	
RA_SE_Metals	Antimony	7440-36-0	SW6020A	T	mg/kg	1	J-	0.43	0.28	J-	0.23	J-	0.69	J-
RA_SE_Metals	Arsenic	7440-38-2	SW6020A	T	mg/kg	17	J-	2.2	4.2	J-	3.8	J-	4.3	J-
RA_SE_Metals	Barium	7440-39-3	SW6020A	T	mg/kg	150	J-	62	92		92		110	J-
RA_SE_Metals	Beryllium	7440-41-7	SW6020A	T	mg/kg	2.2		0.83	1.2		1.3		1	
RA_SE_Metals	Cadmium	7440-43-9	SW6020A	T	mg/kg	5.2	J-	0.52	1.3		1.2		4.7	J-
RA_SE_Metals	Calcium	7440-70-2	SW6020A	T	mg/kg	2500	J-	2500	1700		1600		2000	J-
RA_SE_Metals	Chromium	7440-47-3	SW6020A	T	mg/kg	76	J-	25	61		62		36	J-
RA_SE_Metals	Cobalt	7440-48-4	SW6020A	T	mg/kg	32	J-	12	13		13		16	J-
RA_SE_Metals	Copper	7440-50-8	SW6020A	T	mg/kg	240		38	44		43		64	
RA_SE_Metals	Iron	7439-89-6	SW6020A	T	mg/kg	25000		16000	22000		23000		17000	
RA_SE_Metals	Lead	7439-92-1	SW6020A	T	mg/kg	230		40	110		110		170	

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				loc_group		RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area					
				sys_loc_code		SED7.5E	SED7A	SED7B	SED7B	SED7D					
				sys_sample_code		SED7.5E00N	SED7A00N	SED7B00N	SED7B00R	SED7D00N					
				sample_date		11/25/2013	11/13/2013	11/13/2013	11/13/2013	11/25/2013					
				sample_type_code		N	N	N	FD	N					
				task_code		Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
				start_depth		0	0	0	0	0					
				end_depth		0.5	0.5	0.5	0.5	0.5					
				depth_unit		ft	ft	ft	ft	ft					
				validated_yn		Y	Y	Y	Y	Y					
RA_SE_Metals	Magnesium	7439-95-4	SW6020A	T	mg/kg	3100	2100	1900	1800	2700					
RA_SE_Metals	Manganese	7439-96-5	SW6020A	T	mg/kg	230	J-	270	260	180	J-				
RA_SE_Metals	Mercury	7439-97-6	SW7471B	T	mg/kg	0.69	J	0.11	J-	0.4	J-	0.34	J-	0.24	J
RA_SE_Metals	Nickel	7440-02-0	SW6020A	T	mg/kg	150	J-	21	22	22	50	J-			
RA_SE_Metals	Potassium	7440-09-7	SW6020A	T	mg/kg	760		710	950	960	1100				
RA_SE_Metals	Selenium	7782-49-2	SW6020A	T	mg/kg	1.8	J-	0.73	J-	1.1	J-	0.72	J-		
RA_SE_Metals	Silver	7440-22-4	SW6020A	T	mg/kg	3.3		0.19	1.2	1	1.3				
RA_SE_Metals	Sodium	7440-23-5	SW6020A	T	mg/kg	220		110	120	86	100				
RA_SE_Metals	Thallium	7440-28-0	SW6020A	T	mg/kg	0.63		0.13	0.27	0.27	0.25				
RA_SE_Metals	Vanadium	7440-62-2	SW6020A	T	mg/kg	360	J+	22	38	37	110	J+			
RA_SE_Metals	Zinc	7440-66-6	SW6020A	T	mg/kg	580	J-	140	J-	170	J-	380	J-		
RA_SE_Other	Arsenic	7440-38-2	SW6010	SEM	umol/g	0.081		0.0082	UJ	0.014	J	0.013	J	0.019	
RA_SE_Other	Cadmium	7440-43-9	SW6010	SEM	umol/g	0.046		0.0025		0.0071		0.0068		0.042	
RA_SE_Other	Chromium	7440-47-3	SW6010	SEM	umol/g	0.88		0.22		0.64		0.6		0.38	
RA_SE_Other	Copper	7440-50-8	SW6010	SEM	umol/g	3.1		0.35		0.46		0.48		0.79	
RA_SE_Other	Lead	7439-92-1	SW6010	SEM	umol/g	1		0.11		0.35		0.33		0.84	
RA_SE_Other	Mercury	7439-97-6	SW7470A	SEM	umol/g	5.2E-05	J	0.00012		5.4E-05	J	6.6E-05	J	3.2E-05	J
RA_SE_Other	Nickel	7440-02-0	SW6010	SEM	umol/g	1.5		0.19		0.22		0.23		0.66	
RA_SE_Other	Silver	7440-22-4	SW6010	SEM	umol/g	0.0088		0.0019	UJ	0.0034	J	0.003	J	0.0048	
RA_SE_Other	Sulfide	18496-25-8	SW9034	SEM	umol/g	7.6	J	1.6	UJ	4.5	J	1.6	UJ	4.4	J
RA_SE_Other	Total Organic Carbon	7440-44-0	LKTOC	T	mg/kg	140000		28000		21000		20000		49000	
RA_SE_Other	Zinc	7440-66-6	SW6010	SEM	umol/g	9.7		1.6		2.1		2.1		6.5	
RA_SE_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	N	mg/kg			0.0089	J	0.0052	J	0.0052	J		
RA_SE_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	N	mg/kg			0.056		0.036		0.036			
RA_SE_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	N	mg/kg			0.00071	UJ	0.0036	J	0.0036	J		
RA_SE_PestPCBs	Aldrin	309-00-2	SW8081B LL	N	mg/kg			0.0003	J	0.00018	J	0.00018	J		
RA_SE_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	N	mg/kg			0.00071	U	0.00071	U	0.00071	U		
RA_SE_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	N	mg/kg	0.012	U	0.007	U	0.0072	U	0.0071	U	0.0074	U
RA_SE_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	N	mg/kg	0.012	U	0.007	U	0.0072	U	0.0071	U	0.0074	U
RA_SE_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	N	mg/kg	0.012	U	0.007	U	0.0072	U	0.0071	U	0.0074	U
RA_SE_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	N	mg/kg	0.012	U	0.007	U	0.0072	U	0.0071	U	0.0074	U
RA_SE_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	N	mg/kg	0.89	J	0.007	U	0.34	J	0.32	J	0.4	J
RA_SE_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	N	mg/kg	0.012	U	0.007	U	0.0072	U	0.0071	U	0.0074	U
RA_SE_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	N	mg/kg	0.97	J	0.023		0.16	J	0.16	J	0.22	J
RA_SE_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	N	mg/kg	0.012	U	0.007	U	0.0072	U	0.0071	U	0.0074	U
RA_SE_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	N	mg/kg	0.012	U	0.007	U	0.0072	U	0.0071	U	0.0074	U
RA_SE_PestPCBs	beta-BHC	319-85-7	SW8081B LL	N	mg/kg			0.0011	J	0.00074	J	0.00074	J		
RA_SE_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	N	mg/kg			0.0032	J	0.0012	J	0.0012	J		
RA_SE_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	N	mg/kg	0.00274									
RA_SE_PestPCBs	delta-BHC	319-86-8	SW8081B LL	N	mg/kg			0.00025	J	0.001	J	0.001	J		
RA_SE_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	N	mg/kg	0.197	JN								
RA_SE_PestPCBs	Diendrin	60-57-1	SW8081B LL	N	mg/kg			0.0032	J	0.002	J	0.002	J		
RA_SE_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	N	mg/kg			0.00071	U	0.00071	U	0.00071	U		

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				loc_group		RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area			
				sys_loc_code		SED7.5E	SED7A	SED7B	SED7B	SED7D			
				sys_sample_code		SED7.5E00N	SED7A00N	SED7B00N	SED7B00R	SED7D00N			
				sample_date		11/25/2013	11/13/2013	11/13/2013	11/13/2013	11/25/2013			
				sample_type_code		N	N	N	FD	N			
				task_code		Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth		0	0	0	0	0			
				end_depth		0.5	0.5	0.5	0.5	0.5			
				depth_unit		ft	ft	ft	ft	ft			
				validated_yn		Y	Y	Y	Y	Y			
RA_SE_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	N	mg/kg			0.0013	J	0.00075	J		
RA_SE_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	N	mg/kg			0.0036	J	0.0021	J		
RA_SE_PestPCBs	Endrin	72-20-8	SW8081B LL	N	mg/kg			0.0085	J	0.0049	J		
RA_SE_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	N	mg/kg			0.0011	J	0.0021	J		
RA_SE_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	N	mg/kg			0.00071	U	0.00071	U		
RA_SE_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	N	mg/kg			0.00071	U	0.00017	J		
RA_SE_PestPCBs	Heptachlor	76-44-8	SW8081B LL	N	mg/kg			0.0048	J	0.0018	J		
RA_SE_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	N	mg/kg			0.0018	J	0.00089	J		
RA_SE_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	N	mg/kg	2.08	JN						
RA_SE_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	N	mg/kg	3.27	JN						
RA_SE_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	N	mg/kg			0.014	J	0.0093	J		
RA_SE_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	N	mg/kg	0.0183							
RA_SE_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	N	mg/kg	0.036							
RA_SE_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	N	mg/kg	0.559							
RA_SE_PestPCBs	PCB TEQ Bird	PCBTEQ-Bird	E1668C	N	mg/kg	0.00358							
RA_SE_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	N	mg/kg	0.00241							
RA_SE_PestPCBs	PCB, TOTAL	PCB	E1668C	N	mg/kg	11.8							
RA_SE_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	N	mg/kg	1.9	0.023	0.5		0.48		0.62	
RA_SE_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	N	mg/kg	1.9	0.023	0.5		0.48		0.62	
RA_SE_PestPCBs	PCB-1	2051-60-7	E1668C	N	mg/kg	0.0104							
RA_SE_PestPCBs	PCB-10	33146-45-1	E1668C	N	mg/kg	0.00128							
RA_SE_PestPCBs	PCB-100	39485-83-1	E1668C	N	mg/kg	0.00106	JN						
RA_SE_PestPCBs	PCB-101	37680-73-2	E1668C	N	mg/kg	0.359							
RA_SE_PestPCBs	PCB-102	68194-06-9	E1668C	N	mg/kg	0.00827							
RA_SE_PestPCBs	PCB-103	60145-21-3	E1668C	N	mg/kg	0.00213							
RA_SE_PestPCBs	PCB-104	56558-16-8	E1668C	N	mg/kg	7.45E-05	U						
RA_SE_PestPCBs	PCB-105	32598-14-4	E1668C	N	mg/kg	0.126							
RA_SE_PestPCBs	PCB-106	70424-69-0	E1668C	N	mg/kg	9.96E-05	U						
RA_SE_PestPCBs	PCB-107	70424-68-9	E1668C	N	mg/kg	0.0247							
RA_SE_PestPCBs	PCB-108	70362-41-3	E1668C	N	mg/kg	0.014							
RA_SE_PestPCBs	PCB-109	74472-35-8	E1668C	N	mg/kg	0.196							
RA_SE_PestPCBs	PCB-11	2050-67-1	E1668C	N	mg/kg	0.000672	J						
RA_SE_PestPCBs	PCB-110	38380-03-9	E1668C	N	mg/kg	0.346							
RA_SE_PestPCBs	PCB-111	39635-32-0	E1668C	N	mg/kg	0.000181	JN						
RA_SE_PestPCBs	PCB-112	74472-36-9	E1668C	N	mg/kg	7.6E-05	U						
RA_SE_PestPCBs	PCB-113	68194-10-5	E1668C	N	mg/kg	0.359							
RA_SE_PestPCBs	PCB-114	74472-37-0	E1668C	N	mg/kg	0.00722							
RA_SE_PestPCBs	PCB-115	74472-38-1	E1668C	N	mg/kg	0.346							
RA_SE_PestPCBs	PCB-116	18259-05-7	E1668C	N	mg/kg	0.0474							
RA_SE_PestPCBs	PCB-117	68194-11-6	E1668C	N	mg/kg	0.0474							
RA_SE_PestPCBs	PCB-118	31508-00-6	E1668C	N	mg/kg	0.314							
RA_SE_PestPCBs	PCB-119	56558-17-9	E1668C	N	mg/kg	0.196							
RA_SE_PestPCBs	PCB-12	2974-92-7	E1668C	N	mg/kg	0.00686							



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				loc_group		RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code		SED7.5E	SED7A	SED7B	SED7B	SED7D
				sys_sample_code		SED7.5E00N	SED7A00N	SED7B00N	SED7B00R	SED7D00N
				sample_date		11/25/2013	11/13/2013	11/13/2013	11/13/2013	11/25/2013
				sample_type_code		N	N	N	FD	N
				task_code		Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth		0	0	0	0	0
				end_depth		0.5	0.5	0.5	0.5	0.5
				depth_unit		ft	ft	ft	ft	ft
				validated_yn		Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-120	68194-12-7	E1668C	N	mg/kg	0.00119				
RA_SE_PestPCBs	PCB-121	56558-18-0	E1668C	N	mg/kg	7.26E-05	U			
RA_SE_PestPCBs	PCB-122	76842-07-4	E1668C	N	mg/kg	0.00476				
RA_SE_PestPCBs	PCB-123	65510-44-3	E1668C	N	mg/kg	0.00613				
RA_SE_PestPCBs	PCB-124	70424-70-3	E1668C	N	mg/kg	0.014				
RA_SE_PestPCBs	PCB-125	74472-39-2	E1668C	N	mg/kg	0.196				
RA_SE_PestPCBs	PCB-126	57465-28-8	E1668C	N	mg/kg	0.021	JN			
RA_SE_PestPCBs	PCB-127	39635-33-1	E1668C	N	mg/kg	0.00075	JN			
RA_SE_PestPCBs	PCB-128	38380-07-3	E1668C	N	mg/kg	0.077				
RA_SE_PestPCBs	PCB-129	55215-18-4	E1668C	N	mg/kg	0.682				
RA_SE_PestPCBs	PCB-13	2974-90-5	E1668C	N	mg/kg	0.00686				
RA_SE_PestPCBs	PCB-130	52663-66-8	E1668C	N	mg/kg	0.0341				
RA_SE_PestPCBs	PCB-131	61798-70-7	E1668C	N	mg/kg	0.0077				
RA_SE_PestPCBs	PCB-132	38380-05-1	E1668C	N	mg/kg	0.22				
RA_SE_PestPCBs	PCB-133	35694-04-3	E1668C	N	mg/kg	0.00974				
RA_SE_PestPCBs	PCB-134	52704-70-8	E1668C	N	mg/kg	0.0338				
RA_SE_PestPCBs	PCB-135	52744-13-5	E1668C	N	mg/kg	0.277				
RA_SE_PestPCBs	PCB-136	38411-22-2	E1668C	N	mg/kg	0.0911				
RA_SE_PestPCBs	PCB-137	35694-06-5	E1668C	N	mg/kg	0.0175				
RA_SE_PestPCBs	PCB-138	35065-28-2	E1668C	N	mg/kg	0.682				
RA_SE_PestPCBs	PCB-139	56030-56-9	E1668C	N	mg/kg	0.00765	JN			
RA_SE_PestPCBs	PCB-14	34883-41-5	E1668C	N	mg/kg	6.88E-05	JN			
RA_SE_PestPCBs	PCB-140	59291-64-4	E1668C	N	mg/kg	0.00765	JN			
RA_SE_PestPCBs	PCB-141	52712-04-6	E1668C	N	mg/kg	0.176				
RA_SE_PestPCBs	PCB-142	41411-61-4	E1668C	N	mg/kg	0.000199	U			
RA_SE_PestPCBs	PCB-143	68194-15-0	E1668C	N	mg/kg	0.0338				
RA_SE_PestPCBs	PCB-144	68194-14-9	E1668C	N	mg/kg	0.0431				
RA_SE_PestPCBs	PCB-145	74472-40-5	E1668C	N	mg/kg	0.000102	JN			
RA_SE_PestPCBs	PCB-146	51908-16-8	E1668C	N	mg/kg	0.109				
RA_SE_PestPCBs	PCB-147	68194-13-8	E1668C	N	mg/kg	0.608				
RA_SE_PestPCBs	PCB-148	74472-41-6	E1668C	N	mg/kg	0.00015	U			
RA_SE_PestPCBs	PCB-149	38380-04-0	E1668C	N	mg/kg	0.608				
RA_SE_PestPCBs	PCB-15	2050-68-2	E1668C	N	mg/kg	0.0608				
RA_SE_PestPCBs	PCB-150	68194-08-1	E1668C	N	mg/kg	0.000592				
RA_SE_PestPCBs	PCB-151	52663-63-5	E1668C	N	mg/kg	0.277				
RA_SE_PestPCBs	PCB-152	68194-09-2	E1668C	N	mg/kg	0.000314	J			
RA_SE_PestPCBs	PCB-153	35065-27-1	E1668C	N	mg/kg	0.642				
RA_SE_PestPCBs	PCB-154	60145-22-4	E1668C	N	mg/kg	0.00408				
RA_SE_PestPCBs	PCB-155	33979-03-2	E1668C	N	mg/kg	0.000102	U			
RA_SE_PestPCBs	PCB-156	38380-08-4	E1668C	N	mg/kg	0.0608				
RA_SE_PestPCBs	PCB-157	69782-90-7	E1668C	N	mg/kg	0.0608				
RA_SE_PestPCBs	PCB-158	74472-42-7	E1668C	N	mg/kg	0.0665				
RA_SE_PestPCBs	PCB-159	39635-35-3	E1668C	N	mg/kg	0.0129				



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				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED7.5E	SED7A	SED7B	SED7B	SED7D
				sys_sample_code	SED7.5E00N	SED7A00N	SED7B00N	SED7B00R	SED7D00N
				sample_date	11/25/2013	11/13/2013	11/13/2013	11/13/2013	11/25/2013
				sample_type_code	N	N	N	FD	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-16	38444-78-9	E1668C	N	mg/kg	0.0699			
RA_SE_PestPCBs	PCB-160	41411-62-5	E1668C	N	mg/kg	0.682			
RA_SE_PestPCBs	PCB-161	74472-43-8	E1668C	N	mg/kg	0.000132	U		
RA_SE_PestPCBs	PCB-162	39635-34-2	E1668C	N	mg/kg	0.00273			
RA_SE_PestPCBs	PCB-163	74472-44-9	E1668C	N	mg/kg	0.682			
RA_SE_PestPCBs	PCB-164	74472-45-0	E1668C	N	mg/kg	0.0501			
RA_SE_PestPCBs	PCB-165	74472-46-1	E1668C	N	mg/kg	0.000265	J		
RA_SE_PestPCBs	PCB-166	41411-63-6	E1668C	N	mg/kg	0.077			
RA_SE_PestPCBs	PCB-167	52663-72-6	E1668C	N	mg/kg	0.025			
RA_SE_PestPCBs	PCB-168	59291-65-5	E1668C	N	mg/kg	0.642			
RA_SE_PestPCBs	PCB-169	32774-16-6	E1668C	N	mg/kg	0.00975	JN		
RA_SE_PestPCBs	PCB-17	37680-66-3	E1668C	N	mg/kg	0.0736			
RA_SE_PestPCBs	PCB-170	35065-30-6	E1668C	N	mg/kg	0.237			
RA_SE_PestPCBs	PCB-171	52663-71-5	E1668C	N	mg/kg	0.0714			
RA_SE_PestPCBs	PCB-172	52663-74-8	E1668C	N	mg/kg	0.0443			
RA_SE_PestPCBs	PCB-173	68194-16-1	E1668C	N	mg/kg	0.0714			
RA_SE_PestPCBs	PCB-174	38411-25-5	E1668C	N	mg/kg	0.286			
RA_SE_PestPCBs	PCB-175	40186-70-7	E1668C	N	mg/kg	0.0106			
RA_SE_PestPCBs	PCB-176	52663-65-7	E1668C	N	mg/kg	0.0335			
RA_SE_PestPCBs	PCB-177	52663-70-4	E1668C	N	mg/kg	0.148			
RA_SE_PestPCBs	PCB-178	52663-67-9	E1668C	N	mg/kg	0.0542			
RA_SE_PestPCBs	PCB-179	52663-64-6	E1668C	N	mg/kg	0.121			
RA_SE_PestPCBs	PCB-18	37680-65-2	E1668C	N	mg/kg	0.156			
RA_SE_PestPCBs	PCB-180	35065-29-3	E1668C	N	mg/kg	0.541			
RA_SE_PestPCBs	PCB-181	74472-47-2	E1668C	N	mg/kg	0.00105	JN		
RA_SE_PestPCBs	PCB-182	60145-23-5	E1668C	N	mg/kg	0.00107			
RA_SE_PestPCBs	PCB-183	52663-69-1	E1668C	N	mg/kg	0.175			
RA_SE_PestPCBs	PCB-184	74472-48-3	E1668C	N	mg/kg	0.00021	J		
RA_SE_PestPCBs	PCB-185	52712-05-7	E1668C	N	mg/kg	0.175			
RA_SE_PestPCBs	PCB-186	74472-49-4	E1668C	N	mg/kg	0.0001	U		
RA_SE_PestPCBs	PCB-187	52663-68-0	E1668C	N	mg/kg	0.296			
RA_SE_PestPCBs	PCB-188	74487-85-7	E1668C	N	mg/kg	0.00025	JN		
RA_SE_PestPCBs	PCB-189	39635-31-9	E1668C	N	mg/kg	0.00891			
RA_SE_PestPCBs	PCB-19	38444-73-4	E1668C	N	mg/kg	0.0132			
RA_SE_PestPCBs	PCB-190	41411-64-7	E1668C	N	mg/kg	0.0452			
RA_SE_PestPCBs	PCB-191	74472-50-7	E1668C	N	mg/kg	0.00912			
RA_SE_PestPCBs	PCB-192	74472-51-8	E1668C	N	mg/kg	0.000106	U		
RA_SE_PestPCBs	PCB-193	69782-91-8	E1668C	N	mg/kg	0.541			
RA_SE_PestPCBs	PCB-194	35694-08-7	E1668C	N	mg/kg	0.142			
RA_SE_PestPCBs	PCB-195	52663-78-2	E1668C	N	mg/kg	0.0569			
RA_SE_PestPCBs	PCB-196	42740-50-1	E1668C	N	mg/kg	0.0683			
RA_SE_PestPCBs	PCB-197	33091-17-7	E1668C	N	mg/kg	0.0049			
RA_SE_PestPCBs	PCB-198	68194-17-2	E1668C	N	mg/kg	0.143			





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		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
		sys_loc_code	SED7.5E	SED7A	SED7B	SED7B	SED7D
		sys_sample_code	SED7.5E00N	SED7A00N	SED7B00N	SED7B00R	SED7D00N
		sample_date	11/25/2013	11/13/2013	11/13/2013	11/13/2013	11/25/2013
		sample_type_code	N	N	N	FD	N
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
		start_depth	0	0	0	0	0
		end_depth	0.5	0.5	0.5	0.5	0.5
		depth_unit	ft	ft	ft	ft	ft
		validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-199	52663-75-9	E1668C	N	mg/kg	0.143	
RA_SE_PestPCBs	PCB-2	2051-61-8	E1668C	N	mg/kg	0.0012	
RA_SE_PestPCBs	PCB-20	38444-84-7	E1668C	N	mg/kg	0.318	
RA_SE_PestPCBs	PCB-200	52663-73-7	E1668C	N	mg/kg	0.0171	
RA_SE_PestPCBs	PCB-201	40186-71-8	E1668C	N	mg/kg	0.0157	
RA_SE_PestPCBs	PCB-202	2136-99-4	E1668C	N	mg/kg	0.0226	
RA_SE_PestPCBs	PCB-203	52663-76-0	E1668C	N	mg/kg	0.0817	
RA_SE_PestPCBs	PCB-204	74472-52-9	E1668C	N	mg/kg	8.98E-05	U
RA_SE_PestPCBs	PCB-205	74472-53-0	E1668C	N	mg/kg	0.00728	
RA_SE_PestPCBs	PCB-206	40186-72-9	E1668C	N	mg/kg	0.0265	
RA_SE_PestPCBs	PCB-207	52663-79-3	E1668C	N	mg/kg	0.00364	
RA_SE_PestPCBs	PCB-208	52663-77-1	E1668C	N	mg/kg	0.00583	
RA_SE_PestPCBs	PCB-21	55702-46-0	E1668C	N	mg/kg	0.153	
RA_SE_PestPCBs	PCB-22	38444-85-8	E1668C	N	mg/kg	0.108	
RA_SE_PestPCBs	PCB-23	55720-44-0	E1668C	N	mg/kg	0.000385	J
RA_SE_PestPCBs	PCB-24	55702-45-9	E1668C	N	mg/kg	0.00252	JN
RA_SE_PestPCBs	PCB-25	55712-37-3	E1668C	N	mg/kg	0.024	
RA_SE_PestPCBs	PCB-26	38444-81-4	E1668C	N	mg/kg	0.0494	
RA_SE_PestPCBs	PCB-27	38444-76-7	E1668C	N	mg/kg	0.0116	
RA_SE_PestPCBs	PCB-28	7012-37-5	E1668C	N	mg/kg	0.318	
RA_SE_PestPCBs	PCB-29	15862-07-4	E1668C	N	mg/kg	0.0494	
RA_SE_PestPCBs	PCB-3	2051-62-9	E1668C	N	mg/kg	0.0067	
RA_SE_PestPCBs	PCB-30	35693-92-6	E1668C	N	mg/kg	0.156	
RA_SE_PestPCBs	PCB-31	16606-02-3	E1668C	N	mg/kg	0.247	
RA_SE_PestPCBs	PCB-32	38444-77-8	E1668C	N	mg/kg	0.0538	
RA_SE_PestPCBs	PCB-33	38444-86-9	E1668C	N	mg/kg	0.153	
RA_SE_PestPCBs	PCB-34	37680-68-5	E1668C	N	mg/kg	0.0014	
RA_SE_PestPCBs	PCB-35	37680-69-6	E1668C	N	mg/kg	0.00508	
RA_SE_PestPCBs	PCB-36	38444-87-0	E1668C	N	mg/kg	3.93E-05	JN
RA_SE_PestPCBs	PCB-37	38444-90-5	E1668C	N	mg/kg	0.109	
RA_SE_PestPCBs	PCB-38	53555-66-1	E1668C	N	mg/kg	0.000308	JN
RA_SE_PestPCBs	PCB-39	38444-88-1	E1668C	N	mg/kg	0.0017	
RA_SE_PestPCBs	PCB-4	13029-08-8	E1668C	N	mg/kg	0.0211	
RA_SE_PestPCBs	PCB-40	38444-93-8	E1668C	N	mg/kg	0.146	
RA_SE_PestPCBs	PCB-41	52663-59-9	E1668C	N	mg/kg	0.146	
RA_SE_PestPCBs	PCB-42	36559-22-5	E1668C	N	mg/kg	0.0651	
RA_SE_PestPCBs	PCB-43	70362-46-8	E1668C	N	mg/kg	0.00914	
RA_SE_PestPCBs	PCB-44	41464-39-5	E1668C	N	mg/kg	0.242	
RA_SE_PestPCBs	PCB-45	70362-45-7	E1668C	N	mg/kg	0.0469	
RA_SE_PestPCBs	PCB-46	41464-47-5	E1668C	N	mg/kg	0.0168	
RA_SE_PestPCBs	PCB-47	2437-79-8	E1668C	N	mg/kg	0.242	
RA_SE_PestPCBs	PCB-48	70362-47-9	E1668C	N	mg/kg	0.0567	
RA_SE_PestPCBs	PCB-49	41464-40-8	E1668C	N	mg/kg	0.148	

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				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED7.5E	SED7A	SED7B	SED7B	SED7D
				sys_sample_code	SED7.5E00N	SED7A00N	SED7B00N	SED7B00R	SED7D00N
				sample_date	11/25/2013	11/13/2013	11/13/2013	11/13/2013	11/25/2013
				sample_type_code	N	N	N	FD	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-5	16605-91-7	E1668C	N	mg/kg	0.00119			
RA_SE_PestPCBs	PCB-50	62796-65-0	E1668C	N	mg/kg	0.0323			
RA_SE_PestPCBs	PCB-51	68194-04-7	E1668C	N	mg/kg	0.0469			
RA_SE_PestPCBs	PCB-52	35693-99-3	E1668C	N	mg/kg	0.318			
RA_SE_PestPCBs	PCB-53	41464-41-9	E1668C	N	mg/kg	0.0323			
RA_SE_PestPCBs	PCB-54	15968-05-5	E1668C	N	mg/kg	0.000401	J		
RA_SE_PestPCBs	PCB-55	74338-24-2	E1668C	N	mg/kg	0.00649	JN		
RA_SE_PestPCBs	PCB-56	41464-43-1	E1668C	N	mg/kg	0.117			
RA_SE_PestPCBs	PCB-57	70424-67-8	E1668C	N	mg/kg	0.00151			
RA_SE_PestPCBs	PCB-58	41464-49-7	E1668C	N	mg/kg	0.00026	J		
RA_SE_PestPCBs	PCB-59	74472-33-6	E1668C	N	mg/kg	0.0224			
RA_SE_PestPCBs	PCB-6	25569-80-6	E1668C	N	mg/kg	0.0173			
RA_SE_PestPCBs	PCB-60	33025-41-1	E1668C	N	mg/kg	0.0571			
RA_SE_PestPCBs	PCB-61	33284-53-6	E1668C	N	mg/kg	0.44			
RA_SE_PestPCBs	PCB-62	54230-22-7	E1668C	N	mg/kg	0.0224			
RA_SE_PestPCBs	PCB-63	74472-34-7	E1668C	N	mg/kg	0.00907			
RA_SE_PestPCBs	PCB-64	52663-58-8	E1668C	N	mg/kg	0.104			
RA_SE_PestPCBs	PCB-65	33284-54-7	E1668C	N	mg/kg	0.242			
RA_SE_PestPCBs	PCB-66	32598-10-0	E1668C	N	mg/kg	0.239			
RA_SE_PestPCBs	PCB-67	73575-53-8	E1668C	N	mg/kg	0.00923			
RA_SE_PestPCBs	PCB-68	73575-52-7	E1668C	N	mg/kg	0.000771			
RA_SE_PestPCBs	PCB-69	60233-24-1	E1668C	N	mg/kg	0.148			
RA_SE_PestPCBs	PCB-7	33284-50-3	E1668C	N	mg/kg	0.00319			
RA_SE_PestPCBs	PCB-70	32598-11-1	E1668C	N	mg/kg	0.44			
RA_SE_PestPCBs	PCB-71	41464-46-4	E1668C	N	mg/kg	0.146			
RA_SE_PestPCBs	PCB-72	41464-42-0	E1668C	N	mg/kg	0.00197			
RA_SE_PestPCBs	PCB-73	74338-23-1	E1668C	N	mg/kg	0.00914			
RA_SE_PestPCBs	PCB-74	32690-93-0	E1668C	N	mg/kg	0.44			
RA_SE_PestPCBs	PCB-75	32598-12-2	E1668C	N	mg/kg	0.0224			
RA_SE_PestPCBs	PCB-76	70362-48-0	E1668C	N	mg/kg	0.44			
RA_SE_PestPCBs	PCB-77	32598-13-3	E1668C	N	mg/kg	0.0264			
RA_SE_PestPCBs	PCB-78	70362-49-1	E1668C	N	mg/kg	6.5E-05	U		
RA_SE_PestPCBs	PCB-79	41464-48-6	E1668C	N	mg/kg	0.00393			
RA_SE_PestPCBs	PCB-8	34883-43-7	E1668C	N	mg/kg	0.0797			
RA_SE_PestPCBs	PCB-80	33284-52-5	E1668C	N	mg/kg	5.57E-05	U		
RA_SE_PestPCBs	PCB-81	70362-50-4	E1668C	N	mg/kg	0.00124			
RA_SE_PestPCBs	PCB-82	52663-62-4	E1668C	N	mg/kg	0.0357			
RA_SE_PestPCBs	PCB-83	60145-20-2	E1668C	N	mg/kg	0.152			
RA_SE_PestPCBs	PCB-84	52663-60-2	E1668C	N	mg/kg	0.0774			
RA_SE_PestPCBs	PCB-85	65510-45-4	E1668C	N	mg/kg	0.0474			
RA_SE_PestPCBs	PCB-86	55312-69-1	E1668C	N	mg/kg	0.196			
RA_SE_PestPCBs	PCB-87	38380-02-8	E1668C	N	mg/kg	0.196			
RA_SE_PestPCBs	PCB-88	55215-17-3	E1668C	N	mg/kg	0.0378			

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED7.5E	SED7A	SED7B	SED7B	SED7D
				sys_sample_code	SED7.5E00N	SED7A00N	SED7B00N	SED7B00R	SED7D00N
				sample_date	11/25/2013	11/13/2013	11/13/2013	11/13/2013	11/25/2013
				sample_type_code	N	N	N	FD	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-89	73575-57-2	E1668C	N	mg/kg	0.00376			
RA_SE_PestPCBs	PCB-9	34883-39-1	E1668C	N	mg/kg	0.00487			
RA_SE_PestPCBs	PCB-90	68194-07-0	E1668C	N	mg/kg	0.359			
RA_SE_PestPCBs	PCB-91	68194-05-8	E1668C	N	mg/kg	0.0378			
RA_SE_PestPCBs	PCB-92	52663-61-3	E1668C	N	mg/kg	0.058			
RA_SE_PestPCBs	PCB-93	73575-56-1	E1668C	N	mg/kg	0.00106	JN		
RA_SE_PestPCBs	PCB-94	73575-55-0	E1668C	N	mg/kg	0.00123			
RA_SE_PestPCBs	PCB-95	38379-99-6	E1668C	N	mg/kg	0.289			
RA_SE_PestPCBs	PCB-96	73575-54-9	E1668C	N	mg/kg	0.00216	JN		
RA_SE_PestPCBs	PCB-97	41464-51-1	E1668C	N	mg/kg	0.196			
RA_SE_PestPCBs	PCB-98	60233-25-2	E1668C	N	mg/kg	0.00827			
RA_SE_PestPCBs	PCB-99	38380-01-7	E1668C	N	mg/kg	0.152			
RA_SE_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	N	mg/kg	2.14	JN		
RA_SE_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	N	mg/kg	2.12	JN		
RA_SE_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	N	mg/kg		0.029	U	0.028
RA_SE_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	N	mg/kg		0.0035	J	0.0031
RA_SE_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	N	mg/kg	1.4	JN		
RA_SE_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	N	mg/kg		0.14	U	0.28
RA_SE_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	N	mg/kg		0.14	U	0.28
RA_SE_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	N	mg/kg		0.029	U	0.057
RA_SE_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	N	mg/kg		0.14	U	0.28
RA_SE_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	N	mg/kg		0.14	U	0.28
RA_SE_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	N	mg/kg		0.14	U	0.28
RA_SE_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	N	mg/kg		0.029	U	0.057
RA_SE_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	N	mg/kg		0.027	J	0.28
RA_SE_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	N	mg/kg		0.72	U	1.5
RA_SE_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	N	mg/kg		0.14	U	0.28
RA_SE_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	N	mg/kg		0.14	U	0.28
RA_SE_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	N	mg/kg		0.029	U	0.057
RA_SE_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	N	mg/kg		0.14	U	0.28
RA_SE_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	N	mg/kg		0.029		0.03
RA_SE_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	N	mg/kg		0.14	U	0.28
RA_SE_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	N	mg/kg		0.72	U	1.5
RA_SE_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	N	mg/kg		0.14	U	0.28
RA_SE_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	N	mg/kg		0.14	U	0.28
RA_SE_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	N	mg/kg		0.72	U	1.5
RA_SE_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	N	mg/kg		0.72	U	1.5
RA_SE_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	N	mg/kg		0.14	U	0.28
RA_SE_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	N	mg/kg		0.14	U	0.28
RA_SE_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	N	mg/kg		0.082	J	0.28
RA_SE_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	N	mg/kg		0.14	U	0.28
RA_SE_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	N	mg/kg		0.14	U	0.065
RA_SE_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	N	mg/kg		0.72	U	1.5

	loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area			
	sys_loc_code	SED7.5E	SED7A	SED7B	SED7B	SED7B	SED7D	SED7D			
	sys_sample_code	SED7.5E00N	SED7A00N	SED7B00N	SED7B00R	SED7B00R	SED7D00N	SED7D00N			
	sample_date	11/25/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/25/2013	11/25/2013			
	sample_type_code	N	N	N	FD	FD	N	N			
	task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
	start_depth	0	0	0	0	0	0	0			
	end_depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5			
	depth_unit	ft	ft	ft	ft	ft	ft	ft			
	validated_yn	Y	Y	Y	Y	Y	Y	Y			
RA_SE_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	N	mg/kg	0.72	U	1.5	U		
RA_SE_SVOCs	Acenaphthene	83-32-9	SW8270D LL	N	mg/kg	0.059		0.02	J	0.034	
RA_SE_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	N	mg/kg	0.047	J	0.037	J	0.072	
RA_SE_SVOCs	Acetophenone	98-86-2	SW8270D LL	N	mg/kg			0.14	U	0.086	
RA_SE_SVOCs	Anthracene	120-12-7	SW8270D LL	N	mg/kg	0.12		0.066		0.065	
RA_SE_SVOCs	Atrazine	1912-24-9	SW8270D LL	N	mg/kg			0.14	U	0.087	0.11
RA_SE_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	N	mg/kg			0.024	J		
RA_SE_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	N	mg/kg	0.36		0.29		0.24	0.48
RA_SE_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	N	mg/kg	0.31		0.37	*	0.24	0.54
RA_SE_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	N	mg/kg	0.5		0.62	*	0.36	0.86
RA_SE_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	N	mg/kg	0.29		0.49	*	0.24	0.47
RA_SE_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	N	mg/kg	0.14		0.19	*	0.096	0.19
RA_SE_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	N	mg/kg			0.14	U	0.28	
RA_SE_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	N	mg/kg			0.029	U	0.057	
RA_SE_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	N	mg/kg			0.8		0.86	
RA_SE_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	N	mg/kg			0.14	U	0.28	
RA_SE_SVOCs	Caprolactam	105-60-2	SW8270D LL	N	mg/kg			0.72	U	1.5	
RA_SE_SVOCs	Carbazole	86-74-8	SW8270D LL	N	mg/kg			0.024	J	0.057	
RA_SE_SVOCs	Chrysene	218-01-9	SW8270D LL	N	mg/kg	0.49		0.55		0.36	0.63
RA_SE_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	N	mg/kg	0.055		0.11	*	0.057	0.086
RA_SE_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	N	mg/kg			0.14	U	0.28	
RA_SE_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	N	mg/kg			0.14	U	0.28	
RA_SE_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	N	mg/kg			0.14	U	0.28	
RA_SE_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	N	mg/kg			0.024	J	0.28	
RA_SE_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	N	mg/kg			0.14	U*	0.28	
RA_SE_SVOCs	Fluoranthene	206-44-0	SW8270D LL	N	mg/kg	0.8		0.85		0.41	0.87
RA_SE_SVOCs	Fluorene	86-73-7	SW8270D LL	N	mg/kg	0.11		0.031	J	0.057	0.053
RA_SE_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	N	mg/kg			0.029	U	0.057	
RA_SE_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	N	mg/kg			0.029	U	0.057	
RA_SE_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	N	mg/kg			0.14	U	0.28	
RA_SE_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	N	mg/kg			0.14	U	0.28	
RA_SE_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	N	mg/kg	0.23		0.41	*	0.18	0.37
RA_SE_SVOCs	Isophorone	78-59-1	SW8270D LL	N	mg/kg			0.14	U	0.28	
RA_SE_SVOCs	Naphthalene	91-20-3	SW8270D LL	N	mg/kg	0.094		0.013	J	0.019	0.046
RA_SE_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	N	mg/kg			0.28	U	0.57	
RA_SE_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	N	mg/kg			0.029	U	0.057	
RA_SE_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	N	mg/kg			0.14	U	0.28	
RA_SE_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	N	mg/kg			0.14	U	0.28	
RA_SE_SVOCs	Phenanthrene	85-01-8	SW8270D LL	N	mg/kg	0.47		0.25		0.26	0.35
RA_SE_SVOCs	Phenol	108-95-2	SW8270D LL	N	mg/kg			0.029	U	0.057	
RA_SE_SVOCs	Pyrene	129-00-0	SW8270D LL	N	mg/kg	0.73		0.52		0.42	0.95
RA_SE_SVOCs	Total High-molecular-weight PAHs	TOT-PAH-HMW	SW8270D LL	N	mg/kg	3.9		4.4		2.2	5.4
RA_SE_SVOCs	Total Low-molecular-weight PAHs	TOT-PAH-LMW	SW8270D LL	N	mg/kg	0.9		0.42		0.48	0.66

		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area						
		sys_loc_code	SED7.5E	SED7A	SED7B	SED7B	SED7B	SED7D						
		sys_sample_code	SED7.5E00N	SED7A00N	SED7B00N	SED7B00R	SED7B00R	SED7D00N						
		sample_date	11/25/2013	11/13/2013	11/13/2013	11/13/2013	11/25/2013	11/25/2013						
		sample_type_code	N	N	N	FD	N	N						
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013						
		start_depth	0	0	0	0	0	0						
		end_depth	0.5	0.5	0.5	0.5	0.5	0.5						
		depth_unit	ft	ft	ft	ft	ft	ft						
		validated_yn	Y	Y	Y	Y	Y	Y						
RA_SE_SVOCs	Total PAHs (sum 16)	TOT-PAH	SW8270D LL	N	mg/kg	4.8		4.8		2.7		3.1		6.1
RA_SE_SVOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	1,1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	1,1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	1,1-Dichloroethane	75-34-3	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	1,1-Dichloroethene	75-35-4	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	1,2-Dibromoethane	106-93-4	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	1,2-Dichloroethane	107-06-2	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	1,2-Dichloropropane	78-87-5	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	1,4-Dioxane	123-91-1	SW8260B	N	mg/kg					1.7	U	2		
RA_SE_SVOCs	2-Butanone	78-93-3	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	2-Hexanone	591-78-6	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	Acetone	67-64-1	SW8260B	N	mg/kg					0.034	U	0.039	U	
RA_SE_SVOCs	Benzene	71-43-2	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	Bromochloromethane	74-97-5	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	Bromodichloromethane	75-27-4	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	Bromoform	75-25-2	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	Bromomethane	74-83-9	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	Carbon Disulfide	75-15-0	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	Carbon Tetrachloride	56-23-5	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	Chlorobenzene	108-90-7	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	Chloroethane	75-00-3	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	Chloroform	67-66-3	SW8260B	N	mg/kg					0.0012	J	0.0014	J	
RA_SE_SVOCs	Chloromethane	74-87-3	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	Cyclohexane	110-82-7	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	Dibromochloromethane	124-48-1	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	Dichlorodifluoromethane	75-71-8	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	Ethylbenzene	100-41-4	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	Isopropylbenzene	98-82-8	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	m, p-Xylene	XYLMP	SW8260B	N	mg/kg					0.017	U	0.02	U	
RA_SE_SVOCs	Methyl Acetate	79-20-9	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	N	mg/kg					0.0085	U	0.0098	U	
RA_SE_SVOCs	Methylcyclohexane	108-87-2	SW8260B	N	mg/kg					0.0085	U	0.0098	U	



Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area				
		sys_loc_code	SED7.5E	SED7A	SED7B	SED7B	SED7D				
		sys_sample_code	SED7.5E00N	SED7A00N	SED7B00N	SED7B00R	SED7D00N				
		sample_date	11/25/2013	11/13/2013	11/13/2013	11/13/2013	11/25/2013				
		sample_type_code	N	N	N	FD	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	0	0	0	0	0				
		end_depth	0.5	0.5	0.5	0.5	0.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
RA_SE_VOCs	Methylene Chloride	75-09-2	SW8260B	N	mg/kg	0.0085	U	0.0098	U		
RA_SE_VOCs	o-Xylene	95-47-6	SW8260B	N	mg/kg	0.0085	U	0.0098	U		
RA_SE_VOCs	Styrene	100-42-5	SW8260B	N	mg/kg	0.0085	U	0.0098	U		
RA_SE_VOCs	Tetrachloroethylene	127-18-4	SW8260B	N	mg/kg	0.0085	U	0.0098	U		
RA_SE_VOCs	Toluene	108-88-3	SW8260B	N	mg/kg	0.0085	U	0.0098	U		
RA_SE_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	N	mg/kg	0.0085	U	0.0098	U		
RA_SE_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	N	mg/kg	0.0085	U	0.0098	U		
RA_SE_VOCs	Trichloroethene	79-01-6	SW8260B	N	mg/kg	0.0085	U	0.0098	U		
RA_SE_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	N	mg/kg	0.0085	U	0.0098	U		
RA_SE_VOCs	Vinyl Chloride	75-01-4	SW8260B	N	mg/kg	0.0085	U	0.0098	U		
RA_SE_VOCs	Xylenes (total)	1330-20-7	SW8260B	N	mg/kg	0.017	U	0.02	U		

method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result_value	report_result_unit	interpreted_qualifiers	report_result_value	report_result_unit	interpreted_qualifiers	report_result_value	report_result_unit	interpreted_qualifiers	report_result_value	report_result_unit	interpreted_qualifiers	report_result_value	report_result_unit	interpreted_qualifiers	
RA_SE_DioxinsFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	N	mg/kg			0.0041		J	4.89E-05									
RA_SE_DioxinsFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	N	mg/kg			0.00108			1.83E-05		JN							
RA_SE_DioxinsFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	N	mg/kg			0.000151		JN	1.77E-06		J							
RA_SE_DioxinsFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	N	mg/kg			0.000289			2.47E-06		J							
RA_SE_DioxinsFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	N	mg/kg			0.00047		JN	2.39E-06		J							
RA_SE_DioxinsFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	N	mg/kg			0.000548			4.11E-06		J							
RA_SE_DioxinsFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	N	mg/kg			0.000272		JN	3.65E-06		JN							
RA_SE_DioxinsFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	N	mg/kg			0.000705		J	6.05E-06									
RA_SE_DioxinsFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	N	mg/kg			2.43E-05		J	2.97E-07		U							
RA_SE_DioxinsFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	N	mg/kg			0.000277		JN	6.9E-06		JN							
RA_SE_DioxinsFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	N	mg/kg			0.000124			9.72E-07		J							
RA_SE_DioxinsFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	N	mg/kg			0.000285			3.05E-06		J							
RA_SE_DioxinsFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	N	mg/kg			0.000217			2.18E-06		J							
RA_SE_DioxinsFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	N	mg/kg			3.82E-05			5.2E-07		U							
RA_SE_DioxinsFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	N	mg/kg			5.67E-05			9E-07		J							
RA_SE_DioxinsFurans	OCDD	3268-87-9	SW8290A	N	mg/kg			0.0147			0.000341									
RA_SE_DioxinsFurans	OCDF	39001-02-0	SW8290A	N	mg/kg			0.001		JN	2.18E-05									
RA_SE_DioxinsFurans	TCDD TEQ Bird	DFTEQ-Bird	SW8290A	N	mg/kg			0.000815			1.2E-05									
RA_SE_DioxinsFurans	TCDD TEQ Fish	DFTEQ-Fish	SW8290A	N	mg/kg			0.000713			1.06E-05									
RA_SE_DioxinsFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	N	mg/kg			0.000707			1.06E-05									
RA_SE_DioxinsFurans	Total HpCDD	37871-00-4	SW8290A	N	mg/kg			0.00785		J	0.000101									
RA_SE_DioxinsFurans	Total HpCDF	38998-75-3	SW8290A	N	mg/kg			0.00217		JN	3.69E-05		JN							
RA_SE_DioxinsFurans	Total HxCDD	34465-46-8	SW8290A	N	mg/kg			0.00593		JN	4.92E-05		JN							
RA_SE_DioxinsFurans	Total HxCDF	55684-94-1	SW8290A	N	mg/kg			0.00289		JN	6.18E-05		JN							
RA_SE_DioxinsFurans	Total PeCDD	36088-22-9	SW8290A	N	mg/kg			0.00644		JN	0.000553		JN							
RA_SE_DioxinsFurans	Total PeCDF	30402-15-4	SW8290A	N	mg/kg			0.00269		JN	9.83E-05		JN							
RA_SE_DioxinsFurans	Total TCDD	41903-57-5	SW8290A	N	mg/kg			0.00165		JN	9.21E-06		JN							
RA_SE_DioxinsFurans	Total TCDF	55722-27-5	SW8290A	N	mg/kg			0.00224		JN	0.000122		JN							
RA_SE_DioxinsFurans	Total TEQ	TTEQ	SW8290A	N	mg/kg			0.000707			1.06E-05									
RA_SE_Metals	Aluminum	7429-90-5	SW6020A	T	mg/kg	4500		7300			2400			7700			9700			
RA_SE_Metals	Antimony	7440-36-0	SW6020A	T	mg/kg	1.2	J-	2.8		J-	0.38			0.45		J-	0.55		J-	
RA_SE_Metals	Arsenic	7440-38-2	SW6020A	T	mg/kg	4.6	J-	11		J-	2.5			2.6		J-	2.9		J-	
RA_SE_Metals	Barium	7440-39-3	SW6020A	T	mg/kg	72	J-	100			17			84			99			
RA_SE_Metals	Beryllium	7440-41-7	SW6020A	T	mg/kg	0.71		0.95			0.15			1.1			1.4			
RA_SE_Metals	Cadmium	7440-43-9	SW6020A	T	mg/kg	3.7	J-	4.4		J-	0.74			0.73			0.87			
RA_SE_Metals	Calcium	7440-70-2	SW6020A	T	mg/kg	4200	J-	2300			17000			2800			3100			
RA_SE_Metals	Chromium	7440-47-3	SW6020A	T	mg/kg	29	J-	46			33			32			40			
RA_SE_Metals	Cobalt	7440-48-4	SW6020A	T	mg/kg	13	J-	13			7.1			16			19			
RA_SE_Metals	Copper	7440-50-8	SW6020A	T	mg/kg	110		190			54			45			55			
RA_SE_Metals	Iron	7439-89-6	SW6020A	T	mg/kg	14000		21000			12000			22000			25000			
RA_SE_Metals	Lead	7439-92-1	SW6020A	T	mg/kg	130		320			48			55			66			



Attachment A  
Surface Sediment Data  
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				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area						
				sys_loc_code	SED7E	SED7F	SED7G	SED8.5B	SED8A						
				sys_sample_code	SED7E00N	SED7F00N	SED7G00N	SED8.5B00N	SED8A00N						
				sample_date	11/25/2013	11/25/2013	1/30/2014	11/13/2013	11/13/2013						
				sample_type_code	N	N	N	N	N						
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013						
				start_depth	0	0	0	0	0						
				end_depth	0.5	0.5	0.5	0.5	0.5						
				depth_unit	ft	ft	ft	ft	ft						
				validated_yn	Y	Y	Y	Y	Y						
RA_SE_Metals	Magnesium	7439-95-4	SW6020A	T	mg/kg	3200		2800		12000		3000		3500	
RA_SE_Metals	Manganese	7439-96-5	SW6020A	T	mg/kg	120	J-	200		120		370		360	
RA_SE_Metals	Mercury	7439-97-6	SW7471B	T	mg/kg	0.27	J	0.46	J	0.041		0.13	J-	0.2	J-
RA_SE_Metals	Nickel	7440-02-0	SW6020A	T	mg/kg	120	J-	160	J-	84		29		34	
RA_SE_Metals	Potassium	7440-09-7	SW6020A	T	mg/kg	450		580		230		1100		1300	
RA_SE_Metals	Selenium	7782-49-2	SW6020A	T	mg/kg	0.54	J-	1.1	J-	0.034	J	0.98	J-	1.2	J-
RA_SE_Metals	Silver	7440-22-4	SW6020A	T	mg/kg	0.92		3.5	J-	0.083		0.24		0.31	
RA_SE_Metals	Sodium	7440-23-5	SW6020A	T	mg/kg	110		160		420		120		140	
RA_SE_Metals	Thallium	7440-28-0	SW6020A	T	mg/kg	0.15		0.13	J-	0.037	J	0.19		0.24	
RA_SE_Metals	Vanadium	7440-62-2	SW6020A	T	mg/kg	150	J+	440		56		28		35	
RA_SE_Metals	Zinc	7440-66-6	SW6020A	T	mg/kg	430	J-	630		260		190	J-	220	J-
RA_SE_Other	Arsenic	7440-38-2	SW6010	SEM	umol/g	0.024	J	0.066	J	0.026	J	0.01	J	0.012	J
RA_SE_Other	Cadmium	7440-43-9	SW6010	SEM	umol/g	0.022		0.035	J	0.0031		0.0042		0.005	
RA_SE_Other	Chromium	7440-47-3	SW6010	SEM	umol/g	0.3		0.48		0.19	J	0.35		0.41	
RA_SE_Other	Copper	7440-50-8	SW6010	SEM	umol/g	1.3		2.6		0.56		0.49		0.59	
RA_SE_Other	Lead	7439-92-1	SW6010	SEM	umol/g	0.75		1.5		0.19	J	0.19		0.21	
RA_SE_Other	Mercury	7439-97-6	SW7470A	SEM	umol/g	2.6E-05	J	0.00049		2.1E-05	J	0.00015		0.00014	J
RA_SE_Other	Nickel	7440-02-0	SW6010	SEM	umol/g	0.92	J	1.8		0.51	J	0.31		0.36	
RA_SE_Other	Silver	7440-22-4	SW6010	SEM	umol/g	0.0034	J	0.016	J	0.00026	J	0.00038	J	0.0027	UJ
RA_SE_Other	Sulfide	18496-25-8	SW9034	SEM	umol/g	1.8	J	0.46	J	1.6		1.4	UJ	2.2	UJ
RA_SE_Other	Total Organic Carbon	7440-44-0	LKTOC	T	mg/kg	51000		240000	J	8400		31000		41000	
RA_SE_Other	Zinc	7440-66-6	SW6010	SEM	umol/g	6.7		11		2.2		2.4		2.7	
RA_SE_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	N	mg/kg			0.012	J	0.009					
RA_SE_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	N	mg/kg			0.0059	J	0.0013	U				
RA_SE_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	N	mg/kg			0.011	J	0.00091	J				
RA_SE_PestPCBs	Aldrin	309-00-2	SW8081B LL	N	mg/kg			0.00075	J	0.0013	U				
RA_SE_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	N	mg/kg			0.0019	U	0.0013	U				
RA_SE_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	N	mg/kg	0.0072	U	0.0075	U	0.005	U	0.0088	U	0.0096	U
RA_SE_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	N	mg/kg	0.0072	U	0.0075	U	0.005	U	0.0088	U	0.0096	U
RA_SE_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	N	mg/kg	0.0072	U	0.0075	U	0.005	U	0.0088	U	0.0096	U
RA_SE_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	N	mg/kg	0.0072	U	0.0075	U	0.005	U	0.0088	U	0.0096	U
RA_SE_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	N	mg/kg	0.55	J	0.39	J	0.1	J	0.076	J	0.11	J
RA_SE_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	N	mg/kg	0.0072	UJ	0.0075	U	0.005	U	0.0088	U	0.0096	U
RA_SE_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	N	mg/kg	0.41	J	0.38	J	0.13	J	0.035	J	0.046	J
RA_SE_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	N	mg/kg	0.0072	UJ	0.0075	U	0.005	U	0.0088	U	0.0096	U
RA_SE_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	N	mg/kg	0.0072	UJ	0.0075	U	0.005	U	0.0088	U	0.0096	U
RA_SE_PestPCBs	beta-BHC	319-85-7	SW8081B LL	N	mg/kg			0.002	J	0.0013	U				
RA_SE_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	N	mg/kg			0.01		0.0017	J				
RA_SE_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	N	mg/kg										
RA_SE_PestPCBs	delta-BHC	319-86-8	SW8081B LL	N	mg/kg			0.0055	J	0.0024	J				
RA_SE_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	N	mg/kg										
RA_SE_PestPCBs	Dieldrin	60-57-1	SW8081B LL	N	mg/kg			0.0049	J	0.0023	J				
RA_SE_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	N	mg/kg			0.0012	J	0.0015	J				



				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area		
				sys_loc_code	SED7E	SED7F	SED7G	SED8.5B	SED8A		
				sys_sample_code	SED7E00N	SED7F00N	SED7G00N	SED8.5B00N	SED8A00N		
				sample_date	11/25/2013	11/25/2013	1/30/2014	11/13/2013	11/13/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	0	0	0	0	0		
				end_depth	0.5	0.5	0.5	0.5	0.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
RA_SE_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	N	mg/kg	0.005	J	0.0013	U		
RA_SE_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	N	mg/kg	0.01		0.0036			
RA_SE_PestPCBs	Endrin	72-20-8	SW8081B LL	N	mg/kg	0.022	J	0.0023	J		
RA_SE_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	N	mg/kg	0.0014	J	0.001	J		
RA_SE_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	N	mg/kg	0.008	J	0.0013	U		
RA_SE_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	N	mg/kg	0.00077	J	0.0016	J		
RA_SE_PestPCBs	Heptachlor	76-44-8	SW8081B LL	N	mg/kg	0.001	J	0.00065	J		
RA_SE_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	N	mg/kg	0.0062	J	0.00062	J		
RA_SE_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	N	mg/kg						
RA_SE_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	N	mg/kg						
RA_SE_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	N	mg/kg	0.023	J	0.019	J		
RA_SE_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	N	mg/kg						
RA_SE_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	N	mg/kg						
RA_SE_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB TEQ Bird	PCBTEQ-Bird	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB, TOTAL	PCB	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	N	mg/kg	0.96	0.77	0.23		0.11	0.16
RA_SE_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	N	mg/kg	0.96	0.77	0.23		0.11	0.16
RA_SE_PestPCBs	PCB-1	2051-60-7	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-10	33146-45-1	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-100	39485-83-1	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-101	37680-73-2	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-102	68194-06-9	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-103	60145-21-3	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-104	56558-16-8	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-105	32598-14-4	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-106	70424-69-0	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-107	70424-68-9	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-108	70362-41-3	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-109	74472-35-8	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-11	2050-67-1	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-110	38380-03-9	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-111	39635-32-0	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-112	74472-36-9	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-113	68194-10-5	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-114	74472-37-0	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-115	74472-38-1	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-116	18259-05-7	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-117	68194-11-6	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-118	31508-00-6	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-119	56558-17-9	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-12	2974-92-7	E1668C	N	mg/kg						



Attachment A  
Surface Sediment Data  
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		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
		sys_loc_code	SED7E	SED7F	SED7G	SED8.5B	SED8A
		sys_sample_code	SED7E00N	SED7F00N	SED7G00N	SED8.5B00N	SED8A00N
		sample_date	11/25/2013	11/25/2013	1/30/2014	11/13/2013	11/13/2013
		sample_type_code	N	N	N	N	N
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
		start_depth	0	0	0	0	0
		end_depth	0.5	0.5	0.5	0.5	0.5
		depth_unit	ft	ft	ft	ft	ft
		validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-120	68194-12-7	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-121	56558-18-0	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-122	76842-07-4	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-123	65510-44-3	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-124	70424-70-3	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-125	74472-39-2	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-126	57465-28-8	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-127	39635-33-1	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-128	38380-07-3	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-129	55215-18-4	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-13	2974-90-5	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-130	52663-66-8	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-131	61798-70-7	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-132	38380-05-1	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-133	35694-04-3	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-134	52704-70-8	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-135	52744-13-5	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-136	38411-22-2	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-137	35694-06-5	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-138	35065-28-2	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-139	56030-56-9	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-14	34883-41-5	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-140	59291-64-4	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-141	52712-04-6	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-142	41411-61-4	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-143	68194-15-0	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-144	68194-14-9	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-145	74472-40-5	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-146	51908-16-8	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-147	68194-13-8	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-148	74472-41-6	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-149	38380-04-0	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-15	2050-68-2	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-150	68194-08-1	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-151	52663-63-5	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-152	68194-09-2	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-153	35065-27-1	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-154	60145-22-4	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-155	33979-03-2	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-156	38380-08-4	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-157	69782-90-7	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-158	74472-42-7	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-159	39635-35-3	E1668C	N	mg/kg		



Attachment A  
Surface Sediment Data  
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		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
	sys_loc_code	SED7E	SED7E00N	SED7F	SED7G	SED8.5B	SED8A
	sys_sample_code	SED7E00N	SED7E00N	SED7F00N	SED7G00N	SED8.5B00N	SED8A00N
	sample_date	11/25/2013	11/25/2013	11/25/2013	1/30/2014	11/13/2013	11/13/2013
	sample_type_code	N	N	N	N	N	N
	task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
	start_depth	0	0	0	0	0	0
	end_depth	0.5	0.5	0.5	0.5	0.5	0.5
	depth_unit	ft	ft	ft	ft	ft	ft
	validated_yn	Y	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-16	38444-78-9	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-160	41411-62-5	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-161	74472-43-8	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-162	39635-34-2	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-163	74472-44-9	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-164	74472-45-0	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-165	74472-46-1	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-166	41411-63-6	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-167	52663-72-6	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-168	59291-65-5	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-169	32774-16-6	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-17	37680-66-3	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-170	35065-30-6	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-171	52663-71-5	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-172	52663-74-8	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-173	68194-16-1	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-174	38411-25-5	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-175	40186-70-7	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-176	52663-65-7	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-177	52663-70-4	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-178	52663-67-9	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-179	52663-64-6	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-18	37680-65-2	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-180	35065-29-3	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-181	74472-47-2	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-182	60145-23-5	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-183	52663-69-1	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-184	74472-48-3	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-185	52712-05-7	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-186	74472-49-4	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-187	52663-68-0	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-188	74487-85-7	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-189	39635-31-9	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-19	38444-73-4	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-190	41411-64-7	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-191	74472-50-7	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-192	74472-51-8	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-193	69782-91-8	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-194	35694-08-7	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-195	52663-78-2	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-196	42740-50-1	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-197	33091-17-7	E1668C	N	mg/kg		
RA_SE_PestPCBs	PCB-198	68194-17-2	E1668C	N	mg/kg		



Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED7E	SED7F	SED7G	SED8.5B	SED8A
				sys_sample_code	SED7E00N	SED7F00N	SED7G00N	SED8.5B00N	SED8A00N
				sample_date	11/25/2013	11/25/2013	1/30/2014	11/13/2013	11/13/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-199	52663-75-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-2	2051-61-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-20	38444-84-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-200	52663-73-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-201	40186-71-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-202	2136-99-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-203	52663-76-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-204	74472-52-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-205	74472-53-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-206	40186-72-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-207	52663-79-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-208	52663-77-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-21	55702-46-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-22	38444-85-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-23	55720-44-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-24	55702-45-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-25	55712-37-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-26	38444-81-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-27	38444-76-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-28	7012-37-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-29	15862-07-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-3	2051-62-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-30	35693-92-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-31	16606-02-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-32	38444-77-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-33	38444-86-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-34	37680-68-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-35	37680-69-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-36	38444-87-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-37	38444-90-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-38	53555-66-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-39	38444-88-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-4	13029-08-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-40	38444-93-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-41	52663-59-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-42	36559-22-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-43	70362-46-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-44	41464-39-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-45	70362-45-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-46	41464-47-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-47	2437-79-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-48	70362-47-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-49	41464-40-8	E1668C	N	mg/kg				



Attachment A  
 Surface Sediment Data  
 Benning Road Facility RI/FS Project  
 3400 Benning Rd, N.E., Washington DC 20019

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED7E	SED7F	SED7G	SED8.5B	SED8A
				sys_sample_code	SED7E00N	SED7F00N	SED7G00N	SED8.5B00N	SED8A00N
				sample_date	11/25/2013	11/25/2013	1/30/2014	11/13/2013	11/13/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-5	16605-91-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-50	62796-65-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-51	68194-04-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-52	35693-99-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-53	41464-41-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-54	15968-05-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-55	74338-24-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-56	41464-43-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-57	70424-67-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-58	41464-49-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-59	74472-33-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-6	25569-80-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-60	33025-41-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-61	33284-53-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-62	54230-22-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-63	74472-34-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-64	52663-58-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-65	33284-54-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-66	32598-10-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-67	73575-53-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-68	73575-52-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-69	60233-24-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-7	33284-50-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-70	32598-11-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-71	41464-46-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-72	41464-42-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-73	74338-23-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-74	32690-93-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-75	32598-12-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-76	70362-48-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-77	32598-13-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-78	70362-49-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-79	41464-48-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-8	34883-43-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-80	33284-52-5	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-81	70362-50-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-82	52663-62-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-83	60145-20-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-84	52663-60-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-85	65510-45-4	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-86	55312-69-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-87	38380-02-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-88	55215-17-3	E1668C	N	mg/kg				

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED7E	SED7F	SED7G	SED8.5B	SED8A
				sys_sample_code	SED7E00N	SED7F00N	SED7G00N	SED8.5B00N	SED8A00N
				sample_date	11/25/2013	11/25/2013	1/30/2014	11/13/2013	11/13/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-89	73575-57-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-9	34883-39-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-90	68194-07-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-91	68194-05-8	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-92	52663-61-3	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-93	73575-56-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-94	73575-55-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-95	38379-99-6	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-96	73575-54-9	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-97	41464-51-1	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-98	60233-25-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	PCB-99	38380-01-7	E1668C	N	mg/kg				
RA_SE_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	N	mg/kg				
RA_SE_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	N	mg/kg				
RA_SE_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	N	mg/kg	0.075	U	0.05	U
RA_SE_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	N	mg/kg	0.0082	J	0.0019	
RA_SE_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	N	mg/kg				
RA_SE_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	N	mg/kg	0.3	U	0.2	U
RA_SE_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	N	mg/kg	0.3	U	0.2	U
RA_SE_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	N	mg/kg	0.06	U	0.041	U
RA_SE_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	N	mg/kg	0.3	U	0.2	U
RA_SE_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	N	mg/kg	0.3	U	0.2	U
RA_SE_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	N	mg/kg	0.3	U	0.2	U
RA_SE_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	N	mg/kg	0.06	U	0.041	U
RA_SE_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	N	mg/kg	0.3	U	0.2	U
RA_SE_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	N	mg/kg	1.5	U	1	U
RA_SE_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	N	mg/kg	0.3	U	0.2	U
RA_SE_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	N	mg/kg	0.3	U	0.2	U
RA_SE_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	N	mg/kg	0.06	U	0.041	U
RA_SE_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	N	mg/kg	0.3	U	0.2	U
RA_SE_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	N	mg/kg	0.067		0.068	
RA_SE_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	N	mg/kg	0.3	U	0.2	U
RA_SE_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	N	mg/kg	1.5	U	1	U
RA_SE_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	N	mg/kg	0.3	U	0.2	U
RA_SE_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	N	mg/kg	0.3	U	0.2	U
RA_SE_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	N	mg/kg	1.5	U	1	U
RA_SE_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	N	mg/kg	1.5	U	1	U
RA_SE_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	N	mg/kg	0.3	U	0.2	U
RA_SE_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	N	mg/kg	0.3	U	0.2	U
RA_SE_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	N	mg/kg	0.3	U	0.2	U
RA_SE_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	N	mg/kg	0.3	U	0.2	U
RA_SE_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	N	mg/kg	0.3	U	0.11	J
RA_SE_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	N	mg/kg	1.5	U	1	U

	loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area					
RA_SE_SVOCs	sys_loc_code	SED7E	SED7F	SED7G	SED8.5B	SED8A	SED8A00N	SED8A					
	sys_sample_code	SED7E00N	SED7F00N	SED7G00N	SED8.5B00N	SED8A00N	SED8A00N	SED8A					
	sample_date	11/25/2013	11/25/2013	1/30/2014	11/13/2013	11/13/2013	11/13/2013	11/13/2013					
	sample_type_code	N	N	N	N	N	N	N					
	task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
	start_depth	0	0	0	0	0	0	0					
	end_depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5					
	depth_unit	ft	ft	ft	ft	ft	ft	ft					
	validated_yn	Y	Y	Y	Y	Y	Y	Y					
RA_SE_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	N	mg/kg		1.5	U					
RA_SE_SVOCs	Acenaphthene	83-32-9	SW8270D LL	N	mg/kg	0.046	J	0.064	U	0.14		0.032	J
RA_SE_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	N	mg/kg	0.027	J	0.043	J	0.023	J	0.052	J
RA_SE_SVOCs	Acetophenone	98-86-2	SW8270D LL	N	mg/kg			0.03	J	0.027	J		
RA_SE_SVOCs	Anthracene	120-12-7	SW8270D LL	N	mg/kg	0.13	J	0.14		0.21		0.094	
RA_SE_SVOCs	Atrazine	1912-24-9	SW8270D LL	N	mg/kg			0.3	U	0.2	U		
RA_SE_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	N	mg/kg			0.3	UJ	0.19	J		
RA_SE_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	N	mg/kg	0.49		0.59		0.95		0.48	
RA_SE_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	N	mg/kg	0.52		0.6		0.89		0.5	
RA_SE_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	N	mg/kg	0.85		0.86		1.2		0.8	
RA_SE_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	N	mg/kg	0.47		0.64		0.78		0.65	
RA_SE_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	N	mg/kg	0.27		0.3		0.43		0.41	
RA_SE_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	N	mg/kg			0.3	U	0.2	U		
RA_SE_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	N	mg/kg			0.06	U	0.041	U		
RA_SE_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	N	mg/kg			0.59	J	0.55			
RA_SE_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	N	mg/kg			0.12	J	0.18	J		
RA_SE_SVOCs	Caprolactam	105-60-2	SW8270D LL	N	mg/kg			1.5	U	1	U		
RA_SE_SVOCs	Carbazole	86-74-8	SW8270D LL	N	mg/kg			0.1		0.25			
RA_SE_SVOCs	Chrysene	218-01-9	SW8270D LL	N	mg/kg	0.76		0.89		1.2		0.82	
RA_SE_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	N	mg/kg	0.094	J	0.16		0.15		0.13	
RA_SE_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	N	mg/kg			0.042	J	0.11	J		
RA_SE_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	N	mg/kg			0.3	U	0.2	U		
RA_SE_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	N	mg/kg			0.3	U	0.2	U		
RA_SE_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	N	mg/kg			0.3	U	0.2	U		
RA_SE_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	N	mg/kg			0.3	U	0.15	J		
RA_SE_SVOCs	Fluoranthene	206-44-0	SW8270D LL	N	mg/kg	1.2		1.3		2.6		0.95	
RA_SE_SVOCs	Fluorene	86-73-7	SW8270D LL	N	mg/kg	0.055	J	0.063		0.1		0.048	J
RA_SE_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	N	mg/kg			0.06	U	0.041	U		
RA_SE_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	N	mg/kg			0.06	U	0.041	U		
RA_SE_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	N	mg/kg			0.3	U	0.2	U		
RA_SE_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	N	mg/kg			0.3	U	0.2	U		
RA_SE_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	N	mg/kg	0.38		0.51		0.64		0.53	
RA_SE_SVOCs	Isophorone	78-59-1	SW8270D LL	N	mg/kg			0.3	U	0.2	U		
RA_SE_SVOCs	Naphthalene	91-20-3	SW8270D LL	N	mg/kg	0.031	J	0.038	J	0.095		0.029	J
RA_SE_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	N	mg/kg			0.6	U	0.4	U		
RA_SE_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	N	mg/kg			0.06	U	0.041	U		
RA_SE_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	N	mg/kg			0.3	U	0.2	U		
RA_SE_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	N	mg/kg			0.3	U	0.2	U		
RA_SE_SVOCs	Phenanthrene	85-01-8	SW8270D LL	N	mg/kg	0.5		0.56		2		0.48	
RA_SE_SVOCs	Phenol	108-95-2	SW8270D LL	N	mg/kg			0.06	U	0.041	U		
RA_SE_SVOCs	Pyrene	129-00-0	SW8270D LL	N	mg/kg	1		1.1		2.1		1	
RA_SE_SVOCs	Total High-molecular-weight PAHs	TOT-PAH-HMW	SW8270D LL	N	mg/kg	6		7		11		6.3	
RA_SE_SVOCs	Total Low-molecular-weight PAHs	TOT-PAH-LMW	SW8270D LL	N	mg/kg	0.79		0.91		2.6		0.74	

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	
				sys_loc_code	SED7E	SED7F	SED7G	SED8.5B	SED8A	
				sys_sample_code	SED7E00N	SED7F00N	SED7G00N	SED8.5B00N	SED8A00N	
				sample_date	11/25/2013	11/25/2013	1/30/2014	11/13/2013	11/13/2013	
				sample_type_code	N	N	N	N	N	
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
				start_depth	0	0	0	0	0	
				end_depth	0.5	0.5	0.5	0.5	0.5	
				depth_unit	ft	ft	ft	ft	ft	
				validated_yn	Y	Y	Y	Y	Y	
RA_SE_SVOCs	Total PAHs (sum 16)	TOT-PAH	SW8270D LL	N	mg/kg	6.8	7.9	14	7	8.5
RA_SE_SVOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	1,1-Dichloroethane	75-34-3	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	1,1-Dichloroethene	75-35-4	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	1,2-Dibromoethane	106-93-4	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	1,2-Dichloroethane	107-06-2	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	1,2-Dichloropropane	78-87-5	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	1,4-Dioxane	123-91-1	SW8260B	N	mg/kg		2.9	U	1.2	U
RA_SE_SVOCs	2-Butanone	78-93-3	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	2-Hexanone	591-78-6	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	Acetone	67-64-1	SW8260B	N	mg/kg		0.057	U	0.023	U
RA_SE_SVOCs	Benzene	71-43-2	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	Bromochloromethane	74-97-5	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	Bromodichloromethane	75-27-4	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	Bromoform	75-25-2	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	Bromomethane	74-83-9	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	Carbon Disulfide	75-15-0	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	Carbon Tetrachloride	56-23-5	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	Chlorobenzene	108-90-7	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	Chloroethane	75-00-3	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	Chloroform	67-66-3	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	Chloromethane	74-87-3	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	Cyclohexane	110-82-7	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	Dibromochloromethane	124-48-1	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	Dichlorodifluoromethane	75-71-8	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	Ethylbenzene	100-41-4	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	Isopropylbenzene	98-82-8	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	m, p-Xylene	XYLMP	SW8260B	N	mg/kg		0.029	U	0.012	U
RA_SE_SVOCs	Methyl Acetate	79-20-9	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	N	mg/kg		0.014	U	0.0058	U
RA_SE_SVOCs	Methylcyclohexane	108-87-2	SW8260B	N	mg/kg		0.014	U	0.0058	U





Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area				
		sys_loc_code	SED7E	SED7F	SED7G	SED8.5B	SED8A	SED8A				
		sys_sample_code	SED7E00N	SED7F00N	SED7G00N	SED8.5B00N	SED8A00N	SED8A00N				
		sample_date	11/25/2013	11/25/2013	1/30/2014	11/13/2013	11/13/2013	11/13/2013				
		sample_type_code	N	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	0	0	0	0	0	0				
		end_depth	0.5	0.5	0.5	0.5	0.5	0.5				
		depth_unit	ft	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y	Y				
RA_SE_VOCs	Methylene Chloride	75-09-2	SW8260B	N	mg/kg	0.014	U	0.0058	U			
RA_SE_VOCs	o-Xylene	95-47-6	SW8260B	N	mg/kg	0.014	U	0.0058	U			
RA_SE_VOCs	Styrene	100-42-5	SW8260B	N	mg/kg	0.014	U	0.0058	U			
RA_SE_VOCs	Tetrachloroethylene	127-18-4	SW8260B	N	mg/kg	0.014	U	0.0058	U			
RA_SE_VOCs	Toluene	108-88-3	SW8260B	N	mg/kg	0.014	U	0.0058	U			
RA_SE_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	N	mg/kg	0.014	U	0.0058	U			
RA_SE_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	N	mg/kg	0.014	U	0.0058	U			
RA_SE_VOCs	Trichloroethene	79-01-6	SW8260B	N	mg/kg	0.014	U	0.0058	U			
RA_SE_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	N	mg/kg	0.014	U	0.0058	U			
RA_SE_VOCs	Vinyl Chloride	75-01-4	SW8260B	N	mg/kg	0.014	U	0.0058	U			
RA_SE_VOCs	Xylenes (total)	1330-20-7	SW8260B	N	mg/kg	0.029	U	0.012	U			

Attachment A  
 Surface Sediment Data  
 Benning Road Facility RI/FS Project  
 3400 Benning Rd, N.E., Washington DC 20019

		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area									
		sys_loc_code	SED8B	SED8C	SED8C	SED9.5B	SED9A	SED9A									
		sys_sample_code	SED8B00N	SED8C00N	SED8C00R	SED9.5B00N	SED9A00N	SED9A00N									
		sample_date	11/13/2013	11/14/2013	11/14/2013	11/11/2013	11/11/2013	11/11/2013									
		sample_type_code	N	N	FD	N	N	N									
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013									
		start_depth	0	0	0	0	0	0									
		end_depth	0.5	0.5	0.5	0.5	0.5	0.5									
		depth_unit	ft	ft	ft	ft	ft	ft									
		validated_yn	Y	Y	Y	Y	Y	Y									
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value
						interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers
RA_SE_DioxinsFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	N	mg/kg		3.68E-05	J	6.46E-05	J							
RA_SE_DioxinsFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	N	mg/kg		7.04E-06	JN	1.39E-05	JN							
RA_SE_DioxinsFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	N	mg/kg		1.03E-06	JN	1.31E-06	JN							
RA_SE_DioxinsFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	N	mg/kg		7.47E-07	J	1.43E-06	J							
RA_SE_DioxinsFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	N	mg/kg		1.4E-06	JN	2.47E-06	JN							
RA_SE_DioxinsFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	N	mg/kg		2.09E-06	J	3.56E-06	J							
RA_SE_DioxinsFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	N	mg/kg		2.65E-06	JN	4.43E-06	JN							
RA_SE_DioxinsFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	N	mg/kg		1.92E-06	J	3.77E-06	J							
RA_SE_DioxinsFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	N	mg/kg		1.25E-07	J	1.31E-07	JN							
RA_SE_DioxinsFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	N	mg/kg		9.24E-07	JN	1.55E-06	JN							
RA_SE_DioxinsFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	N	mg/kg		5.33E-07	JN	6.99E-07	JN							
RA_SE_DioxinsFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	N	mg/kg		9.04E-07	JN	1.46E-06	J							
RA_SE_DioxinsFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	N	mg/kg		1E-06	JN	1.95E-06	JN							
RA_SE_DioxinsFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	N	mg/kg		5.02E-08	JN	5.78E-07	J							
RA_SE_DioxinsFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	N	mg/kg		7.66E-07	JN	1.56E-06	JN							
RA_SE_DioxinsFurans	OCDD	3268-87-9	SW8290A	N	mg/kg		0.000973	J	0.00181	J							
RA_SE_DioxinsFurans	OCDF	39001-02-0	SW8290A	N	mg/kg		1.3E-05	JN	1.92E-05	JN							
RA_SE_DioxinsFurans	TCDD TEQ Bird	DFTEQ-Bird	SW8290A	N	mg/kg		3.77E-06		7.44E-06								
RA_SE_DioxinsFurans	TCDD TEQ Fish	DFTEQ-Fish	SW8290A	N	mg/kg		2.68E-06		5.25E-06								
RA_SE_DioxinsFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	N	mg/kg		3.09E-06		5.96E-06								
RA_SE_DioxinsFurans	Total HpCDD	37871-00-4	SW8290A	N	mg/kg		8.12E-05	J	0.000144	J							
RA_SE_DioxinsFurans	Total HpCDF	38998-75-3	SW8290A	N	mg/kg		1.95E-05	JN	3.36E-05	JN							
RA_SE_DioxinsFurans	Total HxCDD	34465-46-8	SW8290A	N	mg/kg		1.98E-05	JN	3.53E-05	JN							
RA_SE_DioxinsFurans	Total HxCDF	55684-94-1	SW8290A	N	mg/kg		4.1E-05	JN	6.52E-05	JN							
RA_SE_DioxinsFurans	Total PeCDD	36088-22-9	SW8290A	N	mg/kg		6.93E-05	JN	9.62E-05	JN							
RA_SE_DioxinsFurans	Total PeCDF	30402-15-4	SW8290A	N	mg/kg		7.45E-05	JN	0.000122	JN							
RA_SE_DioxinsFurans	Total TCDD	41903-57-5	SW8290A	N	mg/kg		5.15E-06	JN	1.05E-05	JN							
RA_SE_DioxinsFurans	Total TCDF	55722-27-5	SW8290A	N	mg/kg		0.000122	JN	0.0002	JN							
RA_SE_DioxinsFurans	Total TEQ	TTEQ	SW8290A	N	mg/kg		3.09E-06		5.96E-06								
RA_SE_Metals	Aluminum	7429-90-5	SW6020A	T	mg/kg	5500	6600		7700		4500			8800			
RA_SE_Metals	Antimony	7440-36-0	SW6020A	T	mg/kg	0.38	0.35	J-	0.31	J-	0.27	J-	0.43	J-			
RA_SE_Metals	Arsenic	7440-38-2	SW6020A	T	mg/kg	2	3	J-	3.6	J-	2.1	J-	3.2	J-			
RA_SE_Metals	Barium	7440-39-3	SW6020A	T	mg/kg	68	63		71		44	J+	88	J+			
RA_SE_Metals	Beryllium	7440-41-7	SW6020A	T	mg/kg	0.82	0.85		1		0.67		1.1				
RA_SE_Metals	Cadmium	7440-43-9	SW6020A	T	mg/kg	0.61	0.8		0.89		0.35		0.88				
RA_SE_Metals	Calcium	7440-70-2	SW6020A	T	mg/kg	2200	2200	J-	2400	J-	1500	J-	2000	J-			
RA_SE_Metals	Chromium	7440-47-3	SW6020A	T	mg/kg	25	41		41		18	J+	68	J+			
RA_SE_Metals	Cobalt	7440-48-4	SW6020A	T	mg/kg	12	14		16		9.1	J	12	J			
RA_SE_Metals	Copper	7440-50-8	SW6020A	T	mg/kg	38	44		52		21		38				
RA_SE_Metals	Iron	7439-89-6	SW6020A	T	mg/kg	17000	19000		21000		12000		21000				
RA_SE_Metals	Lead	7439-92-1	SW6020A	T	mg/kg	46	56		62		36	J	61	J			



Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area		
		sys_loc_code	SED8B	SED8C	SED8C	SED9.5B	SED9A	SED9A		
		sys_sample_code	SED8B00N	SED8C00N	SED8C00R	SED9.5B00N	SED9A00N	SED9A00N		
		sample_date	11/13/2013	11/14/2013	11/14/2013	11/11/2013	11/11/2013	11/11/2013		
		sample_type_code	N	N	FD	N	N	N		
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
		start_depth	0	0	0	0	0	0		
		end_depth	0.5	0.5	0.5	0.5	0.5	0.5		
		depth_unit	ft	ft	ft	ft	ft	ft		
		validated_yn	Y	Y	Y	Y	Y	Y		
RA_SE_Metals	Magnesium	7439-95-4	SW6020A	T	mg/kg	2100	2000	2300	1900	2400
RA_SE_Metals	Manganese	7439-96-5	SW6020A	T	mg/kg	290	280	330	140	310
RA_SE_Metals	Mercury	7439-97-6	SW7471B	T	mg/kg	0.12	J-	0.16	J+	0.2
RA_SE_Metals	Nickel	7440-02-0	SW6020A	T	mg/kg	21	25	28	15	19
RA_SE_Metals	Potassium	7440-09-7	SW6020A	T	mg/kg	750	870	980	670	920
RA_SE_Metals	Selenium	7782-49-2	SW6020A	T	mg/kg	0.74	J-	1	J-	1.2
RA_SE_Metals	Silver	7440-22-4	SW6020A	T	mg/kg	0.26	0.29	0.43	0.15	0.69
RA_SE_Metals	Sodium	7440-23-5	SW6020A	T	mg/kg	90	89	J-	89	J-
RA_SE_Metals	Thallium	7440-28-0	SW6020A	T	mg/kg	0.14	0.16	J-	0.18	J-
RA_SE_Metals	Vanadium	7440-62-2	SW6020A	T	mg/kg	23	29	36	25	J+
RA_SE_Metals	Zinc	7440-66-6	SW6020A	T	mg/kg	140	J-	180	210	J+
RA_SE_Other	Arsenic	7440-38-2	SW6010	SEM	umol/g	0.0093	UJ	0.0084	0.01	0.016
RA_SE_Other	Cadmium	7440-43-9	SW6010	SEM	umol/g	0.0037	0.0053	0.0063	0.0034	0.0044
RA_SE_Other	Chromium	7440-47-3	SW6010	SEM	umol/g	0.28	0.36	0.41	0.25	0.58
RA_SE_Other	Copper	7440-50-8	SW6010	SEM	umol/g	0.39	0.5	0.59	0.4	0.48
RA_SE_Other	Lead	7439-92-1	SW6010	SEM	umol/g	0.16	0.21	0.24	0.19	0.24
RA_SE_Other	Mercury	7439-97-6	SW7470A	SEM	umol/g	0.00012	5.2E-05	J	3.1E-05	J
RA_SE_Other	Nickel	7440-02-0	SW6010	SEM	umol/g	0.25	0.26	0.3	0.3	0.29
RA_SE_Other	Silver	7440-22-4	SW6010	SEM	umol/g	0.00047	J	0.00039	J	0.00027
RA_SE_Other	Sulfide	18496-25-8	SW9034	SEM	umol/g	1.2	UJ	0.87	J	0.36
RA_SE_Other	Total Organic Carbon	7440-44-0	LKTOC	T	mg/kg	25000	29000	36000	39000	30000
RA_SE_Other	Zinc	7440-66-6	SW6010	SEM	umol/g	1.9	2.3	J	5.9	J
RA_SE_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	N	mg/kg	0.0093	J	0.0039	J	
RA_SE_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	N	mg/kg	0.03	J	0.011	J	
RA_SE_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	N	mg/kg	0.0055	J	0.00084	UJ	
RA_SE_PestPCBs	Aldrin	309-00-2	SW8081B LL	N	mg/kg	0.0023	J	0.00076	J	
RA_SE_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	N	mg/kg	0.00078	U	0.00084	U	
RA_SE_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	N	mg/kg	0.0081	U	0.0078	U	0.0084
RA_SE_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	N	mg/kg	0.0081	U	0.0078	U	0.0084
RA_SE_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	N	mg/kg	0.0081	U	0.0078	U	0.0084
RA_SE_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	N	mg/kg	0.0081	U	0.0078	U	0.0084
RA_SE_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	N	mg/kg	0.069	J	0.38	J	0.3
RA_SE_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	N	mg/kg	0.0081	U	0.0078	U	0.0084
RA_SE_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	N	mg/kg	0.034	J	0.21	J	0.084
RA_SE_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	N	mg/kg	0.0081	U	0.0078	U	0.0084
RA_SE_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	N	mg/kg	0.0081	U	0.0078	U	0.0084
RA_SE_PestPCBs	beta-BHC	319-85-7	SW8081B LL	N	mg/kg	0.00079	J	0.00054	J	
RA_SE_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	N	mg/kg	0.0056	J	0.0049	J	
RA_SE_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	N	mg/kg				0.000393	JN
RA_SE_PestPCBs	delta-BHC	319-86-8	SW8081B LL	N	mg/kg	0.0015	J	0.00032	J	
RA_SE_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	N	mg/kg				0.0035	JN
RA_SE_PestPCBs	Dieldrin	60-57-1	SW8081B LL	N	mg/kg		0.00078	U	0.0023	
RA_SE_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	N	mg/kg		0.00078	U	0.00084	U

loc_group	RA_WaterSide_Area	RA_WaterSide_Area	RA_WaterSide_Area	RA_WaterSide_Area	RA_WaterSide_Area	RA_WaterSide_Area	RA_WaterSide_Area	RA_WaterSide_Area	RA_WaterSide_Area	RA_WaterSide_Area		
sys_loc_code	SED8B	SED8C	SED8C	SED8C	SED8C	SED8C	SED8C	SED8C	SED8C	SED8C		
sys_sample_code	SED8B00N	SED8C00N	SED8C00R	SED8C00R	SED8C00R	SED8C00R	SED8C00R	SED8C00R	SED8C00R	SED8C00R		
sample_date	11/13/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013		
sample_type_code	N	N	N	N	N	N	N	N	N	N		
task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
start_depth	0	0	0	0	0	0	0	0	0	0		
end_depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		
depth_unit	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft		
validated_yn	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		
RA_SE_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	N	mg/kg	0.0012	J	0.00055	J			
RA_SE_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	N	mg/kg	0.0027	J	0.0012	J			
RA_SE_PestPCBs	Endrin	72-20-8	SW8081B LL	N	mg/kg	0.0054	J	0.0025	J			
RA_SE_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	N	mg/kg	0.0013	J	0.00061	J			
RA_SE_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	N	mg/kg	0.00078	U	0.0018	J			
RA_SE_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	N	mg/kg	0.0003	J	0.00084	U			
RA_SE_PestPCBs	Heptachlor	76-44-8	SW8081B LL	N	mg/kg	0.0022	J	0.0013	J			
RA_SE_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	N	mg/kg	0.0019	J	0.00084	J			
RA_SE_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	N	mg/kg					0.0172	JN	
RA_SE_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	N	mg/kg					0.0434	JN	
RA_SE_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	N	mg/kg	0.012	J	0.011	J			
RA_SE_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	N	mg/kg					0.000143	JN	
RA_SE_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	N	mg/kg					0.000936	JN	
RA_SE_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	N	mg/kg					0.00493	JN	
RA_SE_PestPCBs	PCB TEQ Bird	PCBTEQ-Bird	E1668C	N	mg/kg					3.05E-05		
RA_SE_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	N	mg/kg					1.2E-05		
RA_SE_PestPCBs	PCB, TOTAL	PCB	E1668C	N	mg/kg					0.17		
RA_SE_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	N	mg/kg	0.1		0.59		0.41		0.38
RA_SE_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	N	mg/kg	0.1		0.59		0.41		0.38
RA_SE_PestPCBs	PCB-1	2051-60-7	E1668C	N	mg/kg					7.07E-05		
RA_SE_PestPCBs	PCB-10	33146-45-1	E1668C	N	mg/kg					3.4E-05	JN	
RA_SE_PestPCBs	PCB-100	39485-83-1	E1668C	N	mg/kg					2.33E-05		
RA_SE_PestPCBs	PCB-101	37680-73-2	E1668C	N	mg/kg					0.00565		
RA_SE_PestPCBs	PCB-102	68194-06-9	E1668C	N	mg/kg					0.000228		
RA_SE_PestPCBs	PCB-103	60145-21-3	E1668C	N	mg/kg					6.89E-05		
RA_SE_PestPCBs	PCB-104	56558-16-8	E1668C	N	mg/kg					4.28E-06	U	
RA_SE_PestPCBs	PCB-105	32598-14-4	E1668C	N	mg/kg					0.00248		
RA_SE_PestPCBs	PCB-106	70424-69-0	E1668C	N	mg/kg					6.21E-06	U	
RA_SE_PestPCBs	PCB-107	70424-68-9	E1668C	N	mg/kg					0.000465		
RA_SE_PestPCBs	PCB-108	70362-41-3	E1668C	N	mg/kg					0.000269		
RA_SE_PestPCBs	PCB-109	74472-35-8	E1668C	N	mg/kg					0.00361		
RA_SE_PestPCBs	PCB-11	2050-67-1	E1668C	N	mg/kg					0.000278		
RA_SE_PestPCBs	PCB-110	38380-03-9	E1668C	N	mg/kg					0.00674		
RA_SE_PestPCBs	PCB-111	39635-32-0	E1668C	N	mg/kg					6.62E-06	JN	
RA_SE_PestPCBs	PCB-112	74472-36-9	E1668C	N	mg/kg					4.37E-06	U	
RA_SE_PestPCBs	PCB-113	68194-10-5	E1668C	N	mg/kg					0.00565		
RA_SE_PestPCBs	PCB-114	74472-37-0	E1668C	N	mg/kg					0.000154		
RA_SE_PestPCBs	PCB-115	74472-38-1	E1668C	N	mg/kg					0.00674		
RA_SE_PestPCBs	PCB-116	18259-05-7	E1668C	N	mg/kg					0.00109		
RA_SE_PestPCBs	PCB-117	68194-11-6	E1668C	N	mg/kg					0.00109		
RA_SE_PestPCBs	PCB-118	31508-00-6	E1668C	N	mg/kg					0.00583		
RA_SE_PestPCBs	PCB-119	56558-17-9	E1668C	N	mg/kg					0.00361		
RA_SE_PestPCBs	PCB-12	2974-92-7	E1668C	N	mg/kg					0.000121		

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	
				sys_loc_code	SED8B	SED8C	SED8C	SED9.5B	SED9A	
				sys_sample_code	SED8B00N	SED8C00N	SED8C00R	SED9.5B00N	SED9A00N	
				sample_date	11/13/2013	11/14/2013	11/14/2013	11/11/2013	11/11/2013	
				sample_type_code	N	N	FD	N	N	
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
				start_depth	0	0	0	0	0	
				end_depth	0.5	0.5	0.5	0.5	0.5	
				depth_unit	ft	ft	ft	ft	ft	
				validated_yn	Y	Y	Y	Y	Y	
RA_SE_PestPCBs	PCB-120	68194-12-7	E1668C	N	mg/kg			1.49E-05	J	
RA_SE_PestPCBs	PCB-121	56558-18-0	E1668C	N	mg/kg			4.17E-06	U	
RA_SE_PestPCBs	PCB-122	76842-07-4	E1668C	N	mg/kg			0.000122		
RA_SE_PestPCBs	PCB-123	65510-44-3	E1668C	N	mg/kg			0.00013	JN	
RA_SE_PestPCBs	PCB-124	70424-70-3	E1668C	N	mg/kg			0.000269		
RA_SE_PestPCBs	PCB-125	74472-39-2	E1668C	N	mg/kg			0.00361		
RA_SE_PestPCBs	PCB-126	57465-28-8	E1668C	N	mg/kg			8.38E-05		
RA_SE_PestPCBs	PCB-127	39635-33-1	E1668C	N	mg/kg			2.13E-05	J	
RA_SE_PestPCBs	PCB-128	38380-07-3	E1668C	N	mg/kg			0.00142		
RA_SE_PestPCBs	PCB-129	55215-18-4	E1668C	N	mg/kg			0.0103		
RA_SE_PestPCBs	PCB-13	2974-90-5	E1668C	N	mg/kg			0.000121		
RA_SE_PestPCBs	PCB-130	52663-66-8	E1668C	N	mg/kg			0.000595		
RA_SE_PestPCBs	PCB-131	61798-70-7	E1668C	N	mg/kg			0.00014		
RA_SE_PestPCBs	PCB-132	38380-05-1	E1668C	N	mg/kg			0.00329		
RA_SE_PestPCBs	PCB-133	35694-04-3	E1668C	N	mg/kg			0.000159	JN	
RA_SE_PestPCBs	PCB-134	52704-70-8	E1668C	N	mg/kg			0.000548		
RA_SE_PestPCBs	PCB-135	52744-13-5	E1668C	N	mg/kg			0.0022		
RA_SE_PestPCBs	PCB-136	38411-22-2	E1668C	N	mg/kg			0.0008		
RA_SE_PestPCBs	PCB-137	35694-06-5	E1668C	N	mg/kg			0.000403		
RA_SE_PestPCBs	PCB-138	35065-28-2	E1668C	N	mg/kg			0.0103		
RA_SE_PestPCBs	PCB-139	56030-56-9	E1668C	N	mg/kg			0.000181		
RA_SE_PestPCBs	PCB-14	34883-41-5	E1668C	N	mg/kg			5.41E-06	JN	
RA_SE_PestPCBs	PCB-140	59291-64-4	E1668C	N	mg/kg			0.000181		
RA_SE_PestPCBs	PCB-141	52712-04-6	E1668C	N	mg/kg			0.00189		
RA_SE_PestPCBs	PCB-142	41411-61-4	E1668C	N	mg/kg			1.68E-05	U	
RA_SE_PestPCBs	PCB-143	68194-15-0	E1668C	N	mg/kg			0.000548		
RA_SE_PestPCBs	PCB-144	68194-14-9	E1668C	N	mg/kg			0.000318		
RA_SE_PestPCBs	PCB-145	74472-40-5	E1668C	N	mg/kg			5.07E-06	U	
RA_SE_PestPCBs	PCB-146	51908-16-8	E1668C	N	mg/kg			0.00143		
RA_SE_PestPCBs	PCB-147	68194-13-8	E1668C	N	mg/kg			0.00819		
RA_SE_PestPCBs	PCB-148	74472-41-6	E1668C	N	mg/kg			7.09E-06	U	
RA_SE_PestPCBs	PCB-149	38380-04-0	E1668C	N	mg/kg			0.00819		
RA_SE_PestPCBs	PCB-15	2050-68-2	E1668C	N	mg/kg			0.000856		
RA_SE_PestPCBs	PCB-150	68194-08-1	E1668C	N	mg/kg			4.94E-06	U	
RA_SE_PestPCBs	PCB-151	52663-63-5	E1668C	N	mg/kg			0.0022		
RA_SE_PestPCBs	PCB-152	68194-09-2	E1668C	N	mg/kg			5.04E-06	U	
RA_SE_PestPCBs	PCB-153	35065-27-1	E1668C	N	mg/kg			0.00826		
RA_SE_PestPCBs	PCB-154	60145-22-4	E1668C	N	mg/kg			7.31E-05		
RA_SE_PestPCBs	PCB-155	33979-03-2	E1668C	N	mg/kg			4.8E-06	U	
RA_SE_PestPCBs	PCB-156	38380-08-4	E1668C	N	mg/kg			0.00086		
RA_SE_PestPCBs	PCB-157	69782-90-7	E1668C	N	mg/kg			0.00086		
RA_SE_PestPCBs	PCB-158	74472-42-7	E1668C	N	mg/kg			0.000965		
RA_SE_PestPCBs	PCB-159	39635-35-3	E1668C	N	mg/kg			0.000127		

			loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
			sys_loc_code	SED8B	SED8C	SED8C	SED9.5B	SED9A	
			sys_sample_code	SED8B00N	SED8C00N	SED8C00R	SED9.5B00N	SED9A00N	
			sample_date	11/13/2013	11/14/2013	11/14/2013	11/11/2013	11/11/2013	
			sample_type_code	N	N	FD	N	N	
			task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
			start_depth	0	0	0	0	0	
			end_depth	0.5	0.5	0.5	0.5	0.5	
			depth_unit	ft	ft	ft	ft	ft	
			validated_yn	Y	Y	Y	Y	Y	
RA_SE_PestPCBs	PCB-16	38444-78-9	E1668C	N	mg/kg				0.000822
RA_SE_PestPCBs	PCB-160	41411-62-5	E1668C	N	mg/kg				0.0103
RA_SE_PestPCBs	PCB-161	74472-43-8	E1668C	N	mg/kg				1.11E-05
RA_SE_PestPCBs	PCB-162	39635-34-2	E1668C	N	mg/kg				2.52E-05
RA_SE_PestPCBs	PCB-163	74472-44-9	E1668C	N	mg/kg				0.0103
RA_SE_PestPCBs	PCB-164	74472-45-0	E1668C	N	mg/kg				0.000691
RA_SE_PestPCBs	PCB-165	74472-46-1	E1668C	N	mg/kg				1.22E-05
RA_SE_PestPCBs	PCB-166	41411-63-6	E1668C	N	mg/kg				0.00142
RA_SE_PestPCBs	PCB-167	52663-72-6	E1668C	N	mg/kg				0.000348
RA_SE_PestPCBs	PCB-168	59291-65-5	E1668C	N	mg/kg				0.00826
RA_SE_PestPCBs	PCB-169	32774-16-6	E1668C	N	mg/kg				0.000109
RA_SE_PestPCBs	PCB-17	37680-66-3	E1668C	N	mg/kg				0.00124
RA_SE_PestPCBs	PCB-170	35065-30-6	E1668C	N	mg/kg				0.00228
RA_SE_PestPCBs	PCB-171	52663-71-5	E1668C	N	mg/kg				0.000617
RA_SE_PestPCBs	PCB-172	52663-74-8	E1668C	N	mg/kg				0.000356
RA_SE_PestPCBs	PCB-173	68194-16-1	E1668C	N	mg/kg				0.000617
RA_SE_PestPCBs	PCB-174	38411-25-5	E1668C	N	mg/kg				0.00222
RA_SE_PestPCBs	PCB-175	40186-70-7	E1668C	N	mg/kg				8.39E-05
RA_SE_PestPCBs	PCB-176	52663-65-7	E1668C	N	mg/kg				0.000274
RA_SE_PestPCBs	PCB-177	52663-70-4	E1668C	N	mg/kg				0.00119
RA_SE_PestPCBs	PCB-178	52663-67-9	E1668C	N	mg/kg				0.000465
RA_SE_PestPCBs	PCB-179	52663-64-6	E1668C	N	mg/kg				0.00103
RA_SE_PestPCBs	PCB-18	37680-65-2	E1668C	N	mg/kg				0.00209
RA_SE_PestPCBs	PCB-180	35065-29-3	E1668C	N	mg/kg				0.00407
RA_SE_PestPCBs	PCB-181	74472-47-2	E1668C	N	mg/kg				2.63E-05
RA_SE_PestPCBs	PCB-182	60145-23-5	E1668C	N	mg/kg				1.1E-05
RA_SE_PestPCBs	PCB-183	52663-69-1	E1668C	N	mg/kg				0.00144
RA_SE_PestPCBs	PCB-184	74472-48-3	E1668C	N	mg/kg				5.34E-06
RA_SE_PestPCBs	PCB-185	52712-05-7	E1668C	N	mg/kg				0.00144
RA_SE_PestPCBs	PCB-186	74472-49-4	E1668C	N	mg/kg				5.18E-06
RA_SE_PestPCBs	PCB-187	52663-68-0	E1668C	N	mg/kg				0.00256
RA_SE_PestPCBs	PCB-188	74487-85-7	E1668C	N	mg/kg				4.01E-06
RA_SE_PestPCBs	PCB-189	39635-31-9	E1668C	N	mg/kg				8.63E-05
RA_SE_PestPCBs	PCB-19	38444-73-4	E1668C	N	mg/kg				0.000404
RA_SE_PestPCBs	PCB-190	41411-64-7	E1668C	N	mg/kg				0.000362
RA_SE_PestPCBs	PCB-191	74472-50-7	E1668C	N	mg/kg				8.06E-05
RA_SE_PestPCBs	PCB-192	74472-51-8	E1668C	N	mg/kg				5.5E-06
RA_SE_PestPCBs	PCB-193	69782-91-8	E1668C	N	mg/kg				0.00407
RA_SE_PestPCBs	PCB-194	35694-08-7	E1668C	N	mg/kg				0.00126
RA_SE_PestPCBs	PCB-195	52663-78-2	E1668C	N	mg/kg				0.000559
RA_SE_PestPCBs	PCB-196	42740-50-1	E1668C	N	mg/kg				0.000523
RA_SE_PestPCBs	PCB-197	33091-17-7	E1668C	N	mg/kg				3.04E-05
RA_SE_PestPCBs	PCB-198	68194-17-2	E1668C	N	mg/kg				0.00121

				loc_group		RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area		
				sys_loc_code		SED8B	SED8C	SED8C	SED8C	SED8C	SED8C	SED8C	SED8C	SED8C	SED8C	SED8C	SED8C	SED8C	SED8C	SED8C	SED8C	SED8C		
				sys_sample_code		SED8B00N	SED8C00N	SED8C00R	SED8C00R	SED8C00R	SED8C00R	SED8C00R	SED8C00R	SED8C00R	SED8C00R	SED8C00R	SED8C00R	SED8C00R	SED8C00R	SED8C00R	SED8C00R	SED8C00R		
				sample_date		11/13/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013		
				sample_type_code		N	N	FD	FD	FD	FD	FD	FD	FD	FD	FD	FD	FD	FD	FD	FD	FD		
				task_code		Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
				end_depth		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		
				depth_unit		ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft		
				validated_yn		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		
RA_SE_PestPCBs	PCB-199	52663-75-9	E1668C	N	mg/kg															0.00121				
RA_SE_PestPCBs	PCB-2	2051-61-8	E1668C	N	mg/kg																2.24E-05	JN		
RA_SE_PestPCBs	PCB-20	38444-84-7	E1668C	N	mg/kg																0.00485			
RA_SE_PestPCBs	PCB-200	52663-73-7	E1668C	N	mg/kg																0.00014			
RA_SE_PestPCBs	PCB-201	40186-71-8	E1668C	N	mg/kg																0.000127			
RA_SE_PestPCBs	PCB-202	2136-99-4	E1668C	N	mg/kg																0.000281			
RA_SE_PestPCBs	PCB-203	52663-76-0	E1668C	N	mg/kg																0.000727			
RA_SE_PestPCBs	PCB-204	74472-52-9	E1668C	N	mg/kg																5.61E-06	U		
RA_SE_PestPCBs	PCB-205	74472-53-0	E1668C	N	mg/kg																7.28E-05			
RA_SE_PestPCBs	PCB-206	40186-72-9	E1668C	N	mg/kg																0.000681			
RA_SE_PestPCBs	PCB-207	52663-79-3	E1668C	N	mg/kg																8.04E-05	JN		
RA_SE_PestPCBs	PCB-208	52663-77-1	E1668C	N	mg/kg																0.000175			
RA_SE_PestPCBs	PCB-21	55702-46-0	E1668C	N	mg/kg																0.00175			
RA_SE_PestPCBs	PCB-22	38444-85-8	E1668C	N	mg/kg																0.00127			
RA_SE_PestPCBs	PCB-23	55720-44-0	E1668C	N	mg/kg																6.91E-06	JN		
RA_SE_PestPCBs	PCB-24	55702-45-9	E1668C	N	mg/kg																4.27E-05	J		
RA_SE_PestPCBs	PCB-25	55712-37-3	E1668C	N	mg/kg																0.000473			
RA_SE_PestPCBs	PCB-26	38444-81-4	E1668C	N	mg/kg																0.000824			
RA_SE_PestPCBs	PCB-27	38444-76-7	E1668C	N	mg/kg																0.000308			
RA_SE_PestPCBs	PCB-28	7012-37-5	E1668C	N	mg/kg																0.00485			
RA_SE_PestPCBs	PCB-29	15862-07-4	E1668C	N	mg/kg																0.000824			
RA_SE_PestPCBs	PCB-3	2051-62-9	E1668C	N	mg/kg																4.98E-05	J		
RA_SE_PestPCBs	PCB-30	35693-92-6	E1668C	N	mg/kg																0.00209			
RA_SE_PestPCBs	PCB-31	16606-02-3	E1668C	N	mg/kg																0.00363			
RA_SE_PestPCBs	PCB-32	38444-77-8	E1668C	N	mg/kg																0.00106			
RA_SE_PestPCBs	PCB-33	38444-86-9	E1668C	N	mg/kg																0.00175			
RA_SE_PestPCBs	PCB-34	37680-68-5	E1668C	N	mg/kg																2.24E-05	JN		
RA_SE_PestPCBs	PCB-35	37680-69-6	E1668C	N	mg/kg																6.55E-05	JN		
RA_SE_PestPCBs	PCB-36	38444-87-0	E1668C	N	mg/kg																3.57E-06	U		
RA_SE_PestPCBs	PCB-37	38444-90-5	E1668C	N	mg/kg																0.00116			
RA_SE_PestPCBs	PCB-38	53555-66-1	E1668C	N	mg/kg																6.75E-06	JN		
RA_SE_PestPCBs	PCB-39	38444-88-1	E1668C	N	mg/kg																2.77E-05	JN		
RA_SE_PestPCBs	PCB-4	13029-08-8	E1668C	N	mg/kg																0.000679			
RA_SE_PestPCBs	PCB-40	38444-93-8	E1668C	N	mg/kg																0.00281			
RA_SE_PestPCBs	PCB-41	52663-59-9	E1668C	N	mg/kg																0.00281			
RA_SE_PestPCBs	PCB-42	36559-22-5	E1668C	N	mg/kg																0.00128			
RA_SE_PestPCBs	PCB-43	70362-46-8	E1668C	N	mg/kg																0.000233			
RA_SE_PestPCBs	PCB-44	41464-39-5	E1668C	N	mg/kg																0.00562			
RA_SE_PestPCBs	PCB-45	70362-45-7	E1668C	N	mg/kg																0.00108			
RA_SE_PestPCBs	PCB-46	41464-47-5	E1668C	N	mg/kg																0.000336			
RA_SE_PestPCBs	PCB-47	2437-79-8	E1668C	N	mg/kg																0.00562			
RA_SE_PestPCBs	PCB-48	70362-47-9	E1668C	N	mg/kg																0.000923			
RA_SE_PestPCBs	PCB-49	41464-40-8	E1668C	N	mg/kg																0.00347			

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED8B	SED8C	SED8C	SED8C	SED9.5B	SED9A	SED9A	SED9A	SED9A
				sys_sample_code	SED8B00N	SED8C00N	SED8C00R	SED8C00R	SED9.5B00N	SED9A00N	SED9A00N	SED9A00N	SED9A00N
				sample_date	11/13/2013	11/14/2013	11/14/2013	11/14/2013	11/11/2013	11/11/2013	11/11/2013	11/11/2013	11/11/2013
				sample_type_code	N	N	FD	FD	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-5	16605-91-7	E1668C	N	mg/kg				1.6E-05	JN			
RA_SE_PestPCBs	PCB-50	62796-65-0	E1668C	N	mg/kg				0.000922				
RA_SE_PestPCBs	PCB-51	68194-04-7	E1668C	N	mg/kg				0.00108				
RA_SE_PestPCBs	PCB-52	35693-99-3	E1668C	N	mg/kg				0.00633				
RA_SE_PestPCBs	PCB-53	41464-41-9	E1668C	N	mg/kg				0.000922				
RA_SE_PestPCBs	PCB-54	15968-05-5	E1668C	N	mg/kg				3.38E-05	J			
RA_SE_PestPCBs	PCB-55	74338-24-2	E1668C	N	mg/kg				6.3E-05	JN			
RA_SE_PestPCBs	PCB-56	41464-43-1	E1668C	N	mg/kg				0.00169				
RA_SE_PestPCBs	PCB-57	70424-67-8	E1668C	N	mg/kg				3.83E-05	J			
RA_SE_PestPCBs	PCB-58	41464-49-7	E1668C	N	mg/kg				1.38E-05	JN			
RA_SE_PestPCBs	PCB-59	74472-33-6	E1668C	N	mg/kg				0.000472				
RA_SE_PestPCBs	PCB-6	25569-80-6	E1668C	N	mg/kg				0.000246				
RA_SE_PestPCBs	PCB-60	33025-41-1	E1668C	N	mg/kg				0.000828				
RA_SE_PestPCBs	PCB-61	33284-53-6	E1668C	N	mg/kg				0.00701				
RA_SE_PestPCBs	PCB-62	54230-22-7	E1668C	N	mg/kg				0.000472				
RA_SE_PestPCBs	PCB-63	74472-34-7	E1668C	N	mg/kg				0.00019				
RA_SE_PestPCBs	PCB-64	52663-58-8	E1668C	N	mg/kg				0.00221				
RA_SE_PestPCBs	PCB-65	33284-54-7	E1668C	N	mg/kg				0.00562				
RA_SE_PestPCBs	PCB-66	32598-10-0	E1668C	N	mg/kg				0.00438				
RA_SE_PestPCBs	PCB-67	73575-53-8	E1668C	N	mg/kg				0.000111	JN			
RA_SE_PestPCBs	PCB-68	73575-52-7	E1668C	N	mg/kg				2.99E-05	JN			
RA_SE_PestPCBs	PCB-69	60233-24-1	E1668C	N	mg/kg				0.00347				
RA_SE_PestPCBs	PCB-7	33284-50-3	E1668C	N	mg/kg				5.68E-05	JN			
RA_SE_PestPCBs	PCB-70	32598-11-1	E1668C	N	mg/kg				0.00701				
RA_SE_PestPCBs	PCB-71	41464-46-4	E1668C	N	mg/kg				0.00281				
RA_SE_PestPCBs	PCB-72	41464-42-0	E1668C	N	mg/kg				5.86E-05				
RA_SE_PestPCBs	PCB-73	74338-23-1	E1668C	N	mg/kg				0.000233				
RA_SE_PestPCBs	PCB-74	32690-93-0	E1668C	N	mg/kg				0.00701				
RA_SE_PestPCBs	PCB-75	32598-12-2	E1668C	N	mg/kg				0.000472				
RA_SE_PestPCBs	PCB-76	70362-48-0	E1668C	N	mg/kg				0.00701				
RA_SE_PestPCBs	PCB-77	32598-13-3	E1668C	N	mg/kg				0.000399				
RA_SE_PestPCBs	PCB-78	70362-49-1	E1668C	N	mg/kg				6.67E-06	JN			
RA_SE_PestPCBs	PCB-79	41464-48-6	E1668C	N	mg/kg				6.28E-05				
RA_SE_PestPCBs	PCB-8	34883-43-7	E1668C	N	mg/kg				0.00114				
RA_SE_PestPCBs	PCB-80	33284-52-5	E1668C	N	mg/kg				3.57E-06	U			
RA_SE_PestPCBs	PCB-81	70362-50-4	E1668C	N	mg/kg				1.6E-05	J			
RA_SE_PestPCBs	PCB-82	52663-62-4	E1668C	N	mg/kg				0.000753				
RA_SE_PestPCBs	PCB-83	60145-20-2	E1668C	N	mg/kg				0.00322				
RA_SE_PestPCBs	PCB-84	52663-60-2	E1668C	N	mg/kg				0.00148				
RA_SE_PestPCBs	PCB-85	65510-45-4	E1668C	N	mg/kg				0.00109				
RA_SE_PestPCBs	PCB-86	55312-69-1	E1668C	N	mg/kg				0.00361				
RA_SE_PestPCBs	PCB-87	38380-02-8	E1668C	N	mg/kg				0.00361				
RA_SE_PestPCBs	PCB-88	55215-17-3	E1668C	N	mg/kg				0.000941				



				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED8B	SED8C	SED8C	SED9.5B	SED9A
				sys_sample_code	SED8B00N	SED8C00N	SED8C00R	SED9.5B00N	SED9A00N
				sample_date	11/13/2013	11/14/2013	11/14/2013	11/11/2013	11/11/2013
				sample_type_code	N	N	FD	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	0	0	0	0	0
				end_depth	0.5	0.5	0.5	0.5	0.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-89	73575-57-2	E1668C	N	mg/kg				0.000116
RA_SE_PestPCBs	PCB-9	34883-39-1	E1668C	N	mg/kg				6.81E-05 JN
RA_SE_PestPCBs	PCB-90	68194-07-0	E1668C	N	mg/kg				0.00565
RA_SE_PestPCBs	PCB-91	68194-05-8	E1668C	N	mg/kg				0.000941
RA_SE_PestPCBs	PCB-92	52663-61-3	E1668C	N	mg/kg				0.00105
RA_SE_PestPCBs	PCB-93	73575-56-1	E1668C	N	mg/kg				2.33E-05
RA_SE_PestPCBs	PCB-94	73575-55-0	E1668C	N	mg/kg				4.67E-05 JN
RA_SE_PestPCBs	PCB-95	38379-99-6	E1668C	N	mg/kg				0.00479
RA_SE_PestPCBs	PCB-96	73575-54-9	E1668C	N	mg/kg				6.41E-05
RA_SE_PestPCBs	PCB-97	41464-51-1	E1668C	N	mg/kg				0.00361
RA_SE_PestPCBs	PCB-98	60233-25-2	E1668C	N	mg/kg				0.000228
RA_SE_PestPCBs	PCB-99	38380-01-7	E1668C	N	mg/kg				0.00322
RA_SE_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	N	mg/kg				0.0395 JN
RA_SE_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	N	mg/kg				0.0406 JN
RA_SE_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	N	mg/kg	0.031	U	0.034	U
RA_SE_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	N	mg/kg	0.0095		0.0077	
RA_SE_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	N	mg/kg				0.0201 JN
RA_SE_SVOCS	1,1'-Biphenyl	92-52-4	SW8270D LL	N	mg/kg	0.15	U	0.33	U
RA_SE_SVOCS	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	N	mg/kg	0.15	U	0.33	U
RA_SE_SVOCS	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	N	mg/kg	0.031	U	0.067	U
RA_SE_SVOCS	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	N	mg/kg	0.15	U	0.33	U
RA_SE_SVOCS	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	N	mg/kg	0.15	U	0.33	U
RA_SE_SVOCS	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	N	mg/kg	0.15	U	0.33	U
RA_SE_SVOCS	2,4-Dichlorophenol	120-83-2	SW8270D LL	N	mg/kg	0.031	U	0.067	U
RA_SE_SVOCS	2,4-Dimethylphenol	105-67-9	SW8270D LL	N	mg/kg	0.15	U	0.33	U
RA_SE_SVOCS	2,4-Dinitrophenol	51-28-5	SW8270D LL	N	mg/kg	0.79	U	1.7	U
RA_SE_SVOCS	2,4-Dinitrotoluene	121-14-2	SW8270D LL	N	mg/kg	0.15	U	0.33	U
RA_SE_SVOCS	2,6-Dinitrotoluene	606-20-2	SW8270D LL	N	mg/kg	0.15	U	0.33	U
RA_SE_SVOCS	2-Chloronaphthalene	91-58-7	SW8270D LL	N	mg/kg	0.031	U	0.067	U
RA_SE_SVOCS	2-Chlorophenol	95-57-8	SW8270D LL	N	mg/kg	0.15	U	0.33	U
RA_SE_SVOCS	2-Methylnaphthalene	91-57-6	SW8270D LL	N	mg/kg	0.033		0.023	J
RA_SE_SVOCS	2-Methylphenol	95-48-7	SW8270D LL	N	mg/kg	0.15	U	0.33	U
RA_SE_SVOCS	2-Nitroaniline	88-74-4	SW8270D LL	N	mg/kg	0.79	U	1.7	U
RA_SE_SVOCS	2-Nitrophenol	88-75-5	SW8270D LL	N	mg/kg	0.15	U	0.33	U
RA_SE_SVOCS	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	N	mg/kg	0.15	U	0.33	U
RA_SE_SVOCS	3-Nitroaniline	99-09-2	SW8270D LL	N	mg/kg	0.79	U	1.7	U
RA_SE_SVOCS	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	N	mg/kg	0.79	U	1.7	U
RA_SE_SVOCS	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	N	mg/kg	0.15	U	0.33	U
RA_SE_SVOCS	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	N	mg/kg	0.15	U	0.33	U
RA_SE_SVOCS	4-Chloroaniline	106-47-8	SW8270D LL	N	mg/kg	0.15	U	0.33	U
RA_SE_SVOCS	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	N	mg/kg	0.15	U	0.33	U
RA_SE_SVOCS	4-Methylphenol	106-44-5	SW8270D LL	N	mg/kg	0.15	U	0.33	U
RA_SE_SVOCS	4-Nitroaniline	100-01-6	SW8270D LL	N	mg/kg	0.79	U	1.7	U

Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				loc_group		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area
RA_SE_SVOCs				sys_loc_code		SED8B		SED8C		SED8C		SED9.5B		SED9A
				sys_sample_code		SED8B00N		SED8C00N		SED8C00R		SED9.5B00N		SED9A00N
				sample_date		11/13/2013		11/14/2013		11/14/2013		11/11/2013		11/11/2013
				sample_type_code		N		N		FD		N		N
				task_code		Phase2-2013		Phase2-2013		Phase2-2013		Phase2-2013		Phase2-2013
				start_depth		0		0		0		0		0
				end_depth		0.5		0.5		0.5		0.5		0.5
				depth_unit		ft		ft		ft		ft		ft
				validated_yn		Y		Y		Y		Y		Y
RA_SE_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	N	mg/kg			0.79	U	1.7	U			
RA_SE_SVOCs	Acenaphthene	83-32-9	SW8270D LL	N	mg/kg	0.023	J	0.0089	J	0.067	U	0.017	J	0.033
RA_SE_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	N	mg/kg	0.046	J	0.034		0.06	J	0.049	J	0.11
RA_SE_SVOCs	Acetophenone	98-86-2	SW8270D LL	N	mg/kg			0.15	U	0.33	U			
RA_SE_SVOCs	Anthracene	120-12-7	SW8270D LL	N	mg/kg	0.072		0.049		0.077		0.087		0.12
RA_SE_SVOCs	Atrazine	1912-24-9	SW8270D LL	N	mg/kg			0.15	U	0.33	U			
RA_SE_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	N	mg/kg			0.057	J		R			
RA_SE_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	N	mg/kg	0.33		0.32		0.45		0.45		0.48
RA_SE_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	N	mg/kg	0.42		0.39		0.63		0.54		0.59
RA_SE_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	N	mg/kg	0.73		0.24	J	0.92	J	0.88		0.83
RA_SE_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	N	mg/kg	0.58		0.3	J	0.77	J	0.56		0.67
RA_SE_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	N	mg/kg	0.28		0.57		0.41		0.2		0.33
RA_SE_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	N	mg/kg			0.15	U	0.33	U			
RA_SE_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	N	mg/kg			0.031	U	0.067	U			
RA_SE_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	N	mg/kg			1.3		1.8				
RA_SE_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	N	mg/kg			0.041	J	0.084	J			
RA_SE_SVOCs	Caprolactam	105-60-2	SW8270D LL	N	mg/kg			0.39	J	1.7	U			
RA_SE_SVOCs	Carbazole	86-74-8	SW8270D LL	N	mg/kg			0.03	J	0.075				
RA_SE_SVOCs	Chrysene	218-01-9	SW8270D LL	N	mg/kg	0.66		0.53		0.75		0.79		0.77
RA_SE_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	N	mg/kg	0.079		0.031	U	0.16		0.12		0.14
RA_SE_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	N	mg/kg			0.15	U	0.33	U			
RA_SE_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	N	mg/kg			0.035	J	0.12	J			
RA_SE_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	N	mg/kg			0.15	U	0.33	U			
RA_SE_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	N	mg/kg			0.023	J	0.33	U			
RA_SE_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	N	mg/kg			0.15	U	0.33	U			
RA_SE_SVOCs	Fluoranthene	206-44-0	SW8270D LL	N	mg/kg	0.66		0.67		0.97		0.92		1
RA_SE_SVOCs	Fluorene	86-73-7	SW8270D LL	N	mg/kg	0.022	J	0.026	J	0.033	J	0.022	J	0.043
RA_SE_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	N	mg/kg			0.031	U	0.067	U			
RA_SE_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	N	mg/kg			0.031	U	0.067	U			
RA_SE_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	N	mg/kg			0.15	U	0.33	U			
RA_SE_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	N	mg/kg			0.15	U	0.33	U			
RA_SE_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	N	mg/kg	0.43		0.27	J	0.62	J	0.43		0.55
RA_SE_SVOCs	Isophorone	78-59-1	SW8270D LL	N	mg/kg			0.15	U	0.33	U			
RA_SE_SVOCs	Naphthalene	91-20-3	SW8270D LL	N	mg/kg	0.017	J	0.022	J	0.067	U	0.067	U	0.073
RA_SE_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	N	mg/kg			0.31	U	0.67	U			
RA_SE_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	N	mg/kg			0.031	U	0.067	U			
RA_SE_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	N	mg/kg			0.15	U	0.33	U			
RA_SE_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	N	mg/kg			0.15	U	0.33	U			
RA_SE_SVOCs	Phenanthrene	85-01-8	SW8270D LL	N	mg/kg	0.25		0.22		0.31		0.37		0.42
RA_SE_SVOCs	Phenol	108-95-2	SW8270D LL	N	mg/kg			0.031	U	0.067	U			
RA_SE_SVOCs	Pyrene	129-00-0	SW8270D LL	N	mg/kg	0.73		0.66		0.93		0.92		0.84
RA_SE_SVOCs	Total High-molecular-weight PAHs	TOT-PAH-HMW	SW8270D LL	N	mg/kg	4.9		4		6.6		5.8		6.2
RA_SE_SVOCs	Total Low-molecular-weight PAHs	TOT-PAH-LMW	SW8270D LL	N	mg/kg	0.43		0.36		0.48		0.55		0.73

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
				sys_loc_code	SED8B	SED8C	SED8C	SED9.5B	SED9A	
				sys_sample_code	SED8B00N	SED8C00N	SED8C00R	SED9.5B00N	SED9A00N	
				sample_date	11/13/2013	11/14/2013	11/14/2013	11/11/2013	11/11/2013	
				sample_type_code	N	N	FD	N	N	
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
				start_depth	0	0	0	0	0	
				end_depth	0.5	0.5	0.5	0.5	0.5	
				depth_unit	ft	ft	ft	ft	ft	
				validated_yn	Y	Y	Y	Y	Y	
RA_SE_SVOCs	Total PAHs (sum 16)	TOT-PAH	SW8270D LL	N	mg/kg	5.3	4.3	7.1	6.4	6.9
RA_SE_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	1,4-Dioxane	123-91-1	SW8260B	N	mg/kg		2.2	U	2.9	U
RA_SE_VOCs	2-Butanone	78-93-3	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	2-Hexanone	591-78-6	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	Acetone	67-64-1	SW8260B	N	mg/kg		0.045	U	0.057	U
RA_SE_VOCs	Benzene	71-43-2	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	Bromochloromethane	74-97-5	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	Bromodichloromethane	75-27-4	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	Bromoform	75-25-2	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	Bromomethane	74-83-9	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	Carbon Disulfide	75-15-0	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	Chlorobenzene	108-90-7	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	Chloroethane	75-00-3	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	Chloroform	67-66-3	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	Chloromethane	74-87-3	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	Cyclohexane	110-82-7	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	Dibromochloromethane	124-48-1	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	Ethylbenzene	100-41-4	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	Isopropylbenzene	98-82-8	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	m, p-Xylene	XYLMP	SW8260B	N	mg/kg		0.022	U	0.029	U
RA_SE_VOCs	Methyl Acetate	79-20-9	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	N	mg/kg		0.011	U	0.014	U
RA_SE_VOCs	Methylcyclohexane	108-87-2	SW8260B	N	mg/kg		0.011	U	0.014	U



Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area				
		sys_loc_code	SED8B	SED8C	SED8C	SED9.5B	SED9A					
		sys_sample_code	SED8B00N	SED8C00N	SED8C00R	SED9.5B00N	SED9A00N					
		sample_date	11/13/2013	11/14/2013	11/14/2013	11/11/2013	11/11/2013					
		sample_type_code	N	N	FD	N	N					
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
		start_depth	0	0	0	0	0					
		end_depth	0.5	0.5	0.5	0.5	0.5					
		depth_unit	ft	ft	ft	ft	ft					
		validated_yn	Y	Y	Y	Y	Y					
RA_SE_VOCs	Methylene Chloride	75-09-2	SW8260B	N	mg/kg	0.011	U	0.014	U			
RA_SE_VOCs	o-Xylene	95-47-6	SW8260B	N	mg/kg	0.011	U	0.014	U			
RA_SE_VOCs	Styrene	100-42-5	SW8260B	N	mg/kg	0.011	U	0.014	U			
RA_SE_VOCs	Tetrachloroethylene	127-18-4	SW8260B	N	mg/kg	0.011	U	0.014	U			
RA_SE_VOCs	Toluene	108-88-3	SW8260B	N	mg/kg	0.011	U	0.014	U			
RA_SE_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	N	mg/kg	0.011	U	0.014	U			
RA_SE_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	N	mg/kg	0.011	U	0.014	U			
RA_SE_VOCs	Trichloroethene	79-01-6	SW8260B	N	mg/kg	0.011	U	0.014	U			
RA_SE_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	N	mg/kg	0.011	U	0.014	U			
RA_SE_VOCs	Vinyl Chloride	75-01-4	SW8260B	N	mg/kg	0.011	U	0.014	U			
RA_SE_VOCs	Xylenes (total)	1330-20-7	SW8260B	N	mg/kg	0.022	U	0.029	U			

Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area						
		sys_loc_code	SED9B	SED9C	WSED1	WSED1	WSED1	WSED2						
		sys_sample_code	SED9B00N	SED9C00N	WSED100N	WSED100R	WSED200N	WSED200N						
		sample_date	11/11/2013	11/11/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013						
		sample_type_code	N	N	N	FD	N	N						
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013						
		start_depth	0	0	0	0	0	0						
		end_depth	0.5	0.5	0.5	0.5	0.5	0.5						
		depth_unit	ft	ft	ft	ft	ft	ft						
		validated_yn	Y	Y	Y	Y	Y	Y						
method_analyte_group	chemical_name	cas_rn	analytic_method	fraction	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value	
				report_unit	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	
RA_SE_DioxinsFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	N	mg/kg		1.38E-05		0.000136	J	4E-05	J	7.52E-05	
RA_SE_DioxinsFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	N	mg/kg		2.73E-06	J	2.9E-05	J	1.16E-05	JN	1.87E-05	
RA_SE_DioxinsFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	N	mg/kg		3.25E-07	JN	2.82E-06	J	7.25E-07	JN	1.58E-06	
RA_SE_DioxinsFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	N	mg/kg		3.93E-07	JN	3.67E-06	J	9.59E-07	JN	1.97E-06	
RA_SE_DioxinsFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	N	mg/kg		3.51E-07	JN	7.4E-06	J	1.34E-06	JN	2.54E-06	
RA_SE_DioxinsFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	N	mg/kg		6.53E-07	JN	8.47E-06	J	2.09E-06	J	3.64E-06	
RA_SE_DioxinsFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	N	mg/kg		5.55E-07	JN	6.2E-06	JN	1.81E-06	JN	3.55E-06	
RA_SE_DioxinsFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	N	mg/kg		8.78E-07	JN	1.02E-05	J	2.47E-06	J	3.96E-06	
RA_SE_DioxinsFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	N	mg/kg		2.1E-08	U	5.01E-07	J	8.49E-08	JN	3.01E-07	
RA_SE_DioxinsFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	N	mg/kg		5.09E-07	JN	4.53E-06	JN	7.58E-07	J	1.65E-06	
RA_SE_DioxinsFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	N	mg/kg		1.13E-07	JN	2.26E-06	JN	5.23E-07	JN	1.25E-06	
RA_SE_DioxinsFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	N	mg/kg		3.39E-07	JN	4.02E-06	J	9.24E-07	JN	1.89E-06	
RA_SE_DioxinsFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	N	mg/kg		3.45E-07	J	4.93E-06	J	9.66E-07	J	2.33E-06	
RA_SE_DioxinsFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	N	mg/kg		1.5E-08	U	1.05E-06	JN	2.75E-07	JN	4.15E-08	
RA_SE_DioxinsFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	N	mg/kg		1.27E-07	JN	3.07E-06	J	6.99E-07	J	1.96E-06	
RA_SE_DioxinsFurans	OCDD	3268-87-9	SW8290A	N	mg/kg		0.000338		0.00382	J	0.000902	J	0.0018	
RA_SE_DioxinsFurans	OCDF	39001-02-0	SW8290A	N	mg/kg		4.21E-06	J	3.96E-05	JN	1.46E-05	JN	2.36E-05	
RA_SE_DioxinsFurans	TCDD TEQ Bird	DFTEQ-Bird	SW8290A	N	mg/kg		1.31E-06		1.77E-05		3.74E-06		7.88E-06	
RA_SE_DioxinsFurans	TCDD TEQ Fish	DFTEQ-Fish	SW8290A	N	mg/kg		1.11E-06		1.3E-05		2.77E-06		5.32E-06	
RA_SE_DioxinsFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	N	mg/kg		1.22E-06		1.43E-05		3.17E-06		5.87E-06	
RA_SE_DioxinsFurans	Total HpCDD	37871-00-4	SW8290A	N	mg/kg		3.24E-05	JN	0.000278	J	9.42E-05	J	0.000175	
RA_SE_DioxinsFurans	Total HpCDF	38998-75-3	SW8290A	N	mg/kg		7.2E-06	JN	6.8E-05	J	2.32E-05	JN	4.17E-05	
RA_SE_DioxinsFurans	Total HxCDD	34465-46-8	SW8290A	N	mg/kg		7.04E-06	JN	8.82E-05	JN	2.15E-05	JN	3.88E-05	
RA_SE_DioxinsFurans	Total HxCDF	55684-94-1	SW8290A	N	mg/kg		9.97E-06	JN	9.44E-05	JN	3.2E-05	JN	5.86E-05	
RA_SE_DioxinsFurans	Total PeCDD	36088-22-9	SW8290A	N	mg/kg		1.49E-05	JN	0.000279	JN	5.41E-05	JN	9.59E-05	
RA_SE_DioxinsFurans	Total PeCDF	30402-15-4	SW8290A	N	mg/kg		1.37E-05	JN	0.000125	JN	4.41E-05	JN	9.35E-05	
RA_SE_DioxinsFurans	Total TCDD	41903-57-5	SW8290A	N	mg/kg		1.4E-06	JN	3.53E-05	JN	4.99E-06	JN	1.04E-05	
RA_SE_DioxinsFurans	Total TCDF	55722-27-5	SW8290A	N	mg/kg		2.13E-05	JN	0.000167	JN	7.69E-05	JN	0.000158	
RA_SE_DioxinsFurans	Total TEQ	TTEQ	SW8290A	N	mg/kg		1.22E-06		1.43E-05		3.17E-06		5.87E-06	
RA_SE_Metals	Aluminum	7429-90-5	SW6020A	T	mg/kg	5600		6300		7900		6100		8700
RA_SE_Metals	Antimony	7440-36-0	SW6020A	T	mg/kg	0.31	J-	0.48	J-	0.44	J-	0.59	J-	0.74
RA_SE_Metals	Arsenic	7440-38-2	SW6020A	T	mg/kg	3.3	J-	2.5	J-	3		2.4		4
RA_SE_Metals	Barium	7440-39-3	SW6020A	T	mg/kg	57	J+	66	J+	89		71		97
RA_SE_Metals	Beryllium	7440-41-7	SW6020A	T	mg/kg	0.83		0.91		1		0.94		1.3
RA_SE_Metals	Cadmium	7440-43-9	SW6020A	T	mg/kg	0.43		0.59		1.5		0.64		0.95
RA_SE_Metals	Calcium	7440-70-2	SW6020A	T	mg/kg	1600	J-	1900	J-	1700	J	2200	J	3500
RA_SE_Metals	Chromium	7440-47-3	SW6020A	T	mg/kg	20	J+	24	J+	34	J+	29	J+	42
RA_SE_Metals	Cobalt	7440-48-4	SW6020A	T	mg/kg	8.4	J	12	J	14		16		22
RA_SE_Metals	Copper	7440-50-8	SW6020A	T	mg/kg	27		30		41		41		59
RA_SE_Metals	Iron	7439-89-6	SW6020A	T	mg/kg	14000		17000		19000		19000		25000
RA_SE_Metals	Lead	7439-92-1	SW6020A	T	mg/kg	44	J	49	J	160	J	47	J	70

						loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area				
						sys_loc_code	SED9B	SED9C	WSED1	WSED1	WSED2				
						sys_sample_code	SED9B00N	SED9C00N	WSED100N	WSED100R	WSED200N				
						sample_date	11/11/2013	11/11/2013	11/15/2013	11/15/2013	11/15/2013				
						sample_type_code	N	N	N	FD	N				
						task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
						start_depth	0	0	0	0	0				
						end_depth	0.5	0.5	0.5	0.5	0.5				
						depth_unit	ft	ft	ft	ft	ft				
						validated_yn	Y	Y	Y	Y	Y				
RA_SE_Metals	Magnesium	7439-95-4	SW6020A	T	mg/kg	1900		2500		2600		2600		3300	
RA_SE_Metals	Manganese	7439-96-5	SW6020A	T	mg/kg	240		230		260		240		310	
RA_SE_Metals	Mercury	7439-97-6	SW7471B	T	mg/kg	0.18		0.15		0.19		0.34		0.15	
RA_SE_Metals	Nickel	7440-02-0	SW6020A	T	mg/kg	16		20		32		29		39	J-
RA_SE_Metals	Potassium	7440-09-7	SW6020A	T	mg/kg	580		880		1200		1200		1400	
RA_SE_Metals	Selenium	7782-49-2	SW6020A	T	mg/kg	0.16	J	0.53		0.93	J-	0.91	J-	1.5	J-
RA_SE_Metals	Silver	7440-22-4	SW6020A	T	mg/kg	0.17		0.18		0.72	J	0.19	J	0.51	J
RA_SE_Metals	Sodium	7440-23-5	SW6020A	T	mg/kg	87		97		130		120		170	
RA_SE_Metals	Thallium	7440-28-0	SW6020A	T	mg/kg	0.12		0.16		0.17		0.18		0.26	
RA_SE_Metals	Vanadium	7440-62-2	SW6020A	T	mg/kg	35	J+	29	J+	36		25		37	
RA_SE_Metals	Zinc	7440-66-6	SW6020A	T	mg/kg	100	J+	130	J+	220	J	170	J	250	
RA_SE_Other	Arsenic	7440-38-2	SW6010	SEM	umol/g	0.02	J	0.016	J	0.0068	J	0.008	J	0.011	J
RA_SE_Other	Cadmium	7440-43-9	SW6010	SEM	umol/g	0.0039		0.0035		0.013	J	0.004	J	0.005	J
RA_SE_Other	Chromium	7440-47-3	SW6010	SEM	umol/g	0.3		0.24		0.34	J	0.22	J	0.27	J
RA_SE_Other	Copper	7440-50-8	SW6010	SEM	umol/g	0.55		0.4		0.55	J	0.39	J	0.48	J
RA_SE_Other	Lead	7439-92-1	SW6010	SEM	umol/g	0.24		0.21		0.72	J	0.15	J	0.2	J
RA_SE_Other	Mercury	7439-97-6	SW7470A	SEM	umol/g	0.00013	J	6E-05	J	9E-05	J	3.2E-05	J	2.8E-05	J
RA_SE_Other	Nickel	7440-02-0	SW6010	SEM	umol/g	0.34		0.31		0.35	J	0.24	J	0.31	J
RA_SE_Other	Silver	7440-22-4	SW6010	SEM	umol/g	0.00096	J	0.00045	J	0.0022	J	0.0023	UJ	0.0037	UJ
RA_SE_Other	Sulfide	18496-25-8	SW9034	SEM	umol/g	1.1	U	1.2	U	3.3	J	3.4	J	12	J
RA_SE_Other	Total Organic Carbon	7440-44-0	LKTOC	T	mg/kg	35000		33000		40000	J	54000	J	60000	
RA_SE_Other	Zinc	7440-66-6	SW6010	SEM	umol/g	2.5		2.2		3.8	J	1.9	J	2.6	J
RA_SE_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	N	mg/kg			0.003	J	0.0064	J	0.0065	J	0.012	J
RA_SE_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	N	mg/kg			0.0071		0.008	J	0.0073	J	0.013	J
RA_SE_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	N	mg/kg			0.0025	J	0.004	J	0.0048	J	0.0072	J
RA_SE_PestPCBs	Aldrin	309-00-2	SW8081B LL	N	mg/kg			0.0006	J	0.003	J	0.0008	J	0.0017	J
RA_SE_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	N	mg/kg			0.00082	U	0.00063	U	0.00083	U	0.0013	U
RA_SE_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	N	mg/kg	0.01	U	0.0082	U	0.0062	U	0.0083	U	0.013	U
RA_SE_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	N	mg/kg	0.01	U	0.0082	U	0.0062	U	0.0083	U	0.013	U
RA_SE_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	N	mg/kg	0.01	U	0.0082	U	0.0062	U	0.0083	U	0.013	U
RA_SE_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	N	mg/kg	0.01	U	0.0082	U	0.0062	U	0.0083	U	0.013	U
RA_SE_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	N	mg/kg	0.12	J	0.12	J	0.25	J	0.086	J	0.11	J
RA_SE_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	N	mg/kg	0.01	U	0.0082	U	0.0062	U	0.0083	U	0.013	U
RA_SE_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	N	mg/kg	0.057	J	0.054	J	0.077	J	0.036	J	0.063	J
RA_SE_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	N	mg/kg	0.01	U	0.0082	U	0.0062	U	0.0083	U	0.013	U
RA_SE_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	N	mg/kg	0.01	U	0.0082	U	0.0062	U	0.0083	U	0.013	U
RA_SE_PestPCBs	beta-BHC	319-85-7	SW8081B LL	N	mg/kg			0.00082	U	0.00063	U	0.00083	U	0.0013	U
RA_SE_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	N	mg/kg			0.0066	J	0.018	J	0.009	J	0.015	J
RA_SE_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	N	mg/kg										
RA_SE_PestPCBs	delta-BHC	319-86-8	SW8081B LL	N	mg/kg			0.00082	U	0.002	J	0.00032	J	0.001	J
RA_SE_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	N	mg/kg										
RA_SE_PestPCBs	Dieldrin	60-57-1	SW8081B LL	N	mg/kg			0.0014	J	0.00063	U	0.0017	J	0.0027	J
RA_SE_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	N	mg/kg			0.00082	U	0.00063	U	0.00083	U	0.0013	U

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				loc_group		RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area				
				sys_loc_code		SED9B	SED9C	WSED1	WSED1	WSED2				
				sys_sample_code		SED9B00N	SED9C00N	WSED100N	WSED100R	WSED200N				
				sample_date		11/11/2013	11/11/2013	11/15/2013	11/15/2013	11/15/2013				
				sample_type_code		N	N	N	FD	N				
				task_code		Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
				start_depth		0	0	0	0	0				
				end_depth		0.5	0.5	0.5	0.5	0.5				
				depth_unit		ft	ft	ft	ft	ft				
				validated_yn		Y	Y	Y	Y	Y				
RA_SE_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	N	mg/kg		0.00023	J	0.0006	J	0.00038	J	0.00089	J
RA_SE_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	N	mg/kg		0.00028	J	0.0015		0.00083	J	0.00032	J
RA_SE_PestPCBs	Endrin	72-20-8	SW8081B LL	N	mg/kg		0.0029		0.0067	J	0.0018	J	0.0032	J
RA_SE_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	N	mg/kg		0.00068	J	0.0014		0.0018	J	0.0011	J
RA_SE_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	N	mg/kg		0.0031		0.00063	U	0.0038	J	0.0061	J
RA_SE_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	N	mg/kg		0.00023	J	0.00015	J	0.0003	J	0.0014	J
RA_SE_PestPCBs	Heptachlor	76-44-8	SW8081B LL	N	mg/kg		0.0015		0.0071	J	0.0016	J	0.0038	J
RA_SE_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	N	mg/kg		0.00065	J	0.0012	J	0.00099	J	0.0013	J
RA_SE_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	N	mg/kg									
RA_SE_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	N	mg/kg									
RA_SE_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	N	mg/kg		0.013		0.0083	J	0.012	J	0.027	J
RA_SE_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	N	mg/kg									
RA_SE_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	N	mg/kg									
RA_SE_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB TEQ Bird	PCBTEQ-Bird	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB, TOTAL	PCB	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	N	mg/kg	0.18	0.17		0.33		0.12		0.17	
RA_SE_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	N	mg/kg	0.18	0.17		0.33		0.12		0.27	
RA_SE_PestPCBs	PCB-1	2051-60-7	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-10	33146-45-1	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-100	39485-83-1	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-101	37680-73-2	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-102	68194-06-9	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-103	60145-21-3	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-104	56558-16-8	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-105	32598-14-4	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-106	70424-69-0	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-107	70424-68-9	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-108	70362-41-3	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-109	74472-35-8	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-11	2050-67-1	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-110	38380-03-9	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-111	39635-32-0	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-112	74472-36-9	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-113	68194-10-5	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-114	74472-37-0	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-115	74472-38-1	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-116	18259-05-7	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-117	68194-11-6	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-118	31508-00-6	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-119	56558-17-9	E1668C	N	mg/kg									
RA_SE_PestPCBs	PCB-12	2974-92-7	E1668C	N	mg/kg									



Attachment A  
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		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
		sys_loc_code	SED9B	SED9C	WSED1	WSED1	WSED1	WSED2
		sys_sample_code	SED9B00N	SED9C00N	WSED100N	WSED100R	WSED200N	WSED200N
		sample_date	11/11/2013	11/11/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013
		sample_type_code	N	N	N	FD	N	N
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
		start_depth	0	0	0	0	0	0
		end_depth	0.5	0.5	0.5	0.5	0.5	0.5
		depth_unit	ft	ft	ft	ft	ft	ft
		validated_yn	Y	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-120	68194-12-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-121	56558-18-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-122	76842-07-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-123	65510-44-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-124	70424-70-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-125	74472-39-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-126	57465-28-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-127	39635-33-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-128	38380-07-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-129	55215-18-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-13	2974-90-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-130	52663-66-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-131	61798-70-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-132	38380-05-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-133	35694-04-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-134	52704-70-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-135	52744-13-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-136	38411-22-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-137	35694-06-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-138	35065-28-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-139	56030-56-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-14	34883-41-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-140	59291-64-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-141	52712-04-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-142	41411-61-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-143	68194-15-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-144	68194-14-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-145	74472-40-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-146	51908-16-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-147	68194-13-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-148	74472-41-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-149	38380-04-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-15	2050-68-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-150	68194-08-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-151	52663-63-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-152	68194-09-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-153	35065-27-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-154	60145-22-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-155	33979-03-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-156	38380-08-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-157	69782-90-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-158	74472-42-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-159	39635-35-3	E1668C	N	mg/kg			





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		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
		sys_loc_code	SED9B	SED9C	WSED1	WSED1	WSED1	WSED2
		sys_sample_code	SED9B00N	SED9C00N	WSED100N	WSED100R	WSED200N	WSED200N
		sample_date	11/11/2013	11/11/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013
		sample_type_code	N	N	N	FD	N	N
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
		start_depth	0	0	0	0	0	0
		end_depth	0.5	0.5	0.5	0.5	0.5	0.5
		depth_unit	ft	ft	ft	ft	ft	ft
		validated_yn	Y	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-16	38444-78-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-160	41411-62-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-161	74472-43-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-162	39635-34-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-163	74472-44-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-164	74472-45-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-165	74472-46-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-166	41411-63-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-167	52663-72-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-168	59291-65-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-169	32774-16-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-17	37680-66-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-170	35065-30-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-171	52663-71-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-172	52663-74-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-173	68194-16-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-174	38411-25-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-175	40186-70-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-176	52663-65-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-177	52663-70-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-178	52663-67-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-179	52663-64-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-18	37680-65-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-180	35065-29-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-181	74472-47-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-182	60145-23-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-183	52663-69-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-184	74472-48-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-185	52712-05-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-186	74472-49-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-187	52663-68-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-188	74487-85-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-189	39635-31-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-19	38444-73-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-190	41411-64-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-191	74472-50-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-192	74472-51-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-193	69782-91-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-194	35694-08-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-195	52663-78-2	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-196	42740-50-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-197	33091-17-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-198	68194-17-2	E1668C	N	mg/kg			



Attachment A  
Surface Sediment Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
		sys_loc_code	SED9B	SED9C	WSED1	WSED1	WSED1	WSED2
		sys_sample_code	SED9B00N	SED9C00N	WSED100N	WSED100R	WSED200N	WSED200N
		sample_date	11/11/2013	11/11/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013
		sample_type_code	N	N	N	FD	N	N
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
		start_depth	0	0	0	0	0	0
		end_depth	0.5	0.5	0.5	0.5	0.5	0.5
		depth_unit	ft	ft	ft	ft	ft	ft
		validated_yn	Y	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-199	52663-75-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-2	2051-61-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-20	38444-84-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-200	52663-73-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-201	40186-71-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-202	2136-99-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-203	52663-76-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-204	74472-52-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-205	74472-53-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-206	40186-72-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-207	52663-79-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-208	52663-77-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-21	55702-46-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-22	38444-85-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-23	55720-44-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-24	55702-45-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-25	55712-37-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-26	38444-81-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-27	38444-76-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-28	7012-37-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-29	15862-07-4	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-3	2051-62-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-30	35693-92-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-31	16606-02-3	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-32	38444-77-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-33	38444-86-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-34	37680-68-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-35	37680-69-6	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-36	38444-87-0	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-37	38444-90-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-38	53555-66-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-39	38444-88-1	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-4	13029-08-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-40	38444-93-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-41	52663-59-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-42	36559-22-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-43	70362-46-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-44	41464-39-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-45	70362-45-7	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-46	41464-47-5	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-47	2437-79-8	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-48	70362-47-9	E1668C	N	mg/kg			
RA_SE_PestPCBs	PCB-49	41464-40-8	E1668C	N	mg/kg			

	loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area
	sys_loc_code	SED9B	SED9C	WSED1	WSED1	WSED2
	sys_sample_code	SED9B00N	SED9C00N	WSED100N	WSED100R	WSED200N
	sample_date	11/11/2013	11/11/2013	11/15/2013	11/15/2013	11/15/2013
	sample_type_code	N	N	N	FD	N
	task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
	start_depth	0	0	0	0	0
	end_depth	0.5	0.5	0.5	0.5	0.5
	depth_unit	ft	ft	ft	ft	ft
	validated_yn	Y	Y	Y	Y	Y
RA_SE_PestPCBs	PCB-5	16605-91-7	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-50	62796-65-0	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-51	68194-04-7	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-52	35693-99-3	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-53	41464-41-9	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-54	15968-05-5	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-55	74338-24-2	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-56	41464-43-1	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-57	70424-67-8	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-58	41464-49-7	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-59	74472-33-6	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-6	25569-80-6	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-60	33025-41-1	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-61	33284-53-6	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-62	54230-22-7	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-63	74472-34-7	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-64	52663-58-8	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-65	33284-54-7	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-66	32598-10-0	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-67	73575-53-8	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-68	73575-52-7	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-69	60233-24-1	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-7	33284-50-3	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-70	32598-11-1	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-71	41464-46-4	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-72	41464-42-0	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-73	74338-23-1	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-74	32690-93-0	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-75	32598-12-2	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-76	70362-48-0	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-77	32598-13-3	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-78	70362-49-1	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-79	41464-48-6	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-8	34883-43-7	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-80	33284-52-5	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-81	70362-50-4	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-82	52663-62-4	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-83	60145-20-2	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-84	52663-60-2	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-85	65510-45-4	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-86	55312-69-1	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-87	38380-02-8	E1668C	N	mg/kg	
RA_SE_PestPCBs	PCB-88	55215-17-3	E1668C	N	mg/kg	

				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	
				sys_loc_code	SED9B	SED9C	WSED1	WSED1	WSED1	WSED2	
				sys_sample_code	SED9B00N	SED9C00N	WSED100N	WSED100R	WSED100R	WSED200N	
				sample_date	11/11/2013	11/11/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	
				sample_type_code	N	N	N	FD	FD	N	
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
				start_depth	0	0	0	0	0	0	
				end_depth	0.5	0.5	0.5	0.5	0.5	0.5	
				depth_unit	ft	ft	ft	ft	ft	ft	
				validated_yn	Y	Y	Y	Y	Y	Y	
RA_SE_PestPCBs	PCB-89	73575-57-2	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-9	34883-39-1	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-90	68194-07-0	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-91	68194-05-8	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-92	52663-61-3	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-93	73575-56-1	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-94	73575-55-0	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-95	38379-99-6	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-96	73575-54-9	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-97	41464-51-1	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-98	60233-25-2	E1668C	N	mg/kg						
RA_SE_PestPCBs	PCB-99	38380-01-7	E1668C	N	mg/kg						
RA_SE_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	N	mg/kg						
RA_SE_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	N	mg/kg						
RA_SE_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	N	mg/kg	0.033	U	0.025	U	0.033	U
RA_SE_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	N	mg/kg	0.011		0.031	J	0.013	J
RA_SE_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	N	mg/kg						
RA_SE_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	N	mg/kg	0.32	U	0.25	U	0.33	U
RA_SE_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	N	mg/kg	0.32	U	0.25	U	0.33	U
RA_SE_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	N	mg/kg	0.066	U	0.051	UJ	0.067	UJ
RA_SE_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	N	mg/kg	0.32	U	0.25	U	0.33	U
RA_SE_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	N	mg/kg	0.32	U	0.25	U	0.33	U
RA_SE_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	N	mg/kg	0.32	U	0.25	U	0.33	U
RA_SE_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	N	mg/kg	0.066	U	0.051	U	0.067	U
RA_SE_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	N	mg/kg	0.32	U	0.25	U	0.33	U
RA_SE_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	N	mg/kg	1.7	U	1.3	UJ	1.7	UJ
RA_SE_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	N	mg/kg	0.32	U	0.25	U	0.33	U
RA_SE_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	N	mg/kg	0.32	U	0.25	U	0.33	U
RA_SE_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	N	mg/kg	0.066	U	0.051	U	0.067	U
RA_SE_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	N	mg/kg	0.32	U	0.25	U	0.33	U
RA_SE_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	N	mg/kg	0.0092	J	0.054		0.021	J
RA_SE_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	N	mg/kg	0.32	U	0.25	U	0.33	U
RA_SE_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	N	mg/kg	1.7	U	1.3	U	1.7	U
RA_SE_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	N	mg/kg	0.32	U	0.25	U	0.33	U
RA_SE_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	N	mg/kg	0.32	U	0.25	U	0.33	U
RA_SE_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	N	mg/kg	1.7	U	1.3	U	1.7	U
RA_SE_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	N	mg/kg	1.7	U	1.3	U	1.7	U
RA_SE_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	N	mg/kg	0.32	U	0.25	U	0.33	U
RA_SE_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	N	mg/kg	0.32	U	0.25	U	0.33	U
RA_SE_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	N	mg/kg	0.32	U	0.057	J	0.33	U
RA_SE_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	N	mg/kg	0.32	U	0.25	U	0.33	U
RA_SE_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	N	mg/kg	0.32	U	0.11	J	0.33	U
RA_SE_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	N	mg/kg	1.7	U	1.3	U	1.7	U

				loc_group		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area		RA_Waterside_Area
RA_SE_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	N	mg/kg			1.7	U	1.3	U	1.7	U	2.7
RA_SE_SVOCs	Acenaphthene	83-32-9	SW8270D LL	N	mg/kg	0.077	J	0.016	J	0.037	J	0.061	J	0.11
RA_SE_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	N	mg/kg	0.047	J	0.056	J	0.035	J	0.055	J	0.064
RA_SE_SVOCs	Acetophenone	98-86-2	SW8270D LL	N	mg/kg			0.32	U	0.03	J	0.035	J	0.52
RA_SE_SVOCs	Anthracene	120-12-7	SW8270D LL	N	mg/kg	0.12		0.095		0.049	J	0.28	J	0.12
RA_SE_SVOCs	Atrazine	1912-24-9	SW8270D LL	N	mg/kg			0.32	U	0.25	U	0.33	U	0.52
RA_SE_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	N	mg/kg			0.063	J	0.25	UJ	0.087	J	0.14
RA_SE_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	N	mg/kg	0.4		0.48		0.26	J	1	J	0.69
RA_SE_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	N	mg/kg	0.47		0.62		0.25	J	1.1	J	0.79
RA_SE_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	N	mg/kg	0.76		0.99		0.43	J	1.8	J	1.5
RA_SE_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	N	mg/kg	0.5		0.74		0.12	J	0.4	J	0.36
RA_SE_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	N	mg/kg	0.25		0.29		0.089	J	0.5	J	0.5
RA_SE_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	N	mg/kg			0.32	U	0.25	U	0.33	U	0.52
RA_SE_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	N	mg/kg			0.066	U	0.051	U	0.067	U	0.11
RA_SE_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	N	mg/kg			1.5		1.6		1.3		1.5
RA_SE_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	N	mg/kg			0.32	U	0.062	J	0.11	J	0.52
RA_SE_SVOCs	Caprolactam	105-60-2	SW8270D LL	N	mg/kg			1.7	U	1.3	U	1.7	U	2.7
RA_SE_SVOCs	Carbazole	86-74-8	SW8270D LL	N	mg/kg			0.09		0.051	U	0.17		0.096
RA_SE_SVOCs	Chrysene	218-01-9	SW8270D LL	N	mg/kg	0.7		0.88		0.4	J	1.4	J	1.3
RA_SE_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	N	mg/kg	0.089		0.14		0.051	U	0.12		0.15
RA_SE_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	N	mg/kg			0.32	U	0.25	U	0.33	U	0.52
RA_SE_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	N	mg/kg			0.32	U	0.25	U	0.33	U	0.52
RA_SE_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	N	mg/kg			0.32	U	0.25	U	0.33	U	0.52
RA_SE_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	N	mg/kg			0.32	U	0.25	U	0.33	U	0.52
RA_SE_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	N	mg/kg			0.32	U	0.25	U	0.24	J	0.52
RA_SE_SVOCs	Fluoranthene	206-44-0	SW8270D LL	N	mg/kg	0.95		0.95		0.69	J	2.7	J	1.8
RA_SE_SVOCs	Fluorene	86-73-7	SW8270D LL	N	mg/kg	0.05	J	0.032	J	0.061		0.091		0.052
RA_SE_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	N	mg/kg			0.066	U	0.051	U	0.067	U	0.11
RA_SE_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	N	mg/kg			0.066	U	0.051	U	0.067	U	0.11
RA_SE_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	N	mg/kg			0.32	U	0.25	U	0.33	U	0.52
RA_SE_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	N	mg/kg			0.32	U	0.25	U	0.33	U	0.52
RA_SE_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	N	mg/kg	0.41		0.57		0.12	J	0.44	J	0.38
RA_SE_SVOCs	Isophorone	78-59-1	SW8270D LL	N	mg/kg			0.32	U	0.25	U	0.33	U	0.52
RA_SE_SVOCs	Naphthalene	91-20-3	SW8270D LL	N	mg/kg	0.081	U	0.066	U	0.022	J	0.023	J	0.11
RA_SE_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	N	mg/kg			0.66	U	0.5	U	0.67	U	1.1
RA_SE_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	N	mg/kg			0.066	U	0.051	U	0.067	U	0.11
RA_SE_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	N	mg/kg			0.32	U	0.25	U	0.33	U	0.52
RA_SE_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	N	mg/kg			0.32	U	0.25	UJ	0.33	UJ	0.52
RA_SE_SVOCs	Phenanthrene	85-01-8	SW8270D LL	N	mg/kg	0.47		0.39		0.36	J	1.1	J	0.63
RA_SE_SVOCs	Phenol	108-95-2	SW8270D LL	N	mg/kg			0.066	U	0.051	U	0.067	U	0.11
RA_SE_SVOCs	Pyrene	129-00-0	SW8270D LL	N	mg/kg	0.81		1.1		0.54	J	1.6	J	1.3
RA_SE_SVOCs	Total High-molecular-weight PAHs	TOT-PAH-HMW	SW8270D LL	N	mg/kg	5.3		6.8		2.9		11		8.8
RA_SE_SVOCs	Total Low-molecular-weight PAHs	TOT-PAH-LMW	SW8270D LL	N	mg/kg	0.76		0.59		0.56		1.6		0.87



Attachment A  
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				loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area				
				sys_loc_code	SED9B	SED9C	WSED1	WSED1	WSED1	WSED2				
				sys_sample_code	SED9B00N	SED9C00N	WSED100N	WSED100R	WSED200N	WSED200N				
				sample_date	11/11/2013	11/11/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013				
				sample_type_code	N	N	N	FD	N	N				
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
				start_depth	0	0	0	0	0	0				
				end_depth	0.5	0.5	0.5	0.5	0.5	0.5				
				depth_unit	ft	ft	ft	ft	ft	ft				
				validated_yn	Y	Y	Y	Y	Y	Y				
RA_SE_SVOCs	Total PAHs (sum 16)	TOT-PAH	SW8270D LL	N	mg/kg	6.1	7.3	3.5	13	9.6				
RA_SE_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	1,4-Dioxane	123-91-1	SW8260B	N	mg/kg		2.3	U	1.6	U	2.8	U	3.8	U
RA_SE_VOCs	2-Butanone	78-93-3	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	2-Hexanone	591-78-6	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	Acetone	67-64-1	SW8260B	N	mg/kg		0.045	U	0.032	U	0.057	U	0.076	U
RA_SE_VOCs	Benzene	71-43-2	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	Bromochloromethane	74-97-5	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	Bromodichloromethane	75-27-4	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	Bromoform	75-25-2	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	Bromomethane	74-83-9	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	Carbon Disulfide	75-15-0	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	Chlorobenzene	108-90-7	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	Chloroethane	75-00-3	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	Chloroform	67-66-3	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	Chloromethane	74-87-3	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	Cyclohexane	110-82-7	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	Dibromochloromethane	124-48-1	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	Ethylbenzene	100-41-4	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	Isopropylbenzene	98-82-8	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	m, p-Xylene	XYLMP	SW8260B	N	mg/kg		0.023	U	0.016	U	0.028	U	0.038	U
RA_SE_VOCs	Methyl Acetate	79-20-9	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	Methylcyclohexane	108-87-2	SW8260B	N	mg/kg		0.011	U	0.0079	U	0.014	U	0.019	U



Attachment A  
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		loc_group	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area	RA_Waterside_Area					
		sys_loc_code	SED9B	SED9C	WSED1	WSED1	WSED2	WSED2					
		sys_sample_code	SED9B00N	SED9C00N	WSED100N	WSED100R	WSED200N	WSED200N					
		sample_date	11/11/2013	11/11/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013					
		sample_type_code	N	N	N	FD	N	N					
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
		start_depth	0	0	0	0	0	0					
		end_depth	0.5	0.5	0.5	0.5	0.5	0.5					
		depth_unit	ft	ft	ft	ft	ft	ft					
		validated_yn	Y	Y	Y	Y	Y	Y					
RA_SE_VOCs	Methylene Chloride	75-09-2	SW8260B	N	mg/kg	0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	o-Xylene	95-47-6	SW8260B	N	mg/kg	0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	Styrene	100-42-5	SW8260B	N	mg/kg	0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	Tetrachloroethylene	127-18-4	SW8260B	N	mg/kg	0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	Toluene	108-88-3	SW8260B	N	mg/kg	0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	N	mg/kg	0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	N	mg/kg	0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	Trichloroethene	79-01-6	SW8260B	N	mg/kg	0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	N	mg/kg	0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	Vinyl Chloride	75-01-4	SW8260B	N	mg/kg	0.011	U	0.0079	U	0.014	U	0.019	U
RA_SE_VOCs	Xylenes (total)	1330-20-7	SW8260B	N	mg/kg	0.023	U	0.016	U	0.028	U	0.038	U

## Surface Soil Data



Attachment A  
Surface Soil Data  
Benning Road Facility RI/FS Project  
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			sys_loc_code	SUS01	SUS01	SUS02	SUS03	SUS04	SUS05									
			sys_sample_code	SUS0100N	SUS0100R	SUS0200N	SUS0300N	SUS0400N	SUS0500N									
			sample_date	2/4/2013	2/4/2013	2/4/2013	2/4/2013	2/4/2013	2/4/2013									
			sample_type_code	N	FD	N	N	N	N									
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013									
			start_depth	0.33	0.33	0.33	0.5	0	0									
			end_depth	1	1	0.83	1	1	1									
			depth_unit	ft	ft	ft	ft	ft	ft									
			validated_yn	Y	Y	Y	Y	Y	Y									
method_analyte_group	chemical_name	cas_rn	analytic_met_hod	report_re_sult_unit	report_result_value	interpreted_qualifiers	report_re_sult_unit	report_result_value	interpreted_qualifiers	report_re_sult_unit	report_result_value	interpreted_qualifiers	report_re_sult_unit	report_result_value	interpreted_qualifiers	report_re_sult_unit	report_result_value	interpreted_qualifiers
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg	2.3E-05		1.73E-05			1.95E-05								
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg	5.59E-06	J	4.11E-06	J		3.37E-06	J							
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg	8.03E-07	J	4.5E-07	J		5.12E-07	JN							
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg	1.13E-06	JN	8.38E-07	J		4.28E-07	JN							
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg	1.59E-06	J	5.99E-07	J		4.82E-07	JN							
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57653-85-7	SW8290A	mg/kg	1.76E-06	J	1.37E-06	J		9.37E-07	JN							
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg	8.61E-07	J	6.99E-07	JN		1.48E-06	JN							
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg	2.69E-06	J	2.16E-06	J		9.07E-07	J							
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg	1.01E-07	U	8.53E-08	U		1.32E-07	U							
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg	1.04E-06	JN	7.38E-07	JN		1.63E-07	U							
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg	2.92E-07	JN	2.28E-07	JN		1.94E-07	J							
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg	1.03E-06	JN	8.07E-07	J		6.03E-07	JN							
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg	4.6E-07	JN	4.7E-07	J		4.97E-07	J							
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg	1.89E-07	U	1.79E-07	U		1.93E-07	U							
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg	6.43E-07	JN	3.84E-07	JN		3.76E-07	JN							
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg	0.000198		0.000147			0.0012								
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg	7.83E-06	J	5.75E-06	J		5.66E-06	J							
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg	2.51E-06		1.84E-06			1.27E-06								
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg	4.44E-05		3.43E-05			5.01E-05								
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg	1.14E-05	JN	8.71E-06	J		7.87E-06	JN							
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg	2.15E-05	JN	1.69E-05	JN		1.03E-05	JN							
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg	1.17E-05	JN	9.19E-06	JN		2.76E-05	JN							
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg	7.85E-06	JN	5.86E-06	JN		2.61E-05	JN							
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg	9.8E-06	JN	7.78E-06	JN		4.51E-05	JN							
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg	2.34E-06	JN	1.58E-06	JN		8.27E-07	J							
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg	5.19E-06	JN	3.71E-06	JN		3.53E-05	JN							
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg	2.51E-06		1.84E-06			1.27E-06								
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg	2800		2700			3600			1500			4400		2400
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg	0.36	J	0.39	J		0.21	UJ		0.24	J		0.23	UJ	0.49
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg	2.6	J	1.9	J		1.8	J		6.3	J		7.7	J	7.3
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg	230	J	32	J		15	J		56	J		56	J	39
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg	0.38		0.35			0.18			0.3			0.45	J	0.38
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg	4.6	J	7.1	J		0.073	J		0.29	J		0.27	J	0.19
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg	8300		5700			2100			16000			42000		3500
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg	9.2		7.8			11			3.7			19		10
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg	92	J	52	J		130	J		3.2	J		7.2	J	4.6
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg	230	J	51	J		14	J		32	J		45	J	26
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg	13000		9300			8100			4800			12000		8000
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg	1100		1300			9.1			42			70		22
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg	920		840			790			6600			18000	J	1500
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg	200		170			36			62			260		150
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg	0.04	J	0.045	J		0.029	J		0.064	J		0.26	J	0.059

			sys_loc_code	SUS01	SUS01	SUS02	SUS03	SUS04	SUS05							
			sys_sample_code	SUS0100N	SUS0100R	SUS0200N	SUS0300N	SUS0400N	SUS0500N							
			sample_date	2/4/2013	2/4/2013	2/4/2013	2/4/2013	2/4/2013	2/4/2013							
			sample_type_code	N	FD	N	N	N	N							
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013							
			start_depth	0.33	0.33	0.33	0.5	0	0							
			end_depth	1	1	0.83	1	1	1							
			depth_unit	ft	ft	ft	ft	ft	ft							
			validated_yn	Y	Y	Y	Y	Y	Y							
method_analyte_group	chemical_name	cas_rn	analytic_met_hod	report_re_sult_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers		
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg	12		11		8.7		7.2		72	J	16	
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg	370		370		210		140		670		230	
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg	0.14	J	0.089	J	0.087	J	0.44	J	0.6	J	0.38	J
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg	0.11	U	0.12		0.11	U	0.12	U	0.12	U	0.11	U
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg	790		700		370		920		120		49	
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg	0.11	U	0.11	U	0.11	U	0.12	U	0.13		0.11	U
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg	58	J	47	J	16	J	9.9	J	140	J	75	J
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg	1300	J	1700	J	20	J	58	J	59	J	33	J
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg	0.00022	J	0.00034	J	0.0046	U						
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg	0.00096	U	0.00094	U	0.0046	U						
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg	0.00096	U	0.00094	U	0.0046	U						
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg	0.00096	U	0.00094	U	0.0046	U						
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg	0.00096	U	0.00094	U	0.0046	U						
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.0096	U	0.0094	U	0.0092	U	0.0099	U	0.0097	U	0.047	U
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.0096	U	0.0094	U	0.0092	U	0.0099	U	0.0097	U	0.047	U
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.0096	U	0.0094	U	0.0092	U	0.0099	U	0.0097	U	0.047	U
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.0096	U	0.0094	U	0.0092	U	0.0099	U	0.0097	U	0.047	U
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.0096	UJ	0.0094	UJ	0.0092	UJ	0.0099	UJ	0.0097	UJ	0.047	U
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.0096	UJ	0.0094	UJ	0.0092	UJ	0.0099	UJ	0.0097	UJ	5.7	
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.0096	UJ	0.0094	UJ	0.021	J	0.0099	UJ	0.064	J	0.047	U
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.0096	UJ	0.0094	UJ	0.0092	UJ	0.0099	UJ	0.0097	UJ	0.047	U
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.0096	UJ	0.0094	UJ	0.0092	UJ	0.0099	UJ	0.0097	UJ	0.047	U
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg	0.00096	U	0.00094	U	0.0046	U						
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg	0.00096	U	0.00094	U	0.0046	U						
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg											3.85E-05	U
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg	0.00096	U	0.00094	U	0.0046	U						
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg											0.00797	JN
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg	0.00096	U	0.00094	U	0.0046	U						
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg	0.00096	U	0.00094	U	0.0046	U						
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg	0.00096	U	0.00094	U	0.0046	U						
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg	0.0002	J	0.00094	U	0.0046	U						
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg	0.00096	U	0.0003	J	0.0046	U						
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg	0.00096	U	0.00094	U	0.0046	U						
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg	0.00085	J	0.00094	U	0.0022	J						
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg	0.00096	U	0.00094	U	0.0046	U						
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg	0.00096	U	0.00094	U	0.0046	U						
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg	0.00096	U	0.00094	U	0.0046	U						
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg											0.288	JN
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg											2.71	JN
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg	0.00026	J	0.00024	J	0.0092	U						
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg											0.000906	JN
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	mg/kg											0.00087	JN



Attachment A  
Surface Soil Data  
Benning Road Facility RI/FS Project  
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		sys_loc_code	SUS01	SUS01	SUS02	SUS03	SUS04	SUS05	
		sys_sample_code	SUS0100N	SUS0100R	SUS0200N	SUS0300N	SUS0400N	SUS0500N	
		sample_date	2/4/2013	2/4/2013	2/4/2013	2/4/2013	2/4/2013	2/4/2013	
		sample_type_code	N	FD	N	N	N	N	
		task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	
		start_depth	0.33	0.33	0.33	0.5	0	0	
		end_depth	1	1	0.83	1	1	1	
		depth_unit	ft	ft	ft	ft	ft	ft	
		validated_yn	Y	Y	Y	Y	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	mg/kg					0.0175 JN
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	mg/kg					7.39E-05
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C	mg/kg					9.56
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO	SW8082A LL	mg/kg	0.0096	U	0.0094	U	0.021 0.0099 U 0.064
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg	0.0096	U	0.0094	U	0.021 0.0099 U 0.064
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg					0.000567
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg					0.000135 U
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg					0.00361 JN
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg					0.831
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg					0.0158
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg					0.00275
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg					0.000149 U
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg					0.246
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg					0.000142 U
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg					0.0409
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg					0.0305
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg					0.553
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg					0.000119 U
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg					0.905
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg					0.000363 JN
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg					0.000153 U
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg					0.831
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg					0.0147
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg					0.905
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg					0.103
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg					0.103
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg					0.676
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg					0.553
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg					0.000185 JN
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg					0.000161 JN
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg					0.000146 U
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg					0.00938
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg					0.0102
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg					0.0305
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg					0.553
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg					0.000338 JN
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg					0.000811 JN
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg					0.111
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg					0.671
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg					0.000185 JN
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg					0.0438
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg					0.0132



Attachment A  
Surface Soil Data  
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			sys_loc_code	SUS01	SUS01	SUS02	SUS03	SUS04	SUS05
			sys_sample_code	SUS0100N	SUS0100R	SUS0200N	SUS0300N	SUS0400N	SUS0500N
			sample_date	2/4/2013	2/4/2013	2/4/2013	2/4/2013	2/4/2013	2/4/2013
			sample_type_code	N	FD	N	N	N	N
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013
			start_depth	0.33	0.33	0.33	0.5	0	0
			end_depth	1	1	0.83	1	1	1
			depth_unit	ft	ft	ft	ft	ft	ft
			validated_yn	Y	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg					0.263
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg					0.00863
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg					0.0449
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg					0.151
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg					0.0793
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg					0.0408
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg					0.671
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg					0.0146
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg					0.000106
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg					0.0146
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg					0.107
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg					0.000255
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg					0.0449
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg					0.0242
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg					0.00074
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg					0.072
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg					0.437
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg					0.000222
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg					0.437
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg					0.00148
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg					0.000583
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg					0.151
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg					0.000513
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg					0.4
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg					0.00311
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg					0.000151
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg					0.0862
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg					0.0862
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg					0.0736
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg					0.00133
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg					0.00322
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg					0.671
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg					0.000169
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg					0.00217
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg					0.671
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg					0.0402
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg					0.000185
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg					0.111
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg					0.0242
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg					0.4
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg					0.000265
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg					0.00296



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Surface Soil Data  
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			sys_loc_code	SUS01	SUS01	SUS02	SUS03	SUS04	SUS05
			sys_sample_code	SUS0100N	SUS0100R	SUS0200N	SUS0300N	SUS0400N	SUS0500N
			sample_date	2/4/2013	2/4/2013	2/4/2013	2/4/2013	2/4/2013	2/4/2013
			sample_type_code	N	FD	N	N	N	N
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013
			start_depth	0.33	0.33	0.33	0.5	0	0
			end_depth	1	1	0.83	1	1	1
			depth_unit	ft	ft	ft	ft	ft	ft
			validated_yn	Y	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg					0.0505
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg					0.0171
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg					0.00721
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg					0.0171
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg					0.0356
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg					0.00157
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg					0.00518
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg					0.0206
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg					0.00578
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg					0.0132
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg					0.00779
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg					0.065
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg					0.00146
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg					0.000555
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg					0.0241
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg					7.67E-05
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg					0.0241
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg					7.45E-05
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg					0.0281
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg					6.69E-05
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg					0.00207
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg					0.000835
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg					0.00779
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg					0.00202
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg					7.91E-05
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg					0.065
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg					0.00461
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg					0.00202
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg					0.00235
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg					0.000161
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg					0.00418
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg					0.00418
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg					6.31E-05
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg					0.00845
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg					0.00053
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg					0.000513
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg					0.000597
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg					0.00257
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg					5.52E-05
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg					5.16E-05
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg					0.000737
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg					3.05E-05



Attachment A  
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		sys_loc_code		SUS01	SUS01	SUS02	SUS03	SUS04	SUS05	
		sys_sample_code		SUS0100N	SUS0100R	SUS0200N	SUS0300N	SUS0400N	SUS0500N	
		sample_date		2/4/2013	2/4/2013	2/4/2013	2/4/2013	2/4/2013	2/4/2013	
		sample_type_code		N	FD	N	N	N	N	
		task_code		Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	
		start_depth		0.33	0.33	0.33	0.5	0	0	
		end_depth		1	1	0.83	1	1	1	
		depth_unit		ft	ft	ft	ft	ft	ft	
		validated_yn		Y	Y	Y	Y	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_meth	report_re	report_result_	report_result_	report_result_	report_result_	report_result_	
			hod	sult_unit	value	interpreted	value	interpreted	value	
						_qualifiers		_qualifiers		
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg					0.000132	JN
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg					0.00575	
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg					0.00445	
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg					5.73E-05	U
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg					0.000158	JN
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg					0.000701	JN
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg					0.00149	
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg					0.000461	JN
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg					0.00845	
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg					0.00149	
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg					0.000276	J
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg					0.00779	
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg					0.0135	
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg					0.00246	
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg					0.00575	
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg					5.64E-05	U
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg					0.000197	J
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg					5.6E-05	U
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg					0.00498	
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg					5.91E-05	U
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg					0.000117	J
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg					0.00192	JN
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg					0.0263	
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg					0.0263	
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg					0.0112	
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg					0.00278	JN
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg					0.166	
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg					0.00415	
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg					0.00158	
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg					0.166	
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg					0.00753	
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg					0.0812	
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg					0.000129	U
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg					0.00827	
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg					0.00415	
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg					0.532	
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg					0.00827	
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg					0.00012	U
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg					0.00172	
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg					0.0302	
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg					0.000121	JN
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg					8.85E-05	U



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			sys_loc_code	SUS01	SUS01	SUS02	SUS03	SUS04	SUS05	
			sys_sample_code	SUS0100N	SUS0100R	SUS0200N	SUS0300N	SUS0400N	SUS0500N	
			sample_date	2/4/2013	2/4/2013	2/4/2013	2/4/2013	2/4/2013	2/4/2013	
			sample_type_code	N	FD	N	N	N	N	
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	
			start_depth	0.33	0.33	0.33	0.5	0	0	
			end_depth	1	1	0.83	1	1	1	
			depth_unit	ft	ft	ft	ft	ft	ft	
			validated_yn	Y	Y	Y	Y	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
			hod	unit	qualifiers	qualifiers	qualifiers	qualifiers	qualifiers	qualifiers
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg						0.0029
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg						0.000683 JN
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg						0.0128
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg						0.363
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg						0.0029
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg						0.00281
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg						0.0421
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg						0.166
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg						0.0785
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg						0.000214 JN
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg						8.06E-05 U
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg						0.0812
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg						0.000125 U
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg						0.363
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg						0.0263
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg						0.000225 JN
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg						0.00278 JN
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg						0.363
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg						0.0029
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg						0.363
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg						0.00415
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg						9.19E-05 U
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg						0.00452
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg						0.00347
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg						7.88E-05 U
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg						8.01E-05 U
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg						0.0839
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg						0.365
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg						0.221
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg						0.103
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg						0.553
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg						0.553
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg						0.0905
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg						0.00473
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg						0.000229 JN
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg						0.831
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg						0.0905
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg						0.137
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg						0.00361 JN
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg						0.0021
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg						0.739
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg						0.00334



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			sys_loc_code	SUS01	SUS01	SUS02	SUS03	SUS04	SUS05							
			sys_sample_code	SUS0100N	SUS0100R	SUS0200N	SUS0300N	SUS0400N	SUS0500N							
			sample_date	2/4/2013	2/4/2013	2/4/2013	2/4/2013	2/4/2013	2/4/2013							
			sample_type_code	N	FD	N	N	N	N							
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013							
			start_depth	0.33	0.33	0.33	0.5	0	0							
			end_depth	1	1	0.83	1	1	1							
			depth_unit	ft	ft	ft	ft	ft	ft							
			validated_yn	Y	Y	Y	Y	Y	Y							
method_analyte_group	chemical_name	cas_rn	analytic_met_hod	report_re_sult_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers		
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg									0.553			
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg									0.0158			
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg									0.365			
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg									5.09	JN		
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg									1.39	JN		
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg	0.038	U	0.038	U	0.18	U						
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg	0.00096	U	0.00094	U	0.0046	U						
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg									0.0575	JN		
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DR	mg/kg	19	U	13	J	92	U	15	J	66	J	180	J
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GR	mg/kg	0.099	U	0.1	U	0.35	U	0.16	U	0.11	U	0.11	U
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DR	mg/kg	43	J	54	J	300	J	110	J	270	J	1800	J
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg	0.039	U	0.038	U	0.037	U						
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg	0.039	U	0.038	U	0.037	U						
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg	0.98	U	0.97	U	0.93	U						
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg	0.039	U	0.038	U	0.037	U						
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg	0.039	U	0.038	U	0.017	J						
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg	0.98	U	0.97	U	0.93	U						
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg	0.98	U	0.97	U	0.93	U						
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg	0.98	U	0.97	U	0.93	U						
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg	0.98	U	0.97	U	0.93	U						
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg	0.98	U	0.97	U	0.93	U						
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg	0.039	U	0.038	U	0.021	J	0.04	U	0.073		0.029	J
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg	0.039	U	0.038	U	0.037	U	0.0089	J	0.03	J	0.011	J
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg	0.19	U	0.19	U	0.053	J						
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg	0.015	J	0.01	J	0.044		0.018	J	0.18		0.071	





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			sys_loc_code	SUS01	SUS01	SUS02	SUS03	SUS04	SUS05							
			sys_sample_code	SUS0100N	SUS0100R	SUS0200N	SUS0300N	SUS0400N	SUS0500N							
			sample_date	2/4/2013	2/4/2013	2/4/2013	2/4/2013	2/4/2013	2/4/2013							
			sample_type_code	N	FD	N	N	N	N							
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013							
			start_depth	0.33	0.33	0.33	0.5	0	0							
			end_depth	1	1	0.83	1	1	1							
			depth_unit	ft	ft	ft	ft	ft	ft							
			validated_yn	Y	Y	Y	Y	Y	Y							
method_analyte_group	chemical_name	cas_rn	analytic_met_hod	report_re_sult_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg	0.19	UJ	0.19	UJ	0.18	UJ						
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg	0.19	UJ	0.19	UJ	0.17	J						
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg	0.12		0.074		0.16		0.092		0.7	J	0.52	
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg	0.12		0.18		0.16		0.1		0.68		0.55	
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg	0.085		0.098		0.17		0.12		0.71	J	0.63	
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg	0.11		0.091		0.13		0.091		0.54		0.43	
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg	0.091		0.045		0.071		0.036	J	0.37		0.36	
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg	0.039	U	0.038	U	0.037	U						
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg	0.14	J	0.14	J	0.23	J						
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg	0.13	J	0.13	J	0.13	J						
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg	0.98	UJ	0.97	UJ	0.93	UJ						
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg	0.039	U	0.038	U	0.021	J						
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg	0.13		0.084		0.19		0.19		0.79	J	0.7	
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg	0.019	J	0.023	J	0.03	J	0.04		0.11		0.11	
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg	0.19	U	0.19	U	0.32							
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg	0.13		0.09		0.31		0.13		1.3	J	0.83	
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg	0.039	U	0.038	U	0.019	J	0.0082	J	0.069		0.02	J
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg	0.039	U	0.038	U	0.037	U						
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg	0.039	U	0.038	U	0.037	U						
RA_SO_SVOCs	Hexachlorocyclopentadiene	77-47-4	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg	0.082		0.064		0.097		0.068		0.44		0.33	
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg	0.039	U	0.038	U	0.018	J	0.037	J	0.084		0.042	
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg	0.38	U	0.38	U	0.37	U						
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg	0.039	U	0.038	U	0.037	U						
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg	0.19	U	0.19	U	0.18	U						
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg	0.031	J	0.03	J	0.18		0.16		0.87	J	0.48	
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg	0.039	U	0.038	U	0.11							
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg	0.19		0.11		0.25		0.14		1.1	J	0.75	
RA_SO_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U

Attachment A  
Surface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

			sys_loc_code	SUS01	SUS01	SUS02	SUS03	SUS04	SUS05							
			sys_sample_code	SUS0100N	SUS0100R	SUS0200N	SUS0300N	SUS0400N	SUS0500N							
			sample_date	2/4/2013	2/4/2013	2/4/2013	2/4/2013	2/4/2013	2/4/2013							
			sample_type_code	N	FD	N	N	N	N							
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013							
			start_depth	0.33	0.33	0.33	0.5	0	0							
			end_depth	1	1	0.83	1	1	1							
			depth_unit	ft	ft	ft	ft	ft	ft							
			validated_yn	Y	Y	Y	Y	Y	Y							
method_analyte_group	chemical_name	cas_rn	analytic_met_hod	report_re_sult_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0021	J	0.0058	U
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	UJ
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg		R		R		R		R		R		R
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg	0.02	UJ	0.02	UJ	0.035	J	0.03	UJ	0.023	UJ	0.023	UJ
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg	0.0049	UJ	0.0049	UJ	0.0042	UJ	0.0075	UJ	0.0057	UJ	0.0058	UJ
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg	0.0049	UJ	0.0049	UJ	0.0042	UJ	0.0075	UJ	0.0057	UJ	0.0058	U
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg	0.0049	UJ	0.0049	UJ	0.0042	UJ	0.0075	UJ	0.0057	UJ	0.0058	UJ
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg	0.0049	UJ	0.0049	UJ	0.0042	UJ	0.0075	UJ	0.0057	UJ	0.0058	U
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0031	J	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg	0.0098	U	0.0098	U	0.02		0.015	U	0.011	U	0.012	U
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg	0.0049	UJ	0.0049	UJ	0.0042	UJ	0.0075	UJ	0.0057	UJ	0.0058	UJ
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg	0.0049	U	0.0049	U	0.013		0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0014	J	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U



Attachment A  
Surface Soil Data  
Benning Road Facility RI/FS Project  
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				SUS01	SUS01	SUS02	SUS03	SUS04	SUS05							
sys_loc_code				SUS01	SUS01	SUS02	SUS03	SUS04	SUS05							
sys_sample_code				SUS0100N	SUS0100R	SUS0200N	SUS0300N	SUS0400N	SUS0500N							
sample_date				2/4/2013	2/4/2013	2/4/2013	2/4/2013	2/4/2013	2/4/2013							
sample_type_code				N	FD	N	N	N	N							
task_code				Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013							
start_depth				0.33	0.33	0.33	0.5	0	0							
end_depth				1	1	0.83	1	1	1							
depth_unit				ft	ft	ft	ft	ft	ft							
validated_yn				Y	Y	Y	Y	Y	Y							
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value						
				unit	qualifiers	qualifiers	qualifiers	qualifiers	qualifiers	qualifiers						
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg	0.0049	U	0.0049	U	0.0042	U	0.0075	U	0.0057	U	0.0058	U
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg	0.0098	U	0.0098	U	0.033		0.015	U	0.011	U	0.012	U

Attachment A  
Surface Soil Data  
Benning Road Facility RI/FS Project  
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			sys_loc_code	SUS06	SUS07	SUS08	SUS09	SUS10	SUS11					
			sys_sample_code	SUS0600N	SUS0700N	SUS0800N	SUS0900N	SUS1000N	SUS1100N					
			sample_date	2/5/2013	2/5/2013	2/5/2013	2/5/2013	2/5/2013	2/5/2013					
			sample_type_code	N	N	N	N	N	N					
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013					
			start_depth	0	0	0	0	0.5	0					
			end_depth	1	1	1	1	1	1					
			depth_unit	ft	ft	ft	ft	ft	ft					
			validated_yn	Y	Y	Y	Y	Y	Y					
method_analyte_group	chemical_name	cas_rn	analytic_met_hod	report_re_sult_unit	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers		
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg			0.000339		5.62E-05		0.000287		0.000279	
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg			7.13E-05		9.09E-06		7.37E-05		7.5E-05	
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg			9.87E-06	JN	1.14E-06	JN	6.23E-06		9.95E-06	
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg			1.57E-05		1.44E-06	JN	3.9E-06	J	2.12E-05	
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg			1.28E-05		1.37E-06	J	1.08E-05	JN	1.7E-05	
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg			2.67E-05		2.39E-06	J	1.23E-05		3.79E-05	
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg			1.66E-05	JN	3.03E-06	JN	1.2E-05	JN	2.51E-05	JN
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg			3.09E-05	J	2.61E-06	JN	8.99E-06	J	4.94E-05	J
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg			1.31E-06	J	1.12E-07	U	4.51E-07	JN	1.57E-06	J
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg			1.1E-05	JN	2.79E-06	JN	1.48E-05	JN	2.51E-05	JN
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg			7.19E-06		4.8E-07	J	1.58E-06	J	1.05E-05	
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg			1.43E-05		1.74E-06	J	5.17E-06	JN	1.94E-05	
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg			1.42E-05		1.33E-06	J	4.31E-06	J	1.91E-05	
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg			9.83E-07	JN	1.43E-07	U	4.89E-07	JN	3.27E-06	
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg			2.59E-05	J	7.93E-07	J	3.24E-06	J	3.12E-05	J
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg			0.0042	J	0.00114		0.00338		0.00126	
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg			7.75E-05	J	1.85E-05		0.000162		4.83E-05	
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg			3.64E-05		5.55E-06		2.7E-05		5.87E-05	
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg			0.000702		0.000111		0.000576		0.000524	
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg			0.000156	JN	2.6E-05	JN	0.000213		0.000137	
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg			0.000279		3.27E-05	JN	9.92E-05	JN	0.000396	JN
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg			0.000209	JN	6.65E-05	JN	0.000275	JN	0.000276	JN
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg			0.00308	JN	0.000152	JN	0.0022	JN	0.00102	JN
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg			0.000216	JN	0.000107	JN	0.000358	JN	0.000427	JN
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg			6.47E-05	JN	4.16E-06	JN	1.75E-05	JN	0.000132	JN
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg			0.000202	JN	8.13E-05	JN	0.000338	JN	0.000538	JN
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg			3.64E-05		5.55E-06		2.7E-05		5.87E-05	
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg	1700		6200		16000		3800		2200	
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg	0.38	J	0.23	UJ	0.26	UJ	0.21	UJ	0.22	UJ
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg	11	J	3		12	J	2.2	J	13	J
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg	56	J	65	J	110	J	32	J	41	J
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg	0.41		0.28		0.54		0.25		0.53	
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg	0.58	J	0.2	J	0.73	J	0.11	J	0.12	J
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg	970		55000		55000		12000		16000	
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg	5.9		33		60		11		12	
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg	5.9	J	8.2	J	23	J	4.6	J	9.6	J
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg	27	J	20	J	190	J	12	J	21	J
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg	5600		11000		18000		8100		10000	
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg	97		38		91		23		33	
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg	1500		21000		16000		3400		9600	
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg	49		270		690		130		210	
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg	0.075	J	0.11	J	0.19	J	0.043	J	0.043	J

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			sys_loc_code	SUS06	SUS07	SUS08	SUS09	SUS10	SUS11					
			sys_sample_code	SUS0600N	SUS0700N	SUS0800N	SUS0900N	SUS1000N	SUS1100N					
			sample_date	2/5/2013	2/5/2013	2/5/2013	2/5/2013	2/5/2013	2/5/2013					
			sample_type_code	N	N	N	N	N	N					
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013					
			start_depth	0	0	0	0	0.5	0					
			end_depth	1	1	1	1	1	1					
			depth_unit	ft	ft	ft	ft	ft	ft					
			validated_yn	Y	Y	Y	Y	Y	Y					
method_analyte_group	chemical_name	cas_rn	analytic_met_hod	report_re_sult_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg	28		97		610		19		9.8	33
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg	130		1000		750		780		370	340
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg	0.36	J	0.2	J	0.51	J	0.11	J	0.68	0.3
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg	0.11	U	0.12	U	0.25		0.1	U	0.11	0.17
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg	49	J	370	J	150	J	360	J	76	120
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg	0.14		0.12	U	0.13	U	0.1	U	0.16	0.11
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg	20	J	45	J	1700	J	16	J	22	78
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg	87	J	45	J	240	J	22	J	44	110
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg					0.0053	U	0.0044	U	0.001	0.00089
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg					0.0084	J	0.0011	J	0.0044	0.0009
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg					0.0099	J	0.0016	J	0.0065	0.036
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg					0.0053	U	0.0044	U	0.005	0.0002
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg					0.0053	U	0.0044	U	0.00093	0.00089
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.0094	U	0.0097	U	0.011	U	0.0089	U	0.0093	0.0089
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.0094	U	0.0097	U	0.011	U	0.0089	U	0.0093	0.0089
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.0094	U	0.0097	U	0.011	U	0.0089	U	0.0093	0.0089
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.0094	U	0.0097	U	0.011	U	0.0089	U	0.0093	0.0089
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.0094	UJ	0.0097	UJ	0.011	UJ	0.0089	UJ	0.0093	0.0089
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.0094	UJ	0.078	J	0.54	J	0.16	J	0.4	0.1
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	1.9	J	0.07	J	0.3	J	0.067	J	0.7	0.51
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.0094	UJ	0.0097	UJ	0.011	UJ	0.0089	UJ	0.0093	0.0089
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.0094	UJ	0.0097	UJ	0.011	UJ	0.0089	UJ	0.0093	0.0089
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg					0.0053	U	0.0044	U	0.0023	0.00089
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg					0.0038	J	0.0044	U	0.00044	0.0018
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg	0.000468				0.000439	JN			0.00125	JN
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg					0.0053	U	0.0044	U	0.0075	0.00089
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg	0.000881	JN			0.0119	JN			0.127	JN
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg					0.0046	J	0.0044	U	0.0057	0.004
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg					0.0014	J	0.0044	U	0.0011	0.00089
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg					0.0053	U	0.0044	U	0.0054	0.0027
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg					0.0027	J	0.0011	J	0.0072	0.0039
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg					0.026		0.0044	U	0.015	0.0041
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg					0.0053	U	0.0044	U	0.00093	0.00034
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg					0.0053	U	0.0044	U	0.00093	0.00089
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg					0.0053	U	0.0044	U	0.00023	0.00089
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg					0.0053	U	0.0044	U	0.0029	0.00089
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg					0.0012	J	0.0012	J	0.0083	0.0003
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg	1.98	JN			0.0819	JN			0.677	JN
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg	1.68	JN			0.401	JN			0.883	JN
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg					0.011	J	0.003	J	0.016	0.0094
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg	0.000178	JN			0.00409	JN			0.00237	
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	mg/kg	0.0198				0.00182	JN			0.0167	JN



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				sys_loc_code	SUS06	SUS07	SUS08	SUS09	SUS10	SUS11		
				sys_sample_code	SUS0600N	SUS0700N	SUS0800N	SUS0900N	SUS1000N	SUS1100N		
				sample_date	2/5/2013	2/5/2013	2/5/2013	2/5/2013	2/5/2013	2/5/2013		
				sample_type_code	N	N	N	N	N	N		
				task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013		
				start_depth	0	0	0	0	0.5	0		
				end_depth	1	1	1	1	1	1		
				depth_unit	ft	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	mg/kg	0.431		0.0142	JN		0.18		
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	mg/kg	0.000148		2.4E-05			0.000128		
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C	mg/kg	4.22		1.24			4.71		
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO	SW8082A LL	mg/kg	1.9	0.15	0.84		0.23	1		0.61
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg	1.9	0.15	0.84		0.23	1.1		0.61
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg	3.46E-05	JN	0.00268			0.000789		
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg	2.87E-05	U	0.000154	JN		0.00187	JN	
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg	0.000114	JN	0.000751	JN		0.000819	JN	
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg	0.011		0.0853			0.0743		
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg	6.76E-05	JN	0.00182	JN		0.00483		
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg	3.37E-05	U	0.000433			0.000167	U	
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg	2.56E-05	U	7.51E-05	U		0.000127	U	
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg	0.00336		0.0252			0.0482		
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg	2.18E-05	U	5.28E-05	U		0.000159	JN	
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg	0.00112		0.00514			0.00738		
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg	0.000444		0.00269			0.00457		
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg	0.0025		0.0539			0.0643		
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg	7.88E-05	JN	0.000101	U		0.000675	JN	
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg	0.0526		0.116			0.128		
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg	5.17E-05	JN	0.00017	JN		0.000119	U	
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg	2.62E-05	U	7.67E-05	U		0.000129	U	
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg	0.011		0.0853			0.0743		
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg	0.000364	J	0.00132			0.00301	JN	
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg	0.0526		0.116			0.128		
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg	0.000394	JN	0.0135			0.0245		
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg	0.000394	JN	0.0135			0.0245		
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg	0.00983		0.0668			0.102		
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg	0.0025		0.0539			0.0643		
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg	6.14E-05	JN	0.000611	JN		0.0088		
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg	0.000258	J	0.000231	JN		0.000122	U	
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg	2.5E-05	U	7.32E-05	U		0.000123	U	
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg	0.000113	JN	0.00113			0.00293		
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg	0.000164	J	0.00115			0.00326		
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg	0.000444		0.00269			0.00457		
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg	0.0025		0.0539			0.0643		
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg	0.00082	JN	0.000179	JN		0.000806		
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg	6.68E-05	JN	5.22E-05	U		0.000112	U	
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg	0.033		0.0164			0.02		
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg	0.432		0.1			0.199		
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg	6.14E-05	JN	0.000611	JN		0.0088		
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg	0.0157		0.00663			0.0086		
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg	0.0018		0.00164			0.00171		



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			sys_loc_code	SUS06	SUS07	SUS08	SUS09	SUS10	SUS11							
			sys_sample_code	SUS0600N	SUS0700N	SUS0800N	SUS0900N	SUS1000N	SUS1100N							
			sample_date	2/5/2013	2/5/2013	2/5/2013	2/5/2013	2/5/2013	2/5/2013							
			sample_type_code	N	N	N	N	N	N							
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013							
			start_depth	0	0	0	0	0.5	0							
			end_depth	1	1	1	1	1	1							
			depth_unit	ft	ft	ft	ft	ft	ft							
			validated_yn	Y	Y	Y	Y	Y	Y							
method_analyte_group	chemical_name	cas_rn	analytic_met_hod	report_re_sult_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg	0.109		0.0357		0.0599							
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg	0.00519		0.00144		0.00266							
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg	0.0164		0.00611		0.01							
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg	0.151		0.0263		0.0724							
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg	0.0484		0.0113		0.025							
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg	0.00126		0.00604		0.005							
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg	0.432		0.1		0.199							
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg	0.00124	JN	0.00225	JN	0.00146	JN						
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg	2.25E-05	U	8.91E-05	U	0.000127	U						
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg	0.00124	JN	0.00225	JN	0.00146	JN						
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg	0.0677		0.0151		0.0506							
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg	0.000103	JN	0.000113	U	0.000249	U						
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg	0.0164		0.00611		0.01							
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg	0.0128		0.00394		0.00897							
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg	6.61E-05	U	0.0001	U	0.000137	U						
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg	0.07		0.0114		0.0269							
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg	0.363		0.0669		0.168							
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg	9.24E-05	U	0.00014	U	0.000192	U						
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg	0.363		0.0669		0.168							
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg	0.000517	JN	0.00202	JN	0.089							
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg	6.44E-05	U	9.75E-05	U	0.000134	U						
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg	0.151		0.0263		0.0724							
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg	6.57E-05	U	9.94E-05	U	0.000137	U						
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg	0.247		0.058		0.166							
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg	0.000464		0.00045	JN	0.000613	JN						
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg	6.26E-05	U	9.48E-05	U	0.00013	U						
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg	0.0127		0.0106		0.0134							
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg	0.0127		0.0106		0.0134							
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg	0.0369		0.0101		0.0175							
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg	0.0067		0.000328	JN	0.00228	JN						
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg	4.04E-05	JN	0.000271	JN	0.0141							
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg	0.432		0.1		0.199							
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg	5.77E-05	U	7.45E-05	U	0.000165	U						
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg	0.0012		0.000299	JN	0.000562							
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg	0.432		0.1		0.199							
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg	0.0364		0.00641		0.0142							
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg	6.35E-05	U	8.19E-05	U	0.000181	U						
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg	0.033		0.0164		0.02							
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg	0.00881		0.00352		0.00564							
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg	0.247		0.058		0.166							
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg	0.00217	JN	9.04E-05	JN	0.0013							
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg	1.88E-05	U	0.000339	JN	0.0229							



Attachment A  
Surface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

			sys_loc_code	SUS06	SUS07	SUS08	SUS09	SUS10	SUS11							
			sys_sample_code	SUS0600N	SUS0700N	SUS0800N	SUS0900N	SUS1000N	SUS1100N							
			sample_date	2/5/2013	2/5/2013	2/5/2013	2/5/2013	2/5/2013	2/5/2013							
			sample_type_code	N	N	N	N	N	N							
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013							
			start_depth	0	0	0	0	0.5	0							
			end_depth	1	1	1	1	1	1							
			depth_unit	ft	ft	ft	ft	ft	ft							
			validated_yn	Y	Y	Y	Y	Y	Y							
method_analyte_group	chemical_name	cas_rn	analytic_met_hod	report_re_sult_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg	0.255		0.0119		0.0731							
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg	0.0758		0.00364	JN	0.0223							
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg	0.0428		0.00181		0.0143							
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg	0.0758		0.00364	JN	0.0223							
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg	0.251		0.0103		0.0907							
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg	0.00945		0.000442	JN	0.00328							
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg	0.0269		0.00131		0.0105							
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg	0.14		0.00557		0.0451							
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg	0.0441		0.00176		0.0166							
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg	0.0968		0.00395		0.0376							
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg	7.74E-05	JN	0.000964		0.0292							
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg	0.542		0.021		0.184							
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg	0.00081	JN	0.000216	JN	0.00028	JN						
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg	0.000547	JN	9.61E-05	JN	0.000323	JN						
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg	0.168		0.00673		0.0579							
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg	0.000132	J	5.83E-05	U	0.000127	U						
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg	0.168		0.00673		0.0579							
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg	5E-05	U	5.66E-05	U	0.000123	U						
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg	0.262		0.01		0.0998							
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg	4.36E-05	U	5.44E-05	U	0.000111	U						
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg	0.00852		0.000505		0.00256							
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg	2.31E-05	U	9.88E-05	U	0.0135							
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg	0.0462		0.00215		0.0159							
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg	0.0104		0.000449	JN	0.00388	JN						
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg	9.43E-05	J	6.01E-05	U	0.000131	U						
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg	0.542		0.021		0.184							
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg	0.118		0.00379		0.0429							
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg	0.0495		0.00144		0.0181							
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg	0.0547		0.00158	JN	0.0218							
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg	0.00362		5.01E-05	U	0.00168							
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg	0.103		0.00361		0.0466							
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg	0.103		0.00361		0.0466							
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg	1.71E-05	JN	0.00024	JN	0.000202	J						
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg	0.000883		0.00308		0.243							
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg	0.011		0.000418	JN	0.00582							
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg	0.0108		0.000472		0.00509							
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg	0.0138		0.000606		0.00753							
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg	0.0603		0.00215		0.028							
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg	2.54E-05	U	5.21E-05	U	8.36E-05	U						
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg	0.00583		0.000132	JN	0.00246							
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg	0.0154		0.00138		0.0126							
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg	0.00198		0.000155	JN	0.00137	JN						





Attachment A  
Surface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

			sys_loc_code	SUS06	SUS07	SUS08	SUS09	SUS10	SUS11					
			sys_sample_code	SUS0600N	SUS0700N	SUS0800N	SUS0900N	SUS1000N	SUS1100N					
			sample_date	2/5/2013	2/5/2013	2/5/2013	2/5/2013	2/5/2013	2/5/2013					
			sample_type_code	N	N	N	N	N	N					
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013					
			start_depth	0	0	0	0	0.5	0					
			end_depth	1	1	1	1	1	1					
			depth_unit	ft	ft	ft	ft	ft	ft					
			validated_yn	Y	Y	Y	Y	Y	Y					
method_analyte_group	chemical_name	cas_rn	analytic_met_hod	report_re_sult_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg	0.00237		0.000279	JN			0.00269			
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg	0.000337		0.00118				0.0373			
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg	0.000292	J	0.000891				0.0649			
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg	9.81E-06	U	3.35E-05	U			6.54E-05	JN		
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg	1.58E-05	U	6.75E-05	U			0.00204			
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg	5.62E-05	JN	0.000218	J			0.0118			
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg	9.1E-05		0.000339	JN			0.0233			
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg	1.36E-05	U	5.83E-05	U			0.00856			
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg	0.000883		0.00308				0.243			
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg	9.1E-05		0.000339	JN			0.0233			
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg	0.000126	J	0.00117				0.00138			
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg	7.74E-05	JN	0.000964				0.0292			
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg	0.000476	J	0.0022				0.111			
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg	8.18E-05	JN	0.000399	JN			0.0415			
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg	0.000337		0.00118				0.0373			
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg	9.66E-06	U	3.3E-05	U			0.000415	J		
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg	9.93E-06	U	0.000102	JN			0.00429			
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg	9.59E-06	U	3.28E-05	U			8.2E-05	U		
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg	0.000665		0.00152				0.113			
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg	1.01E-05	U	3.46E-05	U			0.000236	JN		
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg	9E-06	U	3.07E-05	U			0.000583	JN		
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg	3.32E-05	U	0.00207				0.0025			
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg	0.000242		0.00363				0.115			
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg	0.000242		0.00363				0.115			
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg	0.00011	J	0.00172				0.052			
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg	2.05E-05	U	0.000454	JN			0.00542			
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg	0.000351		0.0159				0.164			
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg	5.9E-05	JN	0.00102				0.0379			
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg	2.69E-05	U	0.000255	JN			0.0134			
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg	0.000351		0.0159				0.164			
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg	8.14E-05	J	0.00104				0.0271			
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg	0.000197		0.00914				0.0898			
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg	2.75E-05	U	0.000242	JN			0.000376	JN		
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg	2.11E-05	U	0.00167				0.0245			
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg	5.9E-05	JN	0.00102				0.0379			
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg	0.000727		0.0465				0.141			
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg	2.11E-05	U	0.00167				0.0245			
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg	2.96E-05	U	0.00012	U			0.000176	U		
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg	6.54E-05	JN	0.000182	JN			0.00866	JN		
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg	0.000448		0.00354				0.0969			
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg	1.62E-05	U	4.83E-05	U			0.000959			
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg	0.00028	JN	0.00232				0.00033	JN		



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Surface Soil Data  
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			sys_loc_code	SUS06	SUS07	SUS08	SUS09	SUS10	SUS11					
			sys_sample_code	SUS0600N	SUS0700N	SUS0800N	SUS0900N	SUS1000N	SUS1100N					
			sample_date	2/5/2013	2/5/2013	2/5/2013	2/5/2013	2/5/2013	2/5/2013					
			sample_type_code	N	N	N	N	N	N					
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013					
			start_depth	0	0	0	0	0.5	0					
			end_depth	1	1	1	1	1	1					
			depth_unit	ft	ft	ft	ft	ft	ft					
			validated_yn	Y	Y	Y	Y	Y	Y					
method_analyte_group	chemical_name	cas_rn	analytic_met_hod	report_re_sult_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg	5.46E-05	JN	0.0006	JN			0.0178			
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg	3.73E-05	JN	0.00125	JN			0.00465	JN		
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg	0.000233	JN	0.00131	JN			0.0537			
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg	0.00156		0.0267				0.266			
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg	5.46E-05	JN	0.0006	JN			0.0178			
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg	2.99E-05	JN	0.000287				0.00513			
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg	0.000317	J	0.00583				0.0758			
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg	0.000351		0.0159				0.164			
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg	0.00105		0.0103				0.195			
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg	2.07E-05	JN	4.34E-05	U			0.00577			
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg	1.47E-05	U	4.38E-05	U			0.000407	JN		
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg	0.000197		0.00914				0.0898			
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg	2.66E-05	U	0.000432	JN			0.000779	JN		
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg	0.00156		0.0267				0.266			
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg	0.000242		0.00363				0.115			
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg	1.58E-05	U	9.33E-05	JN			0.00104			
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg	2.05E-05	U	0.000454	JN			0.00542			
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg	0.00156		0.0267				0.266			
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg	5.46E-05	JN	0.0006	JN			0.0178			
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg	0.00156		0.0267				0.266			
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg	0.000485		0.00117	JN			0.0264			
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg	1.67E-05	U	4.99E-05	U			0.000137	U		
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg	4.13E-05	JN	0.000481	JN			0.00102	JN		
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg	0.000187	JN	0.00464				0.0172			
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg	1.43E-05	U	4.28E-05	U			0.000117	U		
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg	0.000125	JN	7.77E-05	J			0.00113	JN		
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg	0.000541	JN	0.00925				0.0215			
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg	0.00145	JN	0.0451				0.0516			
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg	0.000849		0.0247				0.0246			
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg	0.000394	JN	0.0135				0.0245			
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg	0.0025		0.0539				0.0643			
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg	0.0025		0.0539				0.0643			
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg	0.000296	JN	0.0125				0.0156			
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg	3.85E-05	U	0.000535				0.00297			
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg	2.67E-05	U	0.000493	JN			0.000975	JN		
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg	0.011		0.0853				0.0743			
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg	0.000296	JN	0.0125				0.0156			
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg	0.00298		0.017				0.0135			
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg	0.000114	JN	0.000751	JN			0.000819	JN		
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg	3.84E-05	U	0.000335	JN			0.00019	U		
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg	0.00996		0.0917				0.0541			
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg	2.88E-05	U	0.000429	JN			0.00158			

Attachment A  
Surface Soil Data  
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			sys_loc_code	SUS06	SUS07	SUS08	SUS09	SUS10	SUS11			
			sys_sample_code	SUS0600N	SUS0700N	SUS0800N	SUS0900N	SUS1000N	SUS1100N			
			sample_date	2/5/2013	2/5/2013	2/5/2013	2/5/2013	2/5/2013	2/5/2013			
			sample_type_code	N	N	N	N	N	N			
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013			
			start_depth	0	0	0	0	0.5	0			
			end_depth	1	1	1	1	1	1			
			depth_unit	ft	ft	ft	ft	ft	ft			
			validated_yn	Y	Y	Y	Y	Y	Y			
method_analyte_group	chemical_name	cas_rn	analytic_met_hod	report_re_sult_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg	0.0025		0.0539		0.0643			
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg	6.76E-05	JN	0.00182	JN	0.00483			
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg	0.00145	JN	0.0451		0.0516			
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg	0.0993	JN	0.577	JN	0.654	JN		
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg	0.00647	JN	0.134	JN	1.43	JN		
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg			0.21	U	0.18	U	0.037	U
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg			0.012	J	0.0017	J	0.0048	J
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg	0.003	JN	0.0115	JN			0.742	JN
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DR	mg/kg	95	U	97	U	110	U	18	U
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GR	mg/kg	0.25		0.11	U	0.13	U	0.1	U
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DR	mg/kg	300	J	350	J	1800	J	150	J
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg			0.02	J	0.18	U	0.03	J
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg			0.21	U	0.18	U	0.18	U
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg			0.043	U	0.036	U	0.038	U
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg			0.21	U	0.18	U	0.18	U
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg			0.21	U	0.18	U	0.18	U
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg			0.21	U	0.18	U	0.18	U
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg			0.043	U	0.036	U	0.038	U
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg			0.21	U	0.18	U	0.18	U
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg			1.1	U	0.91	U	0.95	U
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg			0.21	U	0.18	U	0.18	U
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg			0.21	U	0.18	U	0.18	U
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg			0.043	U	0.036	U	0.038	U
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg			0.21	U	0.18	U	0.18	U
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg			0.058		0.011	J	0.085	
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg			0.21	U	0.013	J	0.18	U
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg			1.1	U	0.91	U	0.95	U
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg			0.21	U	0.18	U	0.18	U
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg			0.21	U	0.18	U	0.18	U
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg			1.1	U	0.91	U	0.95	U
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg			1.1	U	0.91	U	0.95	U
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg			0.21	U	0.18	U	0.18	U
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg			0.21	U	0.18	U	0.18	U
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg			0.21	U	0.18	U	0.18	U
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg			0.21	U	0.18	U	0.18	U
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg			0.21	U	0.026	J	0.18	U
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg			1.1	U	0.91	U	0.95	U
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg			1.1	U	0.91	U	0.95	U
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg	0.038	U	0.062		0.033	J	0.0097	J
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg	0.011	J	0.057		0.055		0.081	
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg			0.023	J	0.18	U	0.015	J
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg	0.017	J	0.19		0.097		0.08	

Attachment A  
Surface Soil Data  
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			sys_loc_code	SUS06	SUS07	SUS08	SUS09	SUS10	SUS11					
			sys_sample_code	SUS0600N	SUS0700N	SUS0800N	SUS0900N	SUS1000N	SUS1100N					
			sample_date	2/5/2013	2/5/2013	2/5/2013	2/5/2013	2/5/2013	2/5/2013					
			sample_type_code	N	N	N	N	N	N					
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013					
			start_depth	0	0	0	0	0.5	0					
			end_depth	1	1	1	1	1	1					
			depth_unit	ft	ft	ft	ft	ft	ft					
			validated_yn	Y	Y	Y	Y	Y	Y					
method_analyte_group	chemical_name	cas_rn	analytic_met_hod	report_re_sult_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg			0.21	U	0.18	U	0.18	U	0.18	U
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg			0.1	J	0.18	UJ	0.18	UJ	0.12	J
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg	0.098		0.41		0.25		0.3		0.27	
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg	0.1		0.82		0.45	J	0.29		0.33	J
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg	0.22		0.92		0.44	J	0.32		0.37	J
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg	0.14		0.33		0.22		0.23		0.16	J
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg	0.046		0.34		0.22	J	0.087		0.17	J
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg			0.21	U	0.18	U	0.18	U	0.18	U
RA_SO_SVOCs	bis-(2-Chloroethoxy)ether	111-44-4	SW8270D LL	mg/kg			0.043	U	0.036	U	0.038	U	0.036	U
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg			0.22	J	0.034	J	0.37	U	0.073	J
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg			0.21	U	0.18	U	0.18	U	0.18	U
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg			1.1	U	0.91	U	0.95	U	0.91	U
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg			0.039	J	0.017	J	0.031	J	0.034	J
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg	0.25		0.92		0.4		0.26		0.37	
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg	0.042		0.16		0.086	J	0.045		0.065	J
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg			0.031	J	0.18	U	0.068	J	0.022	J
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg			0.21	U	0.18	U	0.18	U	0.18	U
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg			0.13	J	0.18	U	0.18	U	0.21	
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg			0.21	U	0.18	U	0.18	U	0.18	U
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg			0.21	U	0.18	U	0.18	U	0.18	U
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg	0.19		1.8		0.71		0.42		0.51	
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg	0.011	J	0.039		0.032	J	0.036	U	0.033	J
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg			0.043	U	0.036	U	0.038	U	0.036	U
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg			0.043	U	0.036	U	0.038	U	0.036	U
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg			0.21	U	0.18	U	0.18	U	0.18	U
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg			0.21	U	0.18	U	0.18	U	0.18	U
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg	0.098		0.56		0.29	J	0.17		0.21	J
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg			0.21	U	0.18	U	0.18	U	0.18	U
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg	0.042		0.074		0.052	J	0.027	J	0.12	0.042
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg			0.43	U	0.36	U	0.37	U	0.36	U
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg			0.043	U	0.036	U	0.038	U	0.036	U
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg			0.21	U	0.18	U	0.18	U	0.18	U
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg			0.21	U	0.18	U	0.18	U	0.18	U
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg	0.22		0.69		0.3		0.13		0.29	
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg			0.043	U	0.036	U	0.016	J	0.036	U
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg	0.14		1.4		0.49		0.28		0.33	
RA_SO_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U
RA_SO_VOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U
RA_SO_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethan	76-13-1	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U
RA_SO_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U
RA_SO_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U

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			sys_loc_code	SUS06	SUS07	SUS08	SUS09	SUS10	SUS11							
			sys_sample_code	SUS0600N	SUS0700N	SUS0800N	SUS0900N	SUS1000N	SUS1100N							
			sample_date	2/5/2013	2/5/2013	2/5/2013	2/5/2013	2/5/2013	2/5/2013							
			sample_type_code	N	N	N	N	N	N							
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013							
			start_depth	0	0	0	0	0.5	0							
			end_depth	1	1	1	1	1	1							
			depth_unit	ft	ft	ft	ft	ft	ft							
			validated_yn	Y	Y	Y	Y	Y	Y							
method_analyte_group	chemical_name	cas_rn	analytic_met_hod	report_re_sult_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg	0.0056	UJ	0.005	UJ	0.0059	UJ	0.0048	UJ	0.0049	UJ	0.0046	UJ
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg		R		R		R		R		R		R
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg	0.034	J	0.02	UJ	0.007	J	0.019	UJ	0.019	UJ	0.018	UJ
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg	0.0056	UJ	0.005	UJ	0.0059	UJ	0.0048	UJ	0.0049	UJ	0.0046	UJ
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg	0.0056	UJ	0.005	UJ	0.0059	UJ	0.0048	UJ	0.0049	UJ	0.0046	UJ
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg	0.0013	J	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg	0.0081	J	0.01	U	0.012	U	0.0095	U	0.0097	U	0.0092	U
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg	0.0056	UJ	0.005	UJ	0.0059	UJ	0.0048	UJ	0.0049	UJ	0.0046	UJ
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg	0.0042	J	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg	0.0013	J	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg	0.0056	U	0.005	U	0.0059	U	0.0048	U	0.0049	U	0.0046	U



Attachment A  
Surface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				SUS06	SUS07	SUS08	SUS09	SUS10	SUS11											
sys_loc_code				SUS06	SUS07	SUS08	SUS09	SUS10	SUS11											
sys_sample_code				SUS0600N	SUS0700N	SUS0800N	SUS0900N	SUS1000N	SUS1100N											
sample_date				2/5/2013	2/5/2013	2/5/2013	2/5/2013	2/5/2013	2/5/2013											
sample_type_code				N	N	N	N	N	N											
task_code				Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013											
start_depth				0	0	0	0	0.5	0											
end_depth				1	1	1	1	1	1											
depth_unit				ft	ft	ft	ft	ft	ft											
validated_yn				Y	Y	Y	Y	Y	Y											
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers					
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg	0.0056	U	0.005	U		0.0059	U		0.0048	U		0.0049	U		0.0046	U
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg	0.0056	U	0.005	U		0.0059	U		0.0048	U		0.0049	U		0.0046	U
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg	0.0056	UJ	0.005	UJ		0.0059	UJ		0.0048	UJ		0.0049	UJ		0.0046	UJ
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg	0.0056	U	0.005	U		0.0059	U		0.0048	U		0.0049	U		0.0046	U
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg	0.012		0.01	U		0.012	U		0.0095	U		0.0097	U		0.0092	U



Attachment A  
Surface Soil Data  
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			sys_loc_code	SUS12	SUS13	SUS14	SUS15	SUS16	SUS17					
			sys_sample_code	SUS1200N	SUS1300N	SUS1400N	SUS1500N	SUS1600N	SUS1700N					
			sample_date	2/6/2013	2/5/2013	2/6/2013	2/6/2013	2/6/2013	2/6/2013					
			sample_type_code	N	N	N	N	N	N					
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013					
			start_depth	0	0	0.17	0.17	0.5	0.5					
			end_depth	1	1	1	1	1	1					
			depth_unit	ft	ft	ft	ft	ft	ft					
			validated_yn	Y	Y	Y	Y	Y	Y					
method_analyte_group	chemical_name	cas_rn	analytic_met_hod	report_re_sult_unit	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg									3.65E-05	
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg									1.12E-05	
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg									6.59E-07	JN
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg									9.39E-07	JN
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg									1.32E-06	JN
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57653-85-7	SW8290A	mg/kg									3.6E-06	J
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg									3.52E-06	JN
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg									4.12E-06	J
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg									1.47E-07	U
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg									1.5E-06	JN
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg									2.04E-07	U
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg									1.4E-06	JN
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg									8.77E-07	JN
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg									2.79E-07	U
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg									5.91E-07	JN
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg									0.0003	
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg									9.63E-06	J
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg									3.89E-06	
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg									6.71E-05	
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg									2.28E-05	JN
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg									3.08E-05	JN
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg									5.85E-05	JN
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg									1.06E-05	JN
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg									0.000121	JN
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg									1.15E-06	JN
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg									0.000153	JN
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg									3.89E-06	
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg	4100		2800		4100		4900		2600	3700
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg	0.49	J	0.22	J	0.24	UJ	0.36	J	0.23	0.22
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg	14	J	12	J	3.7	J	5.7	J	3.2	J
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg	79	J	58	J	70	J	67	J	24	43
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg	0.37		0.26		0.32		0.4		0.28	0.37
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg	3.5	J	0.8	J	0.26	J	0.3	J	0.064	J
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg	12000		5400		3800		2800		41000	440
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg	14		27		11				6	7.3
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg	4.4	J	15	J	5	J	4.8	J	3.2	3.1
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg	280	J	38	J	16	J	23	J	5.9	6.3
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg	9400		10000		9700		12000		8700	8600
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg	380		140		32	J	56		11	11
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg	6700		24000		1800		2000		24000	360
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg	120		190		260	J	110		150	58
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg	0.14	J	0.098	J	0.054	J	0.088	J	0.057	0.051



Attachment A  
Surface Soil Data  
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			sys_loc_code	SUS12	SUS13	SUS14	SUS15	SUS16	SUS17							
			sys_sample_code	SUS1200N	SUS1300N	SUS1400N	SUS1500N	SUS1600N	SUS1700N							
			sample_date	2/6/2013	2/5/2013	2/6/2013	2/6/2013	2/6/2013	2/6/2013							
			sample_type_code	N	N	N	N	N	N							
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013							
			start_depth	0	0	0.17	0.17	0.5	0.5							
			end_depth	1	1	1	1	1	1							
			depth_unit	ft	ft	ft	ft	ft	ft							
			validated_yn	Y	Y	Y	Y	Y	Y							
method_analyte_group	chemical_name	cas_rn	analytic_met_hod	report_re_sult_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers		
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg	27		230		19		19		2.2		3.4	
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg	320		660		630		650		290		270	
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg	0.59	J	0.47	J	0.26	J	0.33	J	0.23	J	0.28	J
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg	0.23		0.24		0.12	U	0.11	U	0.11	U	0.11	U
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg	59		130	J	160		170		60		48	
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg	0.18		0.17		0.12	U	0.14		0.11	U	0.11	U
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg	36	J	35	J	23	J	26	J	11	J	12	J
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg	390	J	110	J	33	J	65	J	15	J	13	J
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg											0.00055	J
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg											0.0015	
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg											0.002	J
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg											0.00046	U
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg											0.00046	U
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.023	U	0.0091	U	0.0049	U	0.0046	U	0.0047	U	0.0046	U
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.023	U	0.0091	U	0.0049	U	0.0046	U	0.0047	U	0.0046	U
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.023	U	0.0091	U	0.0049	U	0.0046	U	0.0047	U	0.0046	U
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	1.1		0.0091	U	0.11		0.082		0.0047	U	0.0046	U
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.023	U	0.0091	UJ	0.0049	U	0.0046	U	0.0047	U	0.0046	U
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.023	U	0.0091	UJ	0.0049	U	0.0046	U	0.0047	U	0.0046	U
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	1.8		0.7	J	0.18		0.25		0.00095	J	0.086	
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.023	U	0.0091	UJ	0.0049	U	0.0046	U	0.0047	U	0.0046	U
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.023	U	0.0091	UJ	0.0049	U	0.0046	U	0.0047	U	0.0046	U
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg											0.00046	U
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg											0.00036	J
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg	0.0424											
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg											0.00046	U
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg	0.0889	JN										
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg											0.00049	J
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg											0.00046	U
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg											0.00033	J
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg											0.00046	J
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg											0.00046	J
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg											0.00046	U
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg											0.00046	U
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg											0.00046	U
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg											0.00046	U
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg											0.00033	J
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg	1.48	JN										
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg	1.43	JN										
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg											0.0014	J
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg	0.000914	JN										
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	mg/kg	0.254											





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				sys_loc_code	SUS12	SUS13	SUS14	SUS15	SUS16	SUS17		
				sys_sample_code	SUS1200N	SUS1300N	SUS1400N	SUS1500N	SUS1600N	SUS1700N		
				sample_date	2/6/2013	2/5/2013	2/6/2013	2/6/2013	2/6/2013	2/6/2013		
				sample_type_code	N	N	N	N	N	N		
				task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013		
				start_depth	0	0	0.17	0.17	0.5	0.5		
				end_depth	1	1	1	1	1	1		
				depth_unit	ft	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	mg/kg	0.496							
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	mg/kg	0.000211							
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C	mg/kg	5.18							
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO	SW8082A LL	mg/kg	2.9	0.7	0.29	0.33	0.00095	0.086		
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg	2.9	0.7	0.29	0.33	0.0047	U	0.086	
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg	0.000265	JN						
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg	0.000159	JN						
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg	0.000359	JN						
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg	0.0269							
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg	0.00135	JN						
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg	0.000108	U						
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg	8.18E-05	U						
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg	0.0203							
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg	5.24E-05	U						
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg	0.00329							
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg	0.00168							
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg	0.0143							
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg	0.000562	JN						
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg	0.0697							
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg	7.69E-05	U						
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg	8.35E-05	U						
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg	0.0269							
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg	0.00105							
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg	0.0697							
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg	0.00789							
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg	0.00789							
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg	0.0383							
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg	0.0143							
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg	0.00502	JN						
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg	0.000165	JN						
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg	7.97E-05	U						
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg	0.000812	JN						
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg	0.00103	JN						
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg	0.00168							
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg	0.0143							
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg	0.000651							
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg	5.18E-05	U						
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg	0.0281							
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg	0.358							
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg	0.00502	JN						
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg	0.0128							
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg	0.00156	JN						



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			sys_loc_code	SUS12	SUS13	SUS14	SUS15	SUS16	SUS17				
			sys_sample_code	SUS1200N	SUS1300N	SUS1400N	SUS1500N	SUS1600N	SUS1700N				
			sample_date	2/6/2013	2/5/2013	2/6/2013	2/6/2013	2/6/2013	2/6/2013				
			sample_type_code	N	N	N	N	N	N				
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013				
			start_depth	0	0	0.17	0.17	0.5	0.5				
			end_depth	1	1	1	1	1	1				
			depth_unit	ft	ft	ft	ft	ft	ft				
			validated_yn	Y	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg	0.0898								
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg	0.00431								
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg	0.0128								
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg	0.125								
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg	0.0402								
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg	0.00318								
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg	0.358								
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg	0.00106	JN							
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg	9.56E-05	U							
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg	0.00106	JN							
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg	0.0694								
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg	0.000177	U							
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg	0.0128								
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg	0.0123								
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg	0.000152	U							
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg	0.0526								
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg	0.27								
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg	0.000212	U							
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg	0.27								
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg	0.0619								
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg	0.000148	U							
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg	0.125								
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg	0.000151	U							
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg	0.255								
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg	0.000465								
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg	0.000144	U							
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg	0.0142								
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg	0.0142								
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg	0.0299								
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg	0.00487								
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg	0.00682								
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg	0.358								
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg	0.000117	U							
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg	0.000788	JN							
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg	0.358								
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg	0.0276								
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg	0.000129	U							
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg	0.0281								
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg	0.00854								
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg	0.255								
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg	0.00473	JN							
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg	0.00798								



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			sys_loc_code	SUS12	SUS13	SUS14	SUS15	SUS16	SUS17				
			sys_sample_code	SUS1200N	SUS1300N	SUS1400N	SUS1500N	SUS1600N	SUS1700N				
			sample_date	2/6/2013	2/5/2013	2/6/2013	2/6/2013	2/6/2013	2/6/2013				
			sample_type_code	N	N	N	N	N	N				
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013				
			start_depth	0	0	0.17	0.17	0.5	0.5				
			end_depth	1	1	1	1	1	1				
			depth_unit	ft	ft	ft	ft	ft	ft				
			validated_yn	Y	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg	0.187								
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg	0.0537								
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg	0.0317								
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg	0.0537								
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg	0.185								
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg	0.00704								
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg	0.02								
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg	0.101								
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg	0.0329								
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg	0.0681								
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg	0.0113								
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg	0.409								
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg	0.00055	JN							
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg	0.000698	JN							
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg	0.126								
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg	0.000115	U							
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg	0.126								
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg	0.000112	U							
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg	0.208								
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg	9.84E-05	U							
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg	0.00677								
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg	0.000896								
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg	0.0347								
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg	0.00785								
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg	0.000119	U							
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg	0.409								
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg	0.113								
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg	0.0385								
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg	0.048								
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg	0.00293								
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg	0.15								
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg	0.15								
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg	1.01E-05	U							
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg	0.202								
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg	0.0111								
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg	0.0122								
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg	0.0251								
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg	0.0897								
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg	7.77E-05	U							
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg	0.00484								
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg	0.179								
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg	0.0153								



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				sys_loc_code	SUS12	SUS13	SUS14	SUS15	SUS16	SUS17		
				sys_sample_code	SUS1200N	SUS1300N	SUS1400N	SUS1500N	SUS1600N	SUS1700N		
				sample_date	2/6/2013	2/5/2013	2/6/2013	2/6/2013	2/6/2013	2/6/2013		
				sample_type_code	N	N	N	N	N	N		
				task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013		
				start_depth	0	0	0.17	0.17	0.5	0.5		
				end_depth	1	1	1	1	1	1		
				depth_unit	ft	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg	0.0596							
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg	0.0454							
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg	0.0634							
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg	3.78E-05	U						
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg	0.000449							
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg	0.00872							
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg	0.0136							
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg	0.00147							
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg	0.202							
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg	0.0136							
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg	0.000649							
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg	0.0113							
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg	0.0996							
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg	0.0136							
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg	0.0454							
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg	0.00016	JN						
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg	0.004							
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg	3.7E-05	U						
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg	0.0982							
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg	0.000135	JN						
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg	0.00035	JN						
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg	0.00157	JN						
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg	0.0643							
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg	0.0643							
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg	0.0227							
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg	0.00115							
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg	0.0501							
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg	0.0063							
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg	0.00227							
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg	0.0501							
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg	0.0138							
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg	0.0297							
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg	0.000277	JN						
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg	0.00295							
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg	0.0063							
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg	0.039							
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg	0.00295							
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg	0.000164	U						
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg	0.00234							
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg	0.0393							
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg	0.000395	JN						
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg	0.0002	J						



Attachment A  
Surface Soil Data  
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			sys_loc_code	SUS12	SUS13	SUS14	SUS15	SUS16	SUS17				
			sys_sample_code	SUS1200N	SUS1300N	SUS1400N	SUS1500N	SUS1600N	SUS1700N				
			sample_date	2/6/2013	2/5/2013	2/6/2013	2/6/2013	2/6/2013	2/6/2013				
			sample_type_code	N	N	N	N	N	N				
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013				
			start_depth	0	0	0.17	0.17	0.5	0.5				
			end_depth	1	1	1	1	1	1				
			depth_unit	ft	ft	ft	ft	ft	ft				
			validated_yn	Y	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg	0.0075								
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg	0.00317								
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg	0.0177								
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg	0.116								
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg	0.0075								
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg	0.00232								
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg	0.0544								
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg	0.0501								
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg	0.0838								
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg	0.00313								
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg	0.000291	J							
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg	0.0297								
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg	0.000482	JN							
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg	0.116								
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg	0.0643								
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg	0.000612								
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg	0.00115								
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg	0.116								
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg	0.0075								
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg	0.116								
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg	0.0115								
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg	5.88E-05	U							
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg	0.000216	JN							
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg	0.015								
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg	5.04E-05	U							
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg	0.000374	J							
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg	0.00519								
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg	0.0124								
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg	0.00391								
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg	0.00789								
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg	0.0143								
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg	0.0143								
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg	0.00658								
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg	0.000123	U							
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg	0.000744	JN							
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg	0.0269								
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg	0.00658								
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg	0.00486	JN							
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg	0.000359	JN							
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg	0.000634								
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg	0.023								
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg	0.00126								

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			sys_loc_code	SUS12	SUS13	SUS14	SUS15	SUS16	SUS17				
			sys_sample_code	SUS1200N	SUS1300N	SUS1400N	SUS1500N	SUS1600N	SUS1700N				
			sample_date	2/6/2013	2/5/2013	2/6/2013	2/6/2013	2/6/2013	2/6/2013				
			sample_type_code	N	N	N	N	N	N				
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013				
			start_depth	0	0	0.17	0.17	0.5	0.5				
			end_depth	1	1	1	1	1	1				
			depth_unit	ft	ft	ft	ft	ft	ft				
			validated_yn	Y	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg	0.0143								
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg	0.00135	JN							
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg	0.0124								
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg	0.246	JN							
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg	0.573	JN							
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg							0.019	U	
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg							0.00037	J	
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg	0.578	JN							
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DR	mg/kg	79	J	90	U	99	UJ	170	U	
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GR	mg/kg	0.11	UJ	0.1	U	0.11	UJ	0.089	UJ	
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DR	mg/kg	330	J	340	J	270	J	720	J	
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg								0.037	U
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg								0.037	U
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg								0.0075	U
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg								0.037	U
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg								0.037	U
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg								0.037	U
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg								0.0075	U
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg								0.037	U
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg								0.19	U
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg								0.037	U
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg								0.037	U
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg								0.0075	U
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg								0.037	U
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg								0.006	J
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg								0.037	U
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg								0.19	U
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg								0.037	U
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg								0.037	U
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg								0.19	U
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg								0.19	U
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg								0.037	U
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg								0.037	U
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg								0.037	U
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg								0.037	U
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg								0.037	U
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg								0.19	U
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg								0.19	U
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg	0.14		0.017	J	0.057		0.046	0.0029	J
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg	0.17		0.029	J	0.031	J	0.033	0.002	J
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg								0.0035	J
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg	0.42		0.084		0.16		0.16	0.0055	J



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			sys_loc_code	SUS12	SUS13	SUS14	SUS15	SUS16	SUS17							
			sys_sample_code	SUS1200N	SUS1300N	SUS1400N	SUS1500N	SUS1600N	SUS1700N							
			sample_date	2/6/2013	2/5/2013	2/6/2013	2/6/2013	2/6/2013	2/6/2013							
			sample_type_code	N	N	N	N	N	N							
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013							
			start_depth	0	0	0.17	0.17	0.5	0.5							
			end_depth	1	1	1	1	1	1							
			depth_unit	ft	ft	ft	ft	ft	ft							
			validated_yn	Y	Y	Y	Y	Y	Y							
method_analyte_group	chemical_name	cas_rn	analytic_met_hod	report_re_sult_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg										0.037	U	
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg										0.019	J	
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg	1.7		0.44		0.68	J	0.55	J	0.037		0.012	
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg	1.8	J	0.5	J	0.7		0.44	J	0.041		0.011	
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg	2.4	J	0.65	J	0.82		0.54	J	0.05		0.015	
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg	1.5	J	0.34	J	0.57		0.38	J	0.04		0.013	
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg	0.77	J	0.2	J	0.29		0.31	J	0.021		0.0078	
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg										0.037	U	
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg										0.0075	U	
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg										0.012	J	
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg										0.015	J	
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg										0.19	U	
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg										0.0075	U	
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg	2		0.5		0.67	J	0.59	J	0.049		0.025	
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg	0.42	J	0.095	J	0.15		0.09	J	0.0095		0.0029	J
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg										0.041	J	
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg										0.0082	J	
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg										0.037	U	
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg										0.0056	J	
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg										0.037	U	
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg	3.9		0.7		1.4	J	1.5		0.067		0.027	
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg	0.098		0.013	J	0.045		0.055		0.0021	J	0.0015	J
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg										0.0075	U	
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg										0.0075	U	
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg										0.037	U	
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg										0.037	U	
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg	1.3	J	0.31	J	0.49		0.34	J	0.033		0.0098	
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg										0.037	U	
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg	0.23		0.026	J	0.028	J	0.067		0.0043	J	0.0062	J
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg										0.075	U	
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg										0.0075	U	
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg										0.037	U	
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg										0.037	U	
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg	1.8		0.27		0.61	J	0.54		0.035		0.02	
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg										0.0075	U	
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg	2.3		0.48		0.91	J	0.87	J	0.048		0.017	
RA_SO_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethan	76-13-1	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0063	U	0.0046	U	0.0043	U
RA_SO_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U

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			sys_loc_code	SUS12	SUS13	SUS14	SUS15	SUS16	SUS17							
			sys_sample_code	SUS1200N	SUS1300N	SUS1400N	SUS1500N	SUS1600N	SUS1700N							
			sample_date	2/6/2013	2/5/2013	2/6/2013	2/6/2013	2/6/2013	2/6/2013							
			sample_type_code	N	N	N	N	N	N							
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013							
			start_depth	0	0	0.17	0.17	0.5	0.5							
			end_depth	1	1	1	1	1	1							
			depth_unit	ft	ft	ft	ft	ft	ft							
			validated_yn	Y	Y	Y	Y	Y	Y							
method_analyte_group	chemical_name	cas_rn	analytic_met_hod	report_re_sult_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg	0.0052	UJ	0.0048	UJ	0.0047	UJ	0.0023	J	0.0046	UJ	0.0043	UJ
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg		R		R		R		R		R		R
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0021	J	0.0046	U	0.0043	U
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg	0.021	UJ	0.019	UJ	0.019	UJ	0.019	UJ	0.018	UJ	0.017	UJ
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg	0.0052	U	0.0048	UJ	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg	0.0052	UJ	0.0048	UJ	0.0047	UJ	0.0047	UJ	0.0046	UJ	0.0043	UJ
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg	0.0052	UJ	0.0048	U	0.0047	UJ	0.0047	UJ	0.0046	UJ	0.0043	UJ
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg	0.01	U	0.0096	U	0.0094	U	0.0094	U	0.0092	U	0.0086	U
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg	0.0052	UJ	0.0048	UJ	0.0047	UJ	0.0047	UJ	0.0046	UJ	0.0043	UJ
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U





Attachment A  
Surface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				SUS12	SUS13	SUS14	SUS15	SUS16	SUS17							
sys_loc_code				SUS12	SUS13	SUS14	SUS15	SUS16	SUS17							
sys_sample_code				SUS1200N	SUS1300N	SUS1400N	SUS1500N	SUS1600N	SUS1700N							
sample_date				2/6/2013	2/5/2013	2/6/2013	2/6/2013	2/6/2013	2/6/2013							
sample_type_code				N	N	N	N	N	N							
task_code				Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013							
start_depth				0	0	0.17	0.17	0.5	0.5							
end_depth				1	1	1	1	1	1							
depth_unit				ft	ft	ft	ft	ft	ft							
validated_yn				Y	Y	Y	Y	Y	Y							
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value						
				unit	qualifiers	qualifiers	qualifiers	qualifiers	qualifiers	qualifiers						
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg	0.0052	U	0.0048	UJ	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg	0.0052	U	0.0048	U	0.0047	U	0.0047	U	0.0046	U	0.0043	U
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg	0.01	U	0.0096	U	0.0094	U	0.0094	U	0.0092	U	0.0086	U



Attachment A  
Surface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

			sys_loc_code	SUS18	SUS19	SUS20	SUS22	SUS23	SUS24									
			sys_sample_code	SUS1800N	SUS1900N	SUS2000N	SUS2200N	SUS2300N	SUS2400N									
			sample_date	2/6/2013	2/6/2013	2/7/2013	6/13/2013	2/7/2013	2/7/2013									
			sample_type_code	N	N	N	N	N	N									
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013									
			start_depth	0	0.83	0.42	0.5	0.5	0									
			end_depth	1	1	1	1	1	1									
			depth_unit	ft	ft	ft	ft	ft	ft									
			validated_yn	Y	Y	Y	Y	Y	Y									
method_analyte_group	chemical_name	cas_rn	analytic_met_hod	report_re_sult_unit	report_result_value	interpreted_qualifiers	report_re_sult_unit	report_result_value	interpreted_qualifiers	report_re_sult_unit	report_result_value	interpreted_qualifiers	report_re_sult_unit	report_result_value	interpreted_qualifiers	report_re_sult_unit	report_result_value	interpreted_qualifiers
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg	5.29E-05			0.000237										
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg	2.01E-05			4.94E-05										
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg	9.06E-06	J		4.04E-06	J									
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg	3.82E-06	JN		3.15E-06	J									
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg	1.76E-05	J		4.5E-06	J									
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57653-85-7	SW8290A	mg/kg	1.43E-05			8.24E-06										
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg	7.94E-05	JN		6.45E-06	JN									
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg	9.19E-06			6.62E-06										
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg	5.24E-07	J		2.7E-07	JN									
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg	6.51E-06	JN		5.18E-06	JN									
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg	1.61E-06	J		9.66E-07	JN									
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg	4.95E-06	J		2.4E-06	J									
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg	4.99E-06	JN		2.49E-06	J									
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg	3.17E-07	U		2.74E-07	U									
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg	2.81E-06	JN		2.79E-06	J									
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg	0.000395			0.00455	J									
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg	3.92E-05			0.000142										
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg	2.23E-05			1.37E-05										
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg	0.000118			0.000429										
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg	5.64E-05			0.000162	JN									
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg	0.000157	JN		5.51E-05	JN									
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg	0.000815	JN		0.000139	JN									
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg	0.0022	JN		0.000175	JN									
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg	0.00228	JN		0.000148	JN									
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg	2.49E-05	JN		6.56E-06	JN									
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg	0.00438	JN		0.000123	JN									
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg	2.23E-05			1.37E-05										
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg	3200			5000			2100				1500			4200
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg	0.22	UJ		0.26	J		0.31	J			0.21	UJ		0.23
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg	7	J		3	J		33	J			0.65	J		3.8
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg	36	J		55	J		74	J			14	J		52
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg	0.4			0.34			0.33				0.11			0.33
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg	0.14	J		0.22	J		0.63	J			0.062	J		0.31
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg	2300			12000			59000				150000			2900
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg	7.1			11			10				5			14
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg	3.8	J		11	J		4.6	J			3.7	J		4.7
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg	12	J		49	J		29	J			3.8	J		14
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg	7700			13000			9500				4200			9800
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg	21			170			89				5.5			95
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg	1700			3300			35000				76000			2900
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg	220			170			120				370			160
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg	0.08	J		0.081	J		0.11	J			0.033	UJ		0.1

Attachment A  
Surface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

			sys_loc_code	SUS18	SUS19	SUS20	SUS22	SUS23	SUS24				
			sys_sample_code	SUS1800N	SUS1900N	SUS2000N	SUS2200N	SUS2300N	SUS2400N				
			sample_date	2/6/2013	2/6/2013	2/7/2013	6/13/2013	2/7/2013	2/7/2013				
			sample_type_code	N	N	N	N	N	N				
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013				
			start_depth	0	0.83	0.42	0.5	0.5	0				
			end_depth	1	1	1	1	1	1				
			depth_unit	ft	ft	ft	ft	ft	ft				
			validated_yn	Y	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg	7.7	30	14	12	12				
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg	280	720	340	700	830				
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg	0.38	J 0.19	J 1.7	J 0.26	J 0.28				
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg	0.11	U 0.11	U 0.11	U 0.1	U 0.16				
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg	160	160	84	96	52				
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg	0.11	U 0.11	U 0.25	U 0.1	U 0.11				
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg	13	J 19	J 21	J 3.4	J 23				
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg	78	J 66	J 36	J 9.9	J 80				
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg	0.0046	U 0.0019	J						
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg	0.00072	J 0.001	J						
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg	0.083	0.00079	J						
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg	0.0046	U 0.0047	U						
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg	0.0046	U 0.0047	U						
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.0046	U 0.0047	U 0.047	U 0.0045	U 0.0044				
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.0046	U 0.0047	U 0.047	U 0.0045	U 0.0044				
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.0046	U 0.0047	U 0.047	U 0.0045	U 0.0044				
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.0046	U 0.018	4.1	0.0045	U 0.0044				
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.0046	U 0.0047	U 0.047	U 0.011	U 0.0044				
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.0046	U 0.0047	U 0.047	U 0.0045	U 0.0044				
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	1.4	0.16	0.97	0.025	0.0087				
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.0046	U 0.0047	U 0.047	U 0.0045	U 0.0044				
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.0046	U 0.0047	U 0.047	U 0.0045	U 0.0044				
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg	0.0046	U 0.0047	U						
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg	0.0046	U 0.0047	U						
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg			0.00317						
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg	0.0046	U 0.0047	U						
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg			0.0905	JN					
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg	0.0094	J 0.0021	J						
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg	0.0046	U 0.0047	U						
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg	0.015	0.0047	U						
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg	0.0063	J 0.0011	J						
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg	0.0049	J 0.0047	U						
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg	0.0046	U 0.0047	U						
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg	0.0046	U 0.0047	U						
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg	0.0046	U 0.0047	U						
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg	0.0046	U 0.0047	U						
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg	0.0096	0.0015	J						
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg			0.407	JN					
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg			0.512	JN					
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg	0.023	J 0.012	J						
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg			0.000359	JN					
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	mg/kg			0.0176	JN					



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		sys_loc_code	SUS18	SUS19	SUS20	SUS22	SUS23	SUS24	
		sys_sample_code	SUS1800N	SUS1900N	SUS2000N	SUS2200N	SUS2300N	SUS2400N	
		sample_date	2/6/2013	2/6/2013	2/7/2013	6/13/2013	2/7/2013	2/7/2013	
		sample_type_code	N	N	N	N	N	N	
		task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	
		start_depth	0	0.83	0.42	0.5	0.5	0	
		end_depth	1	1	1	1	1	1	
		depth_unit	ft	ft	ft	ft	ft	ft	
		validated_yn	Y	Y	Y	Y	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	mg/kg			0.112		
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	mg/kg			0.000136		
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C	mg/kg			6.45		
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO	SW8082A LL	mg/kg	1.4	0.18	5.1	0.036	0.0087
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg	1.4	0.18	5.1	0.034	0.0087
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg			0.000122	JN	
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg			0.000875	JN	
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg			0.00215	JN	
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg			0.0868		
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg			0.00977		
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg			0.00108		
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg			7E-05	U	
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg			0.0611		
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg			5.57E-05	U	
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg			0.00822		
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg			0.0054		
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg			0.0757		
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg			0.000542	JN	
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg			0.114		
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg			6.58E-05	U	
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg			7.15E-05	U	
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg			0.0868		
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg			0.00317		
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg			0.114		
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg			0.0295		
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg			0.0295		
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg			0.114		
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg			0.0757		
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg			0.00576		
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg			0.000339		
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg			6.83E-05	U	
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg			0.00334		
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg			0.00411		
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg			0.0054		
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg			0.0757		
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg			0.000987	JN	
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg			5.51E-05	U	
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg			0.0108		
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg			0.115		
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg			0.00576		
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg			0.00574		
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg			0.00103		



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			sys_loc_code	SUS18	SUS19	SUS20	SUS22	SUS23	SUS24				
			sys_sample_code	SUS1800N	SUS1900N	SUS2000N	SUS2200N	SUS2300N	SUS2400N				
			sample_date	2/6/2013	2/6/2013	2/7/2013	6/13/2013	2/7/2013	2/7/2013				
			sample_type_code	N	N	N	N	N	N				
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013				
			start_depth	0	0.83	0.42	0.5	0.5	0				
			end_depth	1	1	1	1	1	1				
			depth_unit	ft	ft	ft	ft	ft	ft				
			validated_yn	Y	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg				0.0331					
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg				0.00167					
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg				0.00469					
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg				0.0408					
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg				0.012					
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg				0.00254					
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg				0.115					
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg				0.00118					
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg				7.46E-05	U				
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg				0.00118					
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg				0.0296					
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg				0.000121	U				
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg				0.00469					
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg				0.00597					
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg				0.000104	U				
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg				0.0173					
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg				0.0935					
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg				0.000146	U				
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg				0.0935					
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg				0.0741					
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg				0.000101	U				
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg				0.0408					
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg				0.000103	U				
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg				0.104					
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg				0.000459	JN				
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg				9.86E-05	U				
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg				0.00768					
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg				0.00768					
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg				0.00997					
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg				0.00156					
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg				0.0174					
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg				0.115					
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg				8.04E-05	U				
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg				0.000474					
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg				0.115					
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg				0.00811					
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg				8.84E-05	U				
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg				0.0108					
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg				0.00461					
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg				0.104					
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg				0.000903	JN				
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg				0.0476					



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				sys_loc_code	SUS18	SUS19	SUS20	SUS22	SUS23	SUS24
				sys_sample_code	SUS1800N	SUS1900N	SUS2000N	SUS2200N	SUS2300N	SUS2400N
				sample_date	2/6/2013	2/6/2013	2/7/2013	6/13/2013	2/7/2013	2/7/2013
				sample_type_code	N	N	N	N	N	N
				task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013
				start_depth	0	0.83	0.42	0.5	0.5	0
				end_depth	1	1	1	1	1	1
				depth_unit	ft	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_meth	report_re	report_result_	report_result_	report_result_	report_result_	report_result_	report_result_
			hod	sult_unit	value	interpreted_	value	interpreted_	value	interpreted_
						qualifiers		qualifiers		qualifiers
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg					0.0473	
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg					0.014	
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg					0.00953	
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg					0.014	
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg					0.0522	
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg					0.00208	
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg					0.00524	
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg					0.0277	
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg					0.00981	
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg					0.0186	
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg					0.0367	
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg					0.116	
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg					8.21E-05	U
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg					0.000246	JN
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg					0.0331	
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg					6.78E-05	U
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg					0.0331	
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg					6.58E-05	U
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg					0.0576	
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg					5.75E-05	U
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg					0.00199	
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg					0.016	
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg					0.00897	
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg					0.00189	JN
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg					6.99E-05	U
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg					0.116	
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg					0.028	
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg					0.0111	
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg					0.0129	
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg					0.000755	
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg					0.0298	
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg					0.0298	
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg					9.54E-06	U
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg					0.536	
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg					0.00307	
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg					0.00284	
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg					0.0052	
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg					0.0172	
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg					5.28E-05	U
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg					0.00138	
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg					0.0119	
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg					0.00139	JN



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		sys_loc_code		SUS18	SUS19	SUS20	SUS22	SUS23	SUS24
		sys_sample_code		SUS1800N	SUS1900N	SUS2000N	SUS2200N	SUS2300N	SUS2400N
		sample_date		2/6/2013	2/6/2013	2/7/2013	6/13/2013	2/7/2013	2/7/2013
		sample_type_code		N	N	N	N	N	N
		task_code		Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013
		start_depth		0	0.83	0.42	0.5	0.5	0
		end_depth		1	1	1	1	1	1
		depth_unit		ft	ft	ft	ft	ft	ft
		validated_yn		Y	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_meth	report_re	report_result_	report_result_	report_result_	report_result_	report_result_
			hod	sult_unit	value	value	value	value	value
					interpreted	interpreted	interpreted	interpreted	interpreted
					qualifiers	qualifiers	qualifiers	qualifiers	qualifiers
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg			0.0043		
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg			0.0446		
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg			0.158		
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg			8E-05	JN	
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg			0.0031		
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg			0.0254		
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg			0.0363		
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg			0.0153		
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg			0.536		
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg			0.0363		
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg			0.000238		
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg			0.0367		
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg			0.207		
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg			0.0917		
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg			0.0446		
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg			0.000671		
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg			0.00729		
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg			6.17E-05	U	
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg			0.2		
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg			0.000273	JN	
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg			0.00158	JN	
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg			0.00116	JN	
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg			0.289		
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg			0.289		
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg			0.129		
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg			0.013	JN	
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg			0.382		
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg			0.0825		
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg			0.026		
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg			0.382		
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg			0.0871		
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg			0.241		
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg			0.000123	JN	
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg			0.0519		
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg			0.0825		
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg			0.324		
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg			0.0519		
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg			0.000626		
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg			0.0117		
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg			0.152		
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg			0.00198		
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg			0.000857	JN	



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		sys_loc_code		SUS18	SUS19	SUS20	SUS22	SUS23	SUS24
		sys_sample_code		SUS1800N	SUS1900N	SUS2000N	SUS2200N	SUS2300N	SUS2400N
		sample_date		2/6/2013	2/6/2013	2/7/2013	6/13/2013	2/7/2013	2/7/2013
		sample_type_code		N	N	N	N	N	N
		task_code		Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013
		start_depth		0	0.83	0.42	0.5	0.5	0
		end_depth		1	1	1	1	1	1
		depth_unit		ft	ft	ft	ft	ft	ft
		validated_yn		Y	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_meth	report_re	report_result_	report_result_	report_result_	report_result_	report_result_
			hod	sult_unit	value	interpreted_	interpreted_	interpreted_	interpreted_
						qualifiers	qualifiers	qualifiers	qualifiers
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg			0.0424		
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg			0.00211	JN	
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg			0.0729		
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg			0.536		
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg			0.0424		
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg			0.0108		
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg			0.207		
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg			0.382		
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg			0.351		
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg			0.012		
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg			0.00103		
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg			0.241		
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg			0.000259	JN	
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg			0.536		
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg			0.289		
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg			0.00242		
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg			0.013	JN	
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg			0.536		
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg			0.0424		
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg			0.536		
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg			0.0368		
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg			0.000215	JN	
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg			0.000857		
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg			0.00501		
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg			7.25E-05	U	
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg			0.00158		
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg			0.0236		
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg			0.0622		
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg			0.0339		
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg			0.0295		
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg			0.0757		
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg			0.0757		
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg			0.0297		
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg			0.00436		
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg			0.000517	JN	
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg			0.0868		
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg			0.0297		
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg			0.0153		
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg			0.00215	JN	
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg			0.0015	JN	
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg			0.0992		
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg			0.00317	JN	



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			sys_loc_code	SUS18	SUS19	SUS20	SUS22	SUS23	SUS24						
			sys_sample_code	SUS1800N	SUS1900N	SUS2000N	SUS2200N	SUS2300N	SUS2400N						
			sample_date	2/6/2013	2/6/2013	2/7/2013	6/13/2013	2/7/2013	2/7/2013						
			sample_type_code	N	N	N	N	N	N						
			task_code	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013						
			start_depth	0	0.83	0.42	0.5	0.5	0						
			end_depth	1	1	1	1	1	1						
			depth_unit	ft	ft	ft	ft	ft	ft						
			validated_yn	Y	Y	Y	Y	Y	Y						
method_analyte_group	chemical_name	cas_rn	analytic_met_hod	report_re_sult_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg			0.0757								
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg			0.00977								
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg			0.0622								
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg			0.792	JN							
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg			3.07	JN							
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg	0.18	U	0.19	U							
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg	0.0046	U	0.0047	U							
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg			1.44	JN							
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DR	mg/kg	21		94	U	18	U	18	U	97	U	
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GR	mg/kg	0.11	U	0.088	U	0.1	UJ	0.088	UJ	0.11	UJ	
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DR	mg/kg	80	J	360	J	230	J	69	J	240	J	
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg	0.073	U	0.18	U							
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg	0.0096	J	0.18	U							
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg	0.015	U	0.037	U							
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg	0.073	U	0.18	U							
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg	0.073	U	0.18	U							
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg	0.073	U	0.18	U							
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg	0.015	U	0.037	U							
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg	0.073	U	0.18	U							
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg	0.37	U	0.95	U							
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg	0.073	U	0.18	U							
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg	0.073	U	0.18	U							
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg	0.015	U	0.037	U							
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg	0.073	U	0.18	U							
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg	0.023		0.052								
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg	0.073	U	0.18	U							
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg	0.37	U	0.95	U							
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg	0.073	U	0.18	U							
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg	0.073	U	0.18	U							
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg	0.37	U	0.95	U							
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg	0.37	U	0.95	U							
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg	0.073	U	0.18	U							
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg	0.073	U	0.18	U							
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg	0.073	U	0.18	U							
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg	0.073	U	0.18	U							
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg	0.073	U	0.18	U							
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg	0.37	U	0.95	U							
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg	0.37	U	0.95	U							
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg	0.005	J	0.23		0.038	U	0.092		0.036	U	0.099
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg	0.0072	J	0.15		0.022	J	0.096		0.036	U	0.87
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg	0.047	J	0.18	U							
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg	0.012	J	0.72		0.044		0.3		0.036	U	1

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			sys_loc_code		SUS18	SUS19	SUS20	SUS22	SUS23	SUS24						
			sys_sample_code		SUS1800N	SUS1900N	SUS2000N	SUS2200N	SUS2300N	SUS2400N						
			sample_date		2/6/2013	2/6/2013	2/7/2013	6/13/2013	2/7/2013	2/7/2013						
			sample_type_code		N	N	N	N	N	N						
			task_code		Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013						
			start_depth		0	0.83	0.42	0.5	0.5	0						
			end_depth		1	1	1	1	1	1						
			depth_unit		ft	ft	ft	ft	ft	ft						
			validated_yn		Y	Y	Y	Y	Y	Y						
method_analyte_group	chemical_name	cas_rn	analytic_met_hod	report_re_sult_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg	0.073	U	0.18	U								
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg	0.073	UJ	0.18	UJ								
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg	0.08		2.9	J	0.11		0.77		0.036	U	1.8	
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg	0.087	J	2.8	J	0.08		0.69		0.036	U	1.4	J
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg	0.15	J	3.3	J	0.2		0.77		0.036	U	3.2	J
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg	0.09	J	2.1	J	0.11		0.59		0.036	U	1.4	J
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg	0.036	J	1.1	J	0.055		0.32		0.036	U	1.7	J
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg	0.073	U	0.18	U								
RA_SO_SVOCs	bis-(2-Chloroethoxy)ether	111-44-4	SW8270D LL	mg/kg	0.015	U	0.037	U								
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg	0.016	J	0.034	J								
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg	0.073	U	0.18	U								
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg	0.37	U	0.95	U								
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg	0.0082	J	0.26									
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg	0.19		2.8	J	0.22		0.79		0.036	U	3.2	
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg	0.025	J	0.69	J	0.035	J	0.15		0.036	U	0.4	J
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg	0.073	U	0.12	J								
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg	0.019	J	0.18	U								
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg	0.073	U	0.18	U								
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg	0.073	U	0.18	U								
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg	0.073	U	0.18	U								
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg	0.2		6.2			1.6		0.0082	J		10	
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg	0.0048	J	0.22		0.024	J	0.07		0.036	U	0.15	
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg	0.015	U	0.037	U								
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg	0.015	U	0.037	U								
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg	0.073	U	0.18	U								
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg	0.073	U	0.18	U								
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg	0.074	J	1.9	J	0.085		0.5		0.036	U	1.3	J
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg	0.073	U	0.18	U								
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg	0.016		0.056		0.067		0.066		0.036	U	0.053	
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg	0.15	U	0.37	U								
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg	0.015	U	0.037	U								
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg	0.073	U	0.18	U								
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg	0.073	U	0.18	U								
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg	0.08		2.6		0.26		0.63		0.0076	J	2.7	
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg	0.0087	J	0.016	J								
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg	0.13		3.6	J	0.16		1.1		0.0079	J	4.9	
RA_SO_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethan	76-13-1	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U

Attachment A  
Surface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

			sys_loc_code		SUS18	SUS19	SUS20	SUS22	SUS23	SUS24						
			sys_sample_code		SUS1800N	SUS1900N	SUS2000N	SUS2200N	SUS2300N	SUS2400N						
			sample_date		2/6/2013	2/6/2013	2/7/2013	6/13/2013	2/7/2013	2/7/2013						
			sample_type_code		N	N	N	N	N	N						
			task_code		Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013						
			start_depth		0	0.83	0.42	0.5	0.5	0						
			end_depth		1	1	1	1	1	1						
			depth_unit		ft	ft	ft	ft	ft	ft						
			validated_yn		Y	Y	Y	Y	Y	Y						
method_analyte_group	chemical_name	cas_rn	analytic_met_hod	report_re_sult_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers		
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg	0.0051	UJ	0.0043	UJ	0.0048	UJ	0.0039	U	0.0041	UJ	0.0051	UJ
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg		R		R		R	0.78	U		R		R
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg	0.02	UJ	0.0051	J	0.019	UJ	0.014	J	0.016	UJ	0.021	UJ
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	UJ	0.0039	U	0.0041	UJ	0.0051	UJ
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg	0.0051	UJ	0.0043	UJ	0.0048	UJ	0.0039	U	0.0041	UJ	0.0051	UJ
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg	0.0051	UJ	0.0043	UJ	0.0048	UJ	0.0039	U	0.0041	UJ	0.0051	UJ
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg	0.01	U	0.0087	U	0.0095	U	0.0078	U	0.0013	J	0.01	U
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg	0.0051	UJ	0.0043	UJ	0.0048	UJ	0.0039	U	0.0041	UJ	0.0051	UJ
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.00096	J	0.0051	U
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U



Attachment A  
Surface Soil Data  
Benning Road Facility RI/FS Project  
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				SUS18	SUS19	SUS20	SUS22	SUS23	SUS24							
sys_loc_code				SUS18	SUS19	SUS20	SUS22	SUS23	SUS24							
sys_sample_code				SUS1800N	SUS1900N	SUS2000N	SUS2200N	SUS2300N	SUS2400N							
sample_date				2/6/2013	2/6/2013	2/7/2013	6/13/2013	2/7/2013	2/7/2013							
sample_type_code				N	N	N	N	N	N							
task_code				Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013	Phase1-2013							
start_depth				0	0.83	0.42	0.5	0.5	0							
end_depth				1	1	1	1	1	1							
depth_unit				ft	ft	ft	ft	ft	ft							
validated_yn				Y	Y	Y	Y	Y	Y							
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value						
				unit	qualifiers	qualifiers	qualifiers	qualifiers	qualifiers	qualifiers						
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg	0.0051	U	0.0043	U	0.0048	U	0.0039	U	0.0041	U	0.0051	U
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg	0.01	U	0.0087	U	0.0095	U	0.0078	U	0.0023		0.01	U



Attachment A  
Surface Soil Data  
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				sys_loc_code	SUS25	
				sys_sample_code	SUS2500N	
				sample_date	2/7/2013	
				sample_type_code	N	
				task_code	Phase1-2013	
				start_depth	0.5	
				end_depth	1	
				depth_unit	ft	
				validated_yn	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	interpreted_qualifiers	
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg	4.84E-05	
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg	1.22E-05	
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg	1.85E-06	JN
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg	8.77E-07	JN
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg	1.62E-06	J
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg	2.44E-06	J
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg	1.41E-06	JN
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg	2.76E-06	JN
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg	2.7E-07	U
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg	2.32E-06	JN
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg	2.3E-07	U
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg	8.01E-07	JN
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg	5.7E-07	JN
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg	3.41E-07	U
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg	1.11E-06	J
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg	0.000487	J
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg	2.71E-05	J
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg	4.37E-06	
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg	0.00013	
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg	3.48E-05	JN
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg	3.24E-05	JN
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg	3.47E-05	JN
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg	0.00017	JN
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg	3.27E-05	JN
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg	2.37E-06	JN
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg	2.8E-05	JN
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg	4.37E-06	
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg	2900	
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg	0.22	UJ
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg	2.6	J
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg	23	J
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg	0.24	
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg	0.093	J
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg	28000	
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg	6.3	
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg	3.1	J
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg	5.7	J
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg	8100	
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg	12	
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg	17000	
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg	140	
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg	0.02	J



Attachment A  
Surface Soil Data  
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				sys_loc_code	SUS25
				sys_sample_code	SUS2500N
				sample_date	2/7/2013
				sample_type_code	N
				task_code	Phase1-2013
				start_depth	0.5
				end_depth	1
				depth_unit	ft
				validated_yn	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	interpreted_qualifiers
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg	3.6
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg	750
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg	0.16 J
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg	0.11 U
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg	290 U
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg	0.11 U
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg	11 J
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg	17 J
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg	0.0002 J
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg	0.00033 J
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg	0.0099
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg	0.00049
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg	0.00046 U
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.0046 U
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.0046 U
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.0046 U
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.081
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.0046 U
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.0046 U
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.17
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.0046 U
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.0046 U
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg	0.00026 J
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg	0.00021 J
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg	
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg	0.00065 J
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg	
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg	0.00079 J
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg	0.00046 U
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg	0.00074 J
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg	0.00079 J
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg	0.001 J
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg	0.00046 U
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg	0.012
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg	0.00046 U
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg	0.00046 U
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg	0.00082
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg	
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg	
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg	0.0027 J
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg	
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	mg/kg	



Attachment A  
Surface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		sys_loc_code		SUS25	
		sys_sample_code		SUS2500N	
		sample_date		2/7/2013	
		sample_type_code		N	
		task_code		Phase1-2013	
		start_depth		0.5	
		end_depth		1	
		depth_unit		ft	
		validated_yn		Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	mg/kg	
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	mg/kg	
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C	mg/kg	
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO	SW8082A LL	mg/kg	0.25
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg	0.25
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg	



Attachment A  
Surface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	SUS25
				sys_sample_code	SUS2500N
				sample_date	2/7/2013
				sample_type_code	N
				task_code	Phase1-2013
				start_depth	0.5
				end_depth	1
				depth_unit	ft
				validated_yn	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg	





Attachment A  
Surface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	SUS25
				sys_sample_code	SUS2500N
				sample_date	2/7/2013
				sample_type_code	N
				task_code	Phase1-2013
				start_depth	0.5
				end_depth	1
				depth_unit	ft
				validated_yn	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg	



Attachment A  
Surface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	SUS25
				sys_sample_code	SUS2500N
				sample_date	2/7/2013
				sample_type_code	N
				task_code	Phase1-2013
				start_depth	0.5
				end_depth	1
				depth_unit	ft
				validated_yn	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg	
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg	



Attachment A  
Surface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	SUS25	
				sys_sample_code	SUS2500N	
				sample_date	2/7/2013	
				sample_type_code	N	
				task_code	Phase1-2013	
				start_depth	0.5	
				end_depth	1	
				depth_unit	ft	
				validated_yn	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_value	interpreted_qualifiers
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg		



Attachment A  
Surface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	SUS25	
				sys_sample_code	SUS2500N	
				sample_date	2/7/2013	
				sample_type_code	N	
				task_code	Phase1-2013	
				start_depth	0.5	
				end_depth	1	
				depth_unit	ft	
				validated_yn	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_unit	interpreted_qualifiers
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg		
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg		
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg		
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg		
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg	0.019	U
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg	0.00036	J
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg		
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DR	mg/kg	20	
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GR	mg/kg	0.095	UJ
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DR	mg/kg	67	J
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg	0.0075	U
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg	0.0075	U
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg	0.19	UJ
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg	0.0075	U
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg	0.0045	J
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg	0.19	U
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg	0.19	U
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg	0.19	U
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg	0.19	U
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg	0.19	U
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg	0.0075	U
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg	0.02	U
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg	0.016	



Attachment A  
Surface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	SUS25	
				sys_sample_code	SUS2500N	
				sample_date	2/7/2013	
				sample_type_code	N	
				task_code	Phase1-2013	
				start_depth	0.5	
				end_depth	1	
				depth_unit	ft	
				validated_yn	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_unit	interpreted_qualifiers
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg	0.017	J
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg	0.057	
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg	0.058	J
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg	0.083	J
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg	0.054	J
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg	0.033	J
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	bis-(2-Chloroethoxy)ether	111-44-4	SW8270D LL	mg/kg	0.0075	U
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg	0.01	J
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg	0.0064	J
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg	0.19	U
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg	0.0082	
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg	0.064	
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg	0.012	J
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg	0.0055	J
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg	0.13	
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg	0.0075	U
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg	0.0075	U
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg	0.0075	U
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg	0.048	J
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg	0.0038	J
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg	0.075	U
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg	0.0075	U
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg	0.037	U
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg	0.032	
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg	0.0075	U
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg	0.088	
RA_SO_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg	0.0046	U



Attachment A  
Surface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	SUS25	
				sys_sample_code	SUS2500N	
				sample_date	2/7/2013	
				sample_type_code	N	
				task_code	Phase1-2013	
				start_depth	0.5	
				end_depth	1	
				depth_unit	ft	
				validated_yn	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg	0.0046	UJ
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg		R
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg	0.018	UJ
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg	0.0046	UJ
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg	0.0046	UJ
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg	0.0046	UJ
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg	0.0092	U
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg	0.0046	UJ
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg	0.0046	U
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg	0.0046	U



Attachment A  
 Surface Soil Data  
 Benning Road Facility RI/FS Project  
 3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	SUS25
				sys_sample_code	SUS2500N
				sample_date	2/7/2013
				sample_type_code	N
				task_code	Phase1-2013
				start_depth	0.5
				end_depth	1
				depth_unit	ft
				validated_yn	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg 0.0046	U
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg 0.0046	U
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg 0.0046	U
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg 0.0046	U
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg 0.0092	U

## **Subsurface Soil Data**



				sys_loc_code	DP01	DP01	DP01	DP01				
				sys_sample_code	DPS0103N	DPS0110N	DPS0110N2	DPS0115N				
				sample_date	5/20/2013	5/20/2013	6/13/2013	5/20/2013				
				sample_type_code	N	N	N	N				
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
				start_depth	2.5	9.5	9.5	14				
				end_depth	3.5	10.5	10.5	15				
				depth_unit	ft	ft	ft	ft				
				validated_yn	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_value	interpreted_qualifiers	report_result_value	report_result_value	interpreted_qualifiers	report_result_value	report_result_value	interpreted_qualifiers
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg	3.72E-06	J						
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg	5.79E-07	JN						
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg	1.59E-07	JN						
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg	1.32E-07	JN						
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg	1.73E-07	JN						
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg	1.47E-07	JN						
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg	3.07E-07	JN						
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg	4.86E-07	J						
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg	4.24E-08	U						
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg	3.76E-08	U						
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg	4.15E-08	U						
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg	1.95E-07	J						
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg	4.06E-08	U						
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg	2.08E-08	U						
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg	3.88E-08	U						
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg	8.1E-05							
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg	7.03E-07	J						
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg	2.13E-07							
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg	8.74E-06	J						
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg	1.14E-06	JN						
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg	3.4E-06	JN						
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg	5.29E-06	JN						
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg	4.09E-07	JN						
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg	1.28E-05	JN						
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg	1.14E-06	JN						
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg	8.02E-06	JN						
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg	2.13E-07							
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg			2600					
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg			0.015	J				
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg			0.93					
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg			51					
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg			0.36					
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg			0.061	J				
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg			560					
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg			6.3					
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg			4					
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg			3.7					
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg			8200					
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg			4.2					
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg			290					
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg			370					
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg			0.035	U				

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP01	DP01	DP01	DP01				
				sys_sample_code	DPS0103N	DPS0110N	DPS0110N2	DPS0115N				
				sample_date	5/20/2013	5/20/2013	6/13/2013	5/20/2013				
				sample_type_code	N	N	N	N				
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
				start_depth	2.5	9.5	9.5	14				
				end_depth	3.5	10.5	10.5	15				
				depth_unit	ft	ft	ft	ft				
				validated_yn	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg		3.4						
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg		230						
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg		0.53	U					
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg		0.0072	J					
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg		110						
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg		0.037	J					
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg		8.6						
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg		20						
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent								
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg	0.00091	U						
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg	0.00091	U						
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg	0.00091	U						
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg	0.00091	U						
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg	0.00091	U						
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.0045	U	0.0045	U			0.0049	U
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.0045	U	0.0045	U			0.0049	U
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.0045	U	0.0045	U			0.0049	U
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.0045	U	0.0045	U			0.0049	U
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.0045	U	0.0045	U			0.0049	U
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.0045	U	0.0045	U			0.0049	U
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.0045	U	0.0045	U			0.0049	U
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.0045	U	0.0045	U			0.0049	U
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.0045	U	0.0045	U			0.0049	U
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg	0.00091	U						
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg	0.00091	U						
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg								
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg	0.00091	U						
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg								
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg	0.00091	U						
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg	0.00091	U						
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg	0.00091	U						
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg	0.00091	U						
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg	0.00091	U						
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg	0.00091	U						
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg	0.00091	U						
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg	0.00091	U						
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg	0.00091	U						
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg	0.00091	U						
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg								
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg								
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg	0.0018	U						
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg								

		sys_loc_code	DP01	DP01	DP01	DP01					
		sys_sample_code	DPS0103N	DPS0110N	DPS0110N2	DPS0115N					
		sample_date	5/20/2013	5/20/2013	6/13/2013	5/20/2013					
		sample_type_code	N	N	N	N					
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
		start_depth	2.5	9.5	9.5	14					
		end_depth	3.5	10.5	10.5	15					
		depth_unit	ft	ft	ft	ft					
		validated_yn	Y	Y	Y	Y					
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C								
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C								
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C								
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C								
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	0.0045	U	0.0045	U		0.0049	U	
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	0.0045	U	0.0045	U		0.0049	U	
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C								
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C								
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C								
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C								
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C								
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C								
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C								
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C								
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C								
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C								
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C								
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C								
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C								
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C								
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C								
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C								
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C								
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C								
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C								
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C								
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C								
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C								
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C								
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C								
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C								
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C								
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C								
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C								
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C								
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C								
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C								
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C								
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C								
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C								
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C								
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C								



Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		sys_loc_code	DP01	DP01	DP01	DP01					
		sys_sample_code	DPS0103N	DPS0110N	DPS0110N2	DPS0115N					
		sample_date	5/20/2013	5/20/2013	6/13/2013	5/20/2013					
		sample_type_code	N	N	N	N					
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
		start_depth	2.5	9.5	9.5	14					
		end_depth	3.5	10.5	10.5	15					
		depth_unit	ft	ft	ft	ft					
		validated_yn	Y	Y	Y	Y					
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg							

					sys_loc_code	DP01	DP01	DP01	DP01						
					sys_sample_code	DPS0103N	DPS0110N	DPS0110N2	DPS0115N						
					sample_date	5/20/2013	5/20/2013	6/13/2013	5/20/2013						
					sample_type_code	N	N	N	N						
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013						
					start_depth	2.5	9.5	9.5	14						
					end_depth	3.5	10.5	10.5	15						
					depth_unit	ft	ft	ft	ft						
					validated_yn	Y	Y	Y	Y						
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_unit	interpreted_qualifiers	report_result_value	report_result_unit	interpreted_qualifiers	report_result_value	report_result_unit	interpreted_qualifiers	report_result_value	report_result_unit	interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C		mg/kg										
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C		mg/kg										

		sys_loc_code	DP01	DP01	DP01	DP01			
		sys_sample_code	DPS0103N	DPS0110N	DPS0110N2	DPS0115N			
		sample_date	5/20/2013	5/20/2013	6/13/2013	5/20/2013			
		sample_type_code	N	N	N	N			
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
		start_depth	2.5	9.5	9.5	14			
		end_depth	3.5	10.5	10.5	15			
		depth_unit	ft	ft	ft	ft			
		validated_yn	Y	Y	Y	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
p				sult_unit		sult_unit		sult_unit	
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg					



Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		sys_loc_code	DP01	DP01	DP01	DP01					
		sys_sample_code	DPS0103N	DPS0110N	DPS0110N2	DPS0115N					
		sample_date	5/20/2013	5/20/2013	6/13/2013	5/20/2013					
		sample_type_code	N	N	N	N					
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
		start_depth	2.5	9.5	9.5	14					
		end_depth	3.5	10.5	10.5	15					
		depth_unit	ft	ft	ft	ft					
		validated_yn	Y	Y	Y	Y					
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg							

		sys_loc_code	DP01	DP01	DP01	DP01	DP01			
		sys_sample_code	DPS0103N	DPS0110N	DPS0110N2	DPS0115N	DPS0115N			
		sample_date	5/20/2013	5/20/2013	6/13/2013	5/20/2013	5/20/2013			
		sample_type_code	N	N	N	N	N			
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
		start_depth	2.5	9.5	9.5	14	14			
		end_depth	3.5	10.5	10.5	15	15			
		depth_unit	ft	ft	ft	ft	ft			
		validated_yn	Y	Y	Y	Y	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg						
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg						
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg						
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg	0.036	U				
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg	0.00091	U				
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg						
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg	18	U	18	U	20	U
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg	0.089	UJ	0.087	UJ	0.083	UJ
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg	64		12	J	20	U
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg						
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg						
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg						
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg						
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg						
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg						
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg						
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg						
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg						
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg						
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg						
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg						
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg						
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg						
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg						
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg						
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg						
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg						
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg						
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg						
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg						
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg						
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg						
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg						
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg						
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg						
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg						
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg						
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg						
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg						



				sys_loc_code	DP01	DP01	DP01	DP01
				sys_sample_code	DPS0103N	DPS0110N	DPS0110N2	DPS0115N
				sample_date	5/20/2013	5/20/2013	6/13/2013	5/20/2013
				sample_type_code	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	2.5	9.5	9.5	14
				end_depth	3.5	10.5	10.5	15
				depth_unit	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg				
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg				
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg				
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg				
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg				
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg				
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg				
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg				
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg				
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg				
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg				
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg				
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg				
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg				
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg				
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg				
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg				
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg				
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg				
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg				
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg				
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg				
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg				
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg				
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg				
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg				
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg				
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg				
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg				
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg				
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg				
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg				
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg				
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg				
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg				
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg				
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg				
RA_SO_VOCS	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg			0.0044	U
RA_SO_VOCS	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg			0.0044	U
RA_SO_VOCS	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg			0.0044	U
RA_SO_VOCS	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg			0.0044	U
RA_SO_VOCS	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg			0.0044	U

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP01	DP01	DP01	DP01
				sys_sample_code	DPS0103N	DPS0110N	DPS0110N2	DPS0115N
				sample_date	5/20/2013	5/20/2013	6/13/2013	5/20/2013
				sample_type_code	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	2.5	9.5	9.5	14
				end_depth	3.5	10.5	10.5	15
				depth_unit	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
p				unit	qualifiers	qualifiers	qualifiers	qualifiers
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg			0.88	U
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg			0.018	U
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg			0.0088	U
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	Tetracloroethylene	127-18-4	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg			0.0044	U

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

					sys_loc_code	DP01	DP01	DP01	DP01
					sys_sample_code	DPS0103N	DPS0110N	DPS0110N2	DPS0115N
					sample_date	5/20/2013	5/20/2013	6/13/2013	5/20/2013
					sample_type_code	N	N	N	N
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
					start_depth	2.5	9.5	9.5	14
					end_depth	3.5	10.5	10.5	15
					depth_unit	ft	ft	ft	ft
					validated_yn	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg				0.0044	U
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg				0.0044	U
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg				0.0044	U
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg				0.0044	U
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg				0.0044	U
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg				0.0088	U

				sys_loc_code	DP02	DP02	DP02	DP02	DP02			
				sys_sample_code	DPS0205N	DPS0210N	DPS0210N2	DPS0215N	DPS0215N2			
				sample_date	5/14/2013	5/20/2013	6/13/2013	5/20/2013	6/13/2013			
				sample_type_code	N	N	N	N	N			
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth	4.5	9.5	9.5	14.5	14.5			
				end_depth	5.5	10.5	10.5	15.5	15.5			
				depth_unit	ft	ft	ft	ft	ft			
				validated_yn	Y	Y	Y	Y	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg	6.94E-06							
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg	4.24E-06	JN						
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg	6.68E-07	JN						
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg	1.76E-07	JN						
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg	1.13E-06	JN						
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg	4.11E-07	J						
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg	3.93E-07	JN						
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg	8.64E-07	J						
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg	1.04E-07	U						
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg	2.6E-07	U						
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg	1.33E-07	U						
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg	4.21E-07	JN						
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg	2.7E-07	JN						
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg	2.35E-07	U						
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg	1.66E-07	U						
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg	5.94E-05							
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg	3.37E-06	JN						
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg	5.58E-07							
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg	1.58E-05							
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg	8.51E-06	JN						
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg	7.66E-06	JN						
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg	6.42E-06	JN						
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg	3.21E-06	JN						
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg	1.57E-06	JN						
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg	4.84E-07	JN						
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg	2.79E-07	JN						
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg	5.58E-07							
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg	3700							
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg	0.22	UJ						
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg	1.9							
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg	17							
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg	0.39							
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg	0.063	J						
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg	530							
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg	6.6							
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg	7.9							
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg	5.1							
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg	9200							
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg	2.9	J+						
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg	390							
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg	230							
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg	0.015	J						

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP02	DP02	DP02	DP02	DP02		
				sys_sample_code	DPS0205N	DPS0210N	DPS0210N2	DPS0215N	DPS0215N2		
				sample_date	5/14/2013	5/20/2013	6/13/2013	5/20/2013	6/13/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	4.5	9.5	9.5	14.5	14.5		
				end_depth	5.5	10.5	10.5	15.5	15.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg	4.2						
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg	400						
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg	0.12	J-					
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg	0.0061	J					
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg	110						
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg	0.053	J					
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg	12						
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg	15						
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent							
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg	9.5E-05	U					
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg	9.5E-05	U					
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg	7E-05	J					
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg	9.5E-05	U					
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg	9.5E-05	U					
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.00095	U	0.0045	U	0.0048	U	
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.00095	U	0.0045	U	0.0048	U	
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.00095	U	0.0045	U	0.0048	U	
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.00095	U	0.0045	U	0.0048	U	
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.00095	U	0.0045	U	0.0048	U	
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.00095	U	0.0045	U	0.0048	U	
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.00095	U	0.0045	U	0.0048	U	
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.00095	U	0.0045	U	0.0048	U	
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.00095	U	0.0045	U	0.0048	U	
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg	9.5E-05	U					
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg	9.5E-05	U					
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg							
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg	9.5E-05	U					
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg							
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg	9.5E-05	U					
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg	9.5E-05	U					
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg	9.5E-05	U					
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg	7.4E-05	J					
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg	4.2E-05	J					
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg	3.1E-05	J					
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg	9.5E-05	U					
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg	5.3E-05	J					
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg	9.5E-05	U					
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg	9.5E-05	U					
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg							
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg							
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg	0.00019	U					
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg							

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		sys_loc_code	DP02	DP02	DP02	DP02	DP02	DP02	DP02		
		sys_sample_code	DPS0205N	DPS0210N	DPS0210N2	DPS0215N	DPS0215N2	DPS0215N2	DPS0215N2		
		sample_date	5/14/2013	5/20/2013	6/13/2013	5/20/2013	6/13/2013	6/13/2013	6/13/2013		
		sample_type_code	N	N	N	N	N	N	N		
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
		start_depth	4.5	9.5	9.5	14.5	14.5	14.5	14.5		
		end_depth	5.5	10.5	10.5	15.5	15.5	15.5	15.5		
		depth_unit	ft	ft	ft	ft	ft	ft	ft		
		validated_yn	Y	Y	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C								
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C								
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C								
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C								
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	0.00095	U	0.0045	U	0.0048	U		
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	0.00095	U	0.0045	U	0.0048	U		
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C								
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C								
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C								
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C								
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C								
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C								
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C								
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C								
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C								
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C								
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C								
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C								
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C								
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C								
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C								
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C								
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C								
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C								
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C								
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C								
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C								
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C								
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C								
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C								
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C								
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C								
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C								
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C								
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C								
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C								
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C								
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C								
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C								
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C								
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C								
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C								

		sys_loc_code	DP02	DP02	DP02	DP02	DP02				
		sys_sample_code	DPS0205N	DPS0210N	DPS0210N2	DPS0215N	DPS0215N2				
		sample_date	5/14/2013	5/20/2013	6/13/2013	5/20/2013	6/13/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	9.5	9.5	14.5	14.5				
		end_depth	5.5	10.5	10.5	15.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg							

		sys_loc_code	DP02	DP02	DP02	DP02	DP02				
		sys_sample_code	DPS0205N	DPS0210N	DPS0210N2	DPS0215N	DPS0215N2				
		sample_date	5/14/2013	5/20/2013	6/13/2013	5/20/2013	6/13/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	9.5	9.5	14.5	14.5				
		end_depth	5.5	10.5	10.5	15.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg							



Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP02	DP02	DP02	DP02	DP02		
				sys_sample_code	DPS0205N	DPS0210N	DPS0210N2	DPS0215N	DPS0215N2		
				sample_date	5/14/2013	5/20/2013	6/13/2013	5/20/2013	6/13/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	4.5	9.5	9.5	14.5	14.5		
				end_depth	5.5	10.5	10.5	15.5	15.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg							

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		sys_loc_code	DP02	DP02	DP02	DP02	DP02				
		sys_sample_code	DPS0205N	DPS0210N	DPS0210N2	DPS0215N	DPS0215N2				
		sample_date	5/14/2013	5/20/2013	6/13/2013	5/20/2013	6/13/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	9.5	9.5	14.5	14.5				
		end_depth	5.5	10.5	10.5	15.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg							

				sys_loc_code	DP02	DP02	DP02	DP02	DP02		
				sys_sample_code	DPS0205N	DPS0210N	DPS0210N2	DPS0215N	DPS0215N2		
				sample_date	5/14/2013	5/20/2013	6/13/2013	5/20/2013	6/13/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	4.5	9.5	9.5	14.5	14.5		
				end_depth	5.5	10.5	10.5	15.5	15.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg							
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg							
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg							
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg	0.0038	U					
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg	9.5E-05	U					
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg							
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg	19	U	18	U	19	U	
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg	0.094	UJ			0.083	U	0.11
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg	19	U	18	U	19	U	
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg							

				sys_loc_code	DP02	DP02	DP02	DP02	DP02		
				sys_sample_code	DPS0205N	DPS0210N	DPS0210N2	DPS0215N	DPS0215N2		
				sample_date	5/14/2013	5/20/2013	6/13/2013	5/20/2013	6/13/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	4.5	9.5	9.5	14.5	14.5		
				end_depth	5.5	10.5	10.5	15.5	15.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg							
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg							
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg							
RA_SO_VOCS	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg			0.0048	U			
RA_SO_VOCS	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg			0.0048	U			
RA_SO_VOCS	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg			0.0048	U			
RA_SO_VOCS	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg			0.0048	U			
RA_SO_VOCS	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg			0.0048	U			

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP02	DP02	DP02	DP02	DP02			
				sys_sample_code	DPS0205N	DPS0210N	DPS0210N2	DPS0215N	DPS0215N2			
				sample_date	5/14/2013	5/20/2013	6/13/2013	5/20/2013	6/13/2013			
				sample_type_code	N	N	N	N	N			
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth	4.5	9.5	9.5	14.5	14.5			
				end_depth	5.5	10.5	10.5	15.5	15.5			
				depth_unit	ft	ft	ft	ft	ft			
				validated_yn	Y	Y	Y	Y	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg			0.96	U				
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg			0.019	U				
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg			0.0096	U				
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg			0.0048	U				

Attachment A  
Subsurface Soil Data  
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					sys_loc_code	DP02	DP02	DP02	DP02	DP02		
					sys_sample_code	DPS0205N	DPS0210N	DPS0210N2	DPS0215N	DPS0215N2		
					sample_date	5/14/2013	5/20/2013	6/13/2013	5/20/2013	6/13/2013		
					sample_type_code	N	N	N	N	N		
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
					start_depth	4.5	9.5	9.5	14.5	14.5		
					end_depth	5.5	10.5	10.5	15.5	15.5		
					depth_unit	ft	ft	ft	ft	ft		
					validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg			0.0048	U				
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg			0.0096	U				

				sys_loc_code	DP03	DP03	DP03	DP03	DP03
				sys_sample_code	DPS0305N	DPS0310N	DPS0310N2	DPS0310R	DPS0315N
				sample_date	5/14/2013	5/21/2013	6/11/2013	5/21/2013	5/21/2013
				sample_type_code	N	N	N	FD	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	4.5	9.5	9.5	9.5	14.5
				end_depth	5.5	10.5	10.5	10.5	15.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value
p				unit	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg					
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg					
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg					
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg					
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg					
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg					
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg					
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg					
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg					
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg					
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg					
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg					
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg					
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg					
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg					
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg					
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg					

				sys_loc_code	DP03	DP03	DP03	DP03	DP03
				sys_sample_code	DPS0305N	DPS0310N	DPS0310N2	DPS0310R	DPS0315N
				sample_date	5/14/2013	5/21/2013	6/11/2013	5/21/2013	5/21/2013
				sample_type_code	N	N	N	FD	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	4.5	9.5	9.5	9.5	14.5
				end_depth	5.5	10.5	10.5	10.5	15.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value
p				unit	unit	unit	unit	unit	unit
				interpretation	interpretation	interpretation	interpretation	interpretation	interpretation
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg					
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg					
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg					
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg					
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg					
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg					
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg					
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg					
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent					
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg					
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg					
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg					
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.00096	U	0.0046	U	0.0044
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.00096	U	0.0046	U	0.0044
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.00096	U	0.0046	U	0.0044
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.00096	U	0.0046	U	0.0044
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.00096	U	0.0046	U	0.0044
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.00096	U	0.0046	U	0.0044
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.00091	J	0.0046	U	0.0044
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.00096	U	0.0046	U	0.0044
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.00096	U	0.0046	U	0.0044
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg					
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg					
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg					
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg					
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg					
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg					
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg					



Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
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		sys_loc_code	DP03	DP03	DP03	DP03	DP03	DP03	DP03		
		sys_sample_code	DPS0305N	DPS0310N	DPS0310N2	DPS0310R	DPS0315N				
		sample_date	5/14/2013	5/21/2013	6/11/2013	5/21/2013	5/21/2013				
		sample_type_code	N	N	N	FD	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	9.5	9.5	9.5	14.5				
		end_depth	5.5	10.5	10.5	10.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C								
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C								
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C								
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C								
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	mg/kg	0.00091	0.0046	U	0.0044	U	0.0045	U
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg	0.00091	0.0046	U	0.0044	U	0.0045	U
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg							

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		sys_loc_code	DP03	DP03	DP03	DP03	DP03				
		sys_sample_code	DPS0305N	DPS0310N	DPS0310N2	DPS0310R	DPS0315N				
		sample_date	5/14/2013	5/21/2013	6/11/2013	5/21/2013	5/21/2013				
		sample_type_code	N	N	N	FD	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	9.5	9.5	9.5	14.5				
		end_depth	5.5	10.5	10.5	10.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg							

					sys_loc_code	DP03	DP03	DP03	DP03	DP03
					sys_sample_code	DPS0305N	DPS0310N	DPS0310N2	DPS0310R	DPS0315N
					sample_date	5/14/2013	5/21/2013	6/11/2013	5/21/2013	5/21/2013
					sample_type_code	N	N	N	FD	N
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
					start_depth	4.5	9.5	9.5	9.5	14.5
					end_depth	5.5	10.5	10.5	10.5	15.5
					depth_unit	ft	ft	ft	ft	ft
					validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg						

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		sys_loc_code	DP03	DP03	DP03	DP03	DP03				
		sys_sample_code	DPS0305N	DPS0310N	DPS0310N2	DPS0310R	DPS0315N				
		sample_date	5/14/2013	5/21/2013	6/11/2013	5/21/2013	5/21/2013				
		sample_type_code	N	N	N	FD	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	9.5	9.5	9.5	14.5				
		end_depth	5.5	10.5	10.5	10.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg							

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		sys_loc_code	DP03	DP03	DP03	DP03	DP03	DP03			
		sys_sample_code	DPS0305N	DPS0310N	DPS0310N2	DPS0310R	DPS0315N				
		sample_date	5/14/2013	5/21/2013	6/11/2013	5/21/2013	5/21/2013				
		sample_type_code	N	N	N	FD	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	9.5	9.5	9.5	14.5				
		end_depth	5.5	10.5	10.5	10.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg							

				sys_loc_code	DP03	DP03	DP03	DP03	DP03		
				sys_sample_code	DPS0305N	DPS0310N	DPS0310N2	DPS0310R	DPS0315N		
				sample_date	5/14/2013	5/21/2013	6/11/2013	5/21/2013	5/21/2013		
				sample_type_code	N	N	N	FD	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	4.5	9.5	9.5	9.5	14.5		
				end_depth	5.5	10.5	10.5	10.5	15.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg							
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg							
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg							
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg							
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg							
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg	19	U	19	U	18	U	18
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg	0.087	UJ	0.098	UJ	0.088	UJ	0.098
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg	19	U	19		18	U	18
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg							

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP03	DP03	DP03	DP03	DP03		
				sys_sample_code	DPS0305N	DPS0310N	DPS0310N2	DPS0310R	DPS0315N		
				sample_date	5/14/2013	5/21/2013	6/11/2013	5/21/2013	5/21/2013		
				sample_type_code	N	N	N	FD	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	4.5	9.5	9.5	9.5	14.5		
				end_depth	5.5	10.5	10.5	10.5	15.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg							
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg							
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg							
RA_SO_VOCS	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg			0.0044	U			
RA_SO_VOCS	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg			0.0044	U			
RA_SO_VOCS	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg			0.0044	U			
RA_SO_VOCS	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg			0.0044	U			
RA_SO_VOCS	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg			0.0044	U			

				sys_loc_code	DP03	DP03	DP03	DP03	DP03		
				sys_sample_code	DPS0305N	DPS0310N	DPS0310N2	DPS0310R	DPS0315N		
				sample_date	5/14/2013	5/21/2013	6/11/2013	5/21/2013	5/21/2013		
				sample_type_code	N	N	N	FD	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	4.5	9.5	9.5	9.5	14.5		
				end_depth	5.5	10.5	10.5	10.5	15.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg				0.88	U		
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg				0.018	U		
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg				0.0088	U		
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg				0.0044	U		



					sys_loc_code	DP03	DP03	DP03	DP03	DP03		
					sys_sample_code	DPS0305N	DPS0310N	DPS0310N2	DPS0310R	DPS0315N		
					sample_date	5/14/2013	5/21/2013	6/11/2013	5/21/2013	5/21/2013		
					sample_type_code	N	N	N	FD	N		
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
					start_depth	4.5	9.5	9.5	9.5	14.5		
					end_depth	5.5	10.5	10.5	10.5	15.5		
					depth_unit	ft	ft	ft	ft	ft		
					validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg			0.0044	U				
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg			0.0044	U				
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg			0.0044	U				
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg			0.0044	U				
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg			0.0044	U				
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg			0.0088	U				

		sys_loc_code	DP04	DP04	DP04	DP05	DP05
		sys_sample_code	DPS0403N	DPS0410N	DPS0415N	DPS0505N	DPS0505N2
		sample_date	5/15/2013	5/20/2013	5/20/2013	5/15/2013	6/12/2013
		sample_type_code	N	N	N	N	N
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
		start_depth	2.5	9.5	14.5	4.5	4.5
		end_depth	3.5	10.5	15.5	5.5	5.5
		depth_unit	ft	ft	ft	ft	ft
		validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg			
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg			
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg			
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg			
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg			
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg			
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg			
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg			
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg			
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg			
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg			
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg			
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg			
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg			
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg			
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg			
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg			
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg			
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg			
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg			
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg			
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg			
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg			
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg			
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg			
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg			
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg			
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg	8500		1900
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg	0.24	U	0.23
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg	4.7		1.8
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg	46		11
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg	0.43		0.19
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg	0.21		0.021
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg	3500		110
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg	15		6.8
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg	7.7		2.6
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg	100		5.6
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg	22000		9000
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg	43		2.2
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg	1500		250
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg	230		71
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg	0.084		0.035

				sys_loc_code	DP04	DP04	DP04	DP05	DP05		
				sys_sample_code	DPS0403N	DPS0410N	DPS0415N	DPS0505N	DPS0505N2		
				sample_date	5/15/2013	5/20/2013	5/20/2013	5/15/2013	6/12/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	2.5	9.5	14.5	4.5	4.5		
				end_depth	3.5	10.5	15.5	5.5	5.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg	12			2.8			
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg	860			280			
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg	0.28	J		0.086	J		
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg	0.074	J		0.0047	J		
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg	84			21			
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg	0.12			0.039	J		
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg	25			11			
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg	44			8.6			
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent							
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg							
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg							
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.00099	U	0.0045	U	0.0044	U	0.00096
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.00099	U	0.0045	U	0.0044	U	0.00096
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.00099	U	0.0045	U	0.0044	U	0.00096
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.00099	U	0.0045	U	0.0044	U	0.00096
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.00099	U	0.0045	U	0.0044	U	0.00096
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.00099	U	0.0045	U	0.0044	U	0.0033
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.00099	U	0.0045	U	0.0044	U	0.00096
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.00099	U	0.0045	U	0.0044	U	0.00096
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.00099	U	0.0045	U	0.0044	U	0.00096
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg							
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg							
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg							
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg							
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg							
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg							
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg							

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		sys_loc_code	DP04	DP04	DP04	DP05	DP05				
		sys_sample_code	DPS0403N	DPS0410N	DPS0415N	DPS0505N	DPS0505N2				
		sample_date	5/15/2013	5/20/2013	5/20/2013	5/15/2013	6/12/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	2.5	9.5	14.5	4.5	4.5				
		end_depth	3.5	10.5	15.5	5.5	5.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C								
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C								
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C								
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C								
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	0.00099	U	0.0045	U	0.0044	U	0.0033	
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	0.00099	U	0.0045	U	0.0044	U	0.0033	
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C								
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C								
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C								
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C								
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C								
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C								
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C								
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C								
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C								
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C								
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C								
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C								
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C								
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C								
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C								
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C								
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C								
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C								
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C								
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C								
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C								
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C								
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C								
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C								
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C								
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C								
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C								
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C								
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C								
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C								
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C								
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C								
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C								
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C								
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C								
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C								

		sys_loc_code	DP04	DP04	DP04	DP05	DP05				
		sys_sample_code	DPS0403N	DPS0410N	DPS0415N	DPS0505N	DPS0505N2				
		sample_date	5/15/2013	5/20/2013	5/20/2013	5/15/2013	6/12/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	2.5	9.5	14.5	4.5	4.5				
		end_depth	3.5	10.5	15.5	5.5	5.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg							

					sys_loc_code	DP04	DP04	DP04	DP05	DP05
					sys_sample_code	DPS0403N	DPS0410N	DPS0415N	DPS0505N	DPS0505N2
					sample_date	5/15/2013	5/20/2013	5/20/2013	5/15/2013	6/12/2013
					sample_type_code	N	N	N	N	N
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
					start_depth	2.5	9.5	14.5	4.5	4.5
					end_depth	3.5	10.5	15.5	5.5	5.5
					depth_unit	ft	ft	ft	ft	ft
					validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg						

				sys_loc_code	DP04	DP04	DP04	DP05	DP05		
				sys_sample_code	DPS0403N	DPS0410N	DPS0415N	DPS0505N	DPS0505N2		
				sample_date	5/15/2013	5/20/2013	5/20/2013	5/15/2013	6/12/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	2.5	9.5	14.5	4.5	4.5		
				end_depth	3.5	10.5	15.5	5.5	5.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg							

		sys_loc_code	DP04	DP04	DP04	DP05	DP05				
		sys_sample_code	DPS0403N	DPS0410N	DPS0415N	DPS0505N	DPS0505N2				
		sample_date	5/15/2013	5/20/2013	5/20/2013	5/15/2013	6/12/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	2.5	9.5	14.5	4.5	4.5				
		end_depth	3.5	10.5	15.5	5.5	5.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg							



Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP04	DP04	DP04	DP05	DP05			
				sys_sample_code	DPS0403N	DPS0410N	DPS0415N	DPS0505N	DPS0505N2			
				sample_date	5/15/2013	5/20/2013	5/20/2013	5/15/2013	6/12/2013			
				sample_type_code	N	N	N	N	N			
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth	2.5	9.5	14.5	4.5	4.5			
				end_depth	3.5	10.5	15.5	5.5	5.5			
				depth_unit	ft	ft	ft	ft	ft			
				validated_yn	Y	Y	Y	Y	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg								
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg								
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg								
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg								
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg								
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg	66	18	U	18	U	19	U	
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg	0.09	UJ	0.092	UJ	0.092	UJ	0.11	UJ
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg	200	18	U	26	U	19	U	
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg								
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg	3.3	0.0071	U	0.007	J			
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg	0.054	0.0071	U	0.0071	U			
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg								

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP04	DP04	DP04	DP05	DP05
				sys_sample_code	DPS0403N	DPS0410N	DPS0415N	DPS0505N	DPS0505N2
				sample_date	5/15/2013	5/20/2013	5/20/2013	5/15/2013	6/12/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	2.5	9.5	14.5	4.5	4.5
				end_depth	3.5	10.5	15.5	5.5	5.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg	4.4		0.001	J	0.011
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg					
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg					
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg	3.4		0.0055	J	0.029
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg	2.6		0.0071	U	0.03
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg	1.8		0.0068	J	0.031
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg	1		0.0071	U	0.021
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg	0.85		0.0019	J	0.012
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg					
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg					
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg					
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg					
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg					
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg					
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg	3.3		0.0063	J	0.037
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg	0.25		0.0071	U	0.0062
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg					
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg					
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg					
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg					
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg					
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg	6.4		0.01		0.057
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg	2.5		0.0071	U	0.0071
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg					
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg					
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg					
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg					
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg	0.82		0.0071	U	0.018
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg					
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg	0.18		0.0071	U	0.0083
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg					
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg					
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg					
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg					
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg	13		0.0073		0.042
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg					
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg	9.7		0.0082		0.046
RA_SO_VOCS	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg	0.0043	U			0.0045
RA_SO_VOCS	1,1,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg	0.0043	U			0.0045
RA_SO_VOCS	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg	0.0043	U			0.0045
RA_SO_VOCS	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg	0.0043	U			0.0045
RA_SO_VOCS	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg	0.0043	U			0.0045

				sys_loc_code	DP04	DP04	DP04	DP05	DP05		
				sys_sample_code	DPS0403N	DPS0410N	DPS0415N	DPS0505N	DPS0505N2		
				sample_date	5/15/2013	5/20/2013	5/20/2013	5/15/2013	6/12/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	2.5	9.5	14.5	4.5	4.5		
				end_depth	3.5	10.5	15.5	5.5	5.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg	0.86	U				0.91	U
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg	0.017	U				0.018	U
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg	0.0086	U				0.0091	U
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg	0.0043	U				0.0045	U



Attachment A  
 Subsurface Soil Data  
 Benning Road Facility RI/FS Project  
 3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP04	DP04	DP04	DP05	DP05		
				sys_sample_code	DPS0403N	DPS0410N	DPS0415N	DPS0505N	DPS0505N2		
				sample_date	5/15/2013	5/20/2013	5/20/2013	5/15/2013	6/12/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	2.5	9.5	14.5	4.5	4.5		
				end_depth	3.5	10.5	15.5	5.5	5.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg	0.0043	U				0.0045	U
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg	0.0086	U				0.0091	U

				sys_loc_code	DP05	DP05	DP06	DP06	DP06
				sys_sample_code	DPS0510N	DPS0515N	DPS0605N	DPS0610N	DPS0615N
				sample_date	5/21/2013	5/21/2013	5/15/2013	5/22/2013	5/22/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	9.5	14.5	4.5	9.5	14.5
				end_depth	10.5	15.5	5.5	10.5	15.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg					
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg					
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg			6000		
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg			0.25	U	
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg			2		
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg			18		
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg			0.31		
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg			0.053	J	
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg			350		
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg			11		
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg			7.8		
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg			6.9		
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg			12000		
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg			5.6		
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg			670		
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg			190		
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg			0.043	U	

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
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				sys_loc_code	DP05	DP05	DP06	DP06	DP06			
				sys_sample_code	DPS0510N	DPS0515N	DPS0605N	DPS0610N	DPS0615N			
				sample_date	5/21/2013	5/21/2013	5/15/2013	5/22/2013	5/22/2013			
				sample_type_code	N	N	N	N	N			
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth	9.5	14.5	4.5	9.5	14.5			
				end_depth	10.5	15.5	5.5	10.5	15.5			
				depth_unit	ft	ft	ft	ft	ft			
				validated_yn	Y	Y	Y	Y	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_value	interpreted_qualifiers	report_result_value	report_result_value	interpreted_qualifiers	report_result_value	report_result_value	interpreted_qualifiers
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg			5.8					
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg			610					
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg			0.12	J				
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg			0.0051	J				
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg			80					
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg			0.081	J				
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg			18					
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg			15					
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent								
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg								
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.0044	U	0.0045	U	0.001	U	0.0049	U
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.0044	U	0.0045	U	0.001	U	0.0049	U
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.0044	U	0.0045	U	0.001	U	0.0049	U
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.0044	U	0.0045	U	0.001	U	0.0049	U
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.0044	U	0.0045	U	0.001	U	0.0049	U
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.019	U	0.19	U	0.001	U	0.0049	U
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.0044	U	0.0045	U	0.005	J	0.0049	U
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.0044	U	0.0045	U	0.001	U	0.0049	U
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.0044	U	0.0045	U	0.0078	J	0.0049	U
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg								
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg			2.82E-06	U				
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg			0.000148	JN				
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg								
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg			0.00358	JN				
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg			0.0323	JN				
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg			1.33E-05	JN				

Attachment A  
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		sys_loc_code	DP05	DP05	DP06	DP06	DP06				
		sys_sample_code	DPS0510N	DPS0515N	DPS0605N	DPS0610N	DPS0615N				
		sample_date	5/21/2013	5/21/2013	5/15/2013	5/22/2013	5/22/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	9.5	14.5	4.5	9.5	14.5				
		end_depth	10.5	15.5	5.5	10.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	mg/kg		1.8E-05	J				
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	mg/kg		0.000213	JN				
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	mg/kg		5.71E-06					
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C	mg/kg		0.11					
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	mg/kg	0.019	0.19		0.013		0.0049	U
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg	0.019	0.19		0.013		0.0049	U
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg		6.94E-06	JN				
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg		6.31E-06	U				
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg		0.000104					
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg		0.00914					
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg		0.000214					
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg		2.64E-05	J				
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg		4.42E-06	U				
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg		0.00314					
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg		5.8E-06	U				
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg		0.000483	JN				
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg		0.0004					
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg		0.00602					
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg		1.17E-05	JN				
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg		0.0102					
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg		4.15E-06	U				
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg		4.51E-06	U				
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg		0.00914					
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg		0.000218					
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg		0.0102					
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg		0.00112					
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg		0.00112					
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg		0.00869					
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg		0.00602					
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg		9.2E-06	JN				
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg		4.27E-06	U				
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg		4.3E-06	U				
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg		0.000165					
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg		0.000125	JN				
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg		0.0004					
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg		0.00602					
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg		5.29E-05					
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg		3.03E-05	J				
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg		0.00137					
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg		0.00801					
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg		9.2E-06	JN				
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg		0.000567					

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Subsurface Soil Data  
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		sys_loc_code	DP05	DP05	DP06	DP06	DP06						
		sys_sample_code	DPS0510N	DPS0515N	DPS0605N	DPS0610N	DPS0615N						
		sample_date	5/21/2013	5/21/2013	5/15/2013	5/22/2013	5/22/2013						
		sample_type_code	N	N	N	N	N						
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013						
		start_depth	9.5	14.5	4.5	9.5	14.5						
		end_depth	10.5	15.5	5.5	10.5	15.5						
		depth_unit	ft	ft	ft	ft	ft						
		validated_yn	Y	Y	Y	Y	Y						
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg	0.000171								
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg	0.00291								
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg	0.00012								
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg	0.000554								
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg	0.00184								
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg	0.000956								
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg	0.000465								
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg	0.00801								
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg	0.000157								
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg	6.78E-06	JN							
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg	0.000157								
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg	0.00132								
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg	1.08E-05	U							
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg	0.000554								
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg	0.000317								
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg	5.72E-06	U							
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg	0.000852								
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg	0.005								
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg	8E-06	U							
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg	0.005								
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg	2.17E-05	JN							
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg	5.58E-06	U							
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg	0.00184								
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg	5.69E-06	U							
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg	0.00476								
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg	3.99E-05	JN							
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg	5.42E-06	U							
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg	0.00107								
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg	0.00107								
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg	0.000898								
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg	2.58E-05	JN							
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg	3.85E-05	J							
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg	0.00801								
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg	7.12E-06	U							
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg	2.39E-05	JN							
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg	0.00801								
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg	0.00052								
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg	7.83E-06	U							
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg	0.00137								
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg	0.000318								
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg	0.00476								
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg	5.34E-06	U							



Attachment A  
Subsurface Soil Data  
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		sys_loc_code	DP05	DP05	DP06	DP06	DP06				
		sys_sample_code	DPS0510N	DPS0515N	DPS0605N	DPS0610N	DPS0615N				
		sample_date	5/21/2013	5/21/2013	5/15/2013	5/22/2013	5/22/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	9.5	14.5	4.5	9.5	14.5				
		end_depth	10.5	15.5	5.5	10.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg	3.96E-05	J					
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg	0.000636						
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg	0.000207						
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg	9.52E-05						
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg	0.000207						
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg	0.000453						
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg	2.14E-05	J					
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg	5.75E-05						
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg	0.000274						
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg	7.48E-05						
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg	0.000157						
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg	9.76E-05						
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg	0.000816						
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg	9.74E-06	JN					
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg	4.18E-06	U					
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg	0.000278						
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg	3.55E-06	U					
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg	0.000278						
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg	3.45E-06	U					
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg	0.000363						
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg	3.05E-06	U					
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg	2.49E-05	JN					
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg	9.01E-06	JN					
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg	8.86E-05	JN					
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg	2.99E-05	J					
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg	3.66E-06	U					
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg	0.000816						
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg	6E-05						
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg	2.2E-05	JN					
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg	2.9E-05	JN					
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg	1.95E-06	U					
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg	5.05E-05	JN					
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg	5.05E-05	JN					
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg	7.23E-07	U					
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg	0.000135	JN					
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg	7.85E-06	J					
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg	1.85E-06	U					
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg	9.36E-06	JN					
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg	3.42E-05	JN					
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg	2.03E-06	U					
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg	2.52E-06	U					
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg	1.8E-05	J					

Attachment A  
Subsurface Soil Data  
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				sys_loc_code	DP05	DP05	DP06	DP06	DP06
				sys_sample_code	DPS0510N	DPS0515N	DPS0605N	DPS0610N	DPS0615N
				sample_date	5/21/2013	5/21/2013	5/15/2013	5/22/2013	5/22/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	9.5	14.5	4.5	9.5	14.5
				end_depth	10.5	15.5	5.5	10.5	15.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
p				unit	qualifiers	qualifiers	qualifiers	qualifiers	qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg		1.89E-06	U		
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg		2.06E-06	U		
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg		8.98E-05	JN		
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg		7.16E-05			
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg		4.05E-06	U		
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg		2.96E-06	U		
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg		1.57E-05	J		
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg		2.31E-05			
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg		6.85E-06	JN		
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg		0.000135	JN		
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg		2.31E-05			
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg		6.34E-06	JN		
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg		9.76E-05			
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg		0.000193			
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg		3.17E-05	J		
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg		8.98E-05	JN		
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg		3.99E-06	U		
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg		4.1E-06	U		
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg		3.96E-06	U		
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg		7.89E-05			
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg		4.18E-06	U		
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg		4.16E-06	JN		
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg		2.51E-05	JN		
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg		0.000296			
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg		0.000296			
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg		0.000161			
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg		9.94E-05	JN		
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg		0.00181			
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg		5.21E-05			
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg		2.03E-05	J		
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg		0.00181			
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg		0.000116			
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg		0.000913			
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg		6.04E-06	U		
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg		8.94E-05			
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg		5.21E-05			
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg		0.00578			
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg		8.94E-05			
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg		5.35E-06	U		
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg		3.58E-05	J		
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg		0.000341			
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg		4.91E-06	U		

Attachment A  
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		sys_loc_code	DP05	DP05	DP06	DP06	DP06
		sys_sample_code	DPS0510N	DPS0515N	DPS0605N	DPS0610N	DPS0615N
		sample_date	5/21/2013	5/21/2013	5/15/2013	5/22/2013	5/22/2013
		sample_type_code	N	N	N	N	N
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
		start_depth	9.5	14.5	4.5	9.5	14.5
		end_depth	10.5	15.5	5.5	10.5	15.5
		depth_unit	ft	ft	ft	ft	ft
		validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg		2.15E-05	JN
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg		4.77E-05	JN
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg		1.78E-05	JN
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg		0.000137	JN
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg		0.00392	
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg		4.77E-05	JN
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg		3.15E-05	J
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg		0.000457	
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg		0.00181	
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg		0.000988	
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg		9.14E-06	JN
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg		4.45E-06	U
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg		0.000913	
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg		5.84E-06	U
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg		0.00392	
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg		0.000296	
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg		4.78E-06	U
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg		9.94E-05	JN
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg		0.00392	
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg		4.77E-05	JN
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg		0.00392	
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg		9.91E-05	JN
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg		9.67E-06	J
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg		7.27E-05	JN
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg		4.39E-05	JN
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg		4.35E-06	U
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg		4.26E-06	U
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg		0.000932	
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg		0.00402	
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg		0.00228	
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg		0.00112	
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg		0.00602	
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg		0.00602	
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg		0.000962	
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg		7.07E-05	JN
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg		1.16E-05	JN
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg		0.00914	
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg		0.000962	
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg		0.00153	
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg		0.000104	
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg		2.15E-05	J
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg		0.0077	

Attachment A  
Subsurface Soil Data  
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				sys_loc_code	DP05	DP05	DP06	DP06	DP06					
				sys_sample_code	DPS0510N	DPS0515N	DPS0605N	DPS0610N	DPS0615N					
				sample_date	5/21/2013	5/21/2013	5/15/2013	5/22/2013	5/22/2013					
				sample_type_code	N	N	N	N	N					
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
				start_depth	9.5	14.5	4.5	9.5	14.5					
				end_depth	10.5	15.5	5.5	10.5	15.5					
				depth_unit	ft	ft	ft	ft	ft					
				validated_yn	Y	Y	Y	Y	Y					
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers			
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg		3.42E-05	J							
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg		0.00602								
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg		0.000214								
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg		0.00402								
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg		0.0576	JN							
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg		0.0155	JN							
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg										
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg		0.000834	JN							
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg	18	U	18	U	20	U	19	U	18	U
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg	0.1	UJ	0.094	UJ	0.1	UJ	0.095	U	0.1	U
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg	18	U	18	U	20	U	19	U	18	U
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg										
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg										
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg										
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg										
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg			0.0082	U	0.0078	U	0.0072	U	0.0072	U
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg			0.0082	U	0.0078	U	0.0072	U	0.0072	U
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg										

				sys_loc_code	DP05	DP05	DP06	DP06	DP06			
				sys_sample_code	DPS0510N	DPS0515N	DPS0605N	DPS0610N	DPS0615N			
				sample_date	5/21/2013	5/21/2013	5/15/2013	5/22/2013	5/22/2013			
				sample_type_code	N	N	N	N	N			
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth	9.5	14.5	4.5	9.5	14.5			
				end_depth	10.5	15.5	5.5	10.5	15.5			
				depth_unit	ft	ft	ft	ft	ft			
				validated_yn	Y	Y	Y	Y	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value			
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg			0.0082	U	0.0078	U	0.0072	U
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg								
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg			0.0014	J	0.0078	U	0.0072	U
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg			0.0082	U	0.0078	U	0.0072	U
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg			0.0017	J	0.0078	U	0.0072	U
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg			0.0082	U	0.0078	U	0.0072	U
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg			0.0082	U	0.0078	U	0.0072	U
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg								
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg			0.0023	J	0.0078	U	0.0072	U
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg			0.0082	U	0.0078	U	0.0072	U
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg								
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg								
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg			0.0012	J	0.0078	U	0.0072	U
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg			0.0082	U	0.0078	U	0.0072	U
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg			0.0082	U	0.0078	U	0.0072	U
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg			0.0082	U	0.0078	U	0.0072	U
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg								
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg								
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg			0.0016	J	0.0078	U	0.0072	U
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg			0.0014	J	0.0078	U	0.0072	U
RA_SO_VOCS	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg								
RA_SO_VOCS	1,1,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg								
RA_SO_VOCS	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg								
RA_SO_VOCS	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg								
RA_SO_VOCS	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg								

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP05	DP05	DP06	DP06	DP06
				sys_sample_code	DPS0510N	DPS0515N	DPS0605N	DPS0610N	DPS0615N
				sample_date	5/21/2013	5/21/2013	5/15/2013	5/22/2013	5/22/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	9.5	14.5	4.5	9.5	14.5
				end_depth	10.5	15.5	5.5	10.5	15.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg					
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg					
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg					
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg					
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg					
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg					
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg					
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg					
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg					
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg					
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg					
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg					
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg					
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg					
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg					
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg					
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg					
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg					
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg					
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg					
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg					
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg					
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg					
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg					
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg					
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg					
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg					
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg					
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg					
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg					
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg					
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg					
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg					
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg					
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg					
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg					
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg					
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg					
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg					
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg					
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg					
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg					

					sys_loc_code	DP05	DP05	DP06	DP06	DP06		
					sys_sample_code	DPS0510N	DPS0515N	DPS0605N	DPS0610N	DPS0615N		
					sample_date	5/21/2013	5/21/2013	5/15/2013	5/22/2013	5/22/2013		
					sample_type_code	N	N	N	N	N		
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
					start_depth	9.5	14.5	4.5	9.5	14.5		
					end_depth	10.5	15.5	5.5	10.5	15.5		
					depth_unit	ft	ft	ft	ft	ft		
					validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg								
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg								
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg								
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg								
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg								
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg								

				sys_loc_code	DP07	DP07	DP07	DP07	DP08
				sys_sample_code	DPS0705N	DPS0710N	DPS0715N	DPS0715N2	DPS0803N
				sample_date	5/15/2013	5/22/2013	5/22/2013	6/12/2013	5/15/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	4.5	9.5	14.5	14.5	2.5
				end_depth	5.5	10.5	15.5	15.5	3.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg					2.51E-05
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg					3.27E-06 J
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg					3.55E-07 J
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg					3.7E-07 JN
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg					3.79E-07 JN
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg					8.42E-07 JN
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg					2.92E-06 J
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg					7.29E-07 JN
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg					1.43E-07 U
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg					2.92E-07 U
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg					2.3E-07 JN
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg					3.78E-07 JN
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg					4.11E-07 JN
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg					2.66E-07 U
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg					2.7E-07 JN
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg					0.000623
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg					4.92E-06 J
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg					1.19E-06
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg					5.43E-05
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg					1.04E-05 JN
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg					1.06E-05 JN
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg					3.29E-05 JN
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg					0.000102 JN
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg					7.09E-05 JN
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg					1.13E-06 JN
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg					7.35E-05 JN
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg					1.19E-06
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg	8200	6800	3400		6700
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg	0.24	U	0.23	UJ	0.23
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg	2.2		2.3		2.1
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg	34		45		30
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg	0.27		0.36		0.42
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg	0.068	J	0.089	J	0.061
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg	4500		3700	J	1100
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg	9.1		13		8.5
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg	6.6		6.5		4.7
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg	9.1		9.6		6.2
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg	20000		16000		19000
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg	12		15		5.8
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg	960		860		340
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg	120		240		360
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg	0.017	J	0.072		0.023



Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP07	DP07	DP07	DP07	DP08			
				sys_sample_code	DPS0705N	DPS0710N	DPS0715N	DPS0715N2	DPS0803N			
				sample_date	5/15/2013	5/22/2013	5/22/2013	6/12/2013	5/15/2013			
				sample_type_code	N	N	N	N	N			
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth	4.5	9.5	14.5	14.5	2.5			
				end_depth	5.5	10.5	15.5	15.5	3.5			
				depth_unit	ft	ft	ft	ft	ft			
				validated_yn	Y	Y	Y	Y	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value			
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg	4.8		7.2		3.7		14	
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg	470		610		300		930	
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg	0.22	J	0.17	J-	0.19	J	0.28	J
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg	0.016	J	0.022	J	0.023	J	0.081	J
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg	74		73		65		130	
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg	0.11	J	0.098	J	0.066	J	0.057	J
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg	18		20		17		25	
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg	15		24		12		32	
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent								
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg							0.0016	J
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg							0.058	
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg							0.01	J
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg							0.0016	
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg							0.001	U
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.001	U	0.0048	U	0.005	U	0.054	
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.001	U	0.0048	U	0.005	U	0.01	U
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.001	U	0.0048	U	0.005	U	0.01	U
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.001	U	0.0048	U	0.005	U	0.01	U
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.001	U	0.0048	U	0.005	U	0.01	U
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.001	U	0.0048	U	0.005	U	0.36	
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.0012		0.0048	U	0.005	U	0.01	U
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.001	U	0.0048	U	0.005	U	0.01	U
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.001	U	0.0048	U	0.005	U	0.01	U
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg							0.001	U
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg							0.0065	
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg								
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg							0.00063	J
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg								
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg							0.001	U
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg							0.001	U
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg							0.00079	J
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg							0.0021	J
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg							0.015	
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg							0.0016	
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg							0.001	U
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg							0.00072	J
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg							0.00052	J
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg							0.0015	J
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg								
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg								
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg							0.014	J
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg								

		sys_loc_code	DP07	DP07	DP07	DP07	DP08				
		sys_sample_code	DPS0705N	DPS0710N	DPS0715N	DPS0715N2	DPS0803N				
		sample_date	5/15/2013	5/22/2013	5/22/2013	6/12/2013	5/15/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	9.5	14.5	14.5	2.5				
		end_depth	5.5	10.5	15.5	15.5	3.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C								
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C								
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C								
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C								
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	mg/kg	0.0012	0.0048	U	0.005	U		0.41
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg	0.0012	0.0048	U	0.005	U		0.4
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg							

		sys_loc_code	DP07	DP07	DP07	DP07	DP08				
		sys_sample_code	DPS0705N	DPS0710N	DPS0715N	DPS0715N2	DPS0803N				
		sample_date	5/15/2013	5/22/2013	5/22/2013	6/12/2013	5/15/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	9.5	14.5	14.5	2.5				
		end_depth	5.5	10.5	15.5	15.5	3.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg							

		sys_loc_code	DP07	DP07	DP07	DP07	DP08				
		sys_sample_code	DPS0705N	DPS0710N	DPS0715N	DPS0715N2	DPS0803N				
		sample_date	5/15/2013	5/22/2013	5/22/2013	6/12/2013	5/15/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	9.5	14.5	14.5	2.5				
		end_depth	5.5	10.5	15.5	15.5	3.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg							

		sys_loc_code	DP07	DP07	DP07	DP07	DP08				
		sys_sample_code	DPS0705N	DPS0710N	DPS0715N	DPS0715N2	DPS0803N				
		sample_date	5/15/2013	5/22/2013	5/22/2013	6/12/2013	5/15/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	9.5	14.5	14.5	2.5				
		end_depth	5.5	10.5	15.5	15.5	3.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg							

		sys_loc_code	DP07	DP07	DP07	DP07	DP08				
		sys_sample_code	DPS0705N	DPS0710N	DPS0715N	DPS0715N2	DPS0803N				
		sample_date	5/15/2013	5/22/2013	5/22/2013	6/12/2013	5/15/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	9.5	14.5	14.5	2.5				
		end_depth	5.5	10.5	15.5	15.5	3.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg							

		sys_loc_code	DP07	DP07	DP07	DP07	DP07	DP07	DP07	DP07	DP08	
		sys_sample_code	DPS0705N	DPS0710N	DPS0715N	DPS0715N2	DPS0715N2	DPS0715N2	DPS0715N2	DPS0715N2	DPS0803N	
		sample_date	5/15/2013	5/22/2013	5/22/2013	6/12/2013	6/12/2013	6/12/2013	6/12/2013	6/12/2013	5/15/2013	
		sample_type_code	N	N	N	N	N	N	N	N	N	
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
		start_depth	4.5	9.5	14.5	14.5	14.5	14.5	14.5	14.5	2.5	
		end_depth	5.5	10.5	15.5	15.5	15.5	15.5	15.5	15.5	3.5	
		depth_unit	ft	ft	ft	ft	ft	ft	ft	ft	ft	
		validated_yn	Y	Y	Y	Y	Y	Y	Y	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg								
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg								
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg								
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg						0.04	U	
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg						0.015		
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg								
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg	20	U	36	J	20	U	100	U
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg	0.093	UJ	0.084	U	0.09	U	0.081	UJ
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg	13	J	230		20	U	340	
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg								
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg	0.0014	J	0.035	J	0.016	U	0.08	
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg	0.0023	J	0.038	U	0.016	U	0.047	J
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg								

				sys_loc_code	DP07	DP07	DP07	DP07	DP08		
				sys_sample_code	DPS0705N	DPS0710N	DPS0715N	DPS0715N2	DPS0803N		
				sample_date	5/15/2013	5/22/2013	5/22/2013	6/12/2013	5/15/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	4.5	9.5	14.5	14.5	2.5		
				end_depth	5.5	10.5	15.5	15.5	3.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg	0.0039	J	0.066	0.016	U	0.16	
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg	0.021		0.19	0.016	U	0.71	
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg	0.022		0.21	0.016	U	0.64	
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg	0.022		0.19	0.016	U	0.66	
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg	0.016		0.13	0.016	U	0.4	
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg	0.012		0.079	0.016	U	0.31	
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg	0.023		0.19	0.016	U	0.74	
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg	0.0029	J	0.04	0.016	U	0.095	
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg							
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg	0.039		0.36	0.016	U	1.5	
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg	0.0015	J	0.031	0.016	U	0.041	J
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg	0.014		0.11	0.016	U	0.35	
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg	0.0026	J	0.038	0.016	U	0.054	J
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg	0.015		0.21	0.016	U	0.6	
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg	0.035		0.31	0.016	U	1.5	
RA_SO_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	1,1,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg				0.0047	U		



				sys_loc_code	DP07	DP07	DP07	DP07	DP08		
				sys_sample_code	DPS0705N	DPS0710N	DPS0715N	DPS0715N2	DPS0803N		
				sample_date	5/15/2013	5/22/2013	5/22/2013	6/12/2013	5/15/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	4.5	9.5	14.5	14.5	2.5		
				end_depth	5.5	10.5	15.5	15.5	3.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg				0.94	U		
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg				0.021	U		
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg				0.0094	U		
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg				0.0047	U		
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg				0.0047	U		

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

					sys_loc_code	DP07	DP07	DP07	DP07	DP08		
					sys_sample_code	DPS0705N	DPS0710N	DPS0715N	DPS0715N2	DPS0803N		
					sample_date	5/15/2013	5/22/2013	5/22/2013	6/12/2013	5/15/2013		
					sample_type_code	N	N	N	N	N		
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
					start_depth	4.5	9.5	14.5	14.5	2.5		
					end_depth	5.5	10.5	15.5	15.5	3.5		
					depth_unit	ft	ft	ft	ft	ft		
					validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg						0.0047	U	
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg						0.0047	U	
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg						0.0047	U	
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg						0.0047	U	
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg						0.0047	U	
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg						0.0094	U	

Attachment A  
Subsurface Soil Data  
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				sys_loc_code	DP08	DP08	DP09	DP09	DP09		
				sys_sample_code	DPS0810N	DPS0815N	DPS0905N	DPS0910N	DPS0915N		
				sample_date	5/23/2013	5/23/2013	5/17/2013	6/11/2013	6/11/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	9.5	14.5	4.5	9.5	14.5		
				end_depth	10.5	15.5	5.5	10.5	15.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg				1.75E-05			
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg				1.41E-07	U		
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg				4.19E-08	U		
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg				1.25E-07	U		
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg				4.42E-08	U		
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg				3.4E-07	JN		
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg				4.09E-08	U		
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg				1.74E-06	J		
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg				5.07E-08	U		
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg				6.68E-08	U		
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg				2.85E-08	U		
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg				3.95E-08	U		
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg				2.64E-08	U		
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg				4.08E-08	U		
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg				3.91E-08	U		
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg				0.000288			
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg				5.64E-07	JN		
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg				4.7E-07			
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg				6.72E-05			
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg				3.44E-07	U		
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg				2.27E-05	JN		
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg				3.28E-07	JN		
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg				2.01E-06	JN		
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg				1.09E-06	JN		
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg				4.82E-07	JN		
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg				1.58E-06	JN		
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg				4.7E-07			
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg	10000		7200			6700	
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg	0.019	J	0.05	J		0.17	J
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg	3.4		3.9			2.4	
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg	37		62			63	
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg	0.24		0.71			0.91	
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg	0.23		0.25			0.12	U
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg	2300		1200			360	
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg	15		13			19	
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg	2.5		8.3			8.6	
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg	9.1		16			9.3	
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg	13000		16000			31000	
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg	30		36			10	
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg	970		670			860	
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg	61		230			67	
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg	0.032	J	0.086			0.039	U

Attachment A  
Subsurface Soil Data  
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				sys_loc_code	DP08	DP08	DP09	DP09	DP09
				sys_sample_code	DPS0810N	DPS0815N	DPS0905N	DPS0910N	DPS0915N
				sample_date	5/23/2013	5/23/2013	5/17/2013	6/11/2013	6/11/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	9.5	14.5	4.5	9.5	14.5
				end_depth	10.5	15.5	5.5	10.5	15.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg	9.6		7.2		11
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg	430		530		530
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg	0.25	J	0.39	J	0.61
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg	0.05	J	0.049	J	0.013
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg	160		180		49
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg	0.094	J	0.15		0.13
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg	36		25		31
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg	28		34		27
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent					
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg			0.00051	U	
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg			0.00027	J	
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg			0.00051	U	
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg			0.00051	U	
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg			0.00051	U	
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.0049	U	0.0052	U	0.0051
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.0049	U	0.0052	U	0.0051
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.0049	U	0.0052	U	0.0051
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.0049	U	0.0052	U	0.0051
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.079	J	0.0052	U	0.0051
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.0049	U	0.0052	U	0.0051
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.065	J	0.0052	U	0.0051
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.0049	U	0.0052	U	0.0051
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.0049	U	0.0052	U	0.0051
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg			0.00051	U	
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg			0.00051	U	
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg					
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg			0.00051	U	
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg					
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg			0.00051	U	
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg			0.00051	U	
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg			0.00051	U	
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg			5.4E-05	J	
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg			9.9E-05	J	
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg			0.00051	U	
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg			0.00051	U	
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg			0.00051	U	
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg			0.00051	U	
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg			0.00051	U	
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg					
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg					
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg			0.001	U	
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg					

Attachment A  
Subsurface Soil Data  
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		sys_loc_code	DP08	DP08	DP09	DP09	DP09				
		sys_sample_code	DPS0810N	DPS0815N	DPS0905N	DPS0910N	DPS0915N				
		sample_date	5/23/2013	5/23/2013	5/17/2013	6/11/2013	6/11/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	9.5	14.5	4.5	9.5	14.5				
		end_depth	10.5	15.5	5.5	10.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	mg/kg							
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	mg/kg							
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C	mg/kg							
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	mg/kg	0.14	0.0052	U	0.0051	U	0.0051	U
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg	0.14	0.0052	U	0.0051	U	0.0051	U
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg							

		sys_loc_code	DP08	DP08	DP09	DP09	DP09				
		sys_sample_code	DPS0810N	DPS0815N	DPS0905N	DPS0910N	DPS0915N				
		sample_date	5/23/2013	5/23/2013	5/17/2013	6/11/2013	6/11/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	9.5	14.5	4.5	9.5	14.5				
		end_depth	10.5	15.5	5.5	10.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg							

		sys_loc_code	DP08	DP08	DP09	DP09	DP09				
		sys_sample_code	DPS0810N	DPS0815N	DPS0905N	DPS0910N	DPS0915N				
		sample_date	5/23/2013	5/23/2013	5/17/2013	6/11/2013	6/11/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	9.5	14.5	4.5	9.5	14.5				
		end_depth	10.5	15.5	5.5	10.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg							

		sys_loc_code	DP08	DP08	DP09	DP09	DP09				
		sys_sample_code	DPS0810N	DPS0815N	DPS0905N	DPS0910N	DPS0915N				
		sample_date	5/23/2013	5/23/2013	5/17/2013	6/11/2013	6/11/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	9.5	14.5	4.5	9.5	14.5				
		end_depth	10.5	15.5	5.5	10.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg							



		sys_loc_code	DP08	DP08	DP09	DP09	DP09				
		sys_sample_code	DPS0810N	DPS0815N	DPS0905N	DPS0910N	DPS0915N				
		sample_date	5/23/2013	5/23/2013	5/17/2013	6/11/2013	6/11/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	9.5	14.5	4.5	9.5	14.5				
		end_depth	10.5	15.5	5.5	10.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg							

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		sys_loc_code	DP08	DP08	DP09	DP09	DP09						
		sys_sample_code	DPS0810N	DPS0815N	DPS0905N	DPS0910N	DPS0915N						
		sample_date	5/23/2013	5/23/2013	5/17/2013	6/11/2013	6/11/2013						
		sample_type_code	N	N	N	N	N						
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013						
		start_depth	9.5	14.5	4.5	9.5	14.5						
		end_depth	10.5	15.5	5.5	10.5	15.5						
		depth_unit	ft	ft	ft	ft	ft						
		validated_yn	Y	Y	Y	Y	Y						
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers		
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg									
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg									
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg									
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg									
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg									
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg									
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg		0.02	U						
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg		0.00051	U						
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg									
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg	190	21	U	20	U	21	U		
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg	0.082	U	0.094	U	0.1	UJ	0.11	U	
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg	500	38		17	J	21	U	18	U
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg									
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg									
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg									
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg									
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg									
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg									
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg									
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg									
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg									
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg									
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg									
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg									
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg									
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg									
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg									
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg									
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg									
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg									
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg									
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg									
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg									
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg									
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg									
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg									
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg									
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg									
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg									
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg	0.038		0.0077	J					
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg	0.03	J	0.0052	J					
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg									

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP08	DP08	DP09	DP09	DP09
				sys_sample_code	DPS0810N	DPS0815N	DPS0905N	DPS0910N	DPS0915N
				sample_date	5/23/2013	5/23/2013	5/17/2013	6/11/2013	6/11/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	9.5	14.5	4.5	9.5	14.5
				end_depth	10.5	15.5	5.5	10.5	15.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg	0.072		0.02		
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg					
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg					
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg	0.15		0.08		
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg	0.17		0.099		
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg	0.17		0.091		
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg	0.14		0.071		
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg	0.058		0.037		
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg					
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg					
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg					
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg					
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg					
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg					
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg	0.17		0.086		
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg	0.034	J	0.017		
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg					
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg					
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg					
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg					
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg					
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg	0.33		0.17		
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg	0.03	J	0.0069	J	
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg					
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg					
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg					
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg					
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg	0.12		0.06		
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg					
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg	0.023	J	0.0094		
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg					
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg					
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg					
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg					
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg	0.12		0.074		
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg					
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg	0.27		0.12		
RA_SO_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg					0.0055 U
RA_SO_VOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg					0.0055 U
RA_SO_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg					0.0055 U
RA_SO_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg					0.0055 U
RA_SO_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg					0.0055 U

				sys_loc_code	DP08	DP08	DP09	DP09	DP09		
				sys_sample_code	DPS0810N	DPS0815N	DPS0905N	DPS0910N	DPS0915N		
				sample_date	5/23/2013	5/23/2013	5/17/2013	6/11/2013	6/11/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	9.5	14.5	4.5	9.5	14.5		
				end_depth	10.5	15.5	5.5	10.5	15.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg						1.1	U
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg						0.022	U
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg						0.011	U
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg						0.0055	U
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg						0.0055	U

Attachment A  
Subsurface Soil Data  
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					sys_loc_code	DP08	DP08	DP09	DP09	DP09				
					sys_sample_code	DPS0810N	DPS0815N	DPS0905N	DPS0910N	DPS0915N				
					sample_date	5/23/2013	5/23/2013	5/17/2013	6/11/2013	6/11/2013				
					sample_type_code	N	N	N	N	N				
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
					start_depth	9.5	14.5	4.5	9.5	14.5				
					end_depth	10.5	15.5	5.5	10.5	15.5				
					depth_unit	ft	ft	ft	ft	ft				
					validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg									0.0055	U
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg									0.0055	U
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg									0.0055	U
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg									0.0055	U
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg									0.0055	U
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg									0.011	U

Attachment A  
Subsurface Soil Data  
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				sys_loc_code	DP10	DP10	DP10	DP11	DP11		
				sys_sample_code	DPS1005N	DPS1010N	DPS1015N	DPS1105N	DPS1110N		
				sample_date	5/15/2013	6/10/2013	6/10/2013	5/14/2013	5/28/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	4.5	9.5	14.5	4.5	9.5		
				end_depth	5.5	10.5	15.5	5.5	10.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg	3.43E-06	J		1.5E-05			
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg	3.22E-07	JN		3.03E-07	J		
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg	1.25E-07	U		1.34E-07	U		
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg	1.16E-07	U		1.49E-07	JN		
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg	7.43E-08	U		7.63E-08	U		
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg	1.07E-07	U		3.36E-07	JN		
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg	2.16E-07	JN		7.21E-08	U		
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg	1.04E-07	U		1.15E-06	JN		
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg	8.57E-08	U		8.58E-08	U		
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg	1.54E-07	U		2.06E-07	U		
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg	1.11E-07	U		1.38E-07	U		
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg	6.86E-08	U		1.3E-07	JN		
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg	1.03E-07	U		1.17E-07	U		
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg	1.82E-07	U		2.53E-07	U		
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg	1.35E-07	U		1.88E-07	U		
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg	0.000263	J		0.000906			
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg	2.01E-07	U		4.51E-07	J		
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg	1.38E-07			6.01E-07			
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg	7.6E-06	J		4.9E-05			
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg	5.87E-07	JN		5.85E-07	J		
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg	1.38E-06	JN		1.54E-05	JN		
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg	2.94E-06	JN		4.75E-06	JN		
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg	1.54E-07	U		3.88E-06	JN		
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg	7.36E-06	JN		1.63E-05	JN		
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg	5.46E-07	JN		2.53E-07	U		
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg	7.74E-06	JN		2.77E-05	JN		
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg	1.38E-07			6.01E-07			
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg				7400		3000	
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg				0.24	U	0.036	J
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg				2.8		1.5	
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg				40		25	
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg				0.63		0.41	
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg				0.074	J	0.11	J
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg				510		460	
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg				14		7	
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg				3.4		3.9	
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg				11		6.9	
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg				19000		8000	
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg				9.3		10	
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg				920		250	
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg				54		76	
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg				0.029	J	0.037	J

Attachment A  
Subsurface Soil Data  
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				sys_loc_code	DP10	DP10	DP10	DP11	DP11
				sys_sample_code	DPS1005N	DPS1010N	DPS1015N	DPS1105N	DPS1110N
				sample_date	5/15/2013	6/10/2013	6/10/2013	5/14/2013	5/28/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	4.5	9.5	14.5	4.5	9.5
				end_depth	5.5	10.5	15.5	5.5	10.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value
p				unit	unit	unit	unit	unit	unit
					interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg				7.2	3.7
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg				550	270
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg				0.27	J
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg				0.074	J
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg				87	55
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg				0.11	J
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg				21	14
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg				21	16
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent					
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg	0.00047	UJ		8.5E-05	J
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg	0.00047	UJ		1.8E-05	J
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg	0.00047	U		8.5E-05	J
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg	0.00047	UJ		3.4E-05	J
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg	0.00047	UJ		9.9E-05	U
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.0047	U	0.0046	U	0.00099
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.0047	U	0.0046	U	0.00099
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.0047	U	0.0046	U	0.00099
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.0047	U	0.0046	U	0.00099
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.0047	U	0.0046	U	0.00099
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.0047	U	0.0046	U	0.00099
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.0047	U	0.0046	U	0.00099
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.0047	U	0.0046	U	0.00099
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.0047	U	0.0046	U	0.00099
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg	0.00047	UJ		9.9E-05	U
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg	0.00047	U		9.9E-05	U
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg					
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg	0.00047	U		9.9E-05	U
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg					
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg	0.00047	UJ		3.6E-05	J
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg	0.00047	UJ		9.9E-05	U
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg	0.00047	UJ		9.9E-05	U
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg	5.4E-05	J		7.6E-05	J
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg	0.00047	U		0.00018	
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg	9.1E-05	J		9.9E-05	U
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg	0.00047	UJ		9.9E-05	U
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg	0.00047	UJ		3.5E-05	J
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg	0.00047	U		9.9E-05	U
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg	0.00047	UJ		9.9E-05	U
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg					
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg					
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg	0.00094	U		0.0002	U
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg					

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		sys_loc_code	DP10	DP10	DP10	DP11	DP11					
		sys_sample_code	DPS1005N	DPS1010N	DPS1015N	DPS1105N	DPS1110N					
		sample_date	5/15/2013	6/10/2013	6/10/2013	5/14/2013	5/28/2013					
		sample_type_code	N	N	N	N	N					
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
		start_depth	4.5	9.5	14.5	4.5	9.5					
		end_depth	5.5	10.5	15.5	5.5	10.5					
		depth_unit	ft	ft	ft	ft	ft					
		validated_yn	Y	Y	Y	Y	Y					
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C									
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C									
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C									
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C									
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	mg/kg	0.0047	U	0.0046	U	0.0099	0.0019	0.0052	U
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg	0.0047	U	0.0046	U	0.0099	0.0018	0.0052	U
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg								



		sys_loc_code	DP10	DP10	DP10	DP11	DP11				
		sys_sample_code	DPS1005N	DPS1010N	DPS1015N	DPS1105N	DPS1110N				
		sample_date	5/15/2013	6/10/2013	6/10/2013	5/14/2013	5/28/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	9.5	14.5	4.5	9.5				
		end_depth	5.5	10.5	15.5	5.5	10.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg							

					sys_loc_code	DP10	DP10	DP10	DP11	DP11	
					sys_sample_code	DPS1005N	DPS1010N	DPS1015N	DPS1105N	DPS1110N	
					sample_date	5/15/2013	6/10/2013	6/10/2013	5/14/2013	5/28/2013	
					sample_type_code	N	N	N	N	N	
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
					start_depth	4.5	9.5	14.5	4.5	9.5	
					end_depth	5.5	10.5	15.5	5.5	10.5	
					depth_unit	ft	ft	ft	ft	ft	
					validated_yn	Y	Y	Y	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg							

				sys_loc_code	DP10	DP10	DP10	DP11	DP11
				sys_sample_code	DPS1005N	DPS1010N	DPS1015N	DPS1105N	DPS1110N
				sample_date	5/15/2013	6/10/2013	6/10/2013	5/14/2013	5/28/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	4.5	9.5	14.5	4.5	9.5
				end_depth	5.5	10.5	15.5	5.5	10.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
p				unit	qualifiers	qualifiers	qualifiers	qualifiers	qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg					

		sys_loc_code	DP10	DP10	DP10	DP11	DP11				
		sys_sample_code	DPS1005N	DPS1010N	DPS1015N	DPS1105N	DPS1110N				
		sample_date	5/15/2013	6/10/2013	6/10/2013	5/14/2013	5/28/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	9.5	14.5	4.5	9.5				
		end_depth	5.5	10.5	15.5	5.5	10.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg							

		sys_loc_code	DP10	DP10	DP10	DP11	DP11							
		sys_sample_code	DPS1005N	DPS1010N	DPS1015N	DPS1105N	DPS1110N							
		sample_date	5/15/2013	6/10/2013	6/10/2013	5/14/2013	5/28/2013							
		sample_type_code	N	N	N	N	N							
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013							
		start_depth	4.5	9.5	14.5	4.5	9.5							
		end_depth	5.5	10.5	15.5	5.5	10.5							
		depth_unit	ft	ft	ft	ft	ft							
		validated_yn	Y	Y	Y	Y	Y							
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers			
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg										
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg										
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg										
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg	0.019	U			0.004	U				
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg	0.00047	U			9.9E-05	U				
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg										
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg	19	U	19	U	20	U	21	U		
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg	0.082	UJ	0.1	U	0.098	U	0.083	UJ	0.087	U
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg	19	U	19	U	20	U	20	U	21	U
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg										
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg										
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg										
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg										
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg										
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg										
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg										

				sys_loc_code	DP10	DP10	DP10	DP11	DP11		
				sys_sample_code	DPS1005N	DPS1010N	DPS1015N	DPS1105N	DPS1110N		
				sample_date	5/15/2013	6/10/2013	6/10/2013	5/14/2013	5/28/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	4.5	9.5	14.5	4.5	9.5		
				end_depth	5.5	10.5	15.5	5.5	10.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg							
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg							
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg							
RA_SO_VOCS	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg			0.0046	U		0.004	U
RA_SO_VOCS	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg			0.0046	U		0.004	U
RA_SO_VOCS	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg			0.0046	U		0.004	U
RA_SO_VOCS	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg			0.0046	U		0.004	U
RA_SO_VOCS	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg			0.0046	U		0.004	U

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP10	DP10	DP10	DP11	DP11				
				sys_sample_code	DPS1005N	DPS1010N	DPS1015N	DPS1105N	DPS1110N				
				sample_date	5/15/2013	6/10/2013	6/10/2013	5/14/2013	5/28/2013				
				sample_type_code	N	N	N	N	N				
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
				start_depth	4.5	9.5	14.5	4.5	9.5				
				end_depth	5.5	10.5	15.5	5.5	10.5				
				depth_unit	ft	ft	ft	ft	ft				
				validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers		
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg				0.91	U			0.81	U
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg				0.018	U			0.016	U
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg				0.0091	U			0.0081	U
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg				0.0012	J			0.004	U
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg				0.0046	U			0.004	U
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg				0.0046	U			0.004	U

					sys_loc_code	DP10	DP10	DP10	DP11	DP11		
					sys_sample_code	DPS1005N	DPS1010N	DPS1015N	DPS1105N	DPS1110N		
					sample_date	5/15/2013	6/10/2013	6/10/2013	5/14/2013	5/28/2013		
					sample_type_code	N	N	N	N	N		
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
					start_depth	4.5	9.5	14.5	4.5	9.5		
					end_depth	5.5	10.5	15.5	5.5	10.5		
					depth_unit	ft	ft	ft	ft	ft		
					validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg			0.0046	U		0.004	U	
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg			0.0046	U		0.004	U	
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg			0.0046	U		0.004	U	
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg			0.0046	U		0.004	U	
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg			0.0046	U		0.004	U	
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg			0.0091	U		0.0081	U	



		sys_loc_code	DP11	DP12	DP12	DP12	DP12	DP13	
		sys_sample_code	DPS1115N	DPS1205N	DPS1210N	DPS1215N	DPS1305N		
		sample_date	5/28/2013	6/13/2013	6/13/2013	6/13/2013	5/20/2013		
		sample_type_code	N	N	N	N	N		
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
		start_depth	14.5	4.5	9.5	14.5	4.5		
		end_depth	15.5	5.5	10.5	15.5	5.5		
		depth_unit	ft	ft	ft	ft	ft		
		validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg					
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg					
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg		3500		5200	
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg		0.063	J	0.74	J-
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg		1.1		2.9	
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg		22		56	
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg		0.43		0.4	
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg		0.12	U	0.16	
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg		240		1700	
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg		10		11	
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg		2.9		6.5	
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg		7.7		25	J+
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg		8500		11000	
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg		3.8		180	
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg		390		490	
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg		24		150	J-
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg		0.04	U	0.073	J-

				sys_loc_code	DP11	DP12	DP12	DP12	DP12	DP13	
				sys_sample_code	DPS1115N	DPS1205N	DPS1210N	DPS1215N	DPS1305N		
				sample_date	5/28/2013	6/13/2013	6/13/2013	6/13/2013	5/20/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	14.5	4.5	9.5	14.5	4.5		
				end_depth	15.5	5.5	10.5	15.5	5.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg				4.2			7.5
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg				360			430
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg				0.61	U		0.096
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg				0.0085	J		0.21
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg				140			130
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg				0.07	J		0.1
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg				17			16
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg				15			58
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent							J+
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg							
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg							
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.0048	U	0.0046	U	0.0051	U	0.0048
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.0048	U	0.0046	U	0.0051	U	0.0048
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.0048	U	0.0046	U	0.0051	U	0.0048
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.0048	U	0.0046	U	0.0051	U	0.0048
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.0048	U	0.0099	J	0.0051	U	0.0048
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.0048	U	0.0046	U	0.0051	U	0.0048
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.0035	J	0.29	J	0.0051	U	0.0041
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.0048	U	0.0046	U	0.0051	U	0.0048
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.0048	U	0.0046	U	0.0051	U	0.0048
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg							
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg							
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg							
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg							
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg							
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg							
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg							

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		sys_loc_code	DP11	DP12	DP12	DP12	DP12	DP13	
		sys_sample_code	DPS1115N	DPS1205N	DPS1210N	DPS1215N	DPS1305N		
		sample_date	5/28/2013	6/13/2013	6/13/2013	6/13/2013	5/20/2013		
		sample_type_code	N	N	N	N	N		
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
		start_depth	14.5	4.5	9.5	14.5	4.5		
		end_depth	15.5	5.5	10.5	15.5	5.5		
		depth_unit	ft	ft	ft	ft	ft		
		validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C						
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C						
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C						
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C						
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	0.0035		0.39		0.0051	U
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	0.0035	J	0.38		0.0051	U
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C						
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C						
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C						
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C						
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C						
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C						
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C						
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C						
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C						
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C						
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C						
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C						
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C						
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C						
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C						
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C						
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C						
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C						
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C						
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C						
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C						
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C						
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C						
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C						
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C						
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C						
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C						
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C						
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C						
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C						
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C						
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C						
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C						
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C						
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C						
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C						

					sys_loc_code	DP11	DP12	DP12	DP12	DP13
					sys_sample_code	DPS1115N	DPS1205N	DPS1210N	DPS1215N	DPS1305N
					sample_date	5/28/2013	6/13/2013	6/13/2013	6/13/2013	5/20/2013
					sample_type_code	N	N	N	N	N
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
					start_depth	14.5	4.5	9.5	14.5	4.5
					end_depth	15.5	5.5	10.5	15.5	5.5
					depth_unit	ft	ft	ft	ft	ft
					validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg						

					sys_loc_code	DP11	DP12	DP12	DP12	DP13	
					sys_sample_code	DPS1115N	DPS1205N	DPS1210N	DPS1215N	DPS1305N	
					sample_date	5/28/2013	6/13/2013	6/13/2013	6/13/2013	5/20/2013	
					sample_type_code	N	N	N	N	N	
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
					start_depth	14.5	4.5	9.5	14.5	4.5	
					end_depth	15.5	5.5	10.5	15.5	5.5	
					depth_unit	ft	ft	ft	ft	ft	
					validated_yn	Y	Y	Y	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg							

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

					sys_loc_code	DP11	DP12	DP12	DP12	DP13	
					sys_sample_code	DPS1115N	DPS1205N	DPS1210N	DPS1215N	DPS1305N	
					sample_date	5/28/2013	6/13/2013	6/13/2013	6/13/2013	5/20/2013	
					sample_type_code	N	N	N	N	N	
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
					start_depth	14.5	4.5	9.5	14.5	4.5	
					end_depth	15.5	5.5	10.5	15.5	5.5	
					depth_unit	ft	ft	ft	ft	ft	
					validated_yn	Y	Y	Y	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg							

					sys_loc_code	DP11	DP12	DP12	DP12	DP13	
					sys_sample_code	DPS1115N	DPS1205N	DPS1210N	DPS1215N	DPS1305N	
					sample_date	5/28/2013	6/13/2013	6/13/2013	6/13/2013	5/20/2013	
					sample_type_code	N	N	N	N	N	
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
					start_depth	14.5	4.5	9.5	14.5	4.5	
					end_depth	15.5	5.5	10.5	15.5	5.5	
					depth_unit	ft	ft	ft	ft	ft	
					validated_yn	Y	Y	Y	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg							

				sys_loc_code	DP11	DP12	DP12	DP12	DP12	DP13	
				sys_sample_code	DPS1115N	DPS1205N	DPS1210N	DPS1215N	DPS1305N		
				sample_date	5/28/2013	6/13/2013	6/13/2013	6/13/2013	5/20/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	14.5	4.5	9.5	14.5	4.5		
				end_depth	15.5	5.5	10.5	15.5	5.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg							
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg							
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg							
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg							
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg							
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg	36	370	U	75	J	22	U
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg	0.086	0.1	U	0.64		0.31	
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg	200	2500		1400		130	
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg		0.17		0.0093	J	0.0048	J
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg		0.14		0.0087	J	0.0074	J
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg							



				sys_loc_code	DP11	DP12	DP12	DP12	DP12	DP13	
				sys_sample_code	DPS1115N	DPS1205N	DPS1210N	DPS1215N	DPS1305N		
				sample_date	5/28/2013	6/13/2013	6/13/2013	6/13/2013	5/20/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	14.5	4.5	9.5	14.5	4.5		
				end_depth	15.5	5.5	10.5	15.5	5.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg		0.59		0.019	J	0.013	J
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg		1.3		0.048		0.045	
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg		1.1		0.046		0.041	J
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg		1.3		0.046		0.039	J
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg		0.82		0.039	J	0.035	J
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg		0.56		0.019	J	0.026	J
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg		1.4		0.05		0.05	
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg		0.2		0.01	J	0.044	U
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg							
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg		2.9		0.099		0.083	
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg		0.17		0.0098	J	0.0085	J
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg		0.7		0.033	J	0.029	J
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg		0.1		0.0067	J	0.0038	J
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg		1.7		0.052	J	0.031	J
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg		2		0.07	J	0.065	
RA_SO_VOCS	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg						0.005	U
RA_SO_VOCS	1,1,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg						0.005	U
RA_SO_VOCS	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg						0.005	U
RA_SO_VOCS	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg						0.005	U
RA_SO_VOCS	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg						0.005	U

				sys_loc_code	DP11	DP12	DP12	DP12	DP12	DP13	
				sys_sample_code	DPS1115N	DPS1205N	DPS1210N	DPS1215N	DPS1305N		
				sample_date	5/28/2013	6/13/2013	6/13/2013	6/13/2013	5/20/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	14.5	4.5	9.5	14.5	4.5		
				end_depth	15.5	5.5	10.5	15.5	5.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg				0.99	U		
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg				0.012			
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg				0.058			
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg				0.0023	J		
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg				0.0099	U		
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg				0.0061			
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg				0.005	U		
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg				0.005	U		

					sys_loc_code	DP11	DP12	DP12	DP12	DP12	DP13	
					sys_sample_code	DPS1115N	DPS1205N	DPS1210N	DPS1215N	DPS1305N		
					sample_date	5/28/2013	6/13/2013	6/13/2013	6/13/2013	5/20/2013		
					sample_type_code	N	N	N	N	N		
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
					start_depth	14.5	4.5	9.5	14.5	4.5		
					end_depth	15.5	5.5	10.5	15.5	5.5		
					depth_unit	ft	ft	ft	ft	ft		
					validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg						0.005	U	
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg						0.005	U	
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg						0.005	U	
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg						0.005	U	
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg						0.005	U	
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg						0.0099	U	

				sys_loc_code	DP13	DP13	DP13	DP13	DP14		
				sys_sample_code	DPS1310N	DPS1310N	DPS1315N	DPS1315N	DPS1403N		
				sample_date	5/29/2013	5/29/2013	5/29/2013	5/29/2013	5/22/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	9.5	9.5	14.5	14.5	2.5		
				end_depth	10.5	10.5	15.5	15.5	3.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	N	Y	N	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg							
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg							
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg							
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg							
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg							
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg		850	J+				
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg		0.46					
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg		0.48	J-				
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg		7.5					
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg		0.034	J				
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg		0.031	J				
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg		270					
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg		2.4					
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg		1.1					
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg		2					
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg		1900	J				
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg		19					
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg		71					
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg		94					
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg		0.035	U				

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP13	DP13	DP13	DP13	DP14	
				sys_sample_code	DPS1310N	DPS1310N	DPS1315N	DPS1315N	DPS1403N	
				sample_date	5/29/2013	5/29/2013	5/29/2013	5/29/2013	5/22/2013	
				sample_type_code	N	N	N	N	N	
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
				start_depth	9.5	9.5	14.5	14.5	2.5	
				end_depth	10.5	10.5	15.5	15.5	3.5	
				depth_unit	ft	ft	ft	ft	ft	
				validated_yn	N	Y	N	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg	0.78					
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg	73					
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg	0.55	UJ				
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg	0.11	U				
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg	34					
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg	0.033	J				
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg	2.9					
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg	12					
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent	9.5		23			
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg						
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg						
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg						
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg						
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg						
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.0046	U		0.0053	U	0.0051
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.0046	U		0.0053	U	0.0051
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.0046	U		0.0053	U	0.0051
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.0046	U		0.0053	U	0.0051
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.0094			0.0053	U	0.18
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.0046	U		0.0053	U	0.0051
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.0036	J		0.0053	U	0.53
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.0046	U		0.0053	U	0.0051
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.0046	U		0.0053	U	0.0051
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg						
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg						
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg						
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg						
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg						
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg						
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg						
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg						
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg						
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg						
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg						
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg						
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg						
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg						
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg						
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg						
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg						
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg						
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg						

		sys_loc_code	DP13	DP13	DP13	DP13	DP14				
		sys_sample_code	DPS1310N	DPS1310N	DPS1315N	DPS1315N	DPS1403N				
		sample_date	5/29/2013	5/29/2013	5/29/2013	5/29/2013	5/22/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	9.5	9.5	14.5	14.5	2.5				
		end_depth	10.5	10.5	15.5	15.5	3.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	N	Y	N	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	mg/kg							
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	mg/kg							
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C	mg/kg							
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	mg/kg		0.013		0.0053	U	0.71	
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg		0.013		0.0053	U	0.71	
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg							

					sys_loc_code	DP13	DP13	DP13	DP13	DP14
					sys_sample_code	DPS1310N	DPS1310N	DPS1315N	DPS1315N	DPS1403N
					sample_date	5/29/2013	5/29/2013	5/29/2013	5/29/2013	5/22/2013
					sample_type_code	N	N	N	N	N
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
					start_depth	9.5	9.5	14.5	14.5	2.5
					end_depth	10.5	10.5	15.5	15.5	3.5
					depth_unit	ft	ft	ft	ft	ft
					validated_yn	N	Y	N	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg						

					DP13	DP13	DP13	DP13	DP14			
					DPS1310N	DPS1310N	DPS1315N	DPS1315N	DPS1403N			
					5/29/2013	5/29/2013	5/29/2013	5/29/2013	5/22/2013			
					N	N	N	N	N			
					Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
					9.5	9.5	14.5	14.5	2.5			
					10.5	10.5	15.5	15.5	3.5			
					ft	ft	ft	ft	ft			
					N	Y	N	Y	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg								



				sys_loc_code	DP13	DP13	DP13	DP13	DP14
				sys_sample_code	DPS1310N	DPS1310N	DPS1315N	DPS1315N	DPS1403N
				sample_date	5/29/2013	5/29/2013	5/29/2013	5/29/2013	5/22/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	9.5	9.5	14.5	14.5	2.5
				end_depth	10.5	10.5	15.5	15.5	3.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	N	Y	N	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
p				unit	qualifiers	qualifiers	qualifiers	qualifiers	qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg					

					DP13	DP13	DP13	DP13	DP14	
					DPS1310N	DPS1310N	DPS1315N	DPS1315N	DPS1403N	
					5/29/2013	5/29/2013	5/29/2013	5/29/2013	5/22/2013	
					N	N	N	N	N	
					Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
					9.5	9.5	14.5	14.5	2.5	
					10.5	10.5	15.5	15.5	3.5	
					ft	ft	ft	ft	ft	
					N	Y	N	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg						

		sys_loc_code	DP13	DP13	DP13	DP13	DP14				
		sys_sample_code	DPS1310N	DPS1310N	DPS1315N	DPS1315N	DPS1403N				
		sample_date	5/29/2013	5/29/2013	5/29/2013	5/29/2013	5/22/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	9.5	9.5	14.5	14.5	2.5				
		end_depth	10.5	10.5	15.5	15.5	3.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	N	Y	N	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg							
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg							
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg							
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg							
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg							
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg		18	U			22	U
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg		0.1	U			0.09	U
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg		48				22	U
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg							

				sys_loc_code	DP13	DP13	DP13	DP13	DP14	
				sys_sample_code	DPS1310N	DPS1310N	DPS1315N	DPS1315N	DPS1403N	
				sample_date	5/29/2013	5/29/2013	5/29/2013	5/29/2013	5/22/2013	
				sample_type_code	N	N	N	N	N	
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
				start_depth	9.5	9.5	14.5	14.5	2.5	
				end_depth	10.5	10.5	15.5	15.5	3.5	
				depth_unit	ft	ft	ft	ft	ft	
				validated_yn	N	Y	N	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg						
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg						
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg						
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg						
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg						
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg						
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg						
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg						
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg						
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg						
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg						
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg						
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg						
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg						
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg						
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg						
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg						
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg						
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg						
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg						
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg						
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg						
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg						
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg						
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg						
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg						
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg						
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg						
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg						
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg						
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg						
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg						
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg						
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg						
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg						
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg						
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg						
RA_SO_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg			0.0049	U		
RA_SO_VOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg			0.0049	U		
RA_SO_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg			0.0049	U		
RA_SO_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg			0.0049	U		
RA_SO_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg			0.0049	U		

				sys_loc_code	DP13	DP13	DP13	DP13	DP14
				sys_sample_code	DPS1310N	DPS1310N	DPS1315N	DPS1315N	DPS1403N
				sample_date	5/29/2013	5/29/2013	5/29/2013	5/29/2013	5/22/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	9.5	9.5	14.5	14.5	2.5
				end_depth	10.5	10.5	15.5	15.5	3.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	N	Y	N	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg		0.98	U		
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg		0.02	U		
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg		0.0098	U		
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg		0.0049	U		
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg		0.0049	U		

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

					sys_loc_code	DP13	DP13	DP13	DP13	DP14		
					sys_sample_code	DPS1310N	DPS1310N	DPS1315N	DPS1315N	DPS1403N		
					sample_date	5/29/2013	5/29/2013	5/29/2013	5/29/2013	5/22/2013		
					sample_type_code	N	N	N	N	N		
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
					start_depth	9.5	9.5	14.5	14.5	2.5		
					end_depth	10.5	10.5	15.5	15.5	3.5		
					depth_unit	ft	ft	ft	ft	ft		
					validated_yn	N	Y	N	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg			0.0049	U				
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg			0.0049	U				
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg			0.0049	U				
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg			0.0049	U				
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg			0.0049	U				
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg			0.0098	U				

		sys_loc_code	DP14	DP14	DP15	DP15	DP15				
		sys_sample_code	DPS1410N	DPS1415N	DPS1504N	DPS1510N	DPS1515N				
		sample_date	6/6/2013	6/6/2013	5/21/2013	6/6/2013	6/10/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	9.5	14.5	3.5	9.5	14.5				
		end_depth	10.5	15.5	4.5	10.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg							
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg							
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg							
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg							
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg							
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg							
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg							
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg							
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg							
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg							
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg							
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg							
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg							
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg							
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg							
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg							
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg							
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg							
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg							
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg							

				sys_loc_code	DP14	DP14	DP15	DP15	DP15
				sys_sample_code	DPS1410N	DPS1415N	DPS1504N	DPS1510N	DPS1515N
				sample_date	6/6/2013	6/6/2013	5/21/2013	6/6/2013	6/10/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	9.5	14.5	3.5	9.5	14.5
				end_depth	10.5	15.5	4.5	10.5	15.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value
p				unit	unit	unit	unit	unit	unit
					interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg					
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg					
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg					
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg					
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg					
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg					
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg					
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg					
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent					
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg					
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg					
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg					
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.0052	U	0.0051	U	0.0049
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.0052	U	0.0051	U	0.0049
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.0052	U	0.0051	U	0.0049
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.0052	U	0.0051	U	0.0049
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.0052	U	0.0051	U	0.17
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.0052	U	0.0051	U	0.0049
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.0052	U	0.0051	U	0.4
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.0052	U	0.0051	U	0.0049
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.0052	U	0.0051	U	0.0049
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg					
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg				0.000859	
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg				0.0118	JN
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg					
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg				0.266	JN
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg				0.409	JN
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg				0.000237	



Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP14	DP14	DP15	DP15	DP15
				sys_sample_code	DPS1410N	DPS1415N	DPS1504N	DPS1510N	DPS1515N
				sample_date	6/6/2013	6/6/2013	5/21/2013	6/6/2013	6/10/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	9.5	14.5	3.5	9.5	14.5
				end_depth	10.5	15.5	4.5	10.5	15.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	mg/kg				0.00641	JN
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	mg/kg				0.0664	
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	mg/kg				0.000386	
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C	mg/kg				1.18	
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	mg/kg	0.0052	U	0.0051	U	0.38
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg	0.0052	U	0.0051	U	0.38
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg				9.02E-05	
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg				0.000128	JN
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg				0.000228	
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg				0.0406	
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg				0.000926	
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg				0.000147	
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg				1.05E-05	U
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg				0.00864	
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg				1.11E-05	U
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg				0.00156	
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg				0.0014	
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg				0.0207	
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg				5.73E-05	J
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg				0.0406	
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg				1.61E-05	JN
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg				1.07E-05	U
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg				0.0406	
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg				0.000436	
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg				0.0406	
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg				0.00535	
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg				0.00535	
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg				0.0221	
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg				0.0207	
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg				0.000405	
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg				9.82E-05	
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg				1.02E-05	U
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg				0.000403	
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg				0.000501	
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg				0.0014	
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg				0.0207	
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg				0.00327	JN
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg				0.000117	
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg				0.0107	
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg				0.0897	
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg				0.000405	
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg				0.0043	

Attachment A  
Subsurface Soil Data  
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		sys_loc_code	DP14	DP14	DP15	DP15	DP15				
		sys_sample_code	DPS1410N	DPS1415N	DPS1504N	DPS1510N	DPS1515N				
		sample_date	6/6/2013	6/6/2013	5/21/2013	6/6/2013	6/10/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	9.5	14.5	3.5	9.5	14.5				
		end_depth	10.5	15.5	4.5	10.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg				0.000959			
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg				0.0286			
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg				0.00114			
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg				0.00441			
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg				0.0338			
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg				0.0118			
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg				0.00244			
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg				0.0897			
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg				0.000993			
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg				4.77E-06	U		
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg				0.000993			
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg				0.0231			
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg				2.67E-05	U		
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg				0.00441			
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg				0.00291			
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg				4.56E-05	J		
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg				0.0121			
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg				0.0745			
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg				2.04E-05	U		
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg				0.0745			
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg				0.00558			
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg				5.79E-05			
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg				0.0338			
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg				2.64E-05	JN		
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg				0.0795			
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg				0.000303			
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg				1.38E-05	U		
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg				0.00572			
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg				0.00572			
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg				0.00845			
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg				0.00159			
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg				0.00348			
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg				0.0897			
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg				1.77E-05	U		
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg				0.000292			
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg				0.0897			
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg				0.00645			
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg				3.34E-05	JN		
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg				0.0107			
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg				0.00313			
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg				0.0795			
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg				0.00192	JN		

		sys_loc_code	DP14	DP14	DP15	DP15	DP15				
		sys_sample_code	DPS1410N	DPS1415N	DPS1504N	DPS1510N	DPS1515N				
		sample_date	6/6/2013	6/6/2013	5/21/2013	6/6/2013	6/10/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	9.5	14.5	3.5	9.5	14.5				
		end_depth	10.5	15.5	4.5	10.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg				0.0036			
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg				0.0323			
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg				0.00982			
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg				0.00581			
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg				0.00982			
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg				0.0338			
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg				0.00145			
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg				0.00422			
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg				0.0178			
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg				0.0063			
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg				0.0138			
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg				0.00801			
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg				0.073			
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg				0.000225			
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg				8.04E-05	JN		
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg				0.0232			
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg				2.29E-05	JN		
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg				0.0232			
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg				1.31E-05	U		
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg				0.0355			
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg				1.15E-05	U		
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg				0.00104			
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg				0.00149			
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg				0.00603			
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg				0.00129			
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg				1.39E-05	U		
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg				0.073			
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg				0.0164			
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg				0.00666			
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg				0.00802			
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg				0.000595			
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg				0.017			
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg				0.017			
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg				3.45E-05	J		
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg				0.0206			
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg				0.00196			
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg				0.00186			
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg				0.0027			
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg				0.0103			
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg				1.13E-05	U		
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg				0.000836			
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg				0.00471			

Attachment A  
Subsurface Soil Data  
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				sys_loc_code	DP14	DP14	DP15	DP15	DP15
				sys_sample_code	DPS1410N	DPS1415N	DPS1504N	DPS1510N	DPS1515N
				sample_date	6/6/2013	6/6/2013	5/21/2013	6/6/2013	6/10/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	9.5	14.5	3.5	9.5	14.5
				end_depth	10.5	15.5	4.5	10.5	15.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
p				unit	qualifiers	qualifiers	qualifiers	qualifiers	qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg				0.000509	JN
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg				0.0012	
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg				0.0068	
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg				0.00615	
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg				1.88E-05	J
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg				0.000148	JN
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg				0.00139	
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg				0.00284	
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg				0.000787	
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg				0.0206	
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg				0.00284	
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg				0.000112	
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg				0.00801	
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg				0.0141	
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg				0.00322	
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg				0.0068	
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg				4.03E-05	JN
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg				0.000339	
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg				6.81E-06	U
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg				0.00766	
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg				2.58E-05	JN
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg				7.51E-05	
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg				0.00144	
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg				0.00703	
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg				0.00703	
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg				0.00312	
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg				0.000441	
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg				0.0124	
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg				0.00313	
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg				0.00117	
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg				0.0124	
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg				0.00226	
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg				0.00671	
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg				4.71E-05	JN
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg				0.0023	
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg				0.00313	
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg				0.0196	
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg				0.0023	
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg				1.25E-05	U
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg				0.000426	
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg				0.00525	
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg				5.15E-05	JN

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		sys_loc_code	DP14	DP14	DP15	DP15	DP15				
		sys_sample_code	DPS1410N	DPS1415N	DPS1504N	DPS1510N	DPS1515N				
		sample_date	6/6/2013	6/6/2013	5/21/2013	6/6/2013	6/10/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	9.5	14.5	3.5	9.5	14.5				
		end_depth	10.5	15.5	4.5	10.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg				8.43E-05			
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg				0.00116			
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg				0.000738			
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg				0.00287			
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg				0.0219			
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg				0.00116			
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg				0.000363			
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg				0.00485			
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg				0.0124			
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg				0.0117			
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg				0.000415			
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg				3.3E-05	J		
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg				0.00671			
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg				8.46E-05	JN		
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg				0.0219			
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg				0.00703			
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg				7.15E-05	JN		
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg				0.000441			
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg				0.0219			
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg				0.00116			
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg				0.0219			
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg				0.00141			
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg				8.09E-06	U		
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg				0.000322	JN		
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg				0.00318			
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg				6.93E-06	U		
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg				5.27E-05			
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg				0.00377			
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg				0.0171			
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg				0.00988			
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg				0.00535			
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg				0.0207			
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg				0.0207			
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg				0.00464			
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg				0.000339	JN		
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg				0.000176			
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg				0.0406			
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg				0.00464			
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg				0.00735			
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg				0.000228			
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg				0.000157			
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg				0.0398			

				sys_loc_code	DP14	DP14	DP15	DP15	DP15		
				sys_sample_code	DPS1410N	DPS1415N	DPS1504N	DPS1510N	DPS1515N		
				sample_date	6/6/2013	6/6/2013	5/21/2013	6/6/2013	6/10/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	9.5	14.5	3.5	9.5	14.5		
				end_depth	10.5	15.5	4.5	10.5	15.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg				0.00024	JN		
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg				0.0207			
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg				0.000926			
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg				0.0171			
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg				0.23	JN		
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg				0.109	JN		
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg							
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg				0.0808	JN		
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg	21	U	21	U	210	280	140
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg	0.093	UJ	0.098	UJ	0.094	UJ	0.094
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg	21	U	21	U	670	750	320
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg							

				sys_loc_code	DP14	DP14	DP15	DP15	DP15		
				sys_sample_code	DPS1410N	DPS1415N	DPS1504N	DPS1510N	DPS1515N		
				sample_date	6/6/2013	6/6/2013	5/21/2013	6/6/2013	6/10/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	9.5	14.5	3.5	9.5	14.5		
				end_depth	10.5	15.5	4.5	10.5	15.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg							
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg							
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg							
RA_SO_VOCS	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCS	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCS	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCS	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCS	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP14	DP14	DP15	DP15	DP15		
				sys_sample_code	DPS1410N	DPS1415N	DPS1504N	DPS1510N	DPS1515N		
				sample_date	6/6/2013	6/6/2013	5/21/2013	6/6/2013	6/10/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	9.5	14.5	3.5	9.5	14.5		
				end_depth	10.5	15.5	4.5	10.5	15.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg	0.96	U	1.2	0.99	U		
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg	0.019	U		0.045	U	0.02	U
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg	0.0096	U		0.012	U	0.0099	U
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg	0.0048	U		0.0088	U	0.0049	U
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	Tetracloroethylene	127-18-4	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U



Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP14	DP14	DP15	DP15	DP15		
				sys_sample_code	DPS1410N	DPS1415N	DPS1504N	DPS1510N	DPS1515N		
				sample_date	6/6/2013	6/6/2013	5/21/2013	6/6/2013	6/10/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	9.5	14.5	3.5	9.5	14.5		
				end_depth	10.5	15.5	4.5	10.5	15.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg	0.0048	U		0.0059	U	0.0049	U
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg	0.0096	U		0.012	U	0.0099	U

					DP16	DP16	DP16	DP16	DP17	
					DPS1605N	DPS1610N	DPS1615N	DPS1615R	DPS1705N	
					5/15/2013	6/10/2013	6/10/2013	6/10/2013	5/23/2013	
					N	N	N	FD	N	
					Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
					4.5	9.5	14.5	14.5	4.5	
					5.5	10.5	15.5	15.5	5.5	
					ft	ft	ft	ft	ft	
					Y	Y	Y	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value	
				unit	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg					2.87E-05	
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg					6.28E-08	JN
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg					1.21E-07	U
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg					7.12E-07	JN
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg					5.67E-08	U
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg					7.21E-07	J
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg					4.8E-08	U
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg					2.54E-06	CJ
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg					5.46E-08	U
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg					3.09E-07	JN
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg					8.93E-08	U
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg					4.17E-08	U
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg					7.31E-08	U
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg					1.6E-07	U
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg					1.05E-07	U
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg					0.00125	
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg					1.47E-07	JN
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg					1.37E-06	
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg					6.39E-05	
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg					6.28E-08	JN
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg					3.17E-05	JN
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg					2.76E-07	JN
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg					3.98E-06	JN
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg					1.05E-06	JN
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg					2.99E-06	JN
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg					1.93E-06	JN
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg					1.37E-06	
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg	5900					
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg	0.23	U				
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg	3					
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg	20					
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg	0.31					
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg	0.053	J				
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg	330					
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg	12					
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg	3.1					
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg	6.6					
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg	15000					
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg	4.6					
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg	500					
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg	110					
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg	0.014	J				

				sys_loc_code	DP16	DP16	DP16	DP16	DP17			
				sys_sample_code	DPS1605N	DPS1610N	DPS1615N	DPS1615R	DPS1705N			
				sample_date	5/15/2013	6/10/2013	6/10/2013	6/10/2013	5/23/2013			
				sample_type_code	N	N	N	FD	N			
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth	4.5	9.5	14.5	14.5	4.5			
				end_depth	5.5	10.5	15.5	15.5	5.5			
				depth_unit	ft	ft	ft	ft	ft			
				validated_yn	Y	Y	Y	Y	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg	3.7							
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg	460							
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg	0.17	J						
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg	0.011	J						
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg	61							
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg	0.082	J						
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg	19							
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg	15							
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent								
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg							9.2E-05	U
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg							9.2E-05	U
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg							5.2E-05	J
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg							9.2E-05	U
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg							9.2E-05	U
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.00097	U	0.0047	U	0.0045	U	0.0046	U
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.00097	U	0.0047	U	0.0045	U	0.0046	U
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.00097	U	0.0047	U	0.0045	U	0.0046	U
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.00097	U	0.0047	U	0.0045	U	0.0046	U
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.00097	U	0.0047	U	0.0045	U	0.0046	U
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.00097	U	0.0047	U	0.0045	U	0.0046	U
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.00097	U	0.0047	U	0.0045	U	0.0046	U
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.00097	U	0.0047	U	0.0045	U	0.0046	U
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.00097	U	0.0047	U	0.0045	U	0.0046	U
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg							9.2E-05	U
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg							9.2E-05	U
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg								
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg							9.2E-05	U
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg								
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg							9.2E-05	U
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg							9.2E-05	U
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg							9.2E-05	U
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg							1.8E-05	J
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg							3.6E-05	J
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg							9.2E-05	U
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg							5E-05	J
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg							9.2E-05	U
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg							9.2E-05	U
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg							9.2E-05	U
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg								
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg								
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg							0.00018	U
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg								

		sys_loc_code	DP16	DP16	DP16	DP16	DP17					
		sys_sample_code	DPS1605N	DPS1610N	DPS1615N	DPS1615R	DPS1705N					
		sample_date	5/15/2013	6/10/2013	6/10/2013	6/10/2013	5/23/2013					
		sample_type_code	N	N	N	FD	N					
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
		start_depth	4.5	9.5	14.5	14.5	4.5					
		end_depth	5.5	10.5	15.5	15.5	5.5					
		depth_unit	ft	ft	ft	ft	ft					
		validated_yn	Y	Y	Y	Y	Y					
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C									
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C									
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C									
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C									
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	mg/kg	0.00097	U	0.0047	U	0.0045	U	0.0046	U
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg	0.00097	U	0.0047	U	0.0045	U	0.0046	U
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg								

					DP16	DP16	DP16	DP16	DP17
					DPS1605N	DPS1610N	DPS1615N	DPS1615R	DPS1705N
					5/15/2013	6/10/2013	6/10/2013	6/10/2013	5/23/2013
					N	N	N	FD	N
					Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
					4.5	9.5	14.5	14.5	4.5
					5.5	10.5	15.5	15.5	5.5
					ft	ft	ft	ft	ft
					Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg					

					DP16	DP16	DP16	DP16	DP17	
					DPS1605N	DPS1610N	DPS1615N	DPS1615R	DPS1705N	
					5/15/2013	6/10/2013	6/10/2013	6/10/2013	5/23/2013	
					N	N	N	FD	N	
					Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
					4.5	9.5	14.5	14.5	4.5	
					5.5	10.5	15.5	15.5	5.5	
					ft	ft	ft	ft	ft	
					Y	Y	Y	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg						

				sys_loc_code	DP16	DP16	DP16	DP16	DP17		
				sys_sample_code	DPS1605N	DPS1610N	DPS1615N	DPS1615R	DPS1705N		
				sample_date	5/15/2013	6/10/2013	6/10/2013	6/10/2013	5/23/2013		
				sample_type_code	N	N	N	FD	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	4.5	9.5	14.5	14.5	4.5		
				end_depth	5.5	10.5	15.5	15.5	5.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg							

		sys_loc_code	DP16	DP16	DP16	DP16	DP17				
		sys_sample_code	DPS1605N	DPS1610N	DPS1615N	DPS1615R	DPS1705N				
		sample_date	5/15/2013	6/10/2013	6/10/2013	6/10/2013	5/23/2013				
		sample_type_code	N	N	N	FD	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	9.5	14.5	14.5	4.5				
		end_depth	5.5	10.5	15.5	15.5	5.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg							



				sys_loc_code	DP16	DP16	DP16	DP16	DP17			
				sys_sample_code	DPS1605N	DPS1610N	DPS1615N	DPS1615R	DPS1705N			
				sample_date	5/15/2013	6/10/2013	6/10/2013	6/10/2013	5/23/2013			
				sample_type_code	N	N	N	FD	N			
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth	4.5	9.5	14.5	14.5	4.5			
				end_depth	5.5	10.5	15.5	15.5	5.5			
				depth_unit	ft	ft	ft	ft	ft			
				validated_yn	Y	Y	Y	Y	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg								
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg								
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg								
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg						0.0037	U	
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg						2E-05	J	
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg								
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg	20	U	19	U	18	U	19	U
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg	0.09	UJ	0.095	U	0.1	U	0.097	U
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg	20	U	19	U	18	U	81	U
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg								
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg								
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg								
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg								

				sys_loc_code	DP16	DP16	DP16	DP16	DP17	
				sys_sample_code	DPS1605N	DPS1610N	DPS1615N	DPS1615R	DPS1705N	
				sample_date	5/15/2013	6/10/2013	6/10/2013	6/10/2013	5/23/2013	
				sample_type_code	N	N	N	FD	N	
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
				start_depth	4.5	9.5	14.5	14.5	4.5	
				end_depth	5.5	10.5	15.5	15.5	5.5	
				depth_unit	ft	ft	ft	ft	ft	
				validated_yn	Y	Y	Y	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg						
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg						
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg						
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg						
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg						
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg						
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg						
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg						
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg						
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg						
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg						
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg						
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg						
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg						
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg						
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg						
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg						
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg						
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg						
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg						
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg						
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg						
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg						
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg						
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg						
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg						
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg						
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg						
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg						
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg						
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg						
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg						
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg						
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg						
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg						
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg						
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg						
RA_SO_VOCS	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg			0.0043	U	0.0049	U
RA_SO_VOCS	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg			0.0043	U	0.0049	U
RA_SO_VOCS	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg			0.0043	U	0.0049	U
RA_SO_VOCS	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg			0.0043	U	0.0049	U
RA_SO_VOCS	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg			0.0043	U	0.0049	U

				sys_loc_code	DP16	DP16	DP16	DP16	DP17		
				sys_sample_code	DPS1605N	DPS1610N	DPS1615N	DPS1615R	DPS1705N		
				sample_date	5/15/2013	6/10/2013	6/10/2013	6/10/2013	5/23/2013		
				sample_type_code	N	N	N	FD	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	4.5	9.5	14.5	14.5	4.5		
				end_depth	5.5	10.5	15.5	15.5	5.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg			0.86 U	0.97 U			
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg			0.017 U	0.019 U			
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg			0.0086 U	0.0097 U			
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg			0.0043 U	0.0049 U			
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg			0.0043 U	0.0049 U			



Attachment A  
 Subsurface Soil Data  
 Benning Road Facility RI/FS Project  
 3400 Benning Rd, N.E., Washington DC 20019

					sys_loc_code	DP16	DP16	DP16	DP16	DP17		
					sys_sample_code	DPS1605N	DPS1610N	DPS1615N	DPS1615R	DPS1705N		
					sample_date	5/15/2013	6/10/2013	6/10/2013	6/10/2013	5/23/2013		
					sample_type_code	N	N	N	FD	N		
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
					start_depth	4.5	9.5	14.5	14.5	4.5		
					end_depth	5.5	10.5	15.5	15.5	5.5		
					depth_unit	ft	ft	ft	ft	ft		
					validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg			0.0043	U		0.0049	U	
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg			0.0043	U		0.0049	U	
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg			0.0043	U		0.0049	U	
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg			0.0043	U		0.0049	U	
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg			0.0043	U		0.0049	U	
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg			0.0086	U		0.0097	U	

				sys_loc_code	DP17	DP17	DP18	DP18	DP18
				sys_sample_code	DPS1710N	DPS1715N	DPS1803N	DPS1810N	DPS1810N
				sample_date	6/11/2013	6/11/2013	5/23/2013	6/4/2013	6/4/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	9.5	14	2.5	9.5	9.5
				end_depth	10.5	15	3.5	10.5	10.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	N	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value
				unit	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg			9.15E-07	J	
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg			1.29E-07	U	
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg			2.24E-07	U	
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg			1.35E-07	U	
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg			1.17E-07	U	
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg			2.38E-07	J	
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg			9.53E-08	U	
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg			1.27E-07	U	
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg			1.2E-07	U	
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg			1.77E-07	U	
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg			1.22E-07	U	
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg			9.11E-08	U	
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg			1.09E-07	U	
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg			1.96E-07	U	
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg			1.48E-07	U	
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg			1.24E-05		
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg			2.76E-07	U	
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg			3.67E-08		
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg			2.38E-06	J	
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg			1.65E-07	U	
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg			1.98E-06	JN	
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg			4.59E-06	JN	
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg			3.19E-07	JN	
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg			1.24E-05	JN	
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg			2.9E-07	JN	
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg			2.45E-05	JN	
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg			3.67E-08		
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg			3200		
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg			0.021	J	
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg			1.6		
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg			27		
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg			0.32		
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg			0.07	J	
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg			140		
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg			9		
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg			4		
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg			3.7		
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg			9300		
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg			3.1		
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg			350		
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg			230		
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg			0.035	U	

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP17	DP17	DP18	DP18	DP18
				sys_sample_code	DPS1710N	DPS1715N	DPS1803N	DPS1810N	DPS1810N
				sample_date	6/11/2013	6/11/2013	5/23/2013	6/4/2013	6/4/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	9.5	14	2.5	9.5	9.5
				end_depth	10.5	15	3.5	10.5	10.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	N	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg			3.5		
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg			250		
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg			0.52	U	
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg			0.1	U	
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg			69		
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg			0.047	J	
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg			12		
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg			17		
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent					11
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg			8.9E-05	U	
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg			8.9E-05	U	
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg			0.00012		
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg			8.9E-05	U	
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg			8.9E-05	U	
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.0045	U	0.0047	U	0.0044
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.0045	U	0.0047	U	0.0044
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.0045	U	0.0047	U	0.0044
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.0045	U	0.0047	U	0.0044
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.0045	U	0.0047	U	0.0044
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.0045	U	0.0047	U	0.0044
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.0045	U	0.0047	U	0.0044
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.0045	U	0.0047	U	0.0044
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.0045	U	0.0047	U	0.0044
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg			8.9E-05	U	
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg			8.9E-05	U	
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg					
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg			8.9E-05	U	
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg					
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg			2.8E-05	J	
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg			8.9E-05	U	
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg			2E-05	J	
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg			3.7E-05	J	
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg			8.9E-05	U	
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg			8.9E-05	U	
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg			8.9E-05	U	
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg			2.3E-05	J	
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg			8.9E-05	U	
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg			2.5E-05	J	
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg					
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg					
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg			4.6E-05	J	
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg					

		sys_loc_code	DP17	DP17	DP18	DP18	DP18					
		sys_sample_code	DPS1710N	DPS1715N	DPS1803N	DPS1810N	DPS1810N					
		sample_date	6/11/2013	6/11/2013	5/23/2013	6/4/2013	6/4/2013					
		sample_type_code	N	N	N	N	N					
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
		start_depth	9.5	14	2.5	9.5	9.5					
		end_depth	10.5	15	3.5	10.5	10.5					
		depth_unit	ft	ft	ft	ft	ft					
		validated_yn	Y	Y	Y	N	Y					
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	mg/kg								
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	mg/kg								
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C	mg/kg								
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	mg/kg	0.0045	U	0.0047	U	0.0046		0.0047	U
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg	0.0045	U	0.0047	U	0.0046		0.0047	U
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg								

		sys_loc_code	DP17	DP17	DP18	DP18	DP18				
		sys_sample_code	DPS1710N	DPS1715N	DPS1803N	DPS1810N	DPS1810N				
		sample_date	6/11/2013	6/11/2013	5/23/2013	6/4/2013	6/4/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	9.5	14	2.5	9.5	9.5				
		end_depth	10.5	15	3.5	10.5	10.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	N	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg							



					DP17	DP17	DP18	DP18	DP18			
					DPS1710N	DPS1715N	DPS1803N	DPS1810N	DPS1810N			
					6/11/2013	6/11/2013	5/23/2013	6/4/2013	6/4/2013			
					N	N	N	N	N			
					Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
					9.5	14	2.5	9.5	9.5			
					10.5	15	3.5	10.5	10.5			
					ft	ft	ft	ft	ft			
					Y	Y	Y	N	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg								

					DP17	DP17	DP18	DP18	DP18
					DPS1710N	DPS1715N	DPS1803N	DPS1810N	DPS1810N
					6/11/2013	6/11/2013	5/23/2013	6/4/2013	6/4/2013
					N	N	N	N	N
					Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
					9.5	14	2.5	9.5	9.5
					10.5	15	3.5	10.5	10.5
					ft	ft	ft	ft	ft
					Y	Y	Y	N	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
p				unit	qualifiers	qualifiers	qualifiers	qualifiers	qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg					

		sys_loc_code	DP17	DP17	DP18	DP18	DP18				
		sys_sample_code	DPS1710N	DPS1715N	DPS1803N	DPS1810N	DPS1810N				
		sample_date	6/11/2013	6/11/2013	5/23/2013	6/4/2013	6/4/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	9.5	14	2.5	9.5	9.5				
		end_depth	10.5	15	3.5	10.5	10.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	N	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg							

				sys_loc_code	DP17	DP17	DP18	DP18	DP18		
				sys_sample_code	DPS1710N	DPS1715N	DPS1803N	DPS1810N	DPS1810N		
				sample_date	6/11/2013	6/11/2013	5/23/2013	6/4/2013	6/4/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	9.5	14	2.5	9.5	9.5		
				end_depth	10.5	15	3.5	10.5	10.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	N	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg							
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg							
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg							
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg			0.0036	U			
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg							
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg	18	U	18	U		19	U
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg	0.1	U	0.083	U		0.1	U
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg	18	U	18	U		11	J
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg							

				sys_loc_code	DP17	DP17	DP18	DP18	DP18		
				sys_sample_code	DPS1710N	DPS1715N	DPS1803N	DPS1810N	DPS1810N		
				sample_date	6/11/2013	6/11/2013	5/23/2013	6/4/2013	6/4/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	9.5	14	2.5	9.5	9.5		
				end_depth	10.5	15	3.5	10.5	10.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	N	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg							
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg							
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg							
RA_SO_VOCS	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCS	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCS	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCS	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCS	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg	0.0047	U		0.0046	U		

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP17	DP17	DP18	DP18	DP18		
				sys_sample_code	DPS1710N	DPS1715N	DPS1803N	DPS1810N	DPS1810N		
				sample_date	6/11/2013	6/11/2013	5/23/2013	6/4/2013	6/4/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	9.5	14	2.5	9.5	9.5		
				end_depth	10.5	15	3.5	10.5	10.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	N	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg	0.95	U		0.91	U		
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg	0.019	U		0.018	U		
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg	0.0095	U		0.0091	U		
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg	0.0047	U		0.0046	U		

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP17	DP17	DP18	DP18	DP18		
				sys_sample_code	DPS1710N	DPS1715N	DPS1803N	DPS1810N	DPS1810N		
				sample_date	6/11/2013	6/11/2013	5/23/2013	6/4/2013	6/4/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	9.5	14	2.5	9.5	9.5		
				end_depth	10.5	15	3.5	10.5	10.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	N	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg	0.0047	U		0.0046	U		
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg	0.0095	U		0.0091	U		

				sys_loc_code	DP19	DP19	DP19	DP19	DP19		
				sys_sample_code	DPS1902N	DPS1902R	DPS1910N	DPS1915N	DPS1915R		
				sample_date	5/23/2013	5/23/2013	6/5/2013	6/5/2013	6/5/2013		
				sample_type_code	N	FD	N	N	FD		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	1.5	1.5	9.5	14.5	14.5		
				end_depth	2.5	2.5	10.5	15.5	15.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg	0.000175		0.000153				
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg	2.97E-05	J	3.1E-05				
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg	3.53E-06	JN	3.59E-06	JN			
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg	4.27E-06	J	2.49E-06	JN			
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg	3.57E-06	JN	3.69E-06	JN			
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg	7.78E-06	JN	5.19E-06	JN			
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg	7.46E-06	JN	5.39E-06	JN			
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg	6.64E-06	J	4.81E-06	JN			
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg	8.25E-07	U	5.37E-07	U			
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg	2.17E-06	U	9.78E-07	U			
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg	1.18E-06	U	7.13E-07	U			
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg	3.22E-06	JN	2.12E-06	J			
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg	1.31E-06	U	1.88E-06	JN			
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg	2.26E-06	U	1.24E-06	U			
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg	2.69E-06	JN	1.82E-06	JN			
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg	0.00299		0.00239				
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg	6.43E-05	J	5.66E-05	J			
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg	6.56E-06		5.72E-06				
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg	0.000312		0.000277				
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg	9.64E-05	JN	8.72E-05	JN			
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg	5.42E-05	JN	4.59E-05	JN			
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg	0.000125	JN	0.000117	JN			
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg	8.97E-06	JN	0.000162	JN			
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg	0.000165	JN	0.000143	JN			
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg	2.26E-06	U	4.58E-06	JN			
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg	0.000121	JN	0.000119	JN			
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg	6.56E-06		5.72E-06				
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg	5100		4800	3900	J+		
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg	0.29		0.28	1.6			
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg	2.8		3	4.2	J-		
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg	64		79	580			
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg	0.31		0.29	0.32			
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg	0.28		0.29	0.88			
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg	8600		8000	39000			
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg	12		12	23			
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg	13		12	7.3			
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg	82		120	230			
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg	13000		13000	14000			
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg	290		400	5400			
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg	1600		1500	1900			
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg	170		200	400			
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg	0.065	J-	0.065	J-	0.11		



Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP19	DP19	DP19	DP19	DP19		
				sys_sample_code	DPS1902N	DPS1902R	DPS1910N	DPS1915N	DPS1915R		
				sample_date	5/23/2013	5/23/2013	6/5/2013	6/5/2013	6/5/2013		
				sample_type_code	N	FD	N	N	FD		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	1.5	1.5	9.5	14.5	14.5		
				end_depth	2.5	2.5	10.5	15.5	15.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg	12	13		18			
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg	830	580		680			
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg	0.19	J	0.17	J	0.57	UJ	
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg	0.11		0.078	J	0.42		
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg	140	140		190			
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg	0.093	J	0.1	J	0.071	J	
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg	20	19		36			
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg	100	120		560			
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent							
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg	0.0023	J	0.0016	J			
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg	0.00096	U	0.00092	U			
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg	0.012	J	0.0078	J			
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg	0.0013	J	0.00092	U			
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg	0.00096	U	0.00092	U			
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.0048	U	0.0047	U	0.0095	U	0.0047
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.0048	U	0.0047	U	0.0095	U	0.0047
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.0048	U	0.0047	U	0.0095	U	0.0047
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.0048	U	0.0047	U	0.0095	U	0.0047
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.016	J	0.012	J	0.0095	U	0.0047
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.0048	U	0.0047	U	0.0095	U	0.0047
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.091	J	0.093	J	0.0095	U	0.0047
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.0048	U	0.0047	U	0.0095	U	0.0047
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.0048	U	0.0047	U	0.0095	U	0.0047
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg	0.0012	J	0.00092	U			
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg	0.00096	U	0.00092	U			
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg							
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg	0.002	J	0.00049	J			
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg							
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg	0.0035	J	0.0022	J			
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg	0.00096	U	0.00092	U			
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg	0.0021	J	0.0012	J			
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg	0.0019	J	0.0016	J			
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg	0.0039	J	0.0025	J			
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg	0.0022	J	0.0004	J			
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg	0.00096	U	0.00092	U			
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg	0.0029	J	0.0014	J			
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg	0.0012	J	0.00092	U			
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg	0.00048	J	0.00092	U			
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg							
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg							
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg	0.036	J	0.021	J			
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg							

		sys_loc_code	DP19	DP19	DP19	DP19	DP19	DP19	DP19		
		sys_sample_code	DPS1902N	DPS1902R	DPS1901N	DPS1915N	DPS1915R				
		sample_date	5/23/2013	5/23/2013	6/5/2013	6/5/2013	6/5/2013				
		sample_type_code	N	FD	N	N	FD				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	1.5	1.5	9.5	14.5	14.5				
		end_depth	2.5	2.5	10.5	15.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C								
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C								
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C								
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C								
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	mg/kg	0.11	0.11		0.0095	U	0.0047	U
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg	0.11	0.11		0.0095	U	0.0047	U
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg							



Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

					sys_loc_code	DP19	DP19	DP19	DP19	DP19	
					sys_sample_code	DPS1902N	DPS1902R	DPS1910N	DPS1915N	DPS1915R	
					sample_date	5/23/2013	5/23/2013	6/5/2013	6/5/2013	6/5/2013	
					sample_type_code	N	FD	N	N	FD	
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
					start_depth	1.5	1.5	9.5	14.5	14.5	
					end_depth	2.5	2.5	10.5	15.5	15.5	
					depth_unit	ft	ft	ft	ft	ft	
					validated_yn	Y	Y	Y	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg							

					DP19	DP19	DP19	DP19	DP19			
					DPS1902N	DPS1902R	DPS1910N	DPS1915N	DPS1915R			
					5/23/2013	5/23/2013	6/5/2013	6/5/2013	6/5/2013			
					N	FD	N	N	FD			
					Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
					1.5	1.5	9.5	14.5	14.5			
					2.5	2.5	10.5	15.5	15.5			
					ft	ft	ft	ft	ft			
					Y	Y	Y	Y	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg								

		sys_loc_code	DP19	DP19	DP19	DP19	DP19				
		sys_sample_code	DPS1902N	DPS1902R	DPS1910N	DPS1915N	DPS1915R				
		sample_date	5/23/2013	5/23/2013	6/5/2013	6/5/2013	6/5/2013				
		sample_type_code	N	FD	N	N	FD				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	1.5	1.5	9.5	14.5	14.5				
		end_depth	2.5	2.5	10.5	15.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg							

		sys_loc_code	DP19	DP19	DP19	DP19	DP19				
		sys_sample_code	DPS1902N	DPS1902R	DPS1910N	DPS1915N	DPS1915R				
		sample_date	5/23/2013	5/23/2013	6/5/2013	6/5/2013	6/5/2013				
		sample_type_code	N	FD	N	N	FD				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	1.5	1.5	9.5	14.5	14.5				
		end_depth	2.5	2.5	10.5	15.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg							

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		sys_loc_code	DP19	DP19	DP19	DP19	DP19	DP19	DP19					
		sys_sample_code	DPS1902N	DPS1902R	DPS1910N	DPS1915N	DPS1915R	DPS1915R	DPS1915R					
		sample_date	5/23/2013	5/23/2013	6/5/2013	6/5/2013	6/5/2013	6/5/2013	6/5/2013					
		sample_type_code	N	FD	N	N	N	N	FD					
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
		start_depth	1.5	1.5	9.5	14.5	14.5	14.5	14.5					
		end_depth	2.5	2.5	10.5	15.5	15.5	15.5	15.5					
		depth_unit	ft	ft	ft	ft	ft	ft	ft					
		validated_yn	Y	Y	Y	Y	Y	Y	Y					
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers			
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg										
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg										
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg										
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg	0.038	U	0.037	U						
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg	0.0015	J	0.0013	J						
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg										
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg	96	U	93	U	380	U	19	U	20	U
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg	0.095	U	0.097	U	0.13	U	0.096	U	0.1	U
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg	390		430		2600		11	J	20	U
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg										
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg										
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg										
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg										
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg	0.21	J	0.22		3.3		0.0074	U	0.0077	U
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg	0.077		0.067		1.5	U	0.0074	U	0.0077	U
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg										

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP19	DP19	DP19	DP19	DP19				
				sys_sample_code	DPS1902N	DPS1902R	DPS1910N	DPS1915N	DPS1915R				
				sample_date	5/23/2013	5/23/2013	6/5/2013	6/5/2013	6/5/2013				
				sample_type_code	N	FD	N	N	FD				
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
				start_depth	1.5	1.5	9.5	14.5	14.5				
				end_depth	2.5	2.5	10.5	15.5	15.5				
				depth_unit	ft	ft	ft	ft	ft				
				validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers		
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg	0.56	J	0.56	6.1		0.0074	U	0.0077	U
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg									
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg									
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg	1.9	J	1.9	15		0.0074	U	0.0011	J
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg	2.3	J	2.1	14		0.0074	U	0.0077	U
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg	2.2	J	2.2	16		0.0074	U	0.0077	U
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg	1.8	J	1.6	11		0.0074	U	0.0077	U
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg	0.95	J	0.68	6.3		0.0074	U	0.0077	U
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg									
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg									
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg									
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg									
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg									
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg									
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg	1.9	J	1.9	15		0.0074	U	0.0013	J
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg	0.5	J	0.44	2.4		0.0074	U	0.0077	U
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg									
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg									
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg									
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg									
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg									
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg	4.4		4.3	30		0.0014	J	0.0016	J
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg	0.2	J	0.19	3.2		0.0074	U	0.0077	U
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg									
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg									
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg									
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg									
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg	1.5	J	1.4	8.9		0.0074	U	0.0077	U
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg									
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg	0.09		0.088	1.1	J	0.0074	U	0.0077	U
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg									
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg									
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg									
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg									
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg	1.8	J	1.9	23		0.0015	J	0.0017	J
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg									
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg	2.5	J	2.6	28		0.0012	J	0.0018	J
RA_SO_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg	0.0048	U	0.0046	U					
RA_SO_VOCs	1,1,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg	0.0048	U	0.0046	U					
RA_SO_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg	0.0048	U	0.0046	U					
RA_SO_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg	0.0048	U	0.0046	U					
RA_SO_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg	0.0048	U	0.0046	U					



Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP19	DP19	DP19	DP19	DP19		
				sys_sample_code	DPS1902N	DPS1902R	DPS1910N	DPS1915N	DPS1915R		
				sample_date	5/23/2013	5/23/2013	6/5/2013	6/5/2013	6/5/2013		
				sample_type_code	N	FD	N	N	FD		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	1.5	1.5	9.5	14.5	14.5		
				end_depth	2.5	2.5	10.5	15.5	15.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg	0.96	U	0.93	U			
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg	0.019	U	0.019	U			
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg	0.0096	U	0.0093	U			
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg	0.0048	U	0.0046	U			



Attachment A  
 Subsurface Soil Data  
 Benning Road Facility RI/FS Project  
 3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP19	DP19	DP19	DP19	DP19		
				sys_sample_code	DPS1902N	DPS1902R	DPS1910N	DPS1915N	DPS1915R		
				sample_date	5/23/2013	5/23/2013	6/5/2013	6/5/2013	6/5/2013		
				sample_type_code	N	FD	N	N	FD		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	1.5	1.5	9.5	14.5	14.5		
				end_depth	2.5	2.5	10.5	15.5	15.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg	0.0048	U	0.0046	U			
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg	0.0096	U	0.0093	U			

				sys_loc_code	DP20	DP20	DP20	DP22	DP22
				sys_sample_code	DPS2005N	DPS2005N	DPS2010N	DPS2203N	DPS2210N
				sample_date	5/30/2013	5/30/2013	6/12/2013	5/22/2013	6/12/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	4.5	4.5	9.5	2.5	9.5
				end_depth	5.5	5.5	10.5	3.5	10.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	N	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg					
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg					
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg					
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg					
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg					
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg					
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg					
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg					
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg					
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg					
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg					
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg					
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg					
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg					
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg					
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg					
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg					

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP20	DP20	DP20	DP22	DP22		
				sys_sample_code	DPS2005N	DPS2005N	DPS2010N	DPS2203N	DPS2210N		
				sample_date	5/30/2013	5/30/2013	6/12/2013	5/22/2013	6/12/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	4.5	4.5	9.5	2.5	9.5		
				end_depth	5.5	5.5	10.5	3.5	10.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	N	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg							
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg							
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg							
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg							
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg							
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg							
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg							
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg							
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent	21						
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg							
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg							
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg		0.0052	U	0.0048	U	0.0048	U
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg		0.0052	U	0.0048	U	0.0048	U
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg		0.0052	U	0.0048	U	0.0048	U
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg		0.0052	U	0.0048	U	0.0048	U
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg		0.0052	U	0.0048	U	0.0048	U
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg		0.0052	U	0.0048	U	0.0048	U
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg		0.0052	U	0.0074	U	0.03	0.0021 J
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg		0.0052	U	0.0048	U	0.0048	U
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg		0.0052	U	0.0048	U	0.0048	U
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg							
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg							
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg							
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg							
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg							
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg							
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg							

		sys_loc_code	DP20	DP20	DP20	DP22	DP22				
		sys_sample_code	DPS2005N	DPS2005N	DPS2010N	DPS2203N	DPS2210N				
		sample_date	5/30/2013	5/30/2013	6/12/2013	5/22/2013	6/12/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	4.5	9.5	2.5	9.5				
		end_depth	5.5	5.5	10.5	3.5	10.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	N	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	mg/kg							
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	mg/kg							
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C	mg/kg							
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	mg/kg		0.0052	U	0.0074		0.03	0.0021
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg		0.0052	U	0.0074		0.03	0.0021 J
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg							

		sys_loc_code	DP20	DP20	DP20	DP22	DP22				
		sys_sample_code	DPS2005N	DPS2005N	DPS2010N	DPS2203N	DPS2210N				
		sample_date	5/30/2013	5/30/2013	6/12/2013	5/22/2013	6/12/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	4.5	9.5	2.5	9.5				
		end_depth	5.5	5.5	10.5	3.5	10.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	N	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg							

		sys_loc_code	DP20	DP20	DP20	DP22	DP22				
		sys_sample_code	DPS2005N	DPS2005N	DPS2010N	DPS2203N	DPS2210N				
		sample_date	5/30/2013	5/30/2013	6/12/2013	5/22/2013	6/12/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	4.5	9.5	2.5	9.5				
		end_depth	5.5	5.5	10.5	3.5	10.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	N	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg							



Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP20	DP20	DP20	DP22	DP22		
				sys_sample_code	DPS2005N	DPS2005N	DPS2010N	DPS2203N	DPS2210N		
				sample_date	5/30/2013	5/30/2013	6/12/2013	5/22/2013	6/12/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	4.5	4.5	9.5	2.5	9.5		
				end_depth	5.5	5.5	10.5	3.5	10.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	N	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg							



					sys_loc_code	DP20	DP20	DP20	DP22	DP22	
					sys_sample_code	DPS2005N	DPS2005N	DPS2010N	DPS2203N	DPS2210N	
					sample_date	5/30/2013	5/30/2013	6/12/2013	5/22/2013	6/12/2013	
					sample_type_code	N	N	N	N	N	
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
					start_depth	4.5	4.5	9.5	2.5	9.5	
					end_depth	5.5	5.5	10.5	3.5	10.5	
					depth_unit	ft	ft	ft	ft	ft	
					validated_yn	N	Y	Y	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg							

				sys_loc_code	DP20	DP20	DP20	DP22	DP22		
				sys_sample_code	DPS2005N	DPS2005N	DPS2010N	DPS2203N	DPS2210N		
				sample_date	5/30/2013	5/30/2013	6/12/2013	5/22/2013	6/12/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	4.5	4.5	9.5	2.5	9.5		
				end_depth	5.5	5.5	10.5	3.5	10.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	N	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg							
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg							
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg							
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg							
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg							
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg		21	U	19	U	190	U
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg		0.096	U	0.11	U	0.12	U
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg		21	U	28	U	870	U
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg							

				sys_loc_code	DP20	DP20	DP20	DP22	DP22		
				sys_sample_code	DPS2005N	DPS2005N	DPS2010N	DPS2203N	DPS2210N		
				sample_date	5/30/2013	5/30/2013	6/12/2013	5/22/2013	6/12/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	4.5	4.5	9.5	2.5	9.5		
				end_depth	5.5	5.5	10.5	3.5	10.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	N	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg							
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg							
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg							
RA_SO_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg		0.0047	U			0.005	U
RA_SO_VOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg		0.0047	U			0.005	U
RA_SO_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg		0.0047	U			0.005	U
RA_SO_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg		0.0047	U			0.005	U
RA_SO_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg		0.0047	U			0.005	U

				sys_loc_code	DP20	DP20	DP20	DP22	DP22	
				sys_sample_code	DPS2005N	DPS2005N	DPS2010N	DPS2203N	DPS2210N	
				sample_date	5/30/2013	5/30/2013	6/12/2013	5/22/2013	6/12/2013	
				sample_type_code	N	N	N	N	N	
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
				start_depth	4.5	4.5	9.5	2.5	9.5	
				end_depth	5.5	5.5	10.5	3.5	10.5	
				depth_unit	ft	ft	ft	ft	ft	
				validated_yn	N	Y	Y	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	
p				unit	qualifiers	qualifiers	qualifiers	qualifiers	qualifiers	
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg		0.95	U		1	U
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg		0.019	U		0.02	U
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg		0.0095	U		0.01	U
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg		0.0047	U		0.005	U
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg		0.0047	U		0.005	U

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP20	DP20	DP20	DP22	DP22		
				sys_sample_code	DPS2005N	DPS2005N	DPS2010N	DPS2203N	DPS2210N		
				sample_date	5/30/2013	5/30/2013	6/12/2013	5/22/2013	6/12/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	4.5	4.5	9.5	2.5	9.5		
				end_depth	5.5	5.5	10.5	3.5	10.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	N	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	0.0047	U	0.0047	U	0.0047	U	0.005	U
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	0.0047	U	0.0047	U	0.0047	U	0.005	U
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	0.0047	U	0.0047	U	0.0047	U	0.005	U
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	0.0047	U	0.0047	U	0.0047	U	0.005	U
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	0.0047	U	0.0047	U	0.0047	U	0.005	U
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	0.0095	U	0.0095	U	0.0095	U	0.01	U

				sys_loc_code	DP22	DP23	DP23	DP23	DP24
				sys_sample_code	DPS2215N	DPS2305N	DPS2310N	DPS2315N	DPS2405N
				sample_date	6/12/2013	5/28/2013	6/12/2013	6/12/2013	5/20/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	14.5	4.5	9.5	14.5	4.5
				end_depth	15.5	5.5	10.5	15.5	5.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg					8.3E-06
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg					3.81E-06 J
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg					5.05E-08 U
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg					1.28E-07 J
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg					6.88E-08 JN
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg					4.31E-07 J
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg					1.31E-07 JN
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg					3.43E-07 J
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg					3.11E-08 U
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg					4.61E-08 JN
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg					1.73E-08 U
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg					9.44E-08 JN
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg					1.74E-08 U
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg					1.42E-08 U
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg					1.89E-08 U
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg					0.000246
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg					4.12E-06 J
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg					3.62E-07
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg					1.9E-05
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg					1.02E-05 JN
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg					3.29E-06 JN
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg					4.42E-06 JN
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg					4.61E-08 JN
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg					1.34E-06 JN
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg					3E-07 JN
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg					1.63E-06 JN
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg					3.62E-07
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg					
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg					
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg					
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg					
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg					
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg					
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg					
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg					
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg					
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg					
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg					
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg					
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg					
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg					
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg					

				sys_loc_code	DP22	DP23	DP23	DP23	DP24				
				sys_sample_code	DPS2215N	DPS2305N	DPS2310N	DPS2315N	DPS2405N				
				sample_date	6/12/2013	5/28/2013	6/12/2013	6/12/2013	5/20/2013				
				sample_type_code	N	N	N	N	N				
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
				start_depth	14.5	4.5	9.5	14.5	4.5				
				end_depth	15.5	5.5	10.5	15.5	5.5				
				depth_unit	ft	ft	ft	ft	ft				
				validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers		
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg									
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg									
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg									
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg									
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg									
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg									
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg									
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg									
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent									
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg						1.7E-05	J		
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg						2.9E-05	J		
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg						2.1E-05	J		
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg						9.1E-05	U		
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg						9.1E-05	U		
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.005	U	0.0046	U	0.0049	U	0.0053	U	
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.005	U	0.0046	U	0.0049	U	0.0053	U	
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.005	U	0.0046	U	0.0049	U	0.0053	U	
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.005	U	0.0046	U	0.0049	U	0.0053	U	
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.015	J	0.0046	U	0.0049	U	0.0053	U	
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.005	U	0.0046	U	0.0049	U	0.0053	U	
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.022	J	0.0046	U	0.003	J	0.0053	U	
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.005	U	0.0046	U	0.0049	U	0.0053	U	
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.041	J	0.0046	U	0.0049	U	0.0053	U	
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg								9.1E-05	U
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg								9.1E-05	U
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg									
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg								9.1E-05	U
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg									
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg								9.1E-05	U
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg								9.1E-05	U
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg								9.1E-05	U
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg								9.1E-05	U
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg								3.8E-05	J
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg								9.1E-05	UJ
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg								2.4E-05	J
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg								2.7E-05	J
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg								9.1E-05	U
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg								9.1E-05	U
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg									
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg									
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg								0.00018	U
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg									

		sys_loc_code	DP22	DP23	DP23	DP23	DP24					
		sys_sample_code	DPS2215N	DPS2305N	DPS2310N	DPS2315N	DPS2405N					
		sample_date	6/12/2013	5/28/2013	6/12/2013	6/12/2013	5/20/2013					
		sample_type_code	N	N	N	N	N					
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
		start_depth	14.5	4.5	9.5	14.5	4.5					
		end_depth	15.5	5.5	10.5	15.5	5.5					
		depth_unit	ft	ft	ft	ft	ft					
		validated_yn	Y	Y	Y	Y	Y					
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	mg/kg								
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	mg/kg								
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C	mg/kg								
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	mg/kg	0.078	0.0046	U	0.003	0.0053	U	0.0046	U
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg	0.078	0.0046	U	0.003	0.0053	U	0.0046	U
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg								



		sys_loc_code	DP22	DP23	DP23	DP23	DP24				
		sys_sample_code	DPS2215N	DPS2305N	DPS2310N	DPS2315N	DPS2405N				
		sample_date	6/12/2013	5/28/2013	6/12/2013	6/12/2013	5/20/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	14.5	4.5	9.5	14.5	4.5				
		end_depth	15.5	5.5	10.5	15.5	5.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg							

					sys_loc_code	DP22	DP23	DP23	DP23	DP24
					sys_sample_code	DPS2215N	DPS2305N	DPS2310N	DPS2315N	DPS2405N
					sample_date	6/12/2013	5/28/2013	6/12/2013	6/12/2013	5/20/2013
					sample_type_code	N	N	N	N	N
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
					start_depth	14.5	4.5	9.5	14.5	4.5
					end_depth	15.5	5.5	10.5	15.5	5.5
					depth_unit	ft	ft	ft	ft	ft
					validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg						

					sys_loc_code	DP22	DP23	DP23	DP23	DP24
					sys_sample_code	DPS2215N	DPS2305N	DPS2310N	DPS2315N	DPS2405N
					sample_date	6/12/2013	5/28/2013	6/12/2013	6/12/2013	5/20/2013
					sample_type_code	N	N	N	N	N
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
					start_depth	14.5	4.5	9.5	14.5	4.5
					end_depth	15.5	5.5	10.5	15.5	5.5
					depth_unit	ft	ft	ft	ft	ft
					validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg						

		sys_loc_code	DP22	DP23	DP23	DP23	DP24				
		sys_sample_code	DPS2215N	DPS2305N	DPS2310N	DPS2315N	DPS2405N				
		sample_date	6/12/2013	5/28/2013	6/12/2013	6/12/2013	5/20/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	14.5	4.5	9.5	14.5	4.5				
		end_depth	15.5	5.5	10.5	15.5	5.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg							

				sys_loc_code	DP22	DP23	DP23	DP23	DP24					
				sys_sample_code	DPS2215N	DPS2305N	DPS2310N	DPS2315N	DPS2405N					
				sample_date	6/12/2013	5/28/2013	6/12/2013	6/12/2013	5/20/2013					
				sample_type_code	N	N	N	N	N					
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
				start_depth	14.5	4.5	9.5	14.5	4.5					
				end_depth	15.5	5.5	10.5	15.5	5.5					
				depth_unit	ft	ft	ft	ft	ft					
				validated_yn	Y	Y	Y	Y	Y					
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers			
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg										
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg										
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg										
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg						0.0037	U			
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg						9.1E-05	U			
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg										
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg	21	U	18	U	20	U	21	U	18	U
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg	0.098	U	0.1	U	0.086	U	0.089	U	0.09	UU
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg	33		18	U	20	U	21	U	11	J
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg										
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg										
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg										
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg										
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg									0.0073	U
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg									0.0073	U
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg										

				sys_loc_code	DP22	DP23	DP23	DP23	DP24		
				sys_sample_code	DPS2215N	DPS2305N	DPS2310N	DPS2315N	DPS2405N		
				sample_date	6/12/2013	5/28/2013	6/12/2013	6/12/2013	5/20/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	14.5	4.5	9.5	14.5	4.5		
				end_depth	15.5	5.5	10.5	15.5	5.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg						0.0073	U
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg						0.0073	U
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg						0.0073	U
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg						0.004	J
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg						0.0073	U
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg						0.0073	U
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg						0.0073	U
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg						0.0073	U
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg							
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg						0.0075	
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg						0.0073	U
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg						0.0073	U
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg						0.0073	U
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg						0.0073	U
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg						0.0052	J
RA_SO_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg			0.0044	U		0.0059	U
RA_SO_VOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg			0.0044	U		0.0059	U
RA_SO_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg			0.0044	U		0.0059	U
RA_SO_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg			0.0044	U		0.0059	U
RA_SO_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg			0.0044	U		0.0059	U

				sys_loc_code	DP22	DP23	DP23	DP23	DP24
				sys_sample_code	DPS2215N	DPS2305N	DPS2310N	DPS2315N	DPS2405N
				sample_date	6/12/2013	5/28/2013	6/12/2013	6/12/2013	5/20/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	14.5	4.5	9.5	14.5	4.5
				end_depth	15.5	5.5	10.5	15.5	5.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg			0.89	U	1.2
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg			0.018	U	0.024
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg			0.0089	U	0.012
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg			0.0044	U	0.0059
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg			0.0044	U	0.0059

					sys_loc_code	DP22	DP23	DP23	DP23	DP24		
					sys_sample_code	DPS2215N	DPS2305N	DPS2310N	DPS2315N	DPS2405N		
					sample_date	6/12/2013	5/28/2013	6/12/2013	6/12/2013	5/20/2013		
					sample_type_code	N	N	N	N	N		
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
					start_depth	14.5	4.5	9.5	14.5	4.5		
					end_depth	15.5	5.5	10.5	15.5	5.5		
					depth_unit	ft	ft	ft	ft	ft		
					validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg				0.0044	U		0.0059	U
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg				0.0044	U		0.0059	U
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg				0.0044	U		0.0059	U
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg				0.0044	U		0.0059	U
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg				0.0044	U		0.0059	U
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg				0.0089	U		0.012	U



				sys_loc_code	DP24	DP24	DP24	DP24	DP24	
				sys_sample_code	DPS2405R	DPS2410N	DPS2410N	DPS2410R	DPS2410R	
				sample_date	5/20/2013	6/4/2013	6/4/2013	6/4/2013	6/4/2013	
				sample_type_code	FD	N	N	FD	FD	
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
				start_depth	4.5	9.5	9.5	9.5	9.5	
				end_depth	5.5	10.5	10.5	10.5	10.5	
				depth_unit	ft	ft	ft	ft	ft	
				validated_yn	Y	N	Y	N	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value	
				unit	unit	unit	unit	unit	unit	
					interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg	5.17E-06	J				
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg	5.96E-07	JN				
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg	6.84E-08	U				
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg	7.08E-08	U				
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg	4.44E-08	U				
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg	1.79E-07	JN				
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg	4.04E-08	U				
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg	2.88E-07	JN				
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg	5.62E-08	U				
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg	3.84E-08	U				
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg	2.91E-08	U				
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg	4.11E-08	U				
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg	2.38E-08	U				
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg	3.7E-08	U				
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg	4.62E-08	JN				
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg	0.00019					
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg	9.18E-07	J				
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg	1.66E-07					
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg	1.22E-05					
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg	1.7E-06	JN				
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg	2.93E-06	JN				
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg	5.03E-07	JN				
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg	1.26E-07	JN				
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg	3.68E-08	JN				
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg	2.58E-07	JN				
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg	8.71E-08	JN				
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg	1.66E-07					
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg			2300	J+	2300	J+
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg			0.017	J	0.23	U
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg			1.1	J-	1.2	J-
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg			10		11	
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg			0.22		0.28	
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg			0.041	J	0.049	J
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg			310		330	
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg			7.5		10	
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg			3.6		4	
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg			5.5		5.6	
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg			8800	J	9800	J
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg			2.5		2.6	
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg			520		500	
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg			73		79	
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg			0.033	U	0.037	U

				sys_loc_code	DP24	DP24	DP24	DP24	DP24
				sys_sample_code	DPS2405R	DPS2410N	DPS2410N	DPS2410R	DPS2410R
				sample_date	5/20/2013	6/4/2013	6/4/2013	6/4/2013	6/4/2013
				sample_type_code	FD	N	N	FD	FD
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	4.5	9.5	9.5	9.5	9.5
				end_depth	5.5	10.5	10.5	10.5	10.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	N	Y	N	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg			2.8		3
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg			520		510
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg			0.55	UJ	0.57
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg			0.11	U	0.11
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg			25		28
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg			0.044	J	0.047
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg			12		11
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg			10		9.6
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent		8.6			13
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg	9.1E-05	U			
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg	2.6E-05	J			
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg	1.8E-05	J			
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg	9.1E-05	U			
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg	9.1E-05	U			
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.0045	U	0.0046	U	0.0048
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.0045	U	0.0046	U	0.0048
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.0045	U	0.0046	U	0.0048
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.0045	U	0.0046	U	0.0048
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.0045	U	0.0046	U	0.0048
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.0045	U	0.0046	U	0.0048
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.0045	U	0.0046	U	0.0048
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.0045	U	0.0046	U	0.0048
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.0045	U	0.0046	U	0.0048
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg	9.1E-05	U			
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg	9.1E-05	U			
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg					
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg	9.1E-05	U			
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg					
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg	9.1E-05	U			
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg	2.3E-05	J			
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg	9.1E-05	U			
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg	9.1E-05	U			
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg	3E-05	J			
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg	9.1E-05	U			
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg	9.1E-05	U			
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg	3E-05	J			
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg	9.1E-05	U			
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg	9.1E-05	U			
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg					
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg					
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg	0.00018	U			
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg					

		sys_loc_code	DP24	DP24	DP24	DP24	DP24					
		sys_sample_code	DPS2405R	DPS2410N	DPS2410N	DPS2410R	DPS2410R					
		sample_date	5/20/2013	6/4/2013	6/4/2013	6/4/2013	6/4/2013					
		sample_type_code	FD	N	N	FD	FD					
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
		start_depth	4.5	9.5	9.5	9.5	9.5					
		end_depth	5.5	10.5	10.5	10.5	10.5					
		depth_unit	ft	ft	ft	ft	ft					
		validated_yn	Y	N	Y	N	Y					
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C									
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C									
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C									
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C									
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	mg/kg	0.0045	U		0.0046	U		0.0048	U
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg	0.0045	U		0.0046	U		0.0048	U
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg								

		sys_loc_code	DP24	DP24	DP24	DP24	DP24				
		sys_sample_code	DPS2405R	DPS2410N	DPS2410N	DPS2410R	DPS2410R				
		sample_date	5/20/2013	6/4/2013	6/4/2013	6/4/2013	6/4/2013				
		sample_type_code	FD	N	N	FD	FD				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	9.5	9.5	9.5	9.5				
		end_depth	5.5	10.5	10.5	10.5	10.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	N	Y	N	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg							

		sys_loc_code	DP24	DP24	DP24	DP24	DP24				
		sys_sample_code	DPS2405R	DPS2410N	DPS2410N	DPS2410R	DPS2410R				
		sample_date	5/20/2013	6/4/2013	6/4/2013	6/4/2013	6/4/2013				
		sample_type_code	FD	N	N	FD	FD				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	9.5	9.5	9.5	9.5				
		end_depth	5.5	10.5	10.5	10.5	10.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	N	Y	N	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg							

		sys_loc_code	DP24	DP24	DP24	DP24	DP24				
		sys_sample_code	DPS2405R	DPS2410N	DPS2410N	DPS2410R	DPS2410R				
		sample_date	5/20/2013	6/4/2013	6/4/2013	6/4/2013	6/4/2013				
		sample_type_code	FD	N	N	FD	FD				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	9.5	9.5	9.5	9.5				
		end_depth	5.5	10.5	10.5	10.5	10.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	N	Y	N	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg							

		sys_loc_code	DP24	DP24	DP24	DP24	DP24				
		sys_sample_code	DPS2405R	DPS2410N	DPS2410N	DPS2410R	DPS2410R				
		sample_date	5/20/2013	6/4/2013	6/4/2013	6/4/2013	6/4/2013				
		sample_type_code	FD	N	N	FD	FD				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	9.5	9.5	9.5	9.5				
		end_depth	5.5	10.5	10.5	10.5	10.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	N	Y	N	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg							

		sys_loc_code	DP24	DP24	DP24	DP24	DP24	DP24	DP24
		sys_sample_code	DPS2405R	DPS2410N	DPS2410N	DPS2410R	DPS2410R	DPS2410R	DPS2410R
		sample_date	5/20/2013	6/4/2013	6/4/2013	6/4/2013	6/4/2013	6/4/2013	6/4/2013
		sample_type_code	FD	N	N	FD	FD	FD	FD
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
		start_depth	4.5	9.5	9.5	9.5	9.5	9.5	9.5
		end_depth	5.5	10.5	10.5	10.5	10.5	10.5	10.5
		depth_unit	ft	ft	ft	ft	ft	ft	ft
		validated_yn	Y	N	Y	N	Y	N	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg					
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg					
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg					
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg	0.0036	U			
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg	9.1E-05	U			
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg					
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg	18	U	18	U	19
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg	0.089	UJ	0.1	U	0.1
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg	18	U	18	U	19
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg					
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg					
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg					
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg					
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg					
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg					
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg					
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg					
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg					
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg					
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg					
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg					
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg					
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg					
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg					
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg					
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg					
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg					
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg					
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg					
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg					
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg					
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg					
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg					
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg					
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg					
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg					
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg	0.0073	U	0.0072	U	0.0075
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg	0.0073	U	0.0072	U	0.0075
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg					



				sys_loc_code	DP24	DP24	DP24	DP24	DP24			
				sys_sample_code	DPS2405R	DPS2410N	DPS2410N	DPS2410R	DPS2410R			
				sample_date	5/20/2013	6/4/2013	6/4/2013	6/4/2013	6/4/2013			
				sample_type_code	FD	N	N	FD	FD			
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth	4.5	9.5	9.5	9.5	9.5			
				end_depth	5.5	10.5	10.5	10.5	10.5			
				depth_unit	ft	ft	ft	ft	ft			
				validated_yn	Y	N	Y	N	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg	0.0073	U		0.0072	U		0.0075	U
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg								
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg	0.0073	U		0.0072	U		0.0075	U
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg	0.0073	U		0.0072	U		0.0075	U
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg	0.0073	U		0.0072	U		0.0075	U
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg	0.0073	U		0.0072	U		0.0075	U
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg	0.0073	U		0.0072	U		0.0075	U
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg								
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg	0.0073	U		0.0072	U		0.0075	U
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg	0.0073	U		0.0072	U		0.0075	U
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg								
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg								
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg	0.01			0.0013	J		0.0075	U
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg	0.0073	U		0.0072	U		0.0075	U
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg	0.0073	U		0.0072	U		0.0075	U
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg	0.0073	U		0.0072	U		0.0075	U
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg								
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg								
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg	0.0071	J		0.0014	J		0.0075	U
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg	0.0062	J		0.00087	J		0.0075	U
RA_SO_VOCS	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg	0.0055	U						
RA_SO_VOCS	1,1,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg	0.0055	U						
RA_SO_VOCS	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg	0.0055	U						
RA_SO_VOCS	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg	0.0055	U						
RA_SO_VOCS	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg	0.0055	U						

				sys_loc_code	DP24	DP24	DP24	DP24	DP24		
				sys_sample_code	DPS2405R	DPS2410N	DPS2410N	DPS2410R	DPS2410R		
				sample_date	5/20/2013	6/4/2013	6/4/2013	6/4/2013	6/4/2013		
				sample_type_code	FD	N	N	FD	FD		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	4.5	9.5	9.5	9.5	9.5		
				end_depth	5.5	10.5	10.5	10.5	10.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	N	Y	N	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg	1.1	U					
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg	0.022	U					
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg	0.011	U					
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg	0.0055	U					
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg	0.0055	U					

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP24	DP24	DP24	DP24	DP24					
				sys_sample_code	DPS2405R	DPS2410N	DPS2410N	DPS2410R	DPS2410R					
				sample_date	5/20/2013	6/4/2013	6/4/2013	6/4/2013	6/4/2013					
				sample_type_code	FD	N	N	FD	FD					
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
				start_depth	4.5	9.5	9.5	9.5	9.5					
				end_depth	5.5	10.5	10.5	10.5	10.5					
				depth_unit	ft	ft	ft	ft	ft					
				validated_yn	Y	N	Y	N	Y					
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_sult_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg	0.0055	U								
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg	0.0055	U								
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg	0.0055	U								
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg	0.0055	U								
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg	0.0055	U								
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg	0.011	U								

				sys_loc_code	DP24	DP24	DP26	DP26	DP27		
				sys_sample_code	DPS2415N	DPS2415N	DPS2604N	DPS2614N	DPS2707N		
				sample_date	6/4/2013	6/4/2013	3/28/2013	3/29/2013	3/26/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	14.5	14.5	3.5	13.5	6.5		
				end_depth	15.5	15.5	4.5	14.5	7.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	N	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg							
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg							
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg							
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg							
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg							
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg			9700		2200		5900
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg			0.021	J-	0.007	J	0.085
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg			1.6	J-	1.9	J-	9.5
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg			43		21		59
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg			0.34		0.45		0.7
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg			0.13		0.051	J	0.39
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg			2800		290		6300
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg			14		5.6		16
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg			4.4		4.5		6.9
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg			12		4.3		30
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg			13000		10000		19000
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg			29	J+	4.5	J+	36
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg			1400		190		940
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg			80		43	J	150
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg			0.034	J	0.035	UJ	0.079

				sys_loc_code	DP24	DP24	DP26	DP26	DP27
				sys_sample_code	DPS2415N	DPS2415N	DPS2604N	DPS2614N	DPS2707N
				sample_date	6/4/2013	6/4/2013	3/28/2013	3/29/2013	3/26/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	14.5	14.5	3.5	13.5	6.5
				end_depth	15.5	15.5	4.5	14.5	7.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	N	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value
				unit	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg			5.6		18
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg			590		1400
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg			0.29	J-	0.89
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg			0.032	J	0.086
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg			130		370
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg			0.12		0.14
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg			33		110
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg			22		72
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent	11				
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg					
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg					
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg					
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg		0.0047	U	0.0047	U
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg		0.0047	U	0.0047	U
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg		0.0047	U	0.0047	U
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg		0.0047	U	0.0047	U
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg		0.0047	U	0.0047	U
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg		0.0047	U	0.0047	U
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg		0.0047	U	0.0047	U
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg		0.0047	U	0.0047	U
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg		0.0047	U	0.0047	U
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg					
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg					
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg					
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg					
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg					
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg					
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg					

		sys_loc_code	DP24	DP24	DP26	DP26	DP27				
		sys_sample_code	DPS2415N	DPS2415N	DPS2604N	DPS2614N	DPS2707N				
		sample_date	6/4/2013	6/4/2013	3/28/2013	3/29/2013	3/26/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	14.5	14.5	3.5	13.5	6.5				
		end_depth	15.5	15.5	4.5	14.5	7.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	N	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	mg/kg							
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	mg/kg							
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C	mg/kg							
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	mg/kg		0.0047	U	0.0047	U	0.0047	U
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg		0.0047	U	0.0047	U	0.0047	U
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg							

					sys_loc_code	DP24	DP24	DP26	DP26	DP27
					sys_sample_code	DPS2415N	DPS2415N	DPS2604N	DPS2614N	DPS2707N
					sample_date	6/4/2013	6/4/2013	3/28/2013	3/29/2013	3/26/2013
					sample_type_code	N	N	N	N	N
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
					start_depth	14.5	14.5	3.5	13.5	6.5
					end_depth	15.5	15.5	4.5	14.5	7.5
					depth_unit	ft	ft	ft	ft	ft
					validated_yn	N	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg						

		sys_loc_code	DP24	DP24	DP26	DP26	DP27				
		sys_sample_code	DPS2415N	DPS2415N	DPS2604N	DPS2614N	DPS2707N				
		sample_date	6/4/2013	6/4/2013	3/28/2013	3/29/2013	3/26/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	14.5	14.5	3.5	13.5	6.5				
		end_depth	15.5	15.5	4.5	14.5	7.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	N	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg							



				sys_loc_code	DP24	DP24	DP26	DP26	DP27		
				sys_sample_code	DPS2415N	DPS2415N	DPS2604N	DPS2614N	DPS2707N		
				sample_date	6/4/2013	6/4/2013	3/28/2013	3/29/2013	3/26/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	14.5	14.5	3.5	13.5	6.5		
				end_depth	15.5	15.5	4.5	14.5	7.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	N	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg							

		sys_loc_code	DP24	DP24	DP26	DP26	DP27				
		sys_sample_code	DPS2415N	DPS2415N	DPS2604N	DPS2614N	DPS2707N				
		sample_date	6/4/2013	6/4/2013	3/28/2013	3/29/2013	3/26/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	14.5	14.5	3.5	13.5	6.5				
		end_depth	15.5	15.5	4.5	14.5	7.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	N	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg							

		sys_loc_code	DP24	DP24	DP26	DP26	DP27				
		sys_sample_code	DPS2415N	DPS2415N	DPS2604N	DPS2614N	DPS2707N				
		sample_date	6/4/2013	6/4/2013	3/28/2013	3/29/2013	3/26/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	14.5	14.5	3.5	13.5	6.5				
		end_depth	15.5	15.5	4.5	14.5	7.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	N	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg							
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg							
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg							
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg							
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg							
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg		19	U	19	U	19	U
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg		0.093	U	0.086	U	0.085	U
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg		19	U	28	U	33	U
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg				0.032	J	0.037	U
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg				0.19	U	0.037	U
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg				0.038	U	0.0076	U
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg				0.19	U	0.037	U
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg				0.19	U	0.037	U
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg				0.19	U	0.037	U
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg				0.038	U	0.0076	U
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg				0.19	U	0.037	U
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg				0.96	U	0.19	U
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg				0.19	U	0.037	U
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg				0.19	U	0.037	U
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg				0.038	U	0.0076	U
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg				0.19	U	0.037	U
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg				0.044	U	0.0076	U
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg				0.19	U	0.037	U
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg				0.96	U	0.19	U
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg				0.19	U	0.037	U
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg				0.19	U	0.037	U
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg				0.96	U	0.19	U
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg				0.96	U	0.19	U
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg				0.19	U	0.037	U
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg				0.19	U	0.037	U
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg				0.19	U	0.037	U
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg				0.19	U	0.037	U
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg				0.19	U	0.037	U
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg				0.96	U	0.19	U
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg				0.96	U	0.19	U
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg		0.0074	U	0.058	U	0.0076	U
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg		0.0074	U	0.02	J	0.0076	U
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg				0.19	U	0.037	U

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP24	DP24	DP26	DP26	DP27			
				sys_sample_code	DPS2415N	DPS2415N	DPS2604N	DPS2614N	DPS2707N			
				sample_date	6/4/2013	6/4/2013	3/28/2013	3/29/2013	3/26/2013			
				sample_type_code	N	N	N	N	N			
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth	14.5	14.5	3.5	13.5	6.5			
				end_depth	15.5	15.5	4.5	14.5	7.5			
				depth_unit	ft	ft	ft	ft	ft			
				validated_yn	N	Y	Y	Y	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value			
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg		0.0074	U	0.1	0.0076	U	0.098	
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg				0.19	0.037	U	0.078	U
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg				0.19	0.018	J	0.078	UJ
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg		0.0074	U	0.24	0.0076	U	0.34	
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg		0.0074	U	0.24	0.0076	U	0.33	
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg		0.0074	U	0.24	0.0076	U	0.39	
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg		0.0074	U	0.17	0.0076	U	0.26	
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg		0.0074	U	0.13	0.0076	U	0.15	
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg				0.19	0.037	U	0.078	U
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg				0.038	0.0076	U	0.016	U
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg				0.38	0.076	U	0.12	J
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg				0.19	0.0096	J	0.078	U
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg				0.96	0.19	U	0.4	U
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg				0.057	0.0076	U	0.037	
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg		0.0074	U	0.23	0.0076	U	0.37	
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg		0.0074	U	0.055	0.0076	U	0.062	
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg				0.098	0.037	J	0.075	J
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg				0.19	0.037	U	0.078	U
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg				0.19	0.037	U	0.078	U
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg				0.19	0.037	U	0.078	U
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg				0.19	0.037	U	0.078	U
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg		0.0074	U	0.6	0.0076	U	0.55	
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg		0.0074	U	0.1	0.0076	U	0.06	
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg				0.038	0.0076	U	0.016	U
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg				0.038	0.0076	U	0.016	U
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg				0.19	0.037	U	0.078	U
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg				0.19	0.037	U	0.078	U
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg		0.0074	U	0.15	0.0076	U	0.2	
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg				0.19	0.037	U	0.078	U
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg		0.0074	U	0.1	0.0076	U	0.087	
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg				0.38	0.076	U	0.16	U
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg				0.038	0.0076	U	0.016	U
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg				0.19	0.037	U	0.078	U
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg				0.19	0.037	U	0.078	U
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg		0.0074	U	0.4	0.0076	U	0.49	
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg				0.038	0.0076	U	0.016	U
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg		0.0074	U	0.34	0.0076	U	0.53	
RA_SO_VOCS	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg				0.0043	0.0043	U	0.0046	U
RA_SO_VOCS	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg				0.0043	0.0043	U	0.0046	U
RA_SO_VOCS	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg				0.0043	0.0043	U	0.0046	U
RA_SO_VOCS	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg				0.0043	0.0043	U	0.0046	U
RA_SO_VOCS	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg				0.0043	0.0043	U	0.0046	U

				sys_loc_code	DP24	DP24	DP26	DP26	DP27			
				sys_sample_code	DPS2415N	DPS2415N	DPS2604N	DPS2614N	DPS2707N			
				sample_date	6/4/2013	6/4/2013	3/28/2013	3/29/2013	3/26/2013			
				sample_type_code	N	N	N	N	N			
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth	14.5	14.5	3.5	13.5	6.5			
				end_depth	15.5	15.5	4.5	14.5	7.5			
				depth_unit	ft	ft	ft	ft	ft			
				validated_yn	N	Y	Y	Y	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value		
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg			0.87	U	0.86	U	0.93	U
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg			0.017	U	0.017	U	0.019	U
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg			0.0087	U	0.0086	U	0.0093	U
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	Tetracloroethylene	127-18-4	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U

					sys_loc_code	DP24	DP24	DP26	DP26	DP27		
					sys_sample_code	DPS2415N	DPS2415N	DPS2604N	DPS2614N	DPS2707N		
					sample_date	6/4/2013	6/4/2013	3/28/2013	3/29/2013	3/26/2013		
					sample_type_code	N	N	N	N	N		
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
					start_depth	14.5	14.5	3.5	13.5	6.5		
					end_depth	15.5	15.5	4.5	14.5	7.5		
					depth_unit	ft	ft	ft	ft	ft		
					validated_yn	N	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg			0.0043	U	0.0043	U	0.0046	U
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg			0.0087	U	0.0086	U	0.0093	U

		sys_loc_code	DP28	DP29	DP32	DP32	DP33							
		sys_sample_code	DPS2808N	DPS2910N	DPS3210N	DPS3210R	DPS3315N							
		sample_date	4/2/2013	4/2/2013	4/1/2013	4/1/2013	4/4/2013							
		sample_type_code	N	N	N	FD	N							
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013							
		start_depth	7.5	9	9.5	9.5	14							
		end_depth	8.5	11	10.5	10.5	16							
		depth_unit	ft	ft	ft	ft	ft							
		validated_yn	Y	Y	Y	Y	Y							
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers			
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg										
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg										
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg										
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg										
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg										
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg										
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg										
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg										
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg										
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg										
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg										
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg										
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg										
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg										
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg										
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg										
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg										
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg										
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg										
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg										
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg										
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg										
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg										
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg										
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg										
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg										
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg										
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg	2000		9200		2200		2400		3200	
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg	0.22	U	0.24		0.24	U	0.24	U	0.23	U
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg	1.8	J-	2.9	J-	2.6	J-	2.8	J-	3.7	J-
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg	9.4		39		17		11		15	
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg	0.36		0.65		0.4		0.29		0.91	
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg	0.059	J	0.12		0.081	J	0.07	J	0.12	
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg	300		2000		330		330		310	
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg	9.8		16		11		12		22	
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg	7.3		6.8		1		1		4.6	
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg	6.5		13		8		7.3		17	
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg	13000		20000		20000		19000		41000	
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg	2.4	J+	42	J+	6.7	J+	3.2	J+	5	J+
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg	220		1600		120		120		320	
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg	140	J	160	J	13	J	14	J	35	J
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg	0.015	J	1	J	0.016	J	0.038	UJ	0.019	J

				sys_loc_code	DP28	DP29	DP32	DP32	DP33					
				sys_sample_code	DPS2808N	DPS2910N	DPS3210N	DPS3210R	DPS3315N					
				sample_date	4/2/2013	4/2/2013	4/1/2013	4/1/2013	4/4/2013					
				sample_type_code	N	N	N	FD	N					
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
				start_depth	7.5	9	9.5	9.5	14					
				end_depth	8.5	11	10.5	10.5	16					
				depth_unit	ft	ft	ft	ft	ft					
				validated_yn	Y	Y	Y	Y	Y					
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers		
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg	3.4		8.6		1.7		1.7		7	
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg	260		1400		250		210		340	
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg	0.54	U	0.61	U	0.6	U	0.59	U	0.57	U
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg	0.11	U	0.025	J	0.0071	J	0.0082	J	0.0075	J
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg	19	U	73		68		68		76	
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg	0.11	U	0.14		0.12	U	0.12	U	0.11	U
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg	15		26		18		22		32	
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg	12		35		10		8.7		28	
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent										
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg										
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg										
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg										
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.0009	U	0.001	U	0.00099	U	0.00098	U	0.00098	U
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.0009	U	0.001	U	0.00099	U	0.00098	U	0.00098	U
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.0009	U	0.001	U	0.00099	U	0.00098	U	0.00098	U
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.0009	U	0.001	U	0.00099	U	0.00098	U	0.00098	U
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.0009	U	0.001	U	0.00099	U	0.00098	U	0.00098	U
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.0009	U	0.001	U	0.00099	U	0.00098	U	0.00098	U
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.0009	U	0.001	U	0.00099	U	0.00098	U	0.00098	U
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.0009	U	0.001	U	0.00099	U	0.00098	U	0.00098	U
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.0009	U	0.001	U	0.00099	U	0.00098	U	0.00098	U
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg										
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg										
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg										
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg										
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg										
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg										
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg										



		sys_loc_code	DP28	DP29	DP32	DP32	DP33							
		sys_sample_code	DPS2808N	DPS2910N	DPS3210N	DPS3210R	DPS3315N							
		sample_date	4/2/2013	4/2/2013	4/1/2013	4/1/2013	4/4/2013							
		sample_type_code	N	N	N	FD	N							
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013							
		start_depth	7.5	9	9.5	9.5	14							
		end_depth	8.5	11	10.5	10.5	16							
		depth_unit	ft	ft	ft	ft	ft							
		validated_yn	Y	Y	Y	Y	Y							
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	mg/kg										
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	mg/kg										
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	mg/kg										
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C	mg/kg										
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	mg/kg	0.0009	U	0.001	U	0.00099	U	0.00098	U	0.00098	U
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg	0.0009	U	0.001	U	0.00099	U	0.00098	U	0.00098	U
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg										

		sys_loc_code	DP28	DP29	DP32	DP32	DP33				
		sys_sample_code	DPS2808N	DPS2910N	DPS3210N	DPS3210R	DPS3315N				
		sample_date	4/2/2013	4/2/2013	4/1/2013	4/1/2013	4/4/2013				
		sample_type_code	N	N	N	FD	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	7.5	9	9.5	9.5	14				
		end_depth	8.5	11	10.5	10.5	16				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg							

					sys_loc_code	DP28	DP29	DP32	DP32	DP33
					sys_sample_code	DPS2808N	DPS2910N	DPS3210N	DPS3210R	DPS3315N
					sample_date	4/2/2013	4/2/2013	4/1/2013	4/1/2013	4/4/2013
					sample_type_code	N	N	N	FD	N
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
					start_depth	7.5	9	9.5	9.5	14
					end_depth	8.5	11	10.5	10.5	16
					depth_unit	ft	ft	ft	ft	ft
					validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg						

				sys_loc_code	DP28	DP29	DP32	DP32	DP33		
				sys_sample_code	DPS2808N	DPS2910N	DPS3210N	DPS3210R	DPS3315N		
				sample_date	4/2/2013	4/2/2013	4/1/2013	4/1/2013	4/4/2013		
				sample_type_code	N	N	N	FD	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	7.5	9	9.5	9.5	14		
				end_depth	8.5	11	10.5	10.5	16		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg							

		sys_loc_code	DP28	DP29	DP32	DP32	DP33				
		sys_sample_code	DPS2808N	DPS2910N	DPS3210N	DPS3210R	DPS3315N				
		sample_date	4/2/2013	4/2/2013	4/1/2013	4/1/2013	4/4/2013				
		sample_type_code	N	N	N	FD	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	7.5	9	9.5	9.5	14				
		end_depth	8.5	11	10.5	10.5	16				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg							

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP28	DP29	DP32	DP32	DP33					
				sys_sample_code	DPS2808N	DPS2910N	DPS3210N	DPS3210R	DPS3315N					
				sample_date	4/2/2013	4/2/2013	4/1/2013	4/1/2013	4/4/2013					
				sample_type_code	N	N	N	FD	N					
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
				start_depth	7.5	9	9.5	9.5	14					
				end_depth	8.5	11	10.5	10.5	16					
				depth_unit	ft	ft	ft	ft	ft					
				validated_yn	Y	Y	Y	Y	Y					
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers			
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg										
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg										
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg										
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg										
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg										
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg										
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg	18	U	12	J	20	U	19	U	20	U
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg	0.085	U	0.097	U	0.091	U	0.094	U	0.06	J
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg	18	U	59	U	20	U	19	U	20	U
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U	0.039	U
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U	0.039	U
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg	0.0073	U	0.0085	U	0.008	U	0.0079	U	0.008	U
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U	0.039	U
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U	0.039	U
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U	0.039	U
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg	0.0073	U	0.0085	U	0.008	U	0.0079	U	0.008	U
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U	0.039	U
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg	0.18	U	0.21	U	0.2	U	0.2	U	0.2	U
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U	0.039	U
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U	0.039	U
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg	0.0073	U	0.0085	U	0.008	U	0.0079	U	0.008	U
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U	0.039	U
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg	0.0073	U	0.002	J	0.008	U	0.0079	U	0.008	U
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U	0.039	U
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg	0.18	U	0.21	U	0.2	U	0.2	U	0.2	U
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U	0.039	U
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U	0.039	U
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg	0.18	U	0.21	U	0.2	U	0.2	U	0.2	U
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg	0.18	U	0.21	U	0.2	U	0.2	U	0.2	U
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U	0.039	U
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U	0.039	U
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U	0.039	U
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U	0.039	U
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U	0.039	U
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg	0.18	U	0.21	U	0.2	U	0.2	U	0.2	U
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg	0.18	U	0.21	U	0.2	U	0.2	U	0.2	U
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg	0.0073	U	0.008	J	0.008	U	0.0079	U	0.008	U
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg	0.0073	U	0.0028	J	0.008	U	0.0079	U	0.008	U
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U	0.039	U

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP28	DP29	DP32	DP32	DP33			
				sys_sample_code	DPS2808N	DPS2910N	DPS3210N	DPS3210R	DPS3315N			
				sample_date	4/2/2013	4/2/2013	4/1/2013	4/1/2013	4/4/2013			
				sample_type_code	N	N	N	FD	N			
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth	7.5	9	9.5	9.5	14			
				end_depth	8.5	11	10.5	10.5	16			
				depth_unit	ft	ft	ft	ft	ft			
				validated_yn	Y	Y	Y	Y	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg	0.0073	U	0.024	U	0.0079	U	0.008	U
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg	0.028	J	0.033	J	0.039	U	0.039	U
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg	0.0073	U	0.068	U	0.0079	U	0.008	U
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg	0.0073	U	0.061	U	0.0079	U	0.008	U
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg	0.0073	U	0.06	U	0.0079	U	0.008	U
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg	0.0073	U	0.035	U	0.0079	U	0.008	U
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg	0.0073	U	0.033	U	0.0079	U	0.008	U
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg	0.0073	U	0.0085	U	0.0079	U	0.008	U
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg	0.0073	J	0.073	J	0.016	J	0.014	J
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg	0.008	J	0.026	J	0.0099	J	0.02	J
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg	0.18	U	0.21	U	0.2	U	0.2	U
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg	0.0073	U	0.0044	J	0.008	U	0.0079	U
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg	0.0073	U	0.063	U	0.0079	U	0.008	U
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg	0.0073	U	0.01	U	0.0079	U	0.008	U
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg	0.036	U	0.005	J	0.039	U	0.039	U
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg	0.0094	J	0.014	J	0.028	J	0.011	J
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg	0.0073	U	0.11	U	0.0079	U	0.008	U
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg	0.0073	U	0.009	U	0.0079	U	0.008	U
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg	0.0073	U	0.0085	U	0.008	U	0.0079	U
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg	0.0073	U	0.0085	U	0.008	U	0.0079	U
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg	0.0073	U	0.03	U	0.008	U	0.0079	U
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg	0.0073	U	0.0036	J	0.008	U	0.0079	U
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg	0.072	U	0.084	U	0.079	U	0.079	U
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg	0.0073	U	0.0085	U	0.008	U	0.0079	U
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg	0.036	U	0.042	U	0.039	U	0.039	U
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg	0.0073	U	0.066	U	0.008	U	0.0079	U
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg	0.0073	U	0.0085	U	0.008	U	0.0079	U
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg	0.0073	U	0.1	U	0.008	U	0.0079	U
RA_SO_VOCS	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg	0.005	U	0.0047	U	0.0051	U	0.0044	U
RA_SO_VOCS	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg	0.005	U	0.0047	U	0.0051	U	0.0044	U
RA_SO_VOCS	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg	0.005	U	0.0047	U	0.0051	U	0.0044	U
RA_SO_VOCS	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg	0.005	U	0.0047	U	0.0051	U	0.0044	U
RA_SO_VOCS	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg	0.005	U	0.0047	U	0.0051	U	0.0044	U

Attachment A  
 Subsurface Soil Data  
 Benning Road Facility RI/FS Project  
 3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP28	DP29	DP32	DP32	DP33				
				sys_sample_code	DPS2808N	DPS2910N	DPS3210N	DPS3210R	DPS3315N				
				sample_date	4/2/2013	4/2/2013	4/1/2013	4/1/2013	4/4/2013				
				sample_type_code	N	N	N	FD	N				
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
				start_depth	7.5	9	9.5	9.5	14				
				end_depth	8.5	11	10.5	10.5	16				
				depth_unit	ft	ft	ft	ft	ft				
				validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers		
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	0.99	U	0.93	U	1	U	0.88	U	0.99	U
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	Acetone	67-64-1	SW8260B	0.02	U	0.019	U	0.0097	J	0.018	U	0.02	U
RA_SO_VOCs	Benzene	71-43-2	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	0.0099	U	0.0093	U	0.01	U	0.0088	U	0.0099	U
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	Styrene	100-42-5	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	Toluene	108-88-3	SW8260B	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U



				sys_loc_code	DP28	DP29	DP32	DP32	DP33					
				sys_sample_code	DPS2808N	DPS2910N	DPS3210N	DPS3210R	DPS3315N					
				sample_date	4/2/2013	4/2/2013	4/1/2013	4/1/2013	4/4/2013					
				sample_type_code	N	N	N	FD	N					
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
				start_depth	7.5	9	9.5	9.5	14					
				end_depth	8.5	11	10.5	10.5	16					
				depth_unit	ft	ft	ft	ft	ft					
				validated_yn	Y	Y	Y	Y	Y					
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers			
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg	0.005	U	0.0047	U	0.0051	U	0.0044	U	0.0049	U
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg	0.0099	U	0.0093	U	0.01	U	0.0088	U	0.0099	U

					sys_loc_code	DP34	DP35	DP36	DP36	DP36	
					sys_sample_code	DPS3405N	DPS3515N	DPS3605N	DPS3610N	DPS3610N2	
					sample_date	3/13/2013	3/28/2013	5/17/2013	5/20/2013	6/13/2013	
					sample_type_code	N	N	N	N	N	
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
					start_depth	4.5	14.5	4.5	9.5	9.5	
					end_depth	5.5	15.5	5.5	10.5	10.5	
					depth_unit	ft	ft	ft	ft	ft	
					validated_yn	Y	Y	Y	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg							
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg							
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg							
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg							
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg							
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg	1700		5600				
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg	0.022	J-		R			
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg	1.5	J-	0.81	J-			
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg	5.1		21				
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg	0.17		0.34				
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg	0.035	J	0.096	J			
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg	110		220				
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg	4.8		9.2				
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg	1.8		1.2				
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg	3.5		4.9				
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg	7600		6500				
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg	1.5	J+	5.4	J+			
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg	190		360				
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg	32		9.9				
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg	0.039	U	0.038	U			

				sys_loc_code	DP34	DP35	DP36	DP36	DP36		
				sys_sample_code	DPS3405N	DPS3515N	DPS3605N	DPS3610N	DPS3610N2		
				sample_date	3/13/2013	3/28/2013	5/17/2013	5/20/2013	6/13/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	4.5	14.5	4.5	9.5	9.5		
				end_depth	5.5	15.5	5.5	10.5	10.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg	1.3			2.8			
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg	170			370			
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg	0.15	J-		0.24	J-		
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg	0.0058	J		0.017	J		
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg	66			110			
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg	0.02	J		0.085	J		
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg	9.7			17			
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg	7.4			9			
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent							
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg							
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg							
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.00098	U	0.0049	U	0.001	U	0.0047
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.00098	U	0.0049	U	0.001	U	0.0047
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.00098	U	0.0049	U	0.001	U	0.0047
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.00098	U	0.0049	U	0.001	U	0.0047
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.00098	U	0.0049	U	0.001	U	0.0047
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.00098	U	0.0049	U	0.001	U	0.0047
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.00098	U	0.0049	U	0.001	U	0.0047
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.00098	U	0.0049	U	0.001	U	0.0047
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.00098	U	0.0049	U	0.001	U	0.0047
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg							
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg							
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg							
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg							
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg							
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg							
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg							

		sys_loc_code	DP34	DP35	DP36	DP36	DP36					
		sys_sample_code	DPS3405N	DPS3515N	DPS3605N	DPS3610N	DPS3610N2					
		sample_date	3/13/2013	3/28/2013	5/17/2013	5/20/2013	6/13/2013					
		sample_type_code	N	N	N	N	N					
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
		start_depth	4.5	14.5	4.5	9.5	9.5					
		end_depth	5.5	15.5	5.5	10.5	10.5					
		depth_unit	ft	ft	ft	ft	ft					
		validated_yn	Y	Y	Y	Y	Y					
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C									
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C									
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C									
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C									
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	mg/kg	0.00098	U	0.0049	U	0.001	U	0.0047	U
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg	0.00098	U	0.0049	U	0.001	U	0.0047	U
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg								



Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		sys_loc_code	DP34	DP35	DP36	DP36	DP36				
		sys_sample_code	DPS3405N	DPS3515N	DPS3605N	DPS3610N	DPS3610N2				
		sample_date	3/13/2013	3/28/2013	5/17/2013	5/20/2013	6/13/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	14.5	4.5	9.5	9.5				
		end_depth	5.5	15.5	5.5	10.5	10.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg							

					sys_loc_code	DP34	DP35	DP36	DP36	DP36
					sys_sample_code	DPS3405N	DPS3515N	DPS3605N	DPS3610N	DPS3610N2
					sample_date	3/13/2013	3/28/2013	5/17/2013	5/20/2013	6/13/2013
					sample_type_code	N	N	N	N	N
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
					start_depth	4.5	14.5	4.5	9.5	9.5
					end_depth	5.5	15.5	5.5	10.5	10.5
					depth_unit	ft	ft	ft	ft	ft
					validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg						

				sys_loc_code	DP34	DP35	DP36	DP36	DP36		
				sys_sample_code	DPS3405N	DPS3515N	DPS3605N	DPS3610N	DPS3610N2		
				sample_date	3/13/2013	3/28/2013	5/17/2013	5/20/2013	6/13/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	4.5	14.5	4.5	9.5	9.5		
				end_depth	5.5	15.5	5.5	10.5	10.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg							

		sys_loc_code	DP34	DP35	DP36	DP36	DP36				
		sys_sample_code	DPS3405N	DPS3515N	DPS3605N	DPS3610N	DPS3610N2				
		sample_date	3/13/2013	3/28/2013	5/17/2013	5/20/2013	6/13/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	14.5	4.5	9.5	9.5				
		end_depth	5.5	15.5	5.5	10.5	10.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg							



				sys_loc_code	DP34	DP35	DP36	DP36	DP36			
				sys_sample_code	DPS3405N	DPS3515N	DPS3605N	DPS3610N	DPS3610N2			
				sample_date	3/13/2013	3/28/2013	5/17/2013	5/20/2013	6/13/2013			
				sample_type_code	N	N	N	N	N			
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth	4.5	14.5	4.5	9.5	9.5			
				end_depth	5.5	15.5	5.5	10.5	10.5			
				depth_unit	ft	ft	ft	ft	ft			
				validated_yn	Y	Y	Y	Y	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg								
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg								
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg								
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg								
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg								
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg	20	U	20	U	19	U		
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg	0.11	U	0.088	U	0.1	UJ	0.1	U
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg	20	U	20	U	19	U		
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg	0.0079	U	0.0079	U				
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg	0.0079	U	0.0079	U				
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg	0.2	U	0.2	U				
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg	0.0079	U	0.0079	U				
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg	0.0079	U	0.0079	U				
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg	0.2	U	0.2	U				
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg	0.2	U	0.2	U				
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg	0.2	U	0.2	U				
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg	0.2	U	0.2	U				
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg	0.2	U	0.2	U				
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg	0.0079	U	0.0079	U	0.0081	U	0.0075	U
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg	0.0079	U	0.0079	U	0.0081	U	0.0075	U
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg	0.039	U	0.039	U				

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP34	DP35	DP36	DP36	DP36			
				sys_sample_code	DPS3405N	DPS3515N	DPS3605N	DPS3610N	DPS3610N2			
				sample_date	3/13/2013	3/28/2013	5/17/2013	5/20/2013	6/13/2013			
				sample_type_code	N	N	N	N	N			
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth	4.5	14.5	4.5	9.5	9.5			
				end_depth	5.5	15.5	5.5	10.5	10.5			
				depth_unit	ft	ft	ft	ft	ft			
				validated_yn	Y	Y	Y	Y	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg	0.0079	U	0.0079	U	0.0081	U	0.0075	U
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg	0.03	J	0.039	U				
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg	0.0079	U	0.0079	U	0.0081	U	0.0075	U
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg	0.0079	U	0.0079	U	0.0081	U	0.0075	U
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg	0.0079	U	0.0079	U	0.0081	U	0.0075	U
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg	0.0079	U	0.0079	U	0.0081	U	0.0075	U
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg	0.0079	U	0.0079	U	0.0081	U	0.0075	U
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg	0.0079	U	0.0079	U				
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg	0.028	J	0.079	U				
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg	0.018	J	0.0081	J				
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg	0.2	U	0.2	U				
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg	0.0079	U	0.0079	U				
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg	0.0079	U	0.0079	U	0.0081	U	0.0075	U
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg	0.0079	U	0.0079	U	0.0081	U	0.0075	U
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg	0.0079	U	0.0079	U	0.0037	J	0.0075	U
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg	0.0079	U	0.0079	U	0.0081	U	0.0075	U
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg	0.0079	U	0.0079	U				
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg	0.0079	U	0.0079	U				
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg	0.0079	U	0.0079	U	0.0081	U	0.0075	U
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg	0.0079	U	0.0079	U	0.0081	U	0.0075	U
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg	0.079	U	0.079	U				
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg	0.0079	U	0.0079	U				
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg	0.039	U	0.039	U				
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg	0.0079	U	0.0079	U	0.0029	J	0.0075	U
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg	0.0079	U	0.0079	U				
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg	0.0079	U	0.0079	U	0.0025	J	0.0075	U
RA_SO_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg	0.0054	U	0.0042	U				0.0054 U
RA_SO_VOCs	1,1,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg	0.0054	U	0.0042	U				0.0054 U
RA_SO_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg	0.0054	U	0.0042	U				0.0054 U
RA_SO_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg	0.0054	U	0.0042	U				0.0054 U
RA_SO_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg	0.0054	U	0.0042	U				0.0054 U

				sys_loc_code	DP34	DP35	DP36	DP36	DP36		
				sys_sample_code	DPS3405N	DPS3515N	DPS3605N	DPS3610N	DPS3610N2		
				sample_date	3/13/2013	3/28/2013	5/17/2013	5/20/2013	6/13/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	4.5	14.5	4.5	9.5	9.5		
				end_depth	5.5	15.5	5.5	10.5	10.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg	1.1	U	0.83	U		1.1	U
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg	0.021	U	0.017	U		0.021	U
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg	0.011	U	0.0083	U		0.011	U
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg	0.0054	U	0.0042	U		0.0054	U

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP34	DP35	DP36	DP36	DP36			
				sys_sample_code	DPS3405N	DPS3515N	DPS3605N	DPS3610N	DPS3610N2			
				sample_date	3/13/2013	3/28/2013	5/17/2013	5/20/2013	6/13/2013			
				sample_type_code	N	N	N	N	N			
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth	4.5	14.5	4.5	9.5	9.5			
				end_depth	5.5	15.5	5.5	10.5	10.5			
				depth_unit	ft	ft	ft	ft	ft			
				validated_yn	Y	Y	Y	Y	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_sult_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg	0.0054	U	0.0042	U			0.0054	U
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg	0.0054	U	0.0042	U			0.0054	U
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg	0.0054	U	0.0042	U			0.0054	U
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg	0.0054	U	0.0042	U			0.0054	U
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg	0.0054	U	0.0042	U			0.0054	U
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg	0.011	U	0.0083	U			0.011	U

		sys_loc_code	DP36	DP37	DP37	DP37	DP37				
		sys_sample_code	DPS3615N	DPS3703N	DPS3710N	DPS3710N2	DPS3715N				
		sample_date	5/20/2013	5/16/2013	5/23/2013	6/10/2013	5/23/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	14.5	2.5	9.5	9.5	14.5				
		end_depth	15.5	3.5	10.5	10.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg							
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg							
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg							
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg							
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg							
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg		9600					
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg		0.22	U				
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg		3.7					
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg		67					
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg		0.59					
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg		0.11					
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg		2700					
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg		24					
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg		6.9					
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg		19					
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg		23000					
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg		27					
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg		1800					
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg		200					
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg		0.086					

				sys_loc_code	DP36	DP37	DP37	DP37	DP37			
				sys_sample_code	DPS3615N	DPS3703N	DPS3710N	DPS3710N2	DPS3715N			
				sample_date	5/20/2013	5/16/2013	5/23/2013	6/10/2013	5/23/2013			
				sample_type_code	N	N	N	N	N			
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth	14.5	2.5	9.5	9.5	14.5			
				end_depth	15.5	3.5	10.5	10.5	15.5			
				depth_unit	ft	ft	ft	ft	ft			
				validated_yn	Y	Y	Y	Y	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg			12					
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg			1100					
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg			0.27	J				
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg			0.031	J				
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg			170					
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg			0.14					
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg			29					
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg			33					
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent								
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg								
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.0047	U	0.00096	U	0.0045	U	0.0045	U
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.0047	U	0.00096	U	0.0045	U	0.0045	U
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.0047	U	0.00096	U	0.0045	U	0.0045	U
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.0047	U	0.00096	U	0.0045	U	0.0045	U
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.0047	U	0.00096	U	0.0045	U	0.0045	U
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.0047	U	0.0027	U	0.0045	U	0.0045	U
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.0047	U	0.00096	U	0.0045	U	0.0045	U
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.0047	U	0.00096	U	0.0045	U	0.0045	U
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.0047	U	0.00096	U	0.0045	U	0.0045	U
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg								
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg								
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg								
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg								
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg								
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg								
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg								

		sys_loc_code	DP36	DP37	DP37	DP37	DP37	DP37			
		sys_sample_code	DPS3615N	DPS3703N	DPS3710N	DPS3710N2	DPS3715N				
		sample_date	5/20/2013	5/16/2013	5/23/2013	6/10/2013	5/23/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	14.5	2.5	9.5	9.5	14.5				
		end_depth	15.5	3.5	10.5	10.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C								
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C								
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C								
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C								
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	0.0047	U	0.0027		0.0045	U		0.0045 U
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	0.0047	U	0.0027		0.0045	U		0.0045 U
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C								
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C								
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C								
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C								
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C								
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C								
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C								
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C								
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C								
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C								
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C								
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C								
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C								
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C								
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C								
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C								
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C								
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C								
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C								
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C								
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C								
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C								
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C								
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C								
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C								
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C								
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C								
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C								
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C								
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C								
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C								
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C								
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C								
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C								
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C								
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C								

					sys_loc_code	DP36	DP37	DP37	DP37	DP37		
					sys_sample_code	DPS3615N	DPS3703N	DPS3710N	DPS3710N2	DPS3715N		
					sample_date	5/20/2013	5/16/2013	5/23/2013	6/10/2013	5/23/2013		
					sample_type_code	N	N	N	N	N		
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
					start_depth	14.5	2.5	9.5	9.5	14.5		
					end_depth	15.5	3.5	10.5	10.5	15.5		
					depth_unit	ft	ft	ft	ft	ft		
					validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg								





Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

					sys_loc_code	DP36	DP37	DP37	DP37	DP37
					sys_sample_code	DPS3615N	DPS3703N	DPS3710N	DPS3710N2	DPS3715N
					sample_date	5/20/2013	5/16/2013	5/23/2013	6/10/2013	5/23/2013
					sample_type_code	N	N	N	N	N
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
					start_depth	14.5	2.5	9.5	9.5	14.5
					end_depth	15.5	3.5	10.5	10.5	15.5
					depth_unit	ft	ft	ft	ft	ft
					validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg						

		sys_loc_code	DP36	DP37	DP37	DP37	DP37				
		sys_sample_code	DPS3615N	DPS3703N	DPS3710N	DPS3710N2	DPS3715N				
		sample_date	5/20/2013	5/16/2013	5/23/2013	6/10/2013	5/23/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	14.5	2.5	9.5	9.5	14.5				
		end_depth	15.5	3.5	10.5	10.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg							

		sys_loc_code	DP36	DP37	DP37	DP37	DP37				
		sys_sample_code	DPS3615N	DPS3703N	DPS3710N	DPS3710N2	DPS3715N				
		sample_date	5/20/2013	5/16/2013	5/23/2013	6/10/2013	5/23/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	14.5	2.5	9.5	9.5	14.5				
		end_depth	15.5	3.5	10.5	10.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg							

		sys_loc_code	DP36	DP37	DP37	DP37	DP37				
		sys_sample_code	DPS3615N	DPS3703N	DPS3710N	DPS3710N2	DPS3715N				
		sample_date	5/20/2013	5/16/2013	5/23/2013	6/10/2013	5/23/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	14.5	2.5	9.5	9.5	14.5				
		end_depth	15.5	3.5	10.5	10.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C								
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C								
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C								
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C								
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C								
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C								
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL								
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL								
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C								
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	19	U	15	J	18	U	18	U
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	0.084	UJ	0.09	UJ	0.1	U	0.11	U
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	19	U	180		18	U	18	U
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL								
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL								
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL								
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL								
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL								
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL								
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL								
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL								
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL								
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL								
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL								
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL								
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL								
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL								
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL								
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL								
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL								
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL								
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL								
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL								
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL								
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL								
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL								
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL								
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL								
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL								
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL								
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	0.0075	U	0.0087	J	0.0072	U	0.007	U
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	0.0075	U	0.019	J	0.0072	U	0.007	U
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL								

				sys_loc_code	DP36	DP37	DP37	DP37	DP37			
				sys_sample_code	DPS3615N	DPS3703N	DPS3710N	DPS3710N2	DPS3715N			
				sample_date	5/20/2013	5/16/2013	5/23/2013	6/10/2013	5/23/2013			
				sample_type_code	N	N	N	N	N			
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth	14.5	2.5	9.5	9.5	14.5			
				end_depth	15.5	3.5	10.5	10.5	15.5			
				depth_unit	ft	ft	ft	ft	ft			
				validated_yn	Y	Y	Y	Y	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg	0.0075	U	0.033	J	0.0072	U	0.007	U
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg								
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg	0.0075	U	0.17		0.0072	U	0.007	U
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg	0.0075	U	0.18		0.0072	U	0.007	U
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg	0.0075	U	0.13		0.0072	U	0.007	U
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg	0.0075	U	0.14		0.0072	U	0.007	U
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg	0.0075	U	0.13		0.0072	U	0.007	U
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg								
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg	0.0075	U	0.19		0.0072	U	0.007	U
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg	0.0075	U	0.049		0.0072	U	0.007	U
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg								
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg								
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg	0.0075	U	0.26		0.0072	U	0.007	U
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg	0.0075	U	0.0094	J	0.0072	U	0.007	U
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg	0.0075	U	0.11		0.0072	U	0.007	U
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg	0.0075	U	0.012	J	0.0072	U	0.007	U
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg								
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg								
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg	0.0075	U	0.13		0.0072	U	0.007	U
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg	0.0075	U	0.25		0.0072	U	0.007	U
RA_SO_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg						0.0044	U	
RA_SO_VOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg						0.0044	U	
RA_SO_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg						0.0044	U	
RA_SO_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg						0.0044	U	
RA_SO_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg						0.0044	U	

				sys_loc_code	DP36	DP37	DP37	DP37	DP37	DP37
				sys_sample_code	DPS3615N	DPS3703N	DPS3710N	DPS3710N2	DPS3715N	DPS3715N
				sample_date	5/20/2013	5/16/2013	5/23/2013	6/10/2013	5/23/2013	5/23/2013
				sample_type_code	N	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	14.5	2.5	9.5	9.5	14.5	14.5
				end_depth	15.5	3.5	10.5	10.5	15.5	15.5
				depth_unit	ft	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
p				unit	qualifiers	qualifiers	qualifiers	qualifiers	qualifiers	qualifiers
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg				0.89	U	
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg				0.018	U	
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg				0.0089	U	
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg				0.0044	U	
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg				0.0044	U	

					sys_loc_code	DP36	DP37	DP37	DP37	DP37		
					sys_sample_code	DPS3615N	DPS3703N	DPS3710N	DPS3710N2	DPS3715N		
					sample_date	5/20/2013	5/16/2013	5/23/2013	6/10/2013	5/23/2013		
					sample_type_code	N	N	N	N	N		
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
					start_depth	14.5	2.5	9.5	9.5	14.5		
					end_depth	15.5	3.5	10.5	10.5	15.5		
					depth_unit	ft	ft	ft	ft	ft		
					validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg						0.0044	U	
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg						0.0044	U	
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg						0.0044	U	
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg						0.0044	U	
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg						0.0044	U	
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg						0.0089	U	

				sys_loc_code	DP38	DP38	DP38	DP39	DP39
				sys_sample_code	DPS3805N	DPS3810N	DPS3815N	DPS3903N	DPS3910N
				sample_date	5/16/2013	5/22/2013	5/22/2013	5/17/2013	5/22/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	4.5	9.5	14	2.5	9.5
				end_depth	5.5	10.5	15	3.5	10.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg					
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg					
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg	2300				10000
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg	0.22	U			0.041
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg	1.6				2.4
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg	7.6				43
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg	0.23				0.33
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg	0.036	J			0.13
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg	320				3000
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg	9.8				15
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg	4				2.6
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg	5.8				9.8
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg	11000				18000
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg	2.9				38
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg	340				580
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg	65				140
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg	0.017	J			0.067



				sys_loc_code	DP38	DP38	DP38	DP39	DP39					
				sys_sample_code	DPS3805N	DPS3810N	DPS3815N	DPS3903N	DPS3910N					
				sample_date	5/16/2013	5/22/2013	5/22/2013	5/17/2013	5/22/2013					
				sample_type_code	N	N	N	N	N					
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
				start_depth	4.5	9.5	14	2.5	9.5					
				end_depth	5.5	10.5	15	3.5	10.5					
				depth_unit	ft	ft	ft	ft	ft					
				validated_yn	Y	Y	Y	Y	Y					
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers			
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg	3.6					4.1				
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg	330					670				
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg	0.085	J				0.18	J			
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg	0.11	U				0.012	J			
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg	14					52				
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg	0.042	J				0.15				
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg	13					26				
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg	12					22				
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent										
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg										
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg										
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg										
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.00092	U	0.0047	U	0.0044	U	0.0049	U		
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.00092	U	0.0047	U	0.0044	U	0.0049	U		
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.00092	U	0.0047	U	0.0044	U	0.0049	U		
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.00092	U	0.0047	U	0.0044	U	0.0049	U		
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.00092	U	0.0047	U	0.0044	U	0.0049	U		
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.00092	U	0.0047	U	0.0044	U	0.038	J	0.0049	U
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.00092	U	0.0052	U	0.0019	J	0.055	J	0.057	
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.00092	U	0.0047	U	0.0044	U	0.00094	U	0.0049	U
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.00092	U	0.0047	U	0.0044	U	0.00094	U	0.0049	U
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg										
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg										
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg										
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg										
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg										
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg										
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg										

		sys_loc_code	DP38	DP38	DP38	DP39	DP39				
		sys_sample_code	DPS3805N	DPS3810N	DPS3815N	DPS3903N	DPS3910N				
		sample_date	5/16/2013	5/22/2013	5/22/2013	5/17/2013	5/22/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	9.5	14	2.5	9.5				
		end_depth	5.5	10.5	15	3.5	10.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C								
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C								
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C								
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C								
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	0.00092	U	0.0052	0.0019	0.093		0.057	
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	0.00092	U	0.0052	0.0019	0.093		0.057	
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C								
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C								
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C								
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C								
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C								
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C								
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C								
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C								
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C								
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C								
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C								
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C								
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C								
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C								
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C								
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C								
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C								
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C								
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C								
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C								
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C								
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C								
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C								
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C								
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C								
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C								
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C								
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C								
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C								
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C								
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C								
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C								
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C								
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C								
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C								
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C								

					sys_loc_code	DP38	DP38	DP38	DP39	DP39	
					sys_sample_code	DPS3805N	DPS3810N	DPS3815N	DPS3903N	DPS3910N	
					sample_date	5/16/2013	5/22/2013	5/22/2013	5/17/2013	5/22/2013	
					sample_type_code	N	N	N	N	N	
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
					start_depth	4.5	9.5	14	2.5	9.5	
					end_depth	5.5	10.5	15	3.5	10.5	
					depth_unit	ft	ft	ft	ft	ft	
					validated_yn	Y	Y	Y	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg							

					sys_loc_code	DP38	DP38	DP38	DP39	DP39
					sys_sample_code	DPS3805N	DPS3810N	DPS3815N	DPS3903N	DPS3910N
					sample_date	5/16/2013	5/22/2013	5/22/2013	5/17/2013	5/22/2013
					sample_type_code	N	N	N	N	N
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
					start_depth	4.5	9.5	14	2.5	9.5
					end_depth	5.5	10.5	15	3.5	10.5
					depth_unit	ft	ft	ft	ft	ft
					validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg						

		sys_loc_code	DP38	DP38	DP38	DP39	DP39				
		sys_sample_code	DPS3805N	DPS3810N	DPS3815N	DPS3903N	DPS3910N				
		sample_date	5/16/2013	5/22/2013	5/22/2013	5/17/2013	5/22/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	9.5	14	2.5	9.5				
		end_depth	5.5	10.5	15	3.5	10.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg							

		sys_loc_code	DP38	DP38	DP38	DP39	DP39				
		sys_sample_code	DPS3805N	DPS3810N	DPS3815N	DPS3903N	DPS3910N				
		sample_date	5/16/2013	5/22/2013	5/22/2013	5/17/2013	5/22/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	4.5	9.5	14	2.5	9.5				
		end_depth	5.5	10.5	15	3.5	10.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg							

				sys_loc_code	DP38	DP38	DP38	DP39	DP39		
				sys_sample_code	DPS3805N	DPS3810N	DPS3815N	DPS3903N	DPS3910N		
				sample_date	5/16/2013	5/22/2013	5/22/2013	5/17/2013	5/22/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	4.5	9.5	14	2.5	9.5		
				end_depth	5.5	10.5	15	3.5	10.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg							
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg							
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg							
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg							
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg							
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg	18	U	19	U	320	27	
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg	0.099	UJ	0.084	U	0.097	25	0.083 U
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg	26		19	U	27	1700	180
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg	0.03		0.026	J	0.058	0.083	0.075
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg	0.024		0.036	J	0.067	0.027	0.22
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg							

				sys_loc_code	DP38	DP38	DP38	DP39	DP39			
				sys_sample_code	DPS3805N	DPS3810N	DPS3815N	DPS3903N	DPS3910N			
				sample_date	5/16/2013	5/22/2013	5/22/2013	5/17/2013	5/22/2013			
				sample_type_code	N	N	N	N	N			
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth	4.5	9.5	14	2.5	9.5			
				end_depth	5.5	10.5	15	3.5	10.5			
				depth_unit	ft	ft	ft	ft	ft			
				validated_yn	Y	Y	Y	Y	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg	0.094	0.12	0.24	0.067	0.43			
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg								
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg	0.21	0.38	0.71	0.15	1.3			
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg	0.2	0.35	0.61	0.0076	U	1.4		
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg	0.21	0.32	0.61	0.046		1.3		
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg	0.12	0.22	0.41	0.0076	U	0.98		
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg	0.092	0.16	0.27	0.071		0.56		
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg								
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg	0.21	0.36	0.68	0.14	1.3			
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg	0.027	0.068	0.1	0.0076	U	0.29		
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg								
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg								
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg	0.5	0.77	1.4	0.55	3			
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg	0.048	0.045	0.095	0.065	0.11			
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg	0.11	0.2	0.34	0.0076	U	0.87		
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg	0.0046	J	0.037	U	0.035	U	0.41	0.061
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg								
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg								
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg	0.42	0.49	0.97	0.27	1.3			
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg	0.39	0.65	1.2	0.37	1.9			
RA_SO_VOCS	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg				0.0044	U			
RA_SO_VOCS	1,1,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg				0.0044	U			
RA_SO_VOCS	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg				0.0044	U			
RA_SO_VOCS	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg				0.0044	U			
RA_SO_VOCS	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg				0.0044	U			



				sys_loc_code	DP38	DP38	DP38	DP39	DP39		
				sys_sample_code	DPS3805N	DPS3810N	DPS3815N	DPS3903N	DPS3910N		
				sample_date	5/16/2013	5/22/2013	5/22/2013	5/17/2013	5/22/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	4.5	9.5	14	2.5	9.5		
				end_depth	5.5	10.5	15	3.5	10.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg				0.88	U		
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg				0.018	U		
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg				0.00077	J		
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg				0.0048	J		
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg				0.0035	J		
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg				0.0042	J		
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg				0.0044	U		

				sys_loc_code	DP38	DP38	DP38	DP39	DP39
				sys_sample_code	DPS3805N	DPS3810N	DPS3815N	DPS3903N	DPS3910N
				sample_date	5/16/2013	5/22/2013	5/22/2013	5/17/2013	5/22/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	4.5	9.5	14	2.5	9.5
				end_depth	5.5	10.5	15	3.5	10.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
p				unit	qualifiers	qualifiers	qualifiers	qualifiers	qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg				0.0044	U
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg				0.0044	U
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg				0.0044	U
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg				0.0044	U
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg				0.0044	U
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg				0.0083	

		sys_loc_code	DP39	DP40	DP40	DP40	DP40				
		sys_sample_code	DPS3915N	DPS4003N	DPS4010N	DPS4010N2	DPS4015N				
		sample_date	5/22/2013	5/20/2013	5/28/2013	6/10/2013	5/28/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	14.5	2.5	9.5	9.5	14.5				
		end_depth	15.5	3.5	10.5	10.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg							
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg							
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg							
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg							
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg							
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg							
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg		8000					
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg		0.24	U				
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg		14					
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg		120					
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg		0.53					
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg		0.41					
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg		45000					
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg		37					
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg		9					
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg		290					
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg		14000					
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg		71					
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg		7400					
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg		580					
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg		0.093					

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP39	DP40	DP40	DP40	DP40			
				sys_sample_code	DPS3915N	DPS4003N	DPS4010N	DPS4010N2	DPS4015N			
				sample_date	5/22/2013	5/20/2013	5/28/2013	6/10/2013	5/28/2013			
				sample_type_code	N	N	N	N	N			
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth	14.5	2.5	9.5	9.5	14.5			
				end_depth	15.5	3.5	10.5	10.5	15.5			
				depth_unit	ft	ft	ft	ft	ft			
				validated_yn	Y	Y	Y	Y	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg			59					
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg			1100					
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg			0.45	J				
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg			0.25					
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg			270					
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg			0.13					
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg			120					
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg			220					
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent								
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg								
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.0049	U	0.014	0.0049	U		0.0045	U
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.0049	U	0.005	0.0049	U		0.0045	U
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.0049	U	0.005	0.0049	U		0.0045	U
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.0049	U	0.005	0.0049	U		0.0045	U
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.0049	U	0.005	0.0036	J		0.0045	U
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.0049	U	0.17	0.0049	U		0.0045	U
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.0019	J	0.005	0.01	J		0.0045	U
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.0049	U	0.005	0.0049	U		0.0045	U
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.0049	U	0.005	0.0049	U		0.0045	U
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg								
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg								
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg								
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg								
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg								
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg								
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg								

		sys_loc_code	DP39	DP40	DP40	DP40	DP40				
		sys_sample_code	DPS3915N	DPS4003N	DPS4010N	DPS4010N2	DPS4015N				
		sample_date	5/22/2013	5/20/2013	5/28/2013	6/10/2013	5/28/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	14.5	2.5	9.5	9.5	14.5				
		end_depth	15.5	3.5	10.5	10.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C								
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C								
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C								
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C								
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	mg/kg	0.0019	0.18	0.014			0.0045	U
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg	0.0019	J	0.18	0.014		0.0045	U
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg							

		sys_loc_code	DP39	DP40	DP40	DP40	DP40				
		sys_sample_code	DPS3915N	DPS4003N	DPS4010N	DPS4010N2	DPS4015N				
		sample_date	5/22/2013	5/20/2013	5/28/2013	6/10/2013	5/28/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	14.5	2.5	9.5	9.5	14.5				
		end_depth	15.5	3.5	10.5	10.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg							

		sys_loc_code	DP39	DP40	DP40	DP40	DP40				
		sys_sample_code	DPS3915N	DPS4003N	DPS4010N	DPS4010N2	DPS4015N				
		sample_date	5/22/2013	5/20/2013	5/28/2013	6/10/2013	5/28/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	14.5	2.5	9.5	9.5	14.5				
		end_depth	15.5	3.5	10.5	10.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg							

				sys_loc_code	DP39	DP40	DP40	DP40	DP40		
				sys_sample_code	DPS3915N	DPS4003N	DPS4010N	DPS4010N2	DPS4015N		
				sample_date	5/22/2013	5/20/2013	5/28/2013	6/10/2013	5/28/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	14.5	2.5	9.5	9.5	14.5		
				end_depth	15.5	3.5	10.5	10.5	15.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg							



		sys_loc_code	DP39	DP40	DP40	DP40	DP40				
		sys_sample_code	DPS3915N	DPS4003N	DPS4010N	DPS4010N2	DPS4015N				
		sample_date	5/22/2013	5/20/2013	5/28/2013	6/10/2013	5/28/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	14.5	2.5	9.5	9.5	14.5				
		end_depth	15.5	3.5	10.5	10.5	15.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg							

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		sys_loc_code	DP39	DP40	DP40	DP40	DP40	DP40				
		sys_sample_code	DPS3915N	DPS4003N	DPS4010N	DPS4010N2	DPS4015N	DPS4015N				
		sample_date	5/22/2013	5/20/2013	5/28/2013	6/10/2013	5/28/2013	5/28/2013				
		sample_type_code	N	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	14.5	2.5	9.5	9.5	14.5	14.5				
		end_depth	15.5	3.5	10.5	10.5	15.5	15.5				
		depth_unit	ft	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg								
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg								
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg								
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg								
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg								
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg	20	U	14	J	20	U	18	U
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg	0.077	U	0.1	UU	0.091	U	0.094	U
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg	28		190		37		18	U
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg								
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg	0.0079	U	0.025	J	0.02	J	0.0072	U
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg	0.0079	U	0.031	J	0.039	U	0.0072	U
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg								

				sys_loc_code	DP39	DP40	DP40	DP40	DP40			
				sys_sample_code	DPS3915N	DPS4003N	DPS4010N	DPS4010N2	DPS4015N			
				sample_date	5/22/2013	5/20/2013	5/28/2013	6/10/2013	5/28/2013			
				sample_type_code	N	N	N	N	N			
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth	14.5	2.5	9.5	9.5	14.5			
				end_depth	15.5	3.5	10.5	10.5	15.5			
				depth_unit	ft	ft	ft	ft	ft			
				validated_yn	Y	Y	Y	Y	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg	0.0025	J	0.066	0.051		0.0072	U	
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg								
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg	0.0094		0.28	0.12		0.0072	U	
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg	0.0099		0.33	0.15		0.0072	U	
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg	0.011		0.32	0.16		0.0072	U	
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg	0.0072	J	0.29	0.15		0.0072	U	
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg	0.0034	J	0.12	0.058		0.0072	U	
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg								
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg	0.0098		0.29	0.15		0.0072	U	
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg	0.0079	U	0.072	0.044		0.0072	U	
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg								
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg								
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg	0.018		0.5	0.25		0.0072	U	
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg	0.0079	U	0.019	J	0.022	J	0.0072	U
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg	0.0066	J	0.23	0.11		0.0072	U	
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg	0.0079	U	0.068	0.043		0.0072	U	
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg								
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg								
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg	0.011		0.21	0.2		0.0072	U	
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg	0.012		0.4	0.17		0.0072	U	
RA_SO_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg					0.0064	U		
RA_SO_VOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg					0.0064	U		
RA_SO_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg					0.0064	U		
RA_SO_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg					0.0064	U		
RA_SO_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg					0.0064	U		

				sys_loc_code	DP39	DP40	DP40	DP40	DP40	DP40	
				sys_sample_code	DPS3915N	DPS4003N	DPS4010N	DPS4010N2	DPS4015N		
				sample_date	5/22/2013	5/20/2013	5/28/2013	6/10/2013	5/28/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	14.5	2.5	9.5	9.5	14.5		
				end_depth	15.5	3.5	10.5	10.5	15.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg				1.3	U		
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg				0.025	U		
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg				0.013	U		
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg				0.0064	U		
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg				0.0064	U		

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

					sys_loc_code	DP39	DP40	DP40	DP40	DP40		
					sys_sample_code	DPS3915N	DPS4003N	DPS4010N	DPS4010N2	DPS4015N		
					sample_date	5/22/2013	5/20/2013	5/28/2013	6/10/2013	5/28/2013		
					sample_type_code	N	N	N	N	N		
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
					start_depth	14.5	2.5	9.5	9.5	14.5		
					end_depth	15.5	3.5	10.5	10.5	15.5		
					depth_unit	ft	ft	ft	ft	ft		
					validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg						0.0064	U	
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg						0.0064	U	
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg						0.0064	U	
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg						0.0064	U	
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg						0.0064	U	
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg						0.013	U	

					sys_loc_code	DP41	DP41	DP41	DP42	DP42
					sys_sample_code	DPS41 10N	DPS41 15N	DPS4103N	DPS4205N	DPS4210N
					sample_date	5/24/2013	5/24/2013	5/22/2013	5/21/2013	5/29/2013
					sample_type_code	N	N	N	N	N
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
					start_depth	9.5	14.5	2.5	4.5	9.5
					end_depth	10.5	15.5	3.5	5.5	10.5
					depth_unit	ft	ft	ft	ft	ft
					validated_yn	Y	Y	Y	Y	N
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg						
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg						
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg						
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg						
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg						
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg						
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg						
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg						
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg						
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg						
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg						
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg						
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg						
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg						
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg						
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg						
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg						
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg						
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg						
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg						
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg						
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg						
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg						
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg						
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg						
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg						
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg						
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg	8200		1800		7500	
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg	0.063	J	0.012	J	0.24	U
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg	2.1		0.74		2.8	
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg	75		14		75	
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg	0.38		0.17		0.36	
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg	0.27		0.027	J	0.22	
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg	39000		190		48000	
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg	22		6.6		21	
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg	5.5		1.1		6.7	
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg	22		5.2		25	
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg	13000		8100		11000	
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg	45		2.5		47	
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg	4800		600		9300	
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg	220		34		230	
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg	0.059		0.035	U	0.091	

				sys_loc_code	DP41	DP41	DP41	DP42	DP42			
				sys_sample_code	DPS41 10N	DPS41 15N	DPS4103N	DPS4205N	DPS4210N			
				sample_date	5/24/2013	5/24/2013	5/22/2013	5/21/2013	5/29/2013			
				sample_type_code	N	N	N	N	N			
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth	9.5	14.5	2.5	4.5	9.5			
				end_depth	10.5	15.5	3.5	5.5	10.5			
				depth_unit	ft	ft	ft	ft	ft			
				validated_yn	Y	Y	Y	Y	N			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg	19		3			68		
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg	2200		670			1200		
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg	0.24	J	0.52	U		0.25	J	
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg	0.11	J	0.1	U		0.12		
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg	220		54			140		
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg	0.12		0.052	J		0.098	J	
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg	23		8.2			130		
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg	50		10			49		
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent								22
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg								
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.0052	U	0.0044	U		0.005	U	0.0047
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.0052	U	0.0044	U		0.005	U	0.0047
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.0052	U	0.0044	U		0.005	U	0.0047
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.0052	U	0.0044	U		0.005	U	0.0047
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.041	J	0.0044	U		0.067	J	0.0047
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.0052	U	0.0044	U		0.005	U	0.0047
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.15	J	0.0044	U		0.088	J	0.023
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.0052	U	0.0044	U		0.005	U	0.0047
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.0052	U	0.0044	U		0.005	U	0.0047
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg								
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg								
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg								
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg								
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg								
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg								
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg								

		sys_loc_code	DP41	DP41	DP41	DP42	DP42				
		sys_sample_code	DPS41 10N	DPS41 15N	DPS4103N	DPS4205N	DPS4210N				
		sample_date	5/24/2013	5/24/2013	5/22/2013	5/21/2013	5/29/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	9.5	14.5	2.5	4.5	9.5				
		end_depth	10.5	15.5	3.5	5.5	10.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	N				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C								
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C								
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C								
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C								
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	mg/kg	0.19	0.0044	U	0.16		0.023	
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg	0.19	0.0044	U	0.16		0.023	
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg							



					sys_loc_code	DP41	DP41	DP41	DP42	DP42
					sys_sample_code	DPS41 10N	DPS41 15N	DPS4103N	DPS4205N	DPS4210N
					sample_date	5/24/2013	5/24/2013	5/22/2013	5/21/2013	5/29/2013
					sample_type_code	N	N	N	N	N
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
					start_depth	9.5	14.5	2.5	4.5	9.5
					end_depth	10.5	15.5	3.5	5.5	10.5
					depth_unit	ft	ft	ft	ft	ft
					validated_yn	Y	Y	Y	Y	N
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg						

					sys_loc_code	DP41	DP41	DP41	DP42	DP42
					sys_sample_code	DPS41 10N	DPS41 15N	DPS4103N	DPS4205N	DPS4210N
					sample_date	5/24/2013	5/24/2013	5/22/2013	5/21/2013	5/29/2013
					sample_type_code	N	N	N	N	N
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
					start_depth	9.5	14.5	2.5	4.5	9.5
					end_depth	10.5	15.5	3.5	5.5	10.5
					depth_unit	ft	ft	ft	ft	ft
					validated_yn	Y	Y	Y	Y	N
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg						

		sys_loc_code	DP41	DP41	DP41	DP42	DP42				
		sys_sample_code	DPS41 10N	DPS41 15N	DPS4103N	DPS4205N	DPS4210N				
		sample_date	5/24/2013	5/24/2013	5/22/2013	5/21/2013	5/29/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	9.5	14.5	2.5	4.5	9.5				
		end_depth	10.5	15.5	3.5	5.5	10.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	N				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg							

					sys_loc_code	DP41	DP41	DP41	DP42	DP42
					sys_sample_code	DPS41 10N	DPS41 15N	DPS4103N	DPS4205N	DPS4210N
					sample_date	5/24/2013	5/24/2013	5/22/2013	5/21/2013	5/29/2013
					sample_type_code	N	N	N	N	N
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
					start_depth	9.5	14.5	2.5	4.5	9.5
					end_depth	10.5	15.5	3.5	5.5	10.5
					depth_unit	ft	ft	ft	ft	ft
					validated_yn	Y	Y	Y	Y	N
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg						

				sys_loc_code	DP41	DP41	DP41	DP42	DP42		
				sys_sample_code	DPS41 10N	DPS41 15N	DPS4103N	DPS4205N	DPS4210N		
				sample_date	5/24/2013	5/24/2013	5/22/2013	5/21/2013	5/29/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	9.5	14.5	2.5	4.5	9.5		
				end_depth	10.5	15.5	3.5	5.5	10.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	N		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg							
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg							
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg							
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg							
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg							
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg	160	18	U	200	U	43	
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg	0.15	U	0.1	U	0.11	UJ	
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg	370	18	U	550	U	160	
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg	0.22	0.0072	U	0.11	0.025	J	
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg	0.05	0.0072	U	0.088	0.0097	J	
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg							

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP41	DP41	DP41	DP42	DP42			
				sys_sample_code	DPS41 10N	DPS41 15N	DPS4103N	DPS4205N	DPS4210N			
				sample_date	5/24/2013	5/24/2013	5/22/2013	5/21/2013	5/29/2013			
				sample_type_code	N	N	N	N	N			
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth	9.5	14.5	2.5	4.5	9.5			
				end_depth	10.5	15.5	3.5	5.5	10.5			
				depth_unit	ft	ft	ft	ft	ft			
				validated_yn	Y	Y	Y	Y	N			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg	0.34		0.0072	U	0.31		0.036	J
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg								
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg	0.57		0.0072	U	1.1		0.088	
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg	0.53		0.0072	U	0.99		0.061	
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg	0.54		0.0072	U	0.89		0.11	
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg	0.4		0.0072	U	0.72		0.067	
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg	0.2		0.0072	U	0.47		0.035	J
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg								
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg	0.58		0.0072	U	1.1		0.22	
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg	0.099		0.0072	U	0.18		0.026	J
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg								
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg								
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg	1.5		0.0072	U	2.1		0.22	
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg	0.17		0.0072	U	0.089		0.055	
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg	0.34		0.0072	U	0.63		0.048	
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg	0.28		0.0072	U	0.089		0.1	
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg								
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg								
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg	1.7		0.0072	U	1		0.32	
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg	1.1		0.0072	U	1.7		0.16	
RA_SO_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg							0.0044	U
RA_SO_VOCs	1,1,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg							0.0044	U
RA_SO_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg							0.0044	U
RA_SO_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg							0.0044	U
RA_SO_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg							0.0044	U

				sys_loc_code	DP41	DP41	DP41	DP42	DP42		
				sys_sample_code	DPS41 10N	DPS41 15N	DPS4103N	DPS4205N	DPS4210N		
				sample_date	5/24/2013	5/24/2013	5/22/2013	5/21/2013	5/29/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	9.5	14.5	2.5	4.5	9.5		
				end_depth	10.5	15.5	3.5	5.5	10.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	N		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg				0.88	U		
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg				0.018	U		
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg				0.0088	U		
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg				0.0044	U		
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg				0.0044	U		



Attachment A  
 Subsurface Soil Data  
 Benning Road Facility RI/FS Project  
 3400 Benning Rd, N.E., Washington DC 20019

					sys_loc_code	DP41	DP41	DP41	DP42	DP42		
					sys_sample_code	DPS41 10N	DPS41 15N	DPS4103N	DPS4205N	DPS4210N		
					sample_date	5/24/2013	5/24/2013	5/22/2013	5/21/2013	5/29/2013		
					sample_type_code	N	N	N	N	N		
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
					start_depth	9.5	14.5	2.5	4.5	9.5		
					end_depth	10.5	15.5	3.5	5.5	10.5		
					depth_unit	ft	ft	ft	ft	ft		
					validated_yn	Y	Y	Y	Y	N		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg					0.0044	U		
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg					0.0044	U		
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg					0.0044	U		
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg					0.0044	U		
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg					0.0044	U		
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg					0.0088	U		



Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP42	DP42	DP42	DP43	DP43				
				sys_sample_code	DPS4210N	DPS4215N	DPS4215N	DPS4304N	DPS4310N				
				sample_date	5/29/2013	5/29/2013	5/29/2013	5/17/2013	6/7/2013				
				sample_type_code	N	N	N	N	N				
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
				start_depth	9.5	14.5	14.5	3.5	9.5				
				end_depth	10.5	15.5	15.5	4.5	10.5				
				depth_unit	ft	ft	ft	ft	ft				
				validated_yn	Y	N	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers		
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg									
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg									
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg									
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg									
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg									
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg									
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg									
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg									
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg									
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg									
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg									
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg									
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg									
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg									
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg									
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg									
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg									
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg									
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg									
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg									
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg									
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg									
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg									
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg									
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg									
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg									
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg									
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg	8600	J+		4400	J+	2900		5600	J+
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg	0.63			0.44		0.025	J-	0.056	J
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg	71	J-		37	J-	0.39	J-	2.9	J-
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg	2400			140		25		48	
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg	1.1			0.67		1.9	J-	0.36	
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg	1.1			0.92		0.26		0.25	
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg	7300			3700		1500		11000	
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg	19			12			J-	13	
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg	11			5.4		4.1		4.8	
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg	140			62		65	J+	39	
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg	25000			11000	J	18000		13000	
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg	280			110		24		150	
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg	1600			570		560		5100	
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg	810			110		53	J	140	
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg	0.44	J-		2.2		0.11	J-	0.15	

				sys_loc_code	DP42	DP42	DP42	DP42	DP42	DP43	DP43	
				sys_sample_code	DPS4210N	DPS4215N	DPS4215N	DPS4215N	DPS4215N	DPS4304N	DPS4310N	
				sample_date	5/29/2013	5/29/2013	5/29/2013	5/29/2013	5/29/2013	5/17/2013	6/7/2013	
				sample_type_code	N	N	N	N	N	N	N	
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
				start_depth	9.5	14.5	14.5	14.5	14.5	3.5	9.5	
				end_depth	10.5	15.5	15.5	15.5	15.5	4.5	10.5	
				depth_unit	ft	ft	ft	ft	ft	ft	ft	
				validated_yn	Y	N	Y	Y	Y	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_value	interpreted_qualifiers	report_result_value	report_result_value	interpreted_qualifiers	report_result_value	report_result_value	interpreted_qualifiers
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg	120			9.6		13		15
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg	730			430		600		500
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg	2.6	J-		1	J-	0.6	UJ	0.29 J-
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg	0.23			0.063	J	0.017	J	0.052 J
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg	380			270		69		88
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg	1.6			0.61		0.11	J	0.1 J
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg	49			25		25	J-	24
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg	690			250		58	J-	250
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent			24					
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg								
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.0054	U		0.0053	U	0.001	U	0.0051 U
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.0054	U		0.0053	U	0.001	U	0.0051 U
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.0054	U		0.0053	U	0.001	U	0.0051 U
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.0054	U		0.0053	U	0.001	U	0.0051 U
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.0054	U		0.0053	U	0.001	U	0.18 J
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.04	J		0.16	J	0.008	J	0.0051 U
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.024	J		0.05	J	0.0058	J	0.1 J
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.0054	U		0.0053	U	0.001	U	0.0051 U
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.0054	U		0.0053	U	0.001	U	0.0051 U
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg								
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg								
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg								
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg								
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg								
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg								
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg								

		sys_loc_code	DP42	DP42	DP42	DP43	DP43				
		sys_sample_code	DPS4210N	DPS4215N	DPS4215N	DPS4304N	DPS4310N				
		sample_date	5/29/2013	5/29/2013	5/29/2013	5/17/2013	6/7/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	9.5	14.5	14.5	3.5	9.5				
		end_depth	10.5	15.5	15.5	4.5	10.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	N	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	mg/kg							
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	mg/kg							
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C	mg/kg							
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	mg/kg	0.064			0.21		0.014	
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg	0.064			0.21		0.014	
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg							

					sys_loc_code	DP42	DP42	DP42	DP43	DP43
					sys_sample_code	DPS4210N	DPS4215N	DPS4215N	DPS4304N	DPS4310N
					sample_date	5/29/2013	5/29/2013	5/29/2013	5/17/2013	6/7/2013
					sample_type_code	N	N	N	N	N
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
					start_depth	9.5	14.5	14.5	3.5	9.5
					end_depth	10.5	15.5	15.5	4.5	10.5
					depth_unit	ft	ft	ft	ft	ft
					validated_yn	Y	N	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg						



Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

					sys_loc_code	DP42	DP42	DP42	DP43	DP43
					sys_sample_code	DPS4210N	DPS4215N	DPS4215N	DPS4304N	DPS4310N
					sample_date	5/29/2013	5/29/2013	5/29/2013	5/17/2013	6/7/2013
					sample_type_code	N	N	N	N	N
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
					start_depth	9.5	14.5	14.5	3.5	9.5
					end_depth	10.5	15.5	15.5	4.5	10.5
					depth_unit	ft	ft	ft	ft	ft
					validated_yn	Y	N	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg						



Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		sys_loc_code	DP42	DP42	DP42	DP43	DP43				
		sys_sample_code	DPS4210N	DPS4215N	DPS4215N	DPS4304N	DPS4310N				
		sample_date	5/29/2013	5/29/2013	5/29/2013	5/17/2013	6/7/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	9.5	14.5	14.5	3.5	9.5				
		end_depth	10.5	15.5	15.5	4.5	10.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	N	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg							

					sys_loc_code	DP42	DP42	DP42	DP43	DP43	
					sys_sample_code	DPS4210N	DPS4215N	DPS4215N	DPS4304N	DPS4310N	
					sample_date	5/29/2013	5/29/2013	5/29/2013	5/17/2013	6/7/2013	
					sample_type_code	N	N	N	N	N	
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
					start_depth	9.5	14.5	14.5	3.5	9.5	
					end_depth	10.5	15.5	15.5	4.5	10.5	
					depth_unit	ft	ft	ft	ft	ft	
					validated_yn	Y	N	Y	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg							

				sys_loc_code	DP42	DP42	DP42	DP43	DP43		
				sys_sample_code	DPS4210N	DPS4215N	DPS4215N	DPS4304N	DPS4310N		
				sample_date	5/29/2013	5/29/2013	5/29/2013	5/17/2013	6/7/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	9.5	14.5	14.5	3.5	9.5		
				end_depth	10.5	15.5	15.5	4.5	10.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	N	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg							
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg							
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg							
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg							
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg							
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg	45			71		20	U
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg	0.12	U		0.11	U	0.092	UJ
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg	390			370		22	
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg	0.055			0.038	J		
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg	0.043			0.044	U		
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg							



				sys_loc_code	DP42	DP42	DP42	DP43	DP43		
				sys_sample_code	DPS4210N	DPS4215N	DPS4215N	DPS4304N	DPS4310N		
				sample_date	5/29/2013	5/29/2013	5/29/2013	5/17/2013	6/7/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	9.5	14.5	14.5	3.5	9.5		
				end_depth	10.5	15.5	15.5	4.5	10.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	N	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg	0.1			0.062			
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg	0.58			0.34			
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg	1.2			0.39			
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg	0.64			0.38			
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg	1.1			0.31			
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg	0.21			0.16			
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg	0.62			0.38			
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg	0.45			0.073			
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg							
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg	0.76			0.51			
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg	0.061			0.036	J		
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg	0.58			0.25			
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg	0.1			0.061			
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg	0.44			0.23			
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg	0.57			0.38			
RA_SO_VOCS	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg						0.0045	U
RA_SO_VOCS	1,1,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg						0.0045	U
RA_SO_VOCS	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg						0.0045	U
RA_SO_VOCS	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg						0.0045	U
RA_SO_VOCS	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg						0.0045	U

		sys_loc_code	DP42	DP42	DP42	DP43	DP43
		sys_sample_code	DPS4210N	DPS4215N	DPS4215N	DPS4304N	DPS4310N
		sample_date	5/29/2013	5/29/2013	5/29/2013	5/17/2013	6/7/2013
		sample_type_code	N	N	N	N	N
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
		start_depth	9.5	14.5	14.5	3.5	9.5
		end_depth	10.5	15.5	15.5	4.5	10.5
		depth_unit	ft	ft	ft	ft	ft
		validated_yn	Y	N	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg			0.89 U
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg			0.018 U
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg			0.0089 U
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg			0.0045 U
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg			0.0045 U

					sys_loc_code	DP42	DP42	DP42	DP43	DP43		
					sys_sample_code	DPS4210N	DPS4215N	DPS4215N	DPS4304N	DPS4310N		
					sample_date	5/29/2013	5/29/2013	5/29/2013	5/17/2013	6/7/2013		
					sample_type_code	N	N	N	N	N		
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
					start_depth	9.5	14.5	14.5	3.5	9.5		
					end_depth	10.5	15.5	15.5	4.5	10.5		
					depth_unit	ft	ft	ft	ft	ft		
					validated_yn	Y	N	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg							0.0045	U
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg							0.0045	U
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg							0.0045	U
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg							0.0045	U
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg							0.0045	U
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg							0.0089	U

		sys_loc_code	DP43	DP44	DP44	DP44	DP44	DP45	
		sys_sample_code	DPS4315N	DPS4403N	DPS4410N	DPS4415N	DPS4503N		
		sample_date	6/7/2013	5/21/2013	6/10/2013	6/10/2013	5/23/2013		
		sample_type_code	N	N	N	N	N		
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
		start_depth	14.5	2.5	9.5	14.5	2.5		
		end_depth	15.5	3.5	10.5	15.5	3.5		
		depth_unit	ft	ft	ft	ft	ft		
		validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg					
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg					
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg		6400			
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg		0.13	J		
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg		6.8			
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg		48			
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg		0.45			
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg		0.17			
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg		1100			
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg		13			
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg		3.3			
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg		23			
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg		17000			
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg		60			
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg		730			
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg		110			
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg		0.083			



Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

				sys_loc_code	DP43	DP44	DP44	DP44	DP44	DP45		
				sys_sample_code	DPS4315N	DPS4403N	DPS4410N	DPS4415N	DPS4503N			
				sample_date	6/7/2013	5/21/2013	6/10/2013	6/10/2013	5/23/2013			
				sample_type_code	N	N	N	N	N			
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth	14.5	2.5	9.5	14.5	2.5			
				end_depth	15.5	3.5	10.5	15.5	3.5			
				depth_unit	ft	ft	ft	ft	ft			
				validated_yn	Y	Y	Y	Y	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg			6					
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg			490					
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg			0.48	J				
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg			0.055	J				
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg			95					
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg			0.19					
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg			27					
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg			28					
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent								
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg								
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.0053	U	0.047	U	0.0045	U	0.0053	U
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.0053	U	0.047	U	0.0045	U	0.0053	U
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.0053	U	0.047	U	0.0045	U	0.0053	U
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.0053	U	0.047	U	0.0045	U	0.0053	U
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.0042	J	1.5	J	0.0045	U	0.0053	U
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.0053	U	0.047	U	0.0045	U	0.0053	U
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.0029	J	1.6	J	0.0045	U	0.0053	U
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.0053	U	0.047	U	0.0045	U	0.0053	U
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.0053	U	0.047	U	0.0045	U	0.0053	U
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg								
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg			0.00219					
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg			0.0468	JN				
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg								
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg			0.455	JN				
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg			0.645	JN				
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg			0.000571	JN				

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

					DP43	DP44	DP44	DP44	DP45
					DPS4315N	DPS4403N	DPS4410N	DPS4415N	DPS4503N
					6/7/2013	5/21/2013	6/10/2013	6/10/2013	5/23/2013
					N	N	N	N	N
					Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
					14.5	2.5	9.5	14.5	2.5
					15.5	3.5	10.5	15.5	3.5
					ft	ft	ft	ft	ft
					Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
p				unit	qualifiers	qualifiers	qualifiers	qualifiers	qualifiers
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	mg/kg		0.0178			
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	mg/kg		0.122			
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	mg/kg		5.95E-05			
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C	mg/kg		2.39			
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	mg/kg	0.0071	3.1	0.0045	U	0.0053
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg	0.0071	3.1	0.0045	U	0.0053
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg		0.000255			
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg		0.00036			
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg		0.000365	JN		
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg		0.0627			
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg		0.00183			
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg		0.000219			
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg		7.06E-06	U		
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg		0.0205			
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg		8.19E-06	U		
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg		0.00315			
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg		0.00253			
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg		0.0408			
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg		0.000171	JN		
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg		0.0735			
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg		2.8E-05	J		
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg		7.2E-06	U		
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg		0.0627			
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg		0.000857			
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg		0.0735			
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg		0.0114			
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg		0.0114			
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg		0.0501			
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg		0.0408			
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg		0.00235			
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg		0.000124			
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg		6.88E-06	U		
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg		0.00109			
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg		0.00143			
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg		0.00253			
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg		0.0408			
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg		0.000337			
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg		0.00011	JN		
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg		0.0158			
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg		0.139			
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg		0.00235			
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg		0.00648			

		sys_loc_code	DP43	DP44	DP44	DP44	DP44	DP45	
		sys_sample_code	DPS4315N	DPS4403N	DPS4410N	DPS4415N	DPS4503N		
		sample_date	6/7/2013	5/21/2013	6/10/2013	6/10/2013	5/23/2013		
		sample_type_code	N	N	N	N	N		
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
		start_depth	14.5	2.5	9.5	14.5	2.5		
		end_depth	15.5	3.5	10.5	15.5	3.5		
		depth_unit	ft	ft	ft	ft	ft		
		validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	0.00135					
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	0.0441					
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	0.00146					
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	0.00653					
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	0.0562					
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	0.0179					
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	0.00335					
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	0.139					
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	0.00123					
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	5.81E-06	JN				
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	0.00123					
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	0.0369					
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	1.9E-05	U				
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	0.00653					
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	0.00801					
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	2.31E-05	JN				
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	0.0193					
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	0.12					
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	4.64E-05	J				
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	0.12					
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	0.0262					
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	5.32E-05	JN				
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	0.0562					
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	3.76E-05	J				
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	0.126					
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	0.00046					
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	1.02E-05	U				
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	0.00901					
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	0.00901					
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	0.0131					
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	0.00197					
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	0.0103					
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	0.139					
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	1.25E-05	U				
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	0.000377					
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	0.139					
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	0.0101					
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	2.66E-05	JN				
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	0.0158					
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	0.00448					
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	0.126					
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	0.000737	JN				

				sys_loc_code	DP43	DP44	DP44	DP44	DP44	DP45
				sys_sample_code	DPS4315N	DPS4403N	DPS4410N	DPS4415N	DPS4415N	DPS4503N
				sample_date	6/7/2013	5/21/2013	6/10/2013	6/10/2013	6/10/2013	5/23/2013
				sample_type_code	N	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	14.5	2.5	9.5	14.5	14.5	2.5
				end_depth	15.5	3.5	10.5	15.5	15.5	3.5
				depth_unit	ft	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg			0.00985			
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg			0.0537			
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg			0.0161			
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg			0.00973			
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg			0.0161			
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg			0.0599			
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg			0.00229			
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg			0.0073			
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg			0.0318			
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg			0.0114			
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg			0.0255			
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg			0.0186			
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg			0.119			
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg			0.000231	JN		
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg			1.18E-05	U		
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg			0.0399			
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg			4.18E-05	J		
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg			0.0399			
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg			7.37E-06	JN		
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg			0.0651			
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg			3.12E-05	JN		
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg			0.00171			
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg			0.00427			
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg			0.00997			
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg			0.00209			
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg			1.03E-05	U		
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg			0.119			
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg			0.0301			
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg			0.0126			
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg			0.0138			
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg			0.00104			
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg			0.0318			
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg			0.0318			
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg			4.68E-05	JN		
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg			0.0691			
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg			0.0035			
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg			0.00352			
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg			0.00561			
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg			0.0181			
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg			7.67E-06	U		
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg			0.00152			
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg			0.0129			



Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		sys_loc_code	DP43	DP44	DP44	DP44	DP44	DP45	
		sys_sample_code	DPS4315N	DPS4403N	DPS4410N	DPS4415N	DPS4415N	DPS4503N	
		sample_date	6/7/2013	5/21/2013	6/10/2013	6/10/2013	6/10/2013	5/23/2013	
		sample_type_code	N	N	N	N	N	N	
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
		start_depth	14.5	2.5	9.5	14.5	14.5	2.5	
		end_depth	15.5	3.5	10.5	15.5	15.5	3.5	
		depth_unit	ft	ft	ft	ft	ft	ft	
		validated_yn	Y	Y	Y	Y	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg		0.00133			
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg		0.00363			
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg		0.0248			
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg		0.0212			
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg		4.14E-05	J		
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg		0.000533			
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg		0.00442			
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg		0.00845			
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg		0.00285			
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg		0.0691			
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg		0.00845			
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg		0.00027			
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg		0.0186			
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg		0.0444			
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg		0.0129			
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg		0.0248			
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg		0.000102			
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg		0.0017			
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg		7.3E-06	U		
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg		0.0424			
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg		6.28E-05			
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg		0.000229			
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg		0.00248			
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg		0.0366			
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg		0.0366			
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg		0.0171			
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg		0.00183			
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg		0.0526			
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg		0.0114			
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg		0.00415			
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg		0.0526			
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg		0.00878			
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg		0.0286			
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg		0.000186			
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg		0.00694			
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg		0.0114			
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg		0.0481			
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg		0.00694			
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg		0.000116			
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg		0.00165			
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg		0.0243			
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg		0.000195			

				sys_loc_code	DP43	DP44	DP44	DP44	DP44	DP45
				sys_sample_code	DPS4315N	DPS4403N	DPS4410N	DPS4415N	DPS4415N	DPS4503N
				sample_date	6/7/2013	5/21/2013	6/10/2013	6/10/2013	6/10/2013	5/23/2013
				sample_type_code	N	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	14.5	2.5	9.5	14.5	14.5	2.5
				end_depth	15.5	3.5	10.5	15.5	15.5	3.5
				depth_unit	ft	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value	report_result_value
p				unit	unit	unit	unit	unit	unit	unit
					interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers	interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg			0.000119	JN		
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg			0.00582			
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg			0.00304			
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg			0.0118			
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg			0.0808			
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg			0.00582			
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg			0.00105			
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg			0.0209			
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg			0.0526			
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg			0.0561			
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg			0.00148			
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg			0.000163			
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg			0.0286			
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg			0.000412			
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg			0.0808			
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg			0.0366			
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg			0.000304			
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg			0.00183			
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg			0.0808			
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg			0.00582			
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg			0.0808			
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg			0.00907			
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg			2.88E-05	JN		
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg			0.000526			
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg			0.0109			
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg			7.08E-06	U		
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg			0.000322			
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg			0.00974			
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg			0.0283			
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg			0.0145			
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg			0.0114			
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg			0.0408			
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg			0.0408			
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg			0.00704			
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg			0.001			
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg			0.000707			
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg			0.0627			
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg			0.00704			
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg			0.0101			
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg			0.000365	JN		
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg			0.000277			
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg			0.0498			

					sys_loc_code	DP43	DP44	DP44	DP44	DP45				
					sys_sample_code	DPS4315N	DPS4403N	DPS4410N	DPS4415N	DPS4503N				
					sample_date	6/7/2013	5/21/2013	6/10/2013	6/10/2013	5/23/2013				
					sample_type_code	N	N	N	N	N				
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
					start_depth	14.5	2.5	9.5	14.5	2.5				
					end_depth	15.5	3.5	10.5	15.5	3.5				
					depth_unit	ft	ft	ft	ft	ft				
					validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers			
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg		0.000456								
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg		0.0408								
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg		0.00183								
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg		0.0283								
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg		0.392	JN							
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg		0.431	JN							
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg										
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg										
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg		0.276								
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg	150	J	67	J	18	U	21	U	20	U
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg	0.1	UJ	0.087	UJ	0.096	U	0.091	U	0.11	U
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg	770	J	770		18	U	21	U	22	
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg										
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg										
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg										
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg										
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg										
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg										
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg										
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg										
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg										
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg										

				sys_loc_code	DP43	DP44	DP44	DP44	DP44	DP45	
				sys_sample_code	DPS4315N	DPS4403N	DPS4410N	DPS4415N	DPS4503N		
				sample_date	6/7/2013	5/21/2013	6/10/2013	6/10/2013	5/23/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	14.5	2.5	9.5	14.5	2.5		
				end_depth	15.5	3.5	10.5	15.5	3.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg							
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg							
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg							
RA_SO_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg		0.0042	U			0.0052	U

				sys_loc_code	DP43	DP44	DP44	DP44	DP44	DP45	
				sys_sample_code	DPS4315N	DPS4403N	DPS4410N	DPS4415N	DPS4503N		
				sample_date	6/7/2013	5/21/2013	6/10/2013	6/10/2013	5/23/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	14.5	2.5	9.5	14.5	2.5		
				end_depth	15.5	3.5	10.5	15.5	3.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg		0.83	U			1	U
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg		0.0078	J			0.021	U
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg		0.0083	U			0.01	U
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	Tetracloroethylene	127-18-4	SW8260B	mg/kg		0.0042	U			0.0052	U
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg		0.0042	U			0.0052	U

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

					sys_loc_code	DP43	DP44	DP44	DP44	DP44	DP45	
					sys_sample_code	DPS4315N	DPS4403N	DPS4410N	DPS4415N	DPS4503N		
					sample_date	6/7/2013	5/21/2013	6/10/2013	6/10/2013	5/23/2013		
					sample_type_code	N	N	N	N	N		
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
					start_depth	14.5	2.5	9.5	14.5	2.5		
					end_depth	15.5	3.5	10.5	15.5	3.5		
					depth_unit	ft	ft	ft	ft	ft		
					validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg			0.0042	U			0.0052	U
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg			0.0042	U			0.0052	U
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg			0.0042	U			0.0052	U
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg			0.0042	U			0.0052	U
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg			0.0042	U			0.0052	U
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg			0.0083	U			0.01	U

				sys_loc_code	DP45	DP45	DP45	DP45	DP46
				sys_sample_code	DPS4510N	DPS4510N	DPS4515N	DPS4515N	DPS4605N
				sample_date	6/4/2013	6/4/2013	6/4/2013	6/4/2013	5/22/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	9.5	9.5	14.5	14.5	4.5
				end_depth	10.5	10.5	15.5	15.5	5.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	N	Y	N	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg					
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg					
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg					
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg					
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg					
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg					
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg					
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg					
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg					
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg					
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg					
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg					
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg					
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg					
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg					
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg					
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg					

				sys_loc_code	DP45	DP45	DP45	DP45	DP46		
				sys_sample_code	DPS4510N	DPS4510N	DPS4515N	DPS4515N	DPS4605N		
				sample_date	6/4/2013	6/4/2013	6/4/2013	6/4/2013	5/22/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	9.5	9.5	14.5	14.5	4.5		
				end_depth	10.5	10.5	15.5	15.5	5.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	N	Y	N	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg							
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg							
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg							
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg							
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg							
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg							
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg							
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg							
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent	5.4		12				
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg							
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg							
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.0044	U		0.0047	U	0.0043	U
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.0044	U		0.0047	U	0.0043	U
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.0044	U		0.0047	U	0.0043	U
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.0044	U		0.0047	U	0.0043	U
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.0044	U		0.0047	U	0.0043	U
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.0044	U		0.0047	U	0.0043	U
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.0044	U		0.0047	U	0.0015	J
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.0044	U		0.0047	U	0.0043	U
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.0044	U		0.0047	U	0.0043	U
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg							
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg							
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg							
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg							
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg							
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg							
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg							
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg							



				sys_loc_code	DP45	DP45	DP45	DP45	DP46		
				sys_sample_code	DPS4510N	DPS4510N	DPS4515N	DPS4515N	DPS4605N		
				sample_date	6/4/2013	6/4/2013	6/4/2013	6/4/2013	5/22/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	9.5	9.5	14.5	14.5	4.5		
				end_depth	10.5	10.5	15.5	15.5	5.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	N	Y	N	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	mg/kg							
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	mg/kg							
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C	mg/kg							
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	mg/kg		0.0044	U	0.0047	U	0.0015	
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg		0.0044	U	0.0047	U	0.0015	J
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg							



Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

					sys_loc_code	DP45	DP45	DP45	DP45	DP46
					sys_sample_code	DPS4510N	DPS4510N	DPS4515N	DPS4515N	DPS4605N
					sample_date	6/4/2013	6/4/2013	6/4/2013	6/4/2013	5/22/2013
					sample_type_code	N	N	N	N	N
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
					start_depth	9.5	9.5	14.5	14.5	4.5
					end_depth	10.5	10.5	15.5	15.5	5.5
					depth_unit	ft	ft	ft	ft	ft
					validated_yn	N	Y	N	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg						

					DP45	DP45	DP45	DP45	DP46	
					DPS4510N	DPS4510N	DPS4515N	DPS4515N	DPS4605N	
					6/4/2013	6/4/2013	6/4/2013	6/4/2013	5/22/2013	
					N	N	N	N	N	
					Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
					9.5	9.5	14.5	14.5	4.5	
					10.5	10.5	15.5	15.5	5.5	
					ft	ft	ft	ft	ft	
					N	Y	N	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg						

				sys_loc_code	DP45	DP45	DP45	DP45	DP46		
				sys_sample_code	DPS4510N	DPS4510N	DPS4515N	DPS4515N	DPS4605N		
				sample_date	6/4/2013	6/4/2013	6/4/2013	6/4/2013	5/22/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	9.5	9.5	14.5	14.5	4.5		
				end_depth	10.5	10.5	15.5	15.5	5.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	N	Y	N	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg							

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

		sys_loc_code	DP45	DP45	DP45	DP45	DP46				
		sys_sample_code	DPS4510N	DPS4510N	DPS4515N	DPS4515N	DPS4605N				
		sample_date	6/4/2013	6/4/2013	6/4/2013	6/4/2013	5/22/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	9.5	9.5	14.5	14.5	4.5				
		end_depth	10.5	10.5	15.5	15.5	5.5				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	N	Y	N	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg							

		sys_loc_code	DP45	DP45	DP45	DP45	DP45	DP46	
		sys_sample_code	DPS4510N	DPS4510N	DPS4515N	DPS4515N	DPS4515N	DPS4605N	
		sample_date	6/4/2013	6/4/2013	6/4/2013	6/4/2013	6/4/2013	5/22/2013	
		sample_type_code	N	N	N	N	N	N	
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	
		start_depth	9.5	9.5	14.5	14.5	14.5	4.5	
		end_depth	10.5	10.5	15.5	15.5	15.5	5.5	
		depth_unit	ft	ft	ft	ft	ft	ft	
		validated_yn	N	Y	N	Y	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg					
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg					
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg					
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg					
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg					
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg					
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg					
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg	18	U		19	U
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg	0.11	U		0.097	U
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg	18	U		19	U
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg					
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg					
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg					
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg					
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg					
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg					
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg					
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg					
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg					
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg					
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg					
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg					
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg					
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg					
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg					
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg					
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg					
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg					
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg					
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg					
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg					
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg					
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg					
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg					
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg					
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg					
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg					
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg					
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg					
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg					

				sys_loc_code	DP45	DP45	DP45	DP45	DP46		
				sys_sample_code	DPS4510N	DPS4510N	DPS4515N	DPS4515N	DPS4605N		
				sample_date	6/4/2013	6/4/2013	6/4/2013	6/4/2013	5/22/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	9.5	9.5	14.5	14.5	4.5		
				end_depth	10.5	10.5	15.5	15.5	5.5		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	N	Y	N	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg							
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg							
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg							
RA_SO_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg		0.0046	U			0.0048	U
RA_SO_VOCs	1,1,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg		0.0046	U			0.0048	U
RA_SO_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg		0.0046	U			0.0048	U
RA_SO_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg		0.0046	U			0.0048	U
RA_SO_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg		0.0046	U			0.0048	U

				sys_loc_code	DP45	DP45	DP45	DP45	DP46
				sys_sample_code	DPS4510N	DPS4510N	DPS4515N	DPS4515N	DPS4605N
				sample_date	6/4/2013	6/4/2013	6/4/2013	6/4/2013	5/22/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	9.5	9.5	14.5	14.5	4.5
				end_depth	10.5	10.5	15.5	15.5	5.5
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	N	Y	N	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg		0.91	U		0.97
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg		0.018	U		0.019
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg		0.0091	U		0.0097
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg		0.0046	U		0.0048
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg		0.0046	U		0.0048



					sys_loc_code	DP45	DP45	DP45	DP45	DP46		
					sys_sample_code	DPS4510N	DPS4510N	DPS4515N	DPS4515N	DPS4605N		
					sample_date	6/4/2013	6/4/2013	6/4/2013	6/4/2013	5/22/2013		
					sample_type_code	N	N	N	N	N		
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
					start_depth	9.5	9.5	14.5	14.5	4.5		
					end_depth	10.5	10.5	15.5	15.5	5.5		
					depth_unit	ft	ft	ft	ft	ft		
					validated_yn	N	Y	N	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_unit	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers	report_result_value	interpreted_qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg	0.0046	U			0.0048	U		
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg	0.0046	U			0.0048	U		
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg	0.0046	U			0.0048	U		
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg	0.0046	U			0.0048	U		
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg	0.0046	U			0.0048	U		
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg	0.0091	U			0.0097	U		

				sys_loc_code	DP46	DP46	DP47	DP47	DP47
				sys_sample_code	DPS4610N	DPS4615N	DPS4702N	DPS4710N	DPS4715N
				sample_date	6/5/2013	6/5/2013	5/28/2013	6/5/2013	6/5/2013
				sample_type_code	N	N	N	N	N
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
				start_depth	9.5	14.5	1.5	9.5	14
				end_depth	10.5	15.5	2.5	10.5	15
				depth_unit	ft	ft	ft	ft	ft
				validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value	report_result_interpreted_value
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg					
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg					
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg					
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg					
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg			8200		
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg			0.13	J	
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg			7.7		
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg			59		
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg			0.58		
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg			0.32		
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg			11000		
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg			23		
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg			6.5		
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg			30		
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg			16000		
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg			60		
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg			2700		
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg			200		
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg			0.1		

				sys_loc_code	DP46	DP46	DP47	DP47	DP47			
				sys_sample_code	DPS4610N	DPS4615N	DPS4702N	DPS4710N	DPS4715N			
				sample_date	6/5/2013	6/5/2013	5/28/2013	6/5/2013	6/5/2013			
				sample_type_code	N	N	N	N	N			
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013			
				start_depth	9.5	14.5	1.5	9.5	14			
				end_depth	10.5	15.5	2.5	10.5	15			
				depth_unit	ft	ft	ft	ft	ft			
				validated_yn	Y	Y	Y	Y	Y			
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg			23					
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg			760					
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg			0.43	J				
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg			0.073	J				
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg			67					
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg			0.17					
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg			23					
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg			56					
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent								
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg								
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg	0.0048	U	0.0049	U	0.0045	U	0.0046	U
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg	0.0048	U	0.0049	U	0.0045	U	0.0046	U
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg	0.0048	U	0.0049	U	0.0045	U	0.0046	U
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg	0.0048	U	0.0049	U	0.0045	U	0.0046	U
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg	0.0048	U	0.0049	U	0.0045	U	0.0046	U
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg	0.0048	U	0.0049	U	0.0045	U	0.0046	U
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg	0.0048	U	0.0049	U	0.34	U	0.0046	U
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg	0.0048	U	0.0049	U	0.0045	U	0.0046	U
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg	0.0048	U	0.0049	U	0.0045	U	0.0046	U
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg								
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg								
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg								
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg								
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg								
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg								
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg								

		sys_loc_code	DP46	DP46	DP47	DP47	DP47				
		sys_sample_code	DPS4610N	DPS4615N	DPS4702N	DPS4710N	DPS4715N				
		sample_date	6/5/2013	6/5/2013	5/28/2013	6/5/2013	6/5/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	9.5	14.5	1.5	9.5	14				
		end_depth	10.5	15.5	2.5	10.5	15				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C								
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C								
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C								
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C								
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	0.0048	U	0.0049	U	0.34		0.0046	U
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	0.0048	U	0.0049	U	0.34		0.0046	U
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C								
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C								
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C								
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C								
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C								
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C								
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C								
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C								
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C								
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C								
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C								
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C								
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C								
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C								
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C								
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C								
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C								
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C								
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C								
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C								
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C								
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C								
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C								
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C								
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C								
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C								
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C								
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C								
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C								
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C								
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C								
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C								
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C								
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C								
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C								
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C								

		sys_loc_code	DP46	DP46	DP47	DP47	DP47				
		sys_sample_code	DPS4610N	DPS4615N	DPS4702N	DPS4710N	DPS4715N				
		sample_date	6/5/2013	6/5/2013	5/28/2013	6/5/2013	6/5/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	9.5	14.5	1.5	9.5	14				
		end_depth	10.5	15.5	2.5	10.5	15				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg							

					sys_loc_code	DP46	DP46	DP47	DP47	DP47
					sys_sample_code	DPS4610N	DPS4615N	DPS4702N	DPS4710N	DPS4715N
					sample_date	6/5/2013	6/5/2013	5/28/2013	6/5/2013	6/5/2013
					sample_type_code	N	N	N	N	N
					task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013
					start_depth	9.5	14.5	1.5	9.5	14
					end_depth	10.5	15.5	2.5	10.5	15
					depth_unit	ft	ft	ft	ft	ft
					validated_yn	Y	Y	Y	Y	Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_interpreted_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg						
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg						

				sys_loc_code	DP46	DP46	DP47	DP47	DP47		
				sys_sample_code	DPS4610N	DPS4615N	DPS4702N	DPS4710N	DPS4715N		
				sample_date	6/5/2013	6/5/2013	5/28/2013	6/5/2013	6/5/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	9.5	14.5	1.5	9.5	14		
				end_depth	10.5	15.5	2.5	10.5	15		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg							

		sys_loc_code	DP46	DP46	DP47	DP47	DP47				
		sys_sample_code	DPS4610N	DPS4615N	DPS4702N	DPS4710N	DPS4715N				
		sample_date	6/5/2013	6/5/2013	5/28/2013	6/5/2013	6/5/2013				
		sample_type_code	N	N	N	N	N				
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013				
		start_depth	9.5	14.5	1.5	9.5	14				
		end_depth	10.5	15.5	2.5	10.5	15				
		depth_unit	ft	ft	ft	ft	ft				
		validated_yn	Y	Y	Y	Y	Y				
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-58	41464-49-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-59	74472-33-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-6	25569-80-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-60	33025-41-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-61	33284-53-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-62	54230-22-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-63	74472-34-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-64	52663-58-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-65	33284-54-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-66	32598-10-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-67	73575-53-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-68	73575-52-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-69	60233-24-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-7	33284-50-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-70	32598-11-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-71	41464-46-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-72	41464-42-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-73	74338-23-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-74	32690-93-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-75	32598-12-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-76	70362-48-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-77	32598-13-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-78	70362-49-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-79	41464-48-6	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-8	34883-43-7	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-80	33284-52-5	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-81	70362-50-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-82	52663-62-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-83	60145-20-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-84	52663-60-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-85	65510-45-4	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-86	55312-69-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-87	38380-02-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-88	55215-17-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-89	73575-57-2	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-9	34883-39-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-90	68194-07-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-91	68194-05-8	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-92	52663-61-3	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-93	73575-56-1	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-94	73575-55-0	E1668C	mg/kg							
RA_SO_PestPCBs	PCB-95	38379-99-6	E1668C	mg/kg							



		sys_loc_code	DP46	DP46	DP47	DP47	DP47					
		sys_sample_code	DPS4610N	DPS4615N	DPS4702N	DPS4710N	DPS4715N					
		sample_date	6/5/2013	6/5/2013	5/28/2013	6/5/2013	6/5/2013					
		sample_type_code	N	N	N	N	N					
		task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013					
		start_depth	9.5	14.5	1.5	9.5	14					
		end_depth	10.5	15.5	2.5	10.5	15					
		depth_unit	ft	ft	ft	ft	ft					
		validated_yn	Y	Y	Y	Y	Y					
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg								
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg								
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg								
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg								
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg								
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg								
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg								
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg	19	U	20	U	19	J	19	U
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg	0.089	U	0.087	U	0.098	U	22	U
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg	19	U	20	U	150	U	18	U
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg								
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg								
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg								
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg								
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg								
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg								
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg								
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg								

				sys_loc_code	DP46	DP46	DP47	DP47	DP47		
				sys_sample_code	DPS4610N	DPS4615N	DPS4702N	DPS4710N	DPS4715N		
				sample_date	6/5/2013	6/5/2013	5/28/2013	6/5/2013	6/5/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	9.5	14.5	1.5	9.5	14		
				end_depth	10.5	15.5	2.5	10.5	15		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_SVOCs	Anthracene	120-12-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Atrazine	1912-24-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Caprolactam	105-60-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Carbazole	86-74-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Chrysene	218-01-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg							
RA_SO_SVOCs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg							
RA_SO_SVOCs	Fluoranthene	206-44-0	SW8270D LL	mg/kg							
RA_SO_SVOCs	Fluorene	86-73-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg							
RA_SO_SVOCs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	Isophorone	78-59-1	SW8270D LL	mg/kg							
RA_SO_SVOCs	Naphthalene	91-20-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg							
RA_SO_SVOCs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg							
RA_SO_SVOCs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg							
RA_SO_SVOCs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg							
RA_SO_SVOCs	Phenanthrene	85-01-8	SW8270D LL	mg/kg							
RA_SO_SVOCs	Phenol	108-95-2	SW8270D LL	mg/kg							
RA_SO_SVOCs	Pyrene	129-00-0	SW8270D LL	mg/kg							
RA_SO_VOCS	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCS	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCS	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCS	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCS	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U

				sys_loc_code	DP46	DP46	DP47	DP47	DP47		
				sys_sample_code	DPS4610N	DPS4615N	DPS4702N	DPS4710N	DPS4715N		
				sample_date	6/5/2013	6/5/2013	5/28/2013	6/5/2013	6/5/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	9.5	14.5	1.5	9.5	14		
				end_depth	10.5	15.5	2.5	10.5	15		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg	0.84	U		0.95	U	0.89	U
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg	0.0075	J		0.0075	J	0.018	U
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg	0.0084	U		0.0095	U	0.0089	U
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U

				sys_loc_code	DP46	DP46	DP47	DP47	DP47		
				sys_sample_code	DPS4610N	DPS4615N	DPS4702N	DPS4710N	DPS4715N		
				sample_date	6/5/2013	6/5/2013	5/28/2013	6/5/2013	6/5/2013		
				sample_type_code	N	N	N	N	N		
				task_code	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013	Phase2-2013		
				start_depth	9.5	14.5	1.5	9.5	14		
				end_depth	10.5	15.5	2.5	10.5	15		
				depth_unit	ft	ft	ft	ft	ft		
				validated_yn	Y	Y	Y	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg	0.0042	U		0.0047	U	0.0045	U
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg	0.0084	U		0.0095	U	0.0089	U

				sys_loc_code	SB3			SUS21
				sys_sample_code	SBS0303N			SUS2100N
				sample_date	3/13/2013			2/7/2013
				sample_type_code	N			N
				task_code	Phase2-2013			Phase1-2013
				start_depth	2.5			1
				end_depth	3.5			1.75
				depth_unit	ft			ft
				validated_yn	Y			Y
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDD	35822-46-9	SW8290A	mg/kg				
RA_SO_DioxinFurans	1,2,3,4,6,7,8-HpCDF	67562-39-4	SW8290A	mg/kg				
RA_SO_DioxinFurans	1,2,3,4,7,8,9-HpCDF	55673-89-7	SW8290A	mg/kg				
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDD	39227-28-6	SW8290A	mg/kg				
RA_SO_DioxinFurans	1,2,3,4,7,8-HxCDF	70648-26-9	SW8290A	mg/kg				
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDD	57653-85-7	SW8290A	mg/kg				
RA_SO_DioxinFurans	1,2,3,6,7,8-HxCDF	57117-44-9	SW8290A	mg/kg				
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDD	19408-74-3	SW8290A	mg/kg				
RA_SO_DioxinFurans	1,2,3,7,8,9-HxCDF	72918-21-9	SW8290A	mg/kg				
RA_SO_DioxinFurans	1,2,3,7,8-PeCDD	40321-76-4	SW8290A	mg/kg				
RA_SO_DioxinFurans	1,2,3,7,8-PeCDF	57117-41-6	SW8290A	mg/kg				
RA_SO_DioxinFurans	2,3,4,6,7,8-HxCDF	60851-34-5	SW8290A	mg/kg				
RA_SO_DioxinFurans	2,3,4,7,8-PeCDF	57117-31-4	SW8290A	mg/kg				
RA_SO_DioxinFurans	2,3,7,8-TCDD	1746-01-6	SW8290A	mg/kg				
RA_SO_DioxinFurans	2,3,7,8-TCDF	51207-31-9	SW8290A	mg/kg				
RA_SO_DioxinFurans	OCDD	3268-87-9	SW8290A	mg/kg				
RA_SO_DioxinFurans	OCDF	39001-02-0	SW8290A	mg/kg				
RA_SO_DioxinFurans	TCDD TEQ HH	DFTEQ-HH	SW8290A	mg/kg				
RA_SO_DioxinFurans	Total HpCDD	37871-00-4	SW8290A	mg/kg				
RA_SO_DioxinFurans	Total HpCDF	38998-75-3	SW8290A	mg/kg				
RA_SO_DioxinFurans	Total HxCDD	34465-46-8	SW8290A	mg/kg				
RA_SO_DioxinFurans	Total HxCDF	55684-94-1	SW8290A	mg/kg				
RA_SO_DioxinFurans	Total PeCDD	36088-22-9	SW8290A	mg/kg				
RA_SO_DioxinFurans	Total PeCDF	30402-15-4	SW8290A	mg/kg				
RA_SO_DioxinFurans	Total TCDD	41903-57-5	SW8290A	mg/kg				
RA_SO_DioxinFurans	Total TCDF	55722-27-5	SW8290A	mg/kg				
RA_SO_DioxinFurans	Total TEQ	TTEQ	SW8290A	mg/kg				
RA_SO_Metals	Aluminum	7429-90-5	SW6020A	mg/kg			2300	
RA_SO_Metals	Antimony	7440-36-0	SW6020A	mg/kg			0.22	UJ
RA_SO_Metals	Arsenic	7440-38-2	SW6020A	mg/kg			1.7	J
RA_SO_Metals	Barium	7440-39-3	SW6020A	mg/kg			27	J
RA_SO_Metals	Beryllium	7440-41-7	SW6020A	mg/kg			0.15	
RA_SO_Metals	Cadmium	7440-43-9	SW6020A	mg/kg			0.11	J
RA_SO_Metals	Calcium	7440-70-2	SW6020A	mg/kg			110000	
RA_SO_Metals	Chromium	7440-47-3	SW6020A	mg/kg			7.3	
RA_SO_Metals	Cobalt	7440-48-4	SW6020A	mg/kg			2.7	J
RA_SO_Metals	Copper	7440-50-8	SW6020A	mg/kg			11	J
RA_SO_Metals	Iron	7439-89-6	SW6020A	mg/kg			6200	
RA_SO_Metals	Lead	7439-92-1	SW6020A	mg/kg			65	
RA_SO_Metals	Magnesium	7439-95-4	SW6020A	mg/kg			53000	
RA_SO_Metals	Manganese	7439-96-5	SW6020A	mg/kg			260	
RA_SO_Metals	Mercury	7439-97-6	SW7471B	mg/kg			0.075	J

				sys_loc_code	SB3	SUS21	
				sys_sample_code	SBS0303N	SUS2100N	
				sample_date	3/13/2013	2/7/2013	
				sample_type_code	N	N	
				task_code	Phase2-2013	Phase1-2013	
				start_depth	2.5	1	
				end_depth	3.5	1.75	
				depth_unit	ft	ft	
				validated_yn	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_Metals	Nickel	7440-02-0	SW6020A	mg/kg		16	
RA_SO_Metals	Potassium	7440-09-7	SW6020A	mg/kg		420	
RA_SO_Metals	Selenium	7782-49-2	SW6020A	mg/kg		0.13	J
RA_SO_Metals	Silver	7440-22-4	SW6020A	mg/kg		0.11	U
RA_SO_Metals	Sodium	7440-23-5	SW6020A	mg/kg		390	U
RA_SO_Metals	Thallium	7440-28-0	SW6020A	mg/kg		0.11	U
RA_SO_Metals	Vanadium	7440-62-2	SW6020A	mg/kg		9.7	J
RA_SO_Metals	Zinc	7440-66-6	SW6020A	mg/kg		32	J
RA_SO_Other	Percent Moisture	MOIST	E160.3	percent			
RA_SO_PestPCBs	4,4'-DDD	72-54-8	SW8081B LL	mg/kg			
RA_SO_PestPCBs	4,4'-DDE	72-55-9	SW8081B LL	mg/kg			
RA_SO_PestPCBs	4,4'-DDT	50-29-3	SW8081B LL	mg/kg			
RA_SO_PestPCBs	Aldrin	309-00-2	SW8081B LL	mg/kg			
RA_SO_PestPCBs	alpha-BHC	319-84-6	SW8081B LL	mg/kg			
RA_SO_PestPCBs	Aroclor-1016	12674-11-2	SW8082A LL	mg/kg		0.046	U
RA_SO_PestPCBs	Aroclor-1221	11104-28-2	SW8082A LL	mg/kg		0.046	U
RA_SO_PestPCBs	Aroclor-1232	11141-16-5	SW8082A LL	mg/kg		0.046	U
RA_SO_PestPCBs	Aroclor-1242	53469-21-9	SW8082A LL	mg/kg		6.4	
RA_SO_PestPCBs	Aroclor-1248	12672-29-6	SW8082A LL	mg/kg		0.046	U
RA_SO_PestPCBs	Aroclor-1254	11097-69-1	SW8082A LL	mg/kg		0.046	U
RA_SO_PestPCBs	Aroclor-1260	11096-82-5	SW8082A LL	mg/kg		0.82	
RA_SO_PestPCBs	Aroclor-1262	37324-23-5	SW8082A LL	mg/kg		0.046	U
RA_SO_PestPCBs	Aroclor-1268	11100-14-4	SW8082A LL	mg/kg		0.046	U
RA_SO_PestPCBs	beta-BHC	319-85-7	SW8081B LL	mg/kg			
RA_SO_PestPCBs	cis-Chlordane	5103-71-9	SW8081B LL	mg/kg			
RA_SO_PestPCBs	Decachlorobiphenyl (PCB-209)	2051-24-3	E1668C	mg/kg		0.000385	J
RA_SO_PestPCBs	delta-BHC	319-86-8	SW8081B LL	mg/kg			
RA_SO_PestPCBs	Dichlorobiphenyl	25512-42-9	E1668C	mg/kg		0.136	JN
RA_SO_PestPCBs	Dieldrin	60-57-1	SW8081B LL	mg/kg			
RA_SO_PestPCBs	Endosulfan I	959-98-8	SW8081B LL	mg/kg			
RA_SO_PestPCBs	Endosulfan II	33213-65-9	SW8081B LL	mg/kg			
RA_SO_PestPCBs	Endosulfan Sulfate	1031-07-8	SW8081B LL	mg/kg			
RA_SO_PestPCBs	Endrin	72-20-8	SW8081B LL	mg/kg			
RA_SO_PestPCBs	Endrin aldehyde	7421-93-4	SW8081B LL	mg/kg			
RA_SO_PestPCBs	Endrin ketone	53494-70-5	SW8081B LL	mg/kg			
RA_SO_PestPCBs	gamma-BHC (Lindane)	58-89-9	SW8081B LL	mg/kg			
RA_SO_PestPCBs	Heptachlor	76-44-8	SW8081B LL	mg/kg			
RA_SO_PestPCBs	Heptachlor Epoxide	1024-57-3	SW8081B LL	mg/kg			
RA_SO_PestPCBs	Heptachlorobiphenyl	28655-71-2	E1668C	mg/kg		0.243	JN
RA_SO_PestPCBs	Hexachlorobiphenyl	26601-64-9	E1668C	mg/kg		0.39	JN
RA_SO_PestPCBs	Methoxychlor	72-43-5	SW8081B LL	mg/kg			
RA_SO_PestPCBs	Monochlorobiphenyl	27323-18-8	E1668C	mg/kg		0.000916	JN

				sys_loc_code	SB3	SUS21	
				sys_sample_code	SBS0303N	SUS2100N	
				sample_date	3/13/2013	2/7/2013	
				sample_type_code	N	N	
				task_code	Phase2-2013	Phase1-2013	
				start_depth	2.5	1	
				end_depth	3.5	1.75	
				depth_unit	ft	ft	
				validated_yn	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_value	interpreted_qualifiers	interpreted_qualifiers
RA_SO_PestPCBs	Nonachlorobiphenyl	53742-07-7	E1668C	mg/kg			0.00466
RA_SO_PestPCBs	Octachlorobiphenyl	55722-26-4	E1668C	mg/kg			0.0601
RA_SO_PestPCBs	PCB TEQ HH	PCBTEQ-HH	E1668C	mg/kg			0.000209
RA_SO_PestPCBs	PCB, Total (Congeners) (AECOM Calc)	PCB	E1668C	mg/kg			4.84
RA_SO_PestPCBs	PCB, Total Aroclors (AECOM Calc)	TOT-PCB-ARO-C	SW8082A LL	mg/kg			7.2
RA_SO_PestPCBs	PCB, Total Aroclors (Lab provided)	TOT-PCB-ARO	SW8082A LL	mg/kg			7.2
RA_SO_PestPCBs	PCB-1	2051-60-7	E1668C	mg/kg			0.00049
RA_SO_PestPCBs	PCB-10	33146-45-1	E1668C	mg/kg			0.00174
RA_SO_PestPCBs	PCB-100	39485-83-1	E1668C	mg/kg			0.00103
RA_SO_PestPCBs	PCB-101	37680-73-2	E1668C	mg/kg			0.0764
RA_SO_PestPCBs	PCB-102	68194-06-9	E1668C	mg/kg			0.00454
RA_SO_PestPCBs	PCB-103	60145-21-3	E1668C	mg/kg			0.000584
RA_SO_PestPCBs	PCB-104	56558-16-8	E1668C	mg/kg			4.13E-05
RA_SO_PestPCBs	PCB-105	32598-14-4	E1668C	mg/kg			0.0414
RA_SO_PestPCBs	PCB-106	70424-69-0	E1668C	mg/kg			0.00018
RA_SO_PestPCBs	PCB-107	70424-68-9	E1668C	mg/kg			0.00533
RA_SO_PestPCBs	PCB-108	70362-41-3	E1668C	mg/kg			0.00329
RA_SO_PestPCBs	PCB-109	74472-35-8	E1668C	mg/kg			0.061
RA_SO_PestPCBs	PCB-11	2050-67-1	E1668C	mg/kg			0.000336
RA_SO_PestPCBs	PCB-110	38380-03-9	E1668C	mg/kg			0.0931
RA_SO_PestPCBs	PCB-111	39635-32-0	E1668C	mg/kg			3.88E-05
RA_SO_PestPCBs	PCB-112	74472-36-9	E1668C	mg/kg			4.22E-05
RA_SO_PestPCBs	PCB-113	68194-10-5	E1668C	mg/kg			0.0764
RA_SO_PestPCBs	PCB-114	74472-37-0	E1668C	mg/kg			0.00296
RA_SO_PestPCBs	PCB-115	74472-38-1	E1668C	mg/kg			0.0931
RA_SO_PestPCBs	PCB-116	18259-05-7	E1668C	mg/kg			0.0186
RA_SO_PestPCBs	PCB-117	68194-11-6	E1668C	mg/kg			0.0186
RA_SO_PestPCBs	PCB-118	31508-00-6	E1668C	mg/kg			0.0727
RA_SO_PestPCBs	PCB-119	56558-17-9	E1668C	mg/kg			0.061
RA_SO_PestPCBs	PCB-12	2974-92-7	E1668C	mg/kg			0.00459
RA_SO_PestPCBs	PCB-120	68194-12-7	E1668C	mg/kg			0.00013
RA_SO_PestPCBs	PCB-121	56558-18-0	E1668C	mg/kg			4.03E-05
RA_SO_PestPCBs	PCB-122	76842-07-4	E1668C	mg/kg			0.00168
RA_SO_PestPCBs	PCB-123	65510-44-3	E1668C	mg/kg			0.00192
RA_SO_PestPCBs	PCB-124	70424-70-3	E1668C	mg/kg			0.00329
RA_SO_PestPCBs	PCB-125	74472-39-2	E1668C	mg/kg			0.061
RA_SO_PestPCBs	PCB-126	57465-28-8	E1668C	mg/kg			0.00154
RA_SO_PestPCBs	PCB-127	39635-33-1	E1668C	mg/kg			0.0001
RA_SO_PestPCBs	PCB-128	38380-07-3	E1668C	mg/kg			0.0108
RA_SO_PestPCBs	PCB-129	55215-18-4	E1668C	mg/kg			0.087
RA_SO_PestPCBs	PCB-13	2974-90-5	E1668C	mg/kg			0.00459
RA_SO_PestPCBs	PCB-130	52663-66-8	E1668C	mg/kg			0.00426

				sys_loc_code	SB3	SUS21	
				sys_sample_code	SBS0303N	SUS2100N	
				sample_date	3/13/2013	2/7/2013	
				sample_type_code	N	N	
				task_code	Phase2-2013	Phase1-2013	
				start_depth	2.5	1	
				end_depth	3.5	1.75	
				depth_unit	ft	ft	
				validated_yn	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-131	61798-70-7	E1668C	mg/kg		0.0013	
RA_SO_PestPCBs	PCB-132	38380-05-1	E1668C	mg/kg		0.0285	
RA_SO_PestPCBs	PCB-133	35694-04-3	E1668C	mg/kg		0.00115	
RA_SO_PestPCBs	PCB-134	52704-70-8	E1668C	mg/kg		0.00453	
RA_SO_PestPCBs	PCB-135	52744-13-5	E1668C	mg/kg		0.0321	
RA_SO_PestPCBs	PCB-136	38411-22-2	E1668C	mg/kg		0.0113	
RA_SO_PestPCBs	PCB-137	35694-06-5	E1668C	mg/kg		0.00258	
RA_SO_PestPCBs	PCB-138	35065-28-2	E1668C	mg/kg		0.087	
RA_SO_PestPCBs	PCB-139	56030-56-9	E1668C	mg/kg		0.00127	
RA_SO_PestPCBs	PCB-14	34883-41-5	E1668C	mg/kg		3.77E-05	JN
RA_SO_PestPCBs	PCB-140	59291-64-4	E1668C	mg/kg		0.00127	
RA_SO_PestPCBs	PCB-141	52712-04-6	E1668C	mg/kg		0.0201	
RA_SO_PestPCBs	PCB-142	41411-61-4	E1668C	mg/kg		6.54E-05	U
RA_SO_PestPCBs	PCB-143	68194-15-0	E1668C	mg/kg		0.00453	
RA_SO_PestPCBs	PCB-144	68194-14-9	E1668C	mg/kg		0.00483	
RA_SO_PestPCBs	PCB-145	74472-40-5	E1668C	mg/kg		4.84E-05	U
RA_SO_PestPCBs	PCB-146	51908-16-8	E1668C	mg/kg		0.0105	
RA_SO_PestPCBs	PCB-147	68194-13-8	E1668C	mg/kg		0.0701	
RA_SO_PestPCBs	PCB-148	74472-41-6	E1668C	mg/kg		7.9E-05	JN
RA_SO_PestPCBs	PCB-149	38380-04-0	E1668C	mg/kg		0.0701	
RA_SO_PestPCBs	PCB-15	2050-68-2	E1668C	mg/kg		0.0463	
RA_SO_PestPCBs	PCB-150	68194-08-1	E1668C	mg/kg		4.71E-05	U
RA_SO_PestPCBs	PCB-151	52663-63-5	E1668C	mg/kg		0.0321	
RA_SO_PestPCBs	PCB-152	68194-09-2	E1668C	mg/kg		4.81E-05	U
RA_SO_PestPCBs	PCB-153	35065-27-1	E1668C	mg/kg		0.0693	
RA_SO_PestPCBs	PCB-154	60145-22-4	E1668C	mg/kg		0.000203	JN
RA_SO_PestPCBs	PCB-155	33979-03-2	E1668C	mg/kg		4.58E-05	U
RA_SO_PestPCBs	PCB-156	38380-08-4	E1668C	mg/kg		0.00972	
RA_SO_PestPCBs	PCB-157	69782-90-7	E1668C	mg/kg		0.00972	
RA_SO_PestPCBs	PCB-158	74472-42-7	E1668C	mg/kg		0.00802	
RA_SO_PestPCBs	PCB-159	39635-35-3	E1668C	mg/kg		0.000901	
RA_SO_PestPCBs	PCB-16	38444-78-9	E1668C	mg/kg		0.0707	
RA_SO_PestPCBs	PCB-160	41411-62-5	E1668C	mg/kg		0.087	
RA_SO_PestPCBs	PCB-161	74472-43-8	E1668C	mg/kg		4.33E-05	U
RA_SO_PestPCBs	PCB-162	39635-34-2	E1668C	mg/kg		0.000291	JN
RA_SO_PestPCBs	PCB-163	74472-44-9	E1668C	mg/kg		0.087	
RA_SO_PestPCBs	PCB-164	74472-45-0	E1668C	mg/kg		0.00599	
RA_SO_PestPCBs	PCB-165	74472-46-1	E1668C	mg/kg		4.76E-05	U
RA_SO_PestPCBs	PCB-166	41411-63-6	E1668C	mg/kg		0.0108	
RA_SO_PestPCBs	PCB-167	52663-72-6	E1668C	mg/kg		0.00324	
RA_SO_PestPCBs	PCB-168	59291-65-5	E1668C	mg/kg		0.0693	
RA_SO_PestPCBs	PCB-169	32774-16-6	E1668C	mg/kg		0.00161	



				sys_loc_code	SB3	SUS21	
				sys_sample_code	SBS0303N	SUS2100N	
				sample_date	3/13/2013	2/7/2013	
				sample_type_code	N	N	
				task_code	Phase2-2013	Phase1-2013	
				start_depth	2.5	1	
				end_depth	3.5	1.75	
				depth_unit	ft	ft	
				validated_yn	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-17	37680-66-3	E1668C	mg/kg		0.0749	
RA_SO_PestPCBs	PCB-170	35065-30-6	E1668C	mg/kg		0.0289	
RA_SO_PestPCBs	PCB-171	52663-71-5	E1668C	mg/kg		0.00874	
RA_SO_PestPCBs	PCB-172	52663-74-8	E1668C	mg/kg		0.00531	
RA_SO_PestPCBs	PCB-173	68194-16-1	E1668C	mg/kg		0.00874	
RA_SO_PestPCBs	PCB-174	38411-25-5	E1668C	mg/kg		0.0317	
RA_SO_PestPCBs	PCB-175	40186-70-7	E1668C	mg/kg		0.00123	
RA_SO_PestPCBs	PCB-176	52663-65-7	E1668C	mg/kg		0.00376	
RA_SO_PestPCBs	PCB-177	52663-70-4	E1668C	mg/kg		0.017	
RA_SO_PestPCBs	PCB-178	52663-67-9	E1668C	mg/kg		0.00547	
RA_SO_PestPCBs	PCB-179	52663-64-6	E1668C	mg/kg		0.0132	
RA_SO_PestPCBs	PCB-18	37680-65-2	E1668C	mg/kg		0.138	
RA_SO_PestPCBs	PCB-180	35065-29-3	E1668C	mg/kg		0.0654	
RA_SO_PestPCBs	PCB-181	74472-47-2	E1668C	mg/kg		0.000192	JN
RA_SO_PestPCBs	PCB-182	60145-23-5	E1668C	mg/kg		2.92E-05	U
RA_SO_PestPCBs	PCB-183	52663-69-1	E1668C	mg/kg		0.0203	
RA_SO_PestPCBs	PCB-184	74472-48-3	E1668C	mg/kg		2.48E-05	U
RA_SO_PestPCBs	PCB-185	52712-05-7	E1668C	mg/kg		0.0203	
RA_SO_PestPCBs	PCB-186	74472-49-4	E1668C	mg/kg		2.41E-05	U
RA_SO_PestPCBs	PCB-187	52663-68-0	E1668C	mg/kg		0.0343	
RA_SO_PestPCBs	PCB-188	74487-85-7	E1668C	mg/kg		2.12E-05	U
RA_SO_PestPCBs	PCB-189	39635-31-9	E1668C	mg/kg		0.00114	
RA_SO_PestPCBs	PCB-19	38444-73-4	E1668C	mg/kg		0.0303	
RA_SO_PestPCBs	PCB-190	41411-64-7	E1668C	mg/kg		0.00576	
RA_SO_PestPCBs	PCB-191	74472-50-7	E1668C	mg/kg		0.00128	
RA_SO_PestPCBs	PCB-192	74472-51-8	E1668C	mg/kg		2.55E-05	U
RA_SO_PestPCBs	PCB-193	69782-91-8	E1668C	mg/kg		0.0654	
RA_SO_PestPCBs	PCB-194	35694-08-7	E1668C	mg/kg		0.0149	
RA_SO_PestPCBs	PCB-195	52663-78-2	E1668C	mg/kg		0.00575	
RA_SO_PestPCBs	PCB-196	42740-50-1	E1668C	mg/kg		0.00745	
RA_SO_PestPCBs	PCB-197	33091-17-7	E1668C	mg/kg		0.000521	
RA_SO_PestPCBs	PCB-198	68194-17-2	E1668C	mg/kg		0.0156	
RA_SO_PestPCBs	PCB-199	52663-75-9	E1668C	mg/kg		0.0156	
RA_SO_PestPCBs	PCB-2	2051-61-8	E1668C	mg/kg		5.37E-05	JN
RA_SO_PestPCBs	PCB-20	38444-84-7	E1668C	mg/kg		0.375	
RA_SO_PestPCBs	PCB-200	52663-73-7	E1668C	mg/kg		0.00175	
RA_SO_PestPCBs	PCB-201	40186-71-8	E1668C	mg/kg		0.00163	
RA_SO_PestPCBs	PCB-202	2136-99-4	E1668C	mg/kg		0.00257	
RA_SO_PestPCBs	PCB-203	52663-76-0	E1668C	mg/kg		0.00905	
RA_SO_PestPCBs	PCB-204	74472-52-9	E1668C	mg/kg		1.49E-05	U
RA_SO_PestPCBs	PCB-205	74472-53-0	E1668C	mg/kg		0.000788	
RA_SO_PestPCBs	PCB-206	40186-72-9	E1668C	mg/kg		0.0035	

				sys_loc_code	SUS21		
				sys_sample_code	SBS0303N	SUS2100N	
				sample_date	3/13/2013	2/7/2013	
				sample_type_code	N	N	
				task_code	Phase2-2013	Phase1-2013	
				start_depth	2.5	1	
				end_depth	3.5	1.75	
				depth_unit	ft	ft	
				validated_yn	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs	PCB-207	52663-79-3	E1668C	mg/kg		0.000419	
RA_SO_PestPCBs	PCB-208	52663-77-1	E1668C	mg/kg		0.000733	
RA_SO_PestPCBs	PCB-21	55702-46-0	E1668C	mg/kg		0.14	
RA_SO_PestPCBs	PCB-22	38444-85-8	E1668C	mg/kg		0.146	
RA_SO_PestPCBs	PCB-23	55720-44-0	E1668C	mg/kg		0.00035	J
RA_SO_PestPCBs	PCB-24	55702-45-9	E1668C	mg/kg		0.00485	
RA_SO_PestPCBs	PCB-25	55712-37-3	E1668C	mg/kg		0.0245	
RA_SO_PestPCBs	PCB-26	38444-81-4	E1668C	mg/kg		0.0489	
RA_SO_PestPCBs	PCB-27	38444-76-7	E1668C	mg/kg		0.02	
RA_SO_PestPCBs	PCB-28	7012-37-5	E1668C	mg/kg		0.375	
RA_SO_PestPCBs	PCB-29	15862-07-4	E1668C	mg/kg		0.0489	
RA_SO_PestPCBs	PCB-3	2051-62-9	E1668C	mg/kg		0.000372	J
RA_SO_PestPCBs	PCB-30	35693-92-6	E1668C	mg/kg		0.138	
RA_SO_PestPCBs	PCB-31	16606-02-3	E1668C	mg/kg		0.283	
RA_SO_PestPCBs	PCB-32	38444-77-8	E1668C	mg/kg		0.0921	
RA_SO_PestPCBs	PCB-33	38444-86-9	E1668C	mg/kg		0.14	
RA_SO_PestPCBs	PCB-34	37680-68-5	E1668C	mg/kg		0.000762	
RA_SO_PestPCBs	PCB-35	37680-69-6	E1668C	mg/kg		0.00538	
RA_SO_PestPCBs	PCB-36	38444-87-0	E1668C	mg/kg		3.1E-05	U
RA_SO_PestPCBs	PCB-37	38444-90-5	E1668C	mg/kg		0.112	
RA_SO_PestPCBs	PCB-38	53555-66-1	E1668C	mg/kg		0.000295	J
RA_SO_PestPCBs	PCB-39	38444-88-1	E1668C	mg/kg		0.0013	
RA_SO_PestPCBs	PCB-4	13029-08-8	E1668C	mg/kg		0.0188	
RA_SO_PestPCBs	PCB-40	38444-93-8	E1668C	mg/kg		0.167	
RA_SO_PestPCBs	PCB-41	52663-59-9	E1668C	mg/kg		0.167	
RA_SO_PestPCBs	PCB-42	36559-22-5	E1668C	mg/kg		0.0736	
RA_SO_PestPCBs	PCB-43	70362-46-8	E1668C	mg/kg		0.00899	
RA_SO_PestPCBs	PCB-44	41464-39-5	E1668C	mg/kg		0.22	
RA_SO_PestPCBs	PCB-45	70362-45-7	E1668C	mg/kg		0.0557	
RA_SO_PestPCBs	PCB-46	41464-47-5	E1668C	mg/kg		0.0206	
RA_SO_PestPCBs	PCB-47	2437-79-8	E1668C	mg/kg		0.22	
RA_SO_PestPCBs	PCB-48	70362-47-9	E1668C	mg/kg		0.0593	
RA_SO_PestPCBs	PCB-49	41464-40-8	E1668C	mg/kg		0.128	
RA_SO_PestPCBs	PCB-5	16605-91-7	E1668C	mg/kg		0.000767	
RA_SO_PestPCBs	PCB-50	62796-65-0	E1668C	mg/kg		0.0344	
RA_SO_PestPCBs	PCB-51	68194-04-7	E1668C	mg/kg		0.0557	
RA_SO_PestPCBs	PCB-52	35693-99-3	E1668C	mg/kg		0.196	
RA_SO_PestPCBs	PCB-53	41464-41-9	E1668C	mg/kg		0.0344	
RA_SO_PestPCBs	PCB-54	15968-05-5	E1668C	mg/kg		0.000553	
RA_SO_PestPCBs	PCB-55	74338-24-2	E1668C	mg/kg		0.00963	
RA_SO_PestPCBs	PCB-56	41464-43-1	E1668C	mg/kg		0.104	
RA_SO_PestPCBs	PCB-57	70424-67-8	E1668C	mg/kg		0.00153	

Attachment A  
Subsurface Soil Data  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019

method_analyte_group		chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_PestPCBs		PCB-58	41464-49-7	E1668C	mg/kg		0.000352	JN
RA_SO_PestPCBs		PCB-59	74472-33-6	E1668C	mg/kg		0.0263	
RA_SO_PestPCBs		PCB-6	25569-80-6	E1668C	mg/kg		0.01	
RA_SO_PestPCBs		PCB-60	33025-41-1	E1668C	mg/kg		0.0708	
RA_SO_PestPCBs		PCB-61	33284-53-6	E1668C	mg/kg		0.333	
RA_SO_PestPCBs		PCB-62	54230-22-7	E1668C	mg/kg		0.0263	
RA_SO_PestPCBs		PCB-63	74472-34-7	E1668C	mg/kg		0.00799	
RA_SO_PestPCBs		PCB-64	52663-58-8	E1668C	mg/kg		0.107	
RA_SO_PestPCBs		PCB-65	33284-54-7	E1668C	mg/kg		0.22	
RA_SO_PestPCBs		PCB-66	32598-10-0	E1668C	mg/kg		0.198	
RA_SO_PestPCBs		PCB-67	73575-53-8	E1668C	mg/kg		0.00899	
RA_SO_PestPCBs		PCB-68	73575-52-7	E1668C	mg/kg		0.00048	
RA_SO_PestPCBs		PCB-69	60233-24-1	E1668C	mg/kg		0.128	
RA_SO_PestPCBs		PCB-7	33284-50-3	E1668C	mg/kg		0.00133	
RA_SO_PestPCBs		PCB-70	32598-11-1	E1668C	mg/kg		0.333	
RA_SO_PestPCBs		PCB-71	41464-46-4	E1668C	mg/kg		0.167	
RA_SO_PestPCBs		PCB-72	41464-42-0	E1668C	mg/kg		0.00093	
RA_SO_PestPCBs		PCB-73	74338-23-1	E1668C	mg/kg		0.00899	
RA_SO_PestPCBs		PCB-74	32690-93-0	E1668C	mg/kg		0.333	
RA_SO_PestPCBs		PCB-75	32598-12-2	E1668C	mg/kg		0.0263	
RA_SO_PestPCBs		PCB-76	70362-48-0	E1668C	mg/kg		0.333	
RA_SO_PestPCBs		PCB-77	32598-13-3	E1668C	mg/kg		0.0239	
RA_SO_PestPCBs		PCB-78	70362-49-1	E1668C	mg/kg		9.18E-05	JN
RA_SO_PestPCBs		PCB-79	41464-48-6	E1668C	mg/kg		0.000771	JN
RA_SO_PestPCBs		PCB-8	34883-43-7	E1668C	mg/kg		0.049	
RA_SO_PestPCBs		PCB-80	33284-52-5	E1668C	mg/kg		3.07E-05	U
RA_SO_PestPCBs		PCB-81	70362-50-4	E1668C	mg/kg		0.00163	
RA_SO_PestPCBs		PCB-82	52663-62-4	E1668C	mg/kg		0.017	
RA_SO_PestPCBs		PCB-83	60145-20-2	E1668C	mg/kg		0.0426	
RA_SO_PestPCBs		PCB-84	52663-60-2	E1668C	mg/kg		0.0274	
RA_SO_PestPCBs		PCB-85	65510-45-4	E1668C	mg/kg		0.0186	
RA_SO_PestPCBs		PCB-86	55312-69-1	E1668C	mg/kg		0.061	
RA_SO_PestPCBs		PCB-87	38380-02-8	E1668C	mg/kg		0.061	
RA_SO_PestPCBs		PCB-88	55215-17-3	E1668C	mg/kg		0.015	
RA_SO_PestPCBs		PCB-89	73575-57-2	E1668C	mg/kg		0.00277	
RA_SO_PestPCBs		PCB-9	34883-39-1	E1668C	mg/kg		0.0027	
RA_SO_PestPCBs		PCB-90	68194-07-0	E1668C	mg/kg		0.0764	
RA_SO_PestPCBs		PCB-91	68194-05-8	E1668C	mg/kg		0.015	
RA_SO_PestPCBs		PCB-92	52663-61-3	E1668C	mg/kg		0.0121	
RA_SO_PestPCBs		PCB-93	73575-56-1	E1668C	mg/kg		0.00103	
RA_SO_PestPCBs		PCB-94	73575-55-0	E1668C	mg/kg		0.000902	
RA_SO_PestPCBs		PCB-95	38379-99-6	E1668C	mg/kg		0.0724	

				sys_loc_code	SB3	SUS21	
				sys_sample_code	SBS0303N	SUS2100N	
				sample_date	3/13/2013	2/7/2013	
				sample_type_code	N	N	
				task_code	Phase2-2013	Phase1-2013	
				start_depth	2.5	1	
				end_depth	3.5	1.75	
				depth_unit	ft	ft	
				validated_yn	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_value	interpreted_qualifiers	interpreted_qualifiers
RA_SO_PestPCBs	PCB-96	73575-54-9	E1668C	mg/kg			0.00164
RA_SO_PestPCBs	PCB-97	41464-51-1	E1668C	mg/kg			0.061
RA_SO_PestPCBs	PCB-98	60233-25-2	E1668C	mg/kg			0.00454
RA_SO_PestPCBs	PCB-99	38380-01-7	E1668C	mg/kg			0.0426
RA_SO_PestPCBs	Pentachlorobiphenyl	25429-29-2	E1668C	mg/kg			0.578 JN
RA_SO_PestPCBs	Tetrachlorobiphenyl	26914-33-0	E1668C	mg/kg			1.86 JN
RA_SO_PestPCBs	Toxaphene	8001-35-2	SW8081B LL	mg/kg			
RA_SO_PestPCBs	trans-Chlordane	5103-74-2	SW8081B LL	mg/kg			
RA_SO_PestPCBs	Trichlorobiphenyl	25323-68-6	E1668C	mg/kg			1.57
RA_SO_Petroleum	Diesel Range Organics (C10-C20)	C10C20	SW8015C DRO	mg/kg	4700		80 J
RA_SO_Petroleum	Gasoline Range Organics (C6-C10)	8006-61-9	SW8015C GRO	mg/kg	38		0.09 UJ
RA_SO_Petroleum	Oil Range Organics (C20-C36)	C20C36	SW8015C DRO	mg/kg	17000		340 J
RA_SO_SVOCs	1,1'-Biphenyl	92-52-4	SW8270D LL	mg/kg			
RA_SO_SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	SW8270D LL	mg/kg			
RA_SO_SVOCs	2,2'-oxybis(1-Chloropropane)	108-60-1	SW8270D LL	mg/kg			
RA_SO_SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	SW8270D LL	mg/kg			
RA_SO_SVOCs	2,4,5-Trichlorophenol	95-95-4	SW8270D LL	mg/kg			
RA_SO_SVOCs	2,4,6-Trichlorophenol	88-06-2	SW8270D LL	mg/kg			
RA_SO_SVOCs	2,4-Dichlorophenol	120-83-2	SW8270D LL	mg/kg			
RA_SO_SVOCs	2,4-Dimethylphenol	105-67-9	SW8270D LL	mg/kg			
RA_SO_SVOCs	2,4-Dinitrophenol	51-28-5	SW8270D LL	mg/kg			
RA_SO_SVOCs	2,4-Dinitrotoluene	121-14-2	SW8270D LL	mg/kg			
RA_SO_SVOCs	2,6-Dinitrotoluene	606-20-2	SW8270D LL	mg/kg			
RA_SO_SVOCs	2-Chloronaphthalene	91-58-7	SW8270D LL	mg/kg			
RA_SO_SVOCs	2-Chlorophenol	95-57-8	SW8270D LL	mg/kg			
RA_SO_SVOCs	2-Methylnaphthalene	91-57-6	SW8270D LL	mg/kg			
RA_SO_SVOCs	2-Methylphenol	95-48-7	SW8270D LL	mg/kg			
RA_SO_SVOCs	2-Nitroaniline	88-74-4	SW8270D LL	mg/kg			
RA_SO_SVOCs	2-Nitrophenol	88-75-5	SW8270D LL	mg/kg			
RA_SO_SVOCs	3,3'-Dichlorobenzidine	91-94-1	SW8270D LL	mg/kg			
RA_SO_SVOCs	3-Nitroaniline	99-09-2	SW8270D LL	mg/kg			
RA_SO_SVOCs	4,6-Dinitro-2-methylphenol	534-52-1	SW8270D LL	mg/kg			
RA_SO_SVOCs	4-Bromophenyl-phenylether	101-55-3	SW8270D LL	mg/kg			
RA_SO_SVOCs	4-Chloro-3-methylphenol	59-50-7	SW8270D LL	mg/kg			
RA_SO_SVOCs	4-Chloroaniline	106-47-8	SW8270D LL	mg/kg			
RA_SO_SVOCs	4-Chlorophenyl-phenylether	7005-72-3	SW8270D LL	mg/kg			
RA_SO_SVOCs	4-Methylphenol	106-44-5	SW8270D LL	mg/kg			
RA_SO_SVOCs	4-Nitroaniline	100-01-6	SW8270D LL	mg/kg			
RA_SO_SVOCs	4-Nitrophenol	100-02-7	SW8270D LL	mg/kg			
RA_SO_SVOCs	Acenaphthene	83-32-9	SW8270D LL	mg/kg	0.15	U	0.26
RA_SO_SVOCs	Acenaphthylene	208-96-8	SW8270D LL	mg/kg	0.15	U	0.048 J
RA_SO_SVOCs	Acetophenone	98-86-2	SW8270D LL	mg/kg			

				sys_loc_code	SB3	SUS21		
				sys_sample_code	SBS0303N	SUS2100N		
				sample_date	3/13/2013	2/7/2013		
				sample_type_code	N	N		
				task_code	Phase2-2013	Phase1-2013		
				start_depth	2.5	1		
				end_depth	3.5	1.75		
				depth_unit	ft	ft		
				validated_yn	Y	Y		
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers	
RA_SO_SVOcs	Anthracene	120-12-7	SW8270D LL	mg/kg	0.15	U	0.78	J
RA_SO_SVOcs	Atrazine	1912-24-9	SW8270D LL	mg/kg				
RA_SO_SVOcs	Benzaldehyde	100-52-7	SW8270D LL	mg/kg				
RA_SO_SVOcs	Benzo(a)anthracene	56-55-3	SW8270D LL	mg/kg	0.079	J	1.9	J
RA_SO_SVOcs	Benzo(a)pyrene	50-32-8	SW8270D LL	mg/kg	0.15	U	1.6	J
RA_SO_SVOcs	Benzo(b)fluoranthene	205-99-2	SW8270D LL	mg/kg	0.15	U	1.9	J
RA_SO_SVOcs	Benzo(g,h,i)perylene	191-24-2	SW8270D LL	mg/kg	0.15	U	1.2	J
RA_SO_SVOcs	Benzo(k)fluoranthene	207-08-9	SW8270D LL	mg/kg	0.15	U	0.77	J
RA_SO_SVOcs	bis-(2-chloroethoxy)methane	111-91-1	SW8270D LL	mg/kg				
RA_SO_SVOcs	bis-(2-Chloroethyl)ether	111-44-4	SW8270D LL	mg/kg				
RA_SO_SVOcs	bis-(2-Ethylhexyl)phthalate	117-81-7	SW8270D LL	mg/kg				
RA_SO_SVOcs	Butylbenzylphthalate	85-68-7	SW8270D LL	mg/kg				
RA_SO_SVOcs	Caprolactam	105-60-2	SW8270D LL	mg/kg				
RA_SO_SVOcs	Carbazole	86-74-8	SW8270D LL	mg/kg				
RA_SO_SVOcs	Chrysene	218-01-9	SW8270D LL	mg/kg	0.16		1.8	J
RA_SO_SVOcs	Dibenzo(a,h)anthracene	53-70-3	SW8270D LL	mg/kg	0.15	U	0.35	J
RA_SO_SVOcs	Dibenzofuran	132-64-9	SW8270D LL	mg/kg				
RA_SO_SVOcs	Diethylphthalate	84-66-2	SW8270D LL	mg/kg				
RA_SO_SVOcs	Dimethylphthalate	131-11-3	SW8270D LL	mg/kg				
RA_SO_SVOcs	Di-n-butylphthalate	84-74-2	SW8270D LL	mg/kg				
RA_SO_SVOcs	Di-n-octylphthalate	117-84-0	SW8270D LL	mg/kg				
RA_SO_SVOcs	Fluoranthene	206-44-0	SW8270D LL	mg/kg	0.15	U	5	
RA_SO_SVOcs	Fluorene	86-73-7	SW8270D LL	mg/kg	0.15		0.3	J
RA_SO_SVOcs	Hexachlorobenzene	118-74-1	SW8270D LL	mg/kg				
RA_SO_SVOcs	Hexachlorobutadiene	87-68-3	SW8270D LL	mg/kg				
RA_SO_SVOcs	Hexachlorocyclo-pentadiene	77-47-4	SW8270D LL	mg/kg				
RA_SO_SVOcs	Hexachloroethane	67-72-1	SW8270D LL	mg/kg				
RA_SO_SVOcs	Indeno(1,2,3-cd)pyrene	193-39-5	SW8270D LL	mg/kg	0.15	U	1.1	J
RA_SO_SVOcs	Isophorone	78-59-1	SW8270D LL	mg/kg				
RA_SO_SVOcs	Naphthalene	91-20-3	SW8270D LL	mg/kg	0.31		0.073	
RA_SO_SVOcs	Nitrobenzene	98-95-3	SW8270D LL	mg/kg				
RA_SO_SVOcs	N-Nitroso-di-n-propylamine	621-64-7	SW8270D LL	mg/kg				
RA_SO_SVOcs	N-Nitrosodiphenylamine	86-30-6	SW8270D LL	mg/kg				
RA_SO_SVOcs	Pentachlorophenol	87-86-5	SW8270D LL	mg/kg				
RA_SO_SVOcs	Phenanthrene	85-01-8	SW8270D LL	mg/kg	0.49		3.6	
RA_SO_SVOcs	Phenol	108-95-2	SW8270D LL	mg/kg				
RA_SO_SVOcs	Pyrene	129-00-0	SW8270D LL	mg/kg	0.22		2.9	J
RA_SO_VOCs	1,1,1-Trichloroethane	71-55-6	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	1,1,2-Trichloroethane	79-00-5	SW8260B	mg/kg			0.0044	U
RA_SO_VOCs	1,1-Dichloroethane	75-34-3	SW8260B	mg/kg			0.0044	U

				sys_loc_code	SB3	SUS21	
				sys_sample_code	SBS0303N	SUS2100N	
				sample_date	3/13/2013	2/7/2013	
				sample_type_code	N	N	
				task_code	Phase2-2013	Phase1-2013	
				start_depth	2.5	1	
				end_depth	3.5	1.75	
				depth_unit	ft	ft	
				validated_yn	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_VOCs	1,1-Dichloroethene	75-35-4	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	1,2,3-Trichlorobenzene	87-61-6	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	1,2,4-Trichlorobenzene	120-82-1	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	1,2-Dibromo-3-chloropropane	96-12-8	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	1,2-Dibromoethane	106-93-4	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	1,2-Dichlorobenzene	95-50-1	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	1,2-Dichloroethane	107-06-2	SW8260B	mg/kg		0.0044	UJ
RA_SO_VOCs	1,2-Dichloropropane	78-87-5	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	1,3-Dichlorobenzene	541-73-1	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	1,4-Dichlorobenzene	106-46-7	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	1,4-Dioxane	123-91-1	SW8260B	mg/kg			R
RA_SO_VOCs	2-Butanone	78-93-3	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	2-Hexanone	591-78-6	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	4-Methyl-2-pentanone	108-10-1	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	Acetone	67-64-1	SW8260B	mg/kg		0.0076	J
RA_SO_VOCs	Benzene	71-43-2	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	Bromochloromethane	74-97-5	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	Bromodichloromethane	75-27-4	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	Bromoform	75-25-2	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	Bromomethane	74-83-9	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	Carbon Disulfide	75-15-0	SW8260B	mg/kg		0.0044	UJ
RA_SO_VOCs	Carbon Tetrachloride	56-23-5	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	Chlorobenzene	108-90-7	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	Chloroethane	75-00-3	SW8260B	mg/kg		0.0044	UJ
RA_SO_VOCs	Chloroform	67-66-3	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	Chloromethane	74-87-3	SW8260B	mg/kg		0.0044	UJ
RA_SO_VOCs	cis-1,2-Dichloroethylene	156-59-2	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	cis-1,3-Dichloropropene	10061-01-5	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	Cyclohexane	110-82-7	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	Dibromochloromethane	124-48-1	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	Dichlorodifluoromethane	75-71-8	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	Ethylbenzene	100-41-4	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	Isopropylbenzene	98-82-8	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	m, p-Xylene	XYLMP	SW8260B	mg/kg		0.0087	U
RA_SO_VOCs	Methyl Acetate	79-20-9	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	Methylcyclohexane	108-87-2	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	Methylene Chloride	75-09-2	SW8260B	mg/kg		0.0044	UJ
RA_SO_VOCs	o-Xylene	95-47-6	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	Styrene	100-42-5	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	Tetrachloroethylene	127-18-4	SW8260B	mg/kg		0.00075	J
RA_SO_VOCs	Toluene	108-88-3	SW8260B	mg/kg		0.0044	U

				sys_loc_code	SBS3	SUS21	
				sys_sample_code	SBS0303N	SUS2100N	
				sample_date	3/13/2013	2/7/2013	
				sample_type_code	N	N	
				task_code	Phase2-2013	Phase1-2013	
				start_depth	2.5	1	
				end_depth	3.5	1.75	
				depth_unit	ft	ft	
				validated_yn	Y	Y	
method_analyte_group	chemical_name	cas_rn	analytic_method	report_result_value	report_result_interpreted_qualifiers	report_result_value	report_result_interpreted_qualifiers
RA_SO_VOCs	trans-1,2-Dichloroethene	156-60-5	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	trans-1,3-Dichloropropene	10061-02-6	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	Trichloroethene	79-01-6	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	Trichlorofluoromethane	75-69-4	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	Vinyl Chloride	75-01-4	SW8260B	mg/kg		0.0044	U
RA_SO_VOCs	Xylenes (total)	1330-20-7	SW8260B	mg/kg		0.0087	U

## Fish Tissue Data



**Attachment A**  
**Fish Tissue Samples Collected in Anacostia River by U.S. Fish and Wildlife Service in 2013**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Collection Dates	Species	Sample Code	Length Range (mm)	Number of Individuals Per Composite	Lipid content (%)	Total PCB Congeners (mg/kg ww) [a]	PCB-TEQ (mg/kg ww) [b]
<b>Lower Anacostia Sampling Area [c]</b>							
Sept-2013	American eel	LAAE01O	227-286	4	20.76	0.645	1.12E-05
	Blue catfish	LABC01O	476-503	4	6.30	0.452	1.76E-06
	Carp	LACA01O	479-517	4	33.5	0.542	7.48E-06
	Channel Catfish	LACC01O	432-440	4	3.54	0.12	1.84E-06
	Largemouth Bass	LALB01O	326-335	4	1.78	0.114	2.09E-06
	Sunfish	LASF01O	152-163	9	1.30	0.0411	6.26E-07
<b>Upper Anacostia Sampling Area [c]</b>							
Sept-2013	Brown Bullhead	UABB01O	265-307	7	2.59	0.0562	9.93E-05
	Blue catfish	UABC01O	498-582	4	2.10	0.141	3.05E-06
	Carp	LPCA01O	555-615	3	13.73	0.101	1.15E-05
	Channel Catfish	UACC01O	394-436	4	6.59	0.254	5.14E-06
	Largemouth Bass	UALB01O	362-372	3	1.65	0.12	2.00E-06
	Northern Snakehead	UANS01O	566-607	3	2.75	0.0496	6.65E-07
	Sunfish	LASF01O	152-163	9	1.30	0.0419	7.57E-07

Notes:

mg/kg ww - Milligrams per kilogram wet weight.

mm - Millimeters.

PCB - Polychlorinated Biphenyls.

TEQ - Toxic equivalents.

WHO - World Health Organization.

% - Percent.

[a] Total PCB congeners is the sum of 119 individual congeners, including congeners that co-elute.

[b] PCB-TEQ is the sum of 12 dioxin-like congeners (77, 81, 105, 114, 118, 123, 126, 156, 157, 167, 169, and 189), where the concentration of each congener is multiplied by its WHO mammal TEF. PCB-TEQ concentrations were taken from Pinkney (2014), which states that TEQ concentrations were calculated using the TEFs of Van den Berg et al. (1998). Due to co-elution with a dioxin-like congener, non-dioxin-like congeners 110, 149, 173, and 201 were also included in the PCB-TEQ concentrations.

[c] Lower Anacostia Sampling Area runs from confluence with Potomac River up to CSX railroad bridge; Upper Anacostia Sampling Area runs from CSX railroad bridge up to Maryland state line.

Source: Pinkney, AE. 2014. Analysis of Contaminant Concentrations in Fish Tissue Collected from the Waters of the District of Columbia. Final Report. CBFO-C14-03. U.S. Fish and Wildlife Service, Chesapeake Bay Field Office, Annapolis, MD. September 2014.

**Attachment A**  
**Fish Tissue Samples Collected in Upstream Anacostia River by Maryland Department of Environment, 2003-2010**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Collection Dates	Fish Species	Sample Code	Average Length (mm)	Number of Individuals Per Composite	Total PCB Congeners (mg/kg ww) [a]
<b>Anacostia River - mainstem (ARBR location)</b>					
Sep-07	Brown Bullhead	ANA_09112007_fish_bbc2	264	5	0.0340
	Pumpkinseed Sunfish	ANA_09112007_fish_pps	122	5	0.0177
May-10	Blue catfish	2010FTC-ANAC-C	551	4	0.711
	Blue catfish	2010FTC-ANAC-D	487	4	0.505
	Channel Catfish	2010FTC-ANAC-B	402	5	0.538
	Carp	2010FTC-ANAC-A	547	5	1.83
<b>Northeast Branch Anacostia River (NEBAR location)</b>					
Sep-03	Channel Catfish	NEBAR_09112003_fish_cc	408	4	0.290
	Channel Catfish	NEBAR_09112003_fish_cc1	436	5	0.494
	Channel Catfish	NEBAR_09112003_fish_cc2	499	5	0.501
	Redbreast Sunfish	NEBAR_09112003_fish_rbs	130	5	0.107
	Redbreast Sunfish	NEBAR_09112003_fish_rbs1	149	5	0.241
Oct-08	American Eel	2008FTC_NEBR_C	495	3	0.201
	Redbreast Sunfish	2008FTC_NEBR_A	133	5	0.0240
	White Sucker	2008FTC_NEBR_B	301	4	0.0821
<b>Northwest Branch Anacostia River (NWBAR location)</b>					
Sep-03	American Eel	NWBAR_09112003_fish_ae	622	3	0.276
	Redbreast Sunfish	NWBAR_09112003_fish_rbs	150	5	0.0942
	Redbreast Sunfish	NWBAR_09112003_fish_rbs1	132	5	0.0643
	Redbreast Sunfish	NWBAR_09112003_fish_rbsrep	150	5	0.0989

Notes:

mg/kg ww - Milligrams per kilogram wet weight.

mm - Millimeters.

PCB - Polychlorinated Biphenyls.

[a] Total PCB congeners is the sum of 116 congeners, which includes both individual congeners and grouped congeners that co-elute.

Source: MDE. 2012. Database query for contaminant concentrations in fish tissue collected from the Anacostia River, 2002 to 2010. John Hill, Environmental Specialist, Maryland Department of Environment. May 21, 2012.



## **Attachment B**

### **Exposure Point Concentration Calculations (ProUCL Input and Output)**

## ProUCL Input Files

Matrix	Fraction	Units	Task	Group-ID	Location	Collected	Depth	RA_SE_SVOCs Chrysene	D_RA_SE_SVOCs Chrysene	RA_SE_SVOCs Benzo(k)fluoranthene	D_RA_SE_SVOCs Benzo(k)fluoranthene
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED10C	11/11/2013	0 - 0.5 ft	0.7	1	0.35	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED1C	11/7/2013	0 - 0.5 ft	0.71	1	0.4	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED2C	11/6/2013	0 - 0.5 ft	0.9	1	0.56	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED3C	11/7/2013	0 - 0.5 ft	0.79	1	0.29	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED4C	11/12/2013	0 - 0.5 ft	0.83	1	0.32	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED5C	11/11/2013	0 - 0.5 ft	0.96	1	0.39	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6.5D	11/25/2013	0 - 0.5 ft	0.32	1	0.096	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6.5E	11/25/2013	0 - 0.5 ft	0.74	1	0.25	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6C	11/14/2013	0 - 0.5 ft	0.85	1	0.33	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7.5D	11/25/2013	0 - 0.5 ft	0.27	1	0.1	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7.5E	11/25/2013	0 - 0.5 ft	0.49	1	0.14	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7D	11/25/2013	0 - 0.5 ft	0.63	1	0.19	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7E	11/25/2013	0 - 0.5 ft	0.76	1	0.27	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7F	11/25/2013	0 - 0.5 ft	0.89	1	0.3	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7G	1/30/2014	0 - 0.5 ft	1.2	1	0.43	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED8C	11/14/2013	0 - 0.5 ft	0.64	1	0.49	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED9C	11/11/2013	0 - 0.5 ft	0.88	1	0.29	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	WSED1	11/15/2013	0 - 0.5 ft	0.9	1	0.29	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	WSED2	11/15/2013	0 - 0.5 ft	1.3	1	0.5	1

Matrix	Fraction	Units	Task	Group-ID	Location	Collected	Depth	RA_SE_DioxinsFurans TCDD TEQ HH	D_RA_SE_DioxinsFurans TCDD TEQ HH	RA_SE_Metals Aluminum	D_RA_SE_Metals Aluminum
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED10C	11/11/2013	0 - 0.5 ft			5300	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED1C	11/7/2013	0 - 0.5 ft			5200	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED2C	11/6/2013	0 - 0.5 ft	0.0000525		6200	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED3C	11/7/2013	0 - 0.5 ft	0.00000332		5600	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED4C	11/12/2013	0 - 0.5 ft			10000	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED5C	11/11/2013	0 - 0.5 ft			8000	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6.5D	11/25/2013	0 - 0.5 ft			13000	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6.5E	11/25/2013	0 - 0.5 ft	0.000205		6000	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6C	11/14/2013	0 - 0.5 ft			9800	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7.5D	11/25/2013	0 - 0.5 ft			13000	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7.5E	11/25/2013	0 - 0.5 ft			15000	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7D	11/25/2013	0 - 0.5 ft			7300	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7E	11/25/2013	0 - 0.5 ft			4500	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7F	11/25/2013	0 - 0.5 ft	0.000707		7300	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7G	1/30/2014	0 - 0.5 ft	0.0000106		2400	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED8C	11/14/2013	0 - 0.5 ft	0.00000453		7200	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED9C	11/11/2013	0 - 0.5 ft	0.00000122		6300	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	WSED1	11/15/2013	0 - 0.5 ft	0.00000874		7000	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	WSED2	11/15/2013	0 - 0.5 ft	0.00000587		8700	1

Matrix	Fraction	Units	Task	Group-ID	Location	Collected	Depth	RA_SE_Metals Arsenic	D_RA_SE_Metals Arsenic	RA_SE_Metals Chromium	D_RA_SE_Metals Chromium
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED10C	11/11/2013	0 - 0.5 ft	2.1	1	24	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED1C	11/7/2013	0 - 0.5 ft	2	1	24	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED2C	11/6/2013	0 - 0.5 ft	2.6	1	29	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED3C	11/7/2013	0 - 0.5 ft	2.5	1	24	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED4C	11/12/2013	0 - 0.5 ft	3.4	1	45	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED5C	11/11/2013	0 - 0.5 ft	5.3	1	57	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6.5D	11/25/2013	0 - 0.5 ft	14	1	47	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6.5E	11/25/2013	0 - 0.5 ft	5.9	1	31	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6C	11/14/2013	0 - 0.5 ft	3.6	1	45	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7.5D	11/25/2013	0 - 0.5 ft	11	1	80	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7.5E	11/25/2013	0 - 0.5 ft	17	1	76	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7D	11/25/2013	0 - 0.5 ft	4.3	1	36	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7E	11/25/2013	0 - 0.5 ft	4.6	1	29	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7F	11/25/2013	0 - 0.5 ft	11	1	46	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7G	1/30/2014	0 - 0.5 ft	2.5	1	33	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED8C	11/14/2013	0 - 0.5 ft	3.3	1	39	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED9C	11/11/2013	0 - 0.5 ft	2.5	1	24	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	WSED1	11/15/2013	0 - 0.5 ft	2.7	1	32	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	WSED2	11/15/2013	0 - 0.5 ft	4	1	42	1

Attachment B - Nearshore Sediment ProUCL Input

Matrix	Fraction	Units	Task	Group-ID	Location	Collected	Depth	RA_SE_Metals Cobalt	D_RA_SE_Metals Cobalt	RA_SE_Metals Manganese	D_RA_SE_Metals Manganese
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED10C	11/11/2013	0 - 0.5 ft	16	1	210	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED1C	11/7/2013	0 - 0.5 ft	11	1	160	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED2C	11/6/2013	0 - 0.5 ft	18	1	200	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED3C	11/7/2013	0 - 0.5 ft	13	1	200	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED4C	11/12/2013	0 - 0.5 ft	19	1	390	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED5C	11/11/2013	0 - 0.5 ft	12	1	300	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6.5D	11/25/2013	0 - 0.5 ft	17	1	130	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6.5E	11/25/2013	0 - 0.5 ft	16	1	150	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6C	11/14/2013	0 - 0.5 ft	19	1	390	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7.5D	11/25/2013	0 - 0.5 ft	15	1	180	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7.5E	11/25/2013	0 - 0.5 ft	32	1	230	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7D	11/25/2013	0 - 0.5 ft	16	1	180	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7E	11/25/2013	0 - 0.5 ft	13	1	120	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7F	11/25/2013	0 - 0.5 ft	13	1	200	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7G	1/30/2014	0 - 0.5 ft	7.1	1	120	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED8C	11/14/2013	0 - 0.5 ft	15	1	310	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED9C	11/11/2013	0 - 0.5 ft	12	1	230	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	WSED1	11/15/2013	0 - 0.5 ft	15	1	250	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	WSED2	11/15/2013	0 - 0.5 ft	22	1	310	1



Matrix	Fraction	Units	Task	Group-ID	Location	Collected	Depth	RA_SE_Metals Nickel	D_RA_SE_Metals Nickel	RA_SE_Metals Thallium	D_RA_SE_Metals Thallium
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED10C	11/11/2013	0 - 0.5 ft	26	1	0.17	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED1C	11/7/2013	0 - 0.5 ft	19	1	0.15	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED2C	11/6/2013	0 - 0.5 ft	29	1	0.19	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED3C	11/7/2013	0 - 0.5 ft	22	1	0.17	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED4C	11/12/2013	0 - 0.5 ft	37	1	0.25	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED5C	11/11/2013	0 - 0.5 ft	20	1	0.27	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6.5D	11/25/2013	0 - 0.5 ft	91	1	0.53	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6.5E	11/25/2013	0 - 0.5 ft	65	1	0.16	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6C	11/14/2013	0 - 0.5 ft	36	1	0.23	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7.5D	11/25/2013	0 - 0.5 ft	59	1	0.35	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7.5E	11/25/2013	0 - 0.5 ft	150	1	0.63	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7D	11/25/2013	0 - 0.5 ft	50	1	0.25	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7E	11/25/2013	0 - 0.5 ft	120	1	0.15	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7F	11/25/2013	0 - 0.5 ft	160	1	0.13	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7G	1/30/2014	0 - 0.5 ft	84	1	0.037	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED8C	11/14/2013	0 - 0.5 ft	27	1	0.17	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED9C	11/11/2013	0 - 0.5 ft	20	1	0.16	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	WSED1	11/15/2013	0 - 0.5 ft	31	1	0.18	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	WSED2	11/15/2013	0 - 0.5 ft	39	1	0.26	1

Matrix	Fraction	Units	Task	Group-ID	Location	Collected	Depth	RA_SE_Metals Vanadium	D_RA_SE_Metals Vanadium	RA_SE_SVOCs Benzo(a)anthracene	D_RA_SE_SVOCs Benzo(a)anthracene
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED10C	11/11/2013	0 - 0.5 ft	23	1	0.48	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED1C	11/7/2013	0 - 0.5 ft	21	1	0.49	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED2C	11/6/2013	0 - 0.5 ft	27	1	0.59	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED3C	11/7/2013	0 - 0.5 ft	28	1	0.52	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED4C	11/12/2013	0 - 0.5 ft	41	1	0.47	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED5C	11/11/2013	0 - 0.5 ft	61	1	0.63	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6.5D	11/25/2013	0 - 0.5 ft	250	1	0.19	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6.5E	11/25/2013	0 - 0.5 ft	120	1	0.4	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6C	11/14/2013	0 - 0.5 ft	37	1	0.42	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7.5D	11/25/2013	0 - 0.5 ft	180	1	0.16	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7.5E	11/25/2013	0 - 0.5 ft	360	1	0.36	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7D	11/25/2013	0 - 0.5 ft	110	1	0.48	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7E	11/25/2013	0 - 0.5 ft	150	1	0.49	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7F	11/25/2013	0 - 0.5 ft	440	1	0.59	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7G	1/30/2014	0 - 0.5 ft	56	1	0.95	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED8C	11/14/2013	0 - 0.5 ft	33	1	0.39	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED9C	11/11/2013	0 - 0.5 ft	29	1	0.48	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	WSED1	11/15/2013	0 - 0.5 ft	31	1	0.63	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	WSED2	11/15/2013	0 - 0.5 ft	37	1	0.69	1

Matrix	Fraction	Units	Task	Group-ID	Location	Collected	Depth	RA_SE_SVOCs Benzo(a)pyrene	D_RA_SE_SVOCs Benzo(a)pyrene	RA_SE_SVOCs Benzo(b)fluoranthene	D_RA_SE_SVOCs Benzo(b)fluoranthene
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED10C	11/11/2013	0 - 0.5 ft	0.58	1	0.84	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED1C	11/7/2013	0 - 0.5 ft	0.55	1	0.73	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED2C	11/6/2013	0 - 0.5 ft	0.67	1	0.73	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED3C	11/7/2013	0 - 0.5 ft	0.6	1	0.9	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED4C	11/12/2013	0 - 0.5 ft	0.55	1	0.94	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED5C	11/11/2013	0 - 0.5 ft	0.78	1	1.1	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6.5D	11/25/2013	0 - 0.5 ft	0.19	1	0.32	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6.5E	11/25/2013	0 - 0.5 ft	0.46	1	0.73	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6C	11/14/2013	0 - 0.5 ft	0.53	1	0.85	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7.5D	11/25/2013	0 - 0.5 ft	0.16	1	0.29	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7.5E	11/25/2013	0 - 0.5 ft	0.31	1	0.5	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7D	11/25/2013	0 - 0.5 ft	0.54	1	0.86	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7E	11/25/2013	0 - 0.5 ft	0.52	1	0.85	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7F	11/25/2013	0 - 0.5 ft	0.6	1	0.86	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7G	1/30/2014	0 - 0.5 ft	0.89	1	1.2	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED8C	11/14/2013	0 - 0.5 ft	0.51	1	0.58	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED9C	11/11/2013	0 - 0.5 ft	0.62	1	0.99	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	WSED1	11/15/2013	0 - 0.5 ft	0.68	1	1.1	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	WSED2	11/15/2013	0 - 0.5 ft	0.79	1	1.5	1

Matrix	Fraction	Units	Task	Group-ID	Location	Collected	Depth	RA_SE_SVOCs Dibenzo(a,h)anthracene	D_RA_SE_SVOCs Dibenzo(a,h)anthracene
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED10C	11/11/2013	0 - 0.5 ft	0.14	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED1C	11/7/2013	0 - 0.5 ft	0.11	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED2C	11/6/2013	0 - 0.5 ft	0.2	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED3C	11/7/2013	0 - 0.5 ft	0.15	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED4C	11/12/2013	0 - 0.5 ft	0.16	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED5C	11/11/2013	0 - 0.5 ft	0.17	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6.5D	11/25/2013	0 - 0.5 ft	0.052	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6.5E	11/25/2013	0 - 0.5 ft	0.14	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6C	11/14/2013	0 - 0.5 ft	0.089	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7.5D	11/25/2013	0 - 0.5 ft	0.04	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7.5E	11/25/2013	0 - 0.5 ft	0.055	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7D	11/25/2013	0 - 0.5 ft	0.086	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7E	11/25/2013	0 - 0.5 ft	0.094	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7F	11/25/2013	0 - 0.5 ft	0.16	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7G	1/30/2014	0 - 0.5 ft	0.15	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED8C	11/14/2013	0 - 0.5 ft	0.16	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED9C	11/11/2013	0 - 0.5 ft	0.14	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	WSED1	11/15/2013	0 - 0.5 ft	0.12	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	WSED2	11/15/2013	0 - 0.5 ft	0.15	1

Matrix	Fraction	Units	Task	Group-ID	Location	Collected	Depth	RA_SE_SVOCs Indeno(1,2,3-cd)pyrene	D_RA_SE_SVOCs Indeno(1,2,3-cd)pyrene
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED10C	11/11/2013	0 - 0.5 ft	0.42	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED1C	11/7/2013	0 - 0.5 ft	0.4	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED2C	11/6/2013	0 - 0.5 ft	0.58	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED3C	11/7/2013	0 - 0.5 ft	0.5	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED4C	11/12/2013	0 - 0.5 ft	0.59	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED5C	11/11/2013	0 - 0.5 ft	0.62	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6.5D	11/25/2013	0 - 0.5 ft	0.14	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6.5E	11/25/2013	0 - 0.5 ft	0.42	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6C	11/14/2013	0 - 0.5 ft	0.35	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7.5D	11/25/2013	0 - 0.5 ft	0.12	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7.5E	11/25/2013	0 - 0.5 ft	0.23	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7D	11/25/2013	0 - 0.5 ft	0.37	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7E	11/25/2013	0 - 0.5 ft	0.38	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7F	11/25/2013	0 - 0.5 ft	0.51	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7G	1/30/2014	0 - 0.5 ft	0.64	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED8C	11/14/2013	0 - 0.5 ft	0.45	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED9C	11/11/2013	0 - 0.5 ft	0.57	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	WSED1	11/15/2013	0 - 0.5 ft	0.28	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	WSED2	11/15/2013	0 - 0.5 ft	0.38	1

Matrix	Fraction	Units	Task	Group-ID	Location	Collected	Depth	RA_SE_PestPCBs PCB, Total Aroclors (AECOM Calc)	D_RA_SE_PestPCBs PCB, Total Aroclors (AECOM Calc)
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED10C	11/11/2013	0 - 0.5 ft	0.077	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED1C	11/7/2013	0 - 0.5 ft	0.11	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED2C	11/6/2013	0 - 0.5 ft	0.23	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED3C	11/7/2013	0 - 0.5 ft	0.18	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED4C	11/12/2013	0 - 0.5 ft	0.39	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED5C	11/11/2013	0 - 0.5 ft	0.75	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6.5D	11/25/2013	0 - 0.5 ft	1.8	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6.5E	11/25/2013	0 - 0.5 ft	0.4	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED6C	11/14/2013	0 - 0.5 ft	0.24	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7.5D	11/25/2013	0 - 0.5 ft	0.87	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7.5E	11/25/2013	0 - 0.5 ft	1.9	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7D	11/25/2013	0 - 0.5 ft	0.62	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7E	11/25/2013	0 - 0.5 ft	0.96	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7F	11/25/2013	0 - 0.5 ft	0.77	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED7G	1/30/2014	0 - 0.5 ft	0.23	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED8C	11/14/2013	0 - 0.5 ft	0.5	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	SED9C	11/11/2013	0 - 0.5 ft	0.17	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	WSED1	11/15/2013	0 - 0.5 ft	0.23	1
SE	T	mg/kg	Phase2-2013	RA_Waterside_Area	WSED2	11/15/2013	0 - 0.5 ft	0.17	1

Attachment B - Surface Water ProUCL Input

Matrix	Fraction	Units	Task	Group-ID	Location	Collected	RA_SW_DioxinFurans TCDD TEQ HH	D_RA_SW_DioxinFurans TCDD TEQ HH	RA_SW_Metals Arsenic	D_RA_SW_Metals Arsenic	
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW10B	9/26/2013	0.00000024		1	0.62	1
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW1B	9/23/2013	0.00000025		1	0.73	1
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW2B	9/23/2013				0.59	1
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW3C	9/23/2013	0.000000612		1	0.7	1
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW4B	9/24/2013				1.2	1
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW5C	9/24/2013				0.83	1
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW6B	9/24/2013	0.000000408		1	0.84	1
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW7B	9/24/2013	0.000000378		1	0.48	1
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW8B	9/24/2013				0.82	1
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW9C	9/25/2013				0.62	1

Matrix	Fraction	Units	Task	Group-ID	Location	Collected	RA_SW_Metals Chromium	D_RA_SW_Metals Chromium	RA_SW_Metals Cobalt	D_RA_SW_Metals Cobalt	
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW10B	9/26/2013	2.7		1	1.1	1
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW1B	9/23/2013	3.3		1	0.96	1
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW2B	9/23/2013	2.9		1	0.93	1
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW3C	9/23/2013	3.5		1	1.1	1
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW4B	9/24/2013	2.9		1	1	1
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW5C	9/24/2013	3.2		1	0.97	1
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW6B	9/24/2013	3.3		1	1.1	1
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW7B	9/24/2013	2.4		1	0.8	1
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW8B	9/24/2013	2.8		1	0.98	1
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW9C	9/25/2013	2.3		1	0.89	1



Matrix	Fraction	Units	Task	Group-ID	Location	Collected	RA_SW_Metals Manganese	D_RA_SW_Metals Manganese	RA_SW_PestPCBs 4,4'-DDT	D_RA_SW_PestPCBs 4,4'-DDT
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW10B	9/26/2013	170	1	0.0011	1
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW1B	9/23/2013	140	1	0.0016	1
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW2B	9/23/2013	130	1		
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW3C	9/23/2013	120	1	0.0014	1
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW4B	9/24/2013	140	1		
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW5C	9/24/2013	140	1		
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW6B	9/24/2013	140	1	0.0011	1
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW7B	9/24/2013	140	1	0.0011	1
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW8B	9/24/2013	130	1		
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW9C	9/25/2013	150	1		

Matrix	Fraction	Units	Task	Group-ID	Location	Collected	RA_SW_PestPCBs PC	D_RA_SW_PestPCBs
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW10B	9/26/2013	0.01	0
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW1B	9/23/2013	0.01	0
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW2B	9/23/2013	0.0094	0
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW3C	9/23/2013	0.0095	0
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW4B	9/24/2013	0.0095	0
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW5C	9/24/2013	0.0094	0
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW6B	9/24/2013	0.0098	0
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW7B	9/24/2013	0.0094	0
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW8B	9/24/2013	0.0095	0
WS	T	ug/l	Phase2-2013	RA_Waterside_Area	SUW9C	9/25/2013	0.0095	0

## ProUCL Output Files

## UCL Statistics for Data Sets with Non-Detects

User Selected Options  
 Date/Time of Computation 2/20/2015 12:09:24 PM  
 From File HH\_SED\_Nearshore\_Input.xls  
 Full Precision OFF  
 Confidence Coefficient 95%  
 Number of Bootstrap Operations 2000

## RA\_SE\_DioxinsFuransTCDD TEQ HH

## General Statistics

Total Number of Observations	9	Number of Distinct Observations	9
		Number of Missing Observations	10
Minimum	1.2200E-6	Mean	1.11E-04
Maximum	7.07E-04	Median	8.7400E-6
SD	2.3293E-4	Std. Error of Mean	7.7643E-5
Coefficient of Variation	2.099	Skewness	2.611

**Note: Sample size is small (e.g., <10), if data are collected using ISM approach, you should use guidance provided in ITRC Tech Reg Guide on ISM (ITRC, 2012) to compute statistics of interest.**

**For example, you may want to use Chebyshev UCL to estimate EPC (ITRC, 2012).**

**Chebyshev UCL can be computed using the Nonparametric and All UCL Options of ProUCL 5.0**

## Normal GOF Test

Shapiro Wilk Test Statistic	0.555	<b>Shapiro Wilk GOF Test</b>
5% Shapiro Wilk Critical Value	0.829	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.377	<b>Lilliefors GOF Test</b>
5% Lilliefors Critical Value	0.295	Data Not Normal at 5% Significance Level

**Data Not Normal at 5% Significance Level**

## Assuming Normal Distribution

<b>95% Normal UCL</b>		<b>95% UCLs (Adjusted for Skewness)</b>	
95% Student's-t UCL	2.5536E-4	95% Adjusted-CLT UCL (Chen-1995)	3.1090E-4
		95% Modified-t UCL (Johnson-1978)	2.6662E-4

## Gamma GOF Test

A-D Test Statistic	0.858	<b>Anderson-Darling Gamma GOF Test</b>
5% A-D Critical Value	0.798	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.327	<b>Kolmogrov-Smirnov Gamma GOF Test</b>
5% K-S Critical Value	0.3	Data Not Gamma Distributed at 5% Significance Level

**Data Not Gamma Distributed at 5% Significance Level**

## Gamma Statistics

k hat (MLE)	0.349	k star (bias corrected MLE)	0.307
Theta hat (MLE)	3.1770E-4	Theta star (bias corrected MLE)	3.6154E-4
nu hat (MLE)	6.288	nu star (bias corrected)	5.525
MLE Mean (bias corrected)	1.1098E-4	MLE Sd (bias corrected)	2.0031E-4
Adjusted Level of Significance	0.0231	Approximate Chi Square Value (0.05)	1.402
		Adjusted Chi Square Value	1.013

## Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50)	4.3728E-4	95% Adjusted Gamma UCL (use when n<50)	6.0522E-4
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## Lognormal GOF Test

Shapiro Wilk Test Statistic	0.917	<b>Shapiro Wilk Lognormal GOF Test</b>
5% Shapiro Wilk Critical Value	0.829	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.247	<b>Lilliefors Lognormal GOF Test</b>
5% Lilliefors Critical Value	0.295	Data appear Lognormal at 5% Significance Level

**Data appear Lognormal at 5% Significance Level**

## Lognormal Statistics

Minimum of Logged Data	-13.62	Mean of logged Data	-11.03
Maximum of Logged Data	-7.254	SD of logged Data	2.077

## Assuming Lognormal Distribution

95% H-UCL	0.0107	90% Chebyshev (MVUE) UCL	2.5771E-4
95% Chebyshev (MVUE) UCL	3.3619E-4	97.5% Chebyshev (MVUE) UCL	4.4510E-4
99% Chebyshev (MVUE) UCL	6.5906E-4		

## Nonparametric Distribution Free UCL Statistics

**Data appear to follow a Discernible Distribution at 5% Significance Level**

**Nonparametric Distribution Free UCLs**

95% CLT UCL	2.3869E-4	95% Jackknife UCL	2.5536E-4
95% Standard Bootstrap UCL	2.3040E-4	95% Bootstrap-t UCL	0.00157
95% Hall's Bootstrap UCL	0.00165	95% Percentile Bootstrap UCL	2.5979E-4
95% BCA Bootstrap UCL	3.4511E-4		
90% Chebyshev(Mean, Sd) UCL	3.4390E-4	95% Chebyshev(Mean, Sd) UCL	4.4941E-4
97.5% Chebyshev(Mean, Sd) UCL	5.9586E-4	99% Chebyshev(Mean, Sd) UCL	8.8351E-4

**Suggested UCL to Use**

99% Chebyshev (Mean, Sd) UCL 8.84E-04

**Recommended UCL exceeds the maximum observation**

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)

and Singh and Singh (2003). However, simulation results will not cover all Real World data sets.

For additional insight the user may want to consult a statistician.

## RA\_SE\_Metals|Aluminum

**General Statistics**

Total Number of Observations	19	Number of Distinct Observations	17
		Number of Missing Observations	0
Minimum	2400	Mean	7779
Maximum	15000	Median	7200
SD	3189	Std. Error of Mean	731.6
Coefficient of Variation	0.41	Skewness	0.831

**Normal GOF Test**

Shapiro Wilk Test Statistic	0.929	<b>Shapiro Wilk GOF Test</b>
5% Shapiro Wilk Critical Value	0.901	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.191	<b>Lilliefors GOF Test</b>
5% Lilliefors Critical Value	0.203	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

**Assuming Normal Distribution**

<b>95% Normal UCL</b>		<b>95% UCLs (Adjusted for Skewness)</b>	
95% Student's-t UCL	9048	95% Adjusted-CLT UCL (Chen-1995)	9131
		95% Modified-t UCL (Johnson-1978)	9071

**Gamma GOF Test**

A-D Test Statistic	0.334	<b>Anderson-Darling Gamma GOF Test</b>
5% A-D Critical Value	0.742	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.141	<b>Kolmogrov-Smirnov Gamma GOF Test</b>
5% K-S Critical Value	0.199	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

**Gamma Statistics**

k hat (MLE)	6.331	k star (bias corrected MLE)	5.366
Theta hat (MLE)	1229	Theta star (bias corrected MLE)	1450
nu hat (MLE)	240.6	nu star (bias corrected)	203.9
MLE Mean (bias corrected)	7779	MLE Sd (bias corrected)	3358
		Approximate Chi Square Value (0.05)	171.9
Adjusted Level of Significance	0.0369	Adjusted Chi Square Value	169.3

**Assuming Gamma Distribution**

95% Approximate Gamma UCL (use when n>=50))	9229	95% Adjusted Gamma UCL (use when n<50)	9369
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**Lognormal GOF Test**

Shapiro Wilk Test Statistic	0.955	<b>Shapiro Wilk Lognormal GOF Test</b>
5% Shapiro Wilk Critical Value	0.901	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.119	<b>Lilliefors Lognormal GOF Test</b>
5% Lilliefors Critical Value	0.203	Data appear Lognormal at 5% Significance Level

Data appear Lognormal at 5% Significance Level

**Lognormal Statistics**

Minimum of Logged Data	7.783	Mean of logged Data	8.878
Maximum of Logged Data	9.616	SD of logged Data	0.425

**Assuming Lognormal Distribution**

95% H-UCL	9538	90% Chebyshev (MVUE) UCL	10157
95% Chebyshev (MVUE) UCL	11219	97.5% Chebyshev (MVUE) UCL	12693
99% Chebyshev (MVUE) UCL	15589		

**Nonparametric Distribution Free UCL Statistics**

Data appear to follow a Discernible Distribution at 5% Significance Level

**Nonparametric Distribution Free UCLs**

95% CLT UCL	8982	95% Jackknife UCL	9048
95% Standard Bootstrap UCL	8927	95% Bootstrap-t UCL	9323
95% Hall's Bootstrap UCL	9166	95% Percentile Bootstrap UCL	8995
95% BCA Bootstrap UCL	9074		
90% Chebyshev(Mean, Sd) UCL	9974	95% Chebyshev(Mean, Sd) UCL	10968
97.5% Chebyshev(Mean, Sd) UCL	12348	99% Chebyshev(Mean, Sd) UCL	15058

**Suggested UCL to Use**

95% Student's-t UCL 9048

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)

and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.

For additional insight the user may want to consult a statistician.

RA\_SE\_Metals|Arsenic

**General Statistics**

Total Number of Observations	19	Number of Distinct Observations	16
		Number of Missing Observations	0
Minimum	2	Mean	5.489
Maximum	17	Median	3.6
SD	4.407	Std. Error of Mean	1.011
Coefficient of Variation	0.803	Skewness	1.622

**Normal GOF Test**

Shapiro Wilk Test Statistic	0.745	<b>Shapiro Wilk GOF Test</b>
5% Shapiro Wilk Critical Value	0.901	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.264	<b>Lilliefors GOF Test</b>
5% Lilliefors Critical Value	0.203	Data Not Normal at 5% Significance Level

**Data Not Normal at 5% Significance Level****Assuming Normal Distribution**

<b>95% Normal UCL</b>		<b>95% UCLs (Adjusted for Skewness)</b>	
95% Student's-t UCL	7.243	95% Adjusted-CLT UCL (Chen-1995)	7.555
		95% Modified-t UCL (Johnson-1978)	7.305

**Gamma GOF Test**

A-D Test Statistic	1.243	<b>Anderson-Darling Gamma GOF Test</b>
5% A-D Critical Value	0.751	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.198	<b>Kolmogrov-Smirnov Gamma GOF Test</b>
5% K-S Critical Value	0.201	Detected data appear Gamma Distributed at 5% Significance Level

**Detected data follow Appr. Gamma Distribution at 5% Significance Level****Gamma Statistics**

k hat (MLE)	2.292	k star (bias corrected MLE)	1.965
Theta hat (MLE)	2.395	Theta star (bias corrected MLE)	2.793
nu hat (MLE)	87.1	nu star (bias corrected)	74.68
MLE Mean (bias corrected)	5.489	MLE Sd (bias corrected)	3.916
		Approximate Chi Square Value (0.05)	55.78
Adjusted Level of Significance	0.0369	Adjusted Chi Square Value	54.35

**Assuming Gamma Distribution**

95% Approximate Gamma UCL (use when n>=50)	7.35	<b>95% Adjusted Gamma UCL (use when n&lt;50)</b>	7.543
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**Lognormal GOF Test**

Shapiro Wilk Test Statistic	0.885	<b>Shapiro Wilk Lognormal GOF Test</b>
5% Shapiro Wilk Critical Value	0.901	Data Not Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.15	<b>Lilliefors Lognormal GOF Test</b>
5% Lilliefors Critical Value	0.203	Data appear Lognormal at 5% Significance Level

**Data appear Approximate Lognormal at 5% Significance Level****Lognormal Statistics**

Minimum of Logged Data	0.693	Mean of logged Data	1.469
Maximum of Logged Data	2.833	SD of logged Data	0.659

**Assuming Lognormal Distribution**

95% H-UCL	7.564	90% Chebyshev (MVUE) UCL	7.88
95% Chebyshev (MVUE) UCL	9.038	97.5% Chebyshev (MVUE) UCL	10.64
99% Chebyshev (MVUE) UCL	13.8		

**Nonparametric Distribution Free UCL Statistics****Data appear to follow a Discernible Distribution at 5% Significance Level****Nonparametric Distribution Free UCLs**

95% CLT UCL	7.153	95% Jackknife UCL	7.243
95% Standard Bootstrap UCL	7.148	95% Bootstrap-t UCL	7.974
95% Hall's Bootstrap UCL	7.296	95% Percentile Bootstrap UCL	7.211
95% BCA Bootstrap UCL	7.521		
90% Chebyshev(Mean, Sd) UCL	8.523	95% Chebyshev(Mean, Sd) UCL	9.897
97.5% Chebyshev(Mean, Sd) UCL	11.8	99% Chebyshev(Mean, Sd) UCL	15.55

**Suggested UCL to Use**

95% Adjusted Gamma UCL 7.543

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.

For additional insight the user may want to consult a statistician.

RA\_SE\_Metals|Chromium

**General Statistics**

Total Number of Observations	19	Number of Distinct Observations	14
		Number of Missing Observations	0
Minimum	24	Mean	40.16
Maximum	80	Median	36
SD	16.33	Std. Error of Mean	3.747
Coefficient of Variation	0.407	Skewness	1.332

**Normal GOF Test**

Shapiro Wilk Test Statistic	0.849	<b>Shapiro Wilk GOF Test</b>
5% Shapiro Wilk Critical Value	0.901	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.18	<b>Lilliefors GOF Test</b>
5% Lilliefors Critical Value	0.203	Data appear Normal at 5% Significance Level

**Data appear Approximate Normal at 5% Significance Level****Assuming Normal Distribution**

<b>95% Normal UCL</b>		<b>95% UCLs (Adjusted for Skewness)</b>	
95% Student's-t UCL	46.65	95% Adjusted-CLT UCL (Chen-1995)	47.54
		95% Modified-t UCL (Johnson-1978)	46.85

**Gamma GOF Test**

A-D Test Statistic	0.552	<b>Anderson-Darling Gamma GOF Test</b>
5% A-D Critical Value	0.742	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.129	<b>Kolmogrov-Smirnov Gamma GOF Test</b>
5% K-S Critical Value	0.199	Detected data appear Gamma Distributed at 5% Significance Level

**Detected data appear Gamma Distributed at 5% Significance Level****Gamma Statistics**

k hat (MLE)	7.539	k star (bias corrected MLE)	6.384
Theta hat (MLE)	5.326	Theta star (bias corrected MLE)	6.29
nu hat (MLE)	286.5	nu star (bias corrected)	242.6
MLE Mean (bias corrected)	40.16	MLE Sd (bias corrected)	15.89
		Approximate Chi Square Value (0.05)	207.5
Adjusted Level of Significance	0.0369	Adjusted Chi Square Value	204.7

**Assuming Gamma Distribution**

95% Approximate Gamma UCL (use when n>=50))	46.94	95% Adjusted Gamma UCL (use when n<50)	47.59
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**Lognormal GOF Test**

Shapiro Wilk Test Statistic	0.925	<b>Shapiro Wilk Lognormal GOF Test</b>
5% Shapiro Wilk Critical Value	0.901	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.112	<b>Lilliefors Lognormal GOF Test</b>
5% Lilliefors Critical Value	0.203	Data appear Lognormal at 5% Significance Level

**Data appear Lognormal at 5% Significance Level****Lognormal Statistics**

Minimum of Logged Data	3.178	Mean of logged Data	3.625
Maximum of Logged Data	4.382	SD of logged Data	0.367

**Assuming Lognormal Distribution**

95% H-UCL	47.31	90% Chebyshev (MVUE) UCL	50.31
95% Chebyshev (MVUE) UCL	54.99	97.5% Chebyshev (MVUE) UCL	61.47
99% Chebyshev (MVUE) UCL	74.21		

**Nonparametric Distribution Free UCL Statistics****Data appear to follow a Discernible Distribution at 5% Significance Level****Nonparametric Distribution Free UCLs**

95% CLT UCL	46.32	95% Jackknife UCL	46.65
95% Standard Bootstrap UCL	46.08	95% Bootstrap-t UCL	49.19
95% Hall's Bootstrap UCL	50.03	95% Percentile Bootstrap UCL	46.42
95% BCA Bootstrap UCL	47.26		
90% Chebyshev(Mean, Sd) UCL	51.4	95% Chebyshev(Mean, Sd) UCL	56.49
97.5% Chebyshev(Mean, Sd) UCL	63.56	99% Chebyshev(Mean, Sd) UCL	77.44

**Suggested UCL to Use**

95% Student's-t UCL 46.65

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)

and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.

For additional insight the user may want to consult a statistician.



RA\_SE\_Metals|Cobalt

**General Statistics**

Total Number of Observations	19	Number of Distinct Observations	11
		Number of Missing Observations	0
Minimum	7.1	Mean	15.85
Maximum	32	Median	15
SD	5.168	Std. Error of Mean	1.186
Coefficient of Variation	0.326	Skewness	1.598

**Normal GOF Test**

Shapiro Wilk Test Statistic	0.871	<b>Shapiro Wilk GOF Test</b>
5% Shapiro Wilk Critical Value	0.901	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.172	<b>Lilliefors GOF Test</b>
5% Lilliefors Critical Value	0.203	Data appear Normal at 5% Significance Level

**Data appear Approximate Normal at 5% Significance Level****Assuming Normal Distribution**

<b>95% Normal UCL</b>		<b>95% UCLs (Adjusted for Skewness)</b>	
95% Student's-t UCL	17.9	95% Adjusted-CLT UCL (Chen-1995)	18.26
		95% Modified-t UCL (Johnson-1978)	17.98

**Gamma GOF Test**

A-D Test Statistic	0.472	<b>Anderson-Darling Gamma GOF Test</b>
5% A-D Critical Value	0.741	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.132	<b>Kolmogrov-Smirnov Gamma GOF Test</b>
5% K-S Critical Value	0.199	Detected data appear Gamma Distributed at 5% Significance Level

**Detected data appear Gamma Distributed at 5% Significance Level****Gamma Statistics**

k hat (MLE)	11.17	k star (bias corrected MLE)	9.441
Theta hat (MLE)	1.419	Theta star (bias corrected MLE)	1.679
nu hat (MLE)	424.4	nu star (bias corrected)	358.7
MLE Mean (bias corrected)	15.85	MLE Sd (bias corrected)	5.158
		Approximate Chi Square Value (0.05)	315.8
Adjusted Level of Significance	0.0369	Adjusted Chi Square Value	312.3

**Assuming Gamma Distribution**

95% Approximate Gamma UCL (use when n>=50))	18	95% Adjusted Gamma UCL (use when n<50)	18.2
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**Lognormal GOF Test**

Shapiro Wilk Test Statistic	0.948	<b>Shapiro Wilk Lognormal GOF Test</b>
5% Shapiro Wilk Critical Value	0.901	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.126	<b>Lilliefors Lognormal GOF Test</b>
5% Lilliefors Critical Value	0.203	Data appear Lognormal at 5% Significance Level

**Data appear Lognormal at 5% Significance Level****Lognormal Statistics**

Minimum of Logged Data	1.96	Mean of logged Data	2.718
Maximum of Logged Data	3.466	SD of logged Data	0.308

**Assuming Lognormal Distribution**

95% H-UCL	18.16	90% Chebyshev (MVUE) UCL	19.24
95% Chebyshev (MVUE) UCL	20.79	97.5% Chebyshev (MVUE) UCL	22.93
99% Chebyshev (MVUE) UCL	27.14		

**Nonparametric Distribution Free UCL Statistics****Data appear to follow a Discernible Distribution at 5% Significance Level****Nonparametric Distribution Free UCLs**

95% CLT UCL	17.8	95% Jackknife UCL	17.9
95% Standard Bootstrap UCL	17.75	95% Bootstrap-t UCL	18.56
95% Hall's Bootstrap UCL	21.36	95% Percentile Bootstrap UCL	18
95% BCA Bootstrap UCL	18.21		
90% Chebyshev(Mean, Sd) UCL	19.4	95% Chebyshev(Mean, Sd) UCL	21.02
97.5% Chebyshev(Mean, Sd) UCL	23.25	99% Chebyshev(Mean, Sd) UCL	27.64

**Suggested UCL to Use**

95% Student's-t UCL 17.9

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)

and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.

For additional insight the user may want to consult a statistician.

## RA\_SE\_Metals|Manganese

## General Statistics

Total Number of Observations	19	Number of Distinct Observations	12
		Number of Missing Observations	0
Minimum	120	Mean	224.2
Maximum	390	Median	200
SD	82.42	Std. Error of Mean	18.91
Coefficient of Variation	0.368	Skewness	0.758

## Normal GOF Test

Shapiro Wilk Test Statistic	0.917	<b>Shapiro Wilk GOF Test</b>	
5% Shapiro Wilk Critical Value	0.901	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.156	<b>Lilliefors GOF Test</b>	
5% Lilliefors Critical Value	0.203	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

## Assuming Normal Distribution

<b>95% Normal UCL</b>		<b>95% UCLs (Adjusted for Skewness)</b>	
95% Student's-t UCL	257	95% Adjusted-CLT UCL (Chen-1995)	258.8
		95% Modified-t UCL (Johnson-1978)	257.5

## Gamma GOF Test

A-D Test Statistic	0.317	<b>Anderson-Darling Gamma GOF Test</b>	
5% A-D Critical Value	0.742	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.109	<b>Kolmogrov-Smirnov Gamma GOF Test</b>	
5% K-S Critical Value	0.199	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

## Gamma Statistics

k hat (MLE)	8.241	k star (bias corrected MLE)	6.975
Theta hat (MLE)	27.21	Theta star (bias corrected MLE)	32.14
nu hat (MLE)	313.2	nu star (bias corrected)	265.1
MLE Mean (bias corrected)	224.2	MLE Sd (bias corrected)	84.89
		Approximate Chi Square Value (0.05)	228.4
Adjusted Level of Significance	0.0369	Adjusted Chi Square Value	225.4

## Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	260.2	95% Adjusted Gamma UCL (use when n<50)	263.7
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## Lognormal GOF Test

Shapiro Wilk Test Statistic	0.958	<b>Shapiro Wilk Lognormal GOF Test</b>	
5% Shapiro Wilk Critical Value	0.901	Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.0993	<b>Lilliefors Lognormal GOF Test</b>	
5% Lilliefors Critical Value	0.203	Data appear Lognormal at 5% Significance Level	

Data appear Lognormal at 5% Significance Level

## Lognormal Statistics

Minimum of Logged Data	4.787	Mean of logged Data	5.351
Maximum of Logged Data	5.966	SD of logged Data	0.361

## Assuming Lognormal Distribution

95% H-UCL	264.1	90% Chebyshev (MVUE) UCL	280.8
95% Chebyshev (MVUE) UCL	306.5	97.5% Chebyshev (MVUE) UCL	342.1
99% Chebyshev (MVUE) UCL	412.2		

## Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

## Nonparametric Distribution Free UCLs

95% CLT UCL	255.3	95% Jackknife UCL	257
95% Standard Bootstrap UCL	253.9	95% Bootstrap-t UCL	264.1
95% Hall's Bootstrap UCL	261	95% Percentile Bootstrap UCL	254.2
95% BCA Bootstrap UCL	257.9		
90% Chebyshev(Mean, Sd) UCL	280.9	95% Chebyshev(Mean, Sd) UCL	306.6
97.5% Chebyshev(Mean, Sd) UCL	342.3	99% Chebyshev(Mean, Sd) UCL	412.3

## Suggested UCL to Use

95% Student's-t UCL 257

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.

For additional insight the user may want to consult a statistician.

RA\_SE\_Metals|Nickel

**General Statistics**

Total Number of Observations	19	Number of Distinct Observations	18
		Number of Missing Observations	0
Minimum	19	Mean	57.11
Maximum	160	Median	37
SD	44.17	Std. Error of Mean	10.13
Coefficient of Variation	0.774	Skewness	1.352

**Normal GOF Test**

Shapiro Wilk Test Statistic	0.804	<b>Shapiro Wilk GOF Test</b>
5% Shapiro Wilk Critical Value	0.901	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.238	<b>Lilliefors GOF Test</b>
5% Lilliefors Critical Value	0.203	Data Not Normal at 5% Significance Level

**Data Not Normal at 5% Significance Level****Assuming Normal Distribution**

<b>95% Normal UCL</b>		<b>95% UCLs (Adjusted for Skewness)</b>	
95% Student's-t UCL	74.68	95% Adjusted-CLT UCL (Chen-1995)	77.13
		95% Modified-t UCL (Johnson-1978)	75.2

**Gamma GOF Test**

A-D Test Statistic	0.767	<b>Anderson-Darling Gamma GOF Test</b>
5% A-D Critical Value	0.751	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.197	<b>Kolmogrov-Smirnov Gamma GOF Test</b>
5% K-S Critical Value	0.201	Detected data appear Gamma Distributed at 5% Significance Level

**Detected data follow Appr. Gamma Distribution at 5% Significance Level****Gamma Statistics**

k hat (MLE)	2.202	k star (bias corrected MLE)	1.89
Theta hat (MLE)	25.93	Theta star (bias corrected MLE)	30.22
nu hat (MLE)	83.69	nu star (bias corrected)	71.81
MLE Mean (bias corrected)	57.11	MLE Sd (bias corrected)	41.54
		Approximate Chi Square Value (0.05)	53.3
Adjusted Level of Significance	0.0369	Adjusted Chi Square Value	51.9

**Assuming Gamma Distribution**

95% Approximate Gamma UCL (use when n>=50)	76.94	<b>95% Adjusted Gamma UCL (use when n&lt;50)</b>	79
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**Lognormal GOF Test**

Shapiro Wilk Test Statistic	0.92	<b>Shapiro Wilk Lognormal GOF Test</b>
5% Shapiro Wilk Critical Value	0.901	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.157	<b>Lilliefors Lognormal GOF Test</b>
5% Lilliefors Critical Value	0.203	Data appear Lognormal at 5% Significance Level

**Data appear Lognormal at 5% Significance Level****Lognormal Statistics**

Minimum of Logged Data	2.944	Mean of logged Data	3.801
Maximum of Logged Data	5.075	SD of logged Data	0.695

**Assuming Lognormal Distribution**

95% H-UCL	81.91	90% Chebyshev (MVUE) UCL	84.68
95% Chebyshev (MVUE) UCL	97.62	97.5% Chebyshev (MVUE) UCL	115.6
99% Chebyshev (MVUE) UCL	150.9		

**Nonparametric Distribution Free UCL Statistics****Data appear to follow a Discernible Distribution at 5% Significance Level****Nonparametric Distribution Free UCLs**

95% CLT UCL	73.77	95% Jackknife UCL	74.68
95% Standard Bootstrap UCL	73.3	95% Bootstrap-t UCL	81.35
95% Hall's Bootstrap UCL	77.64	95% Percentile Bootstrap UCL	75.21
95% BCA Bootstrap UCL	75.84		
90% Chebyshev(Mean, Sd) UCL	87.51	95% Chebyshev(Mean, Sd) UCL	101.3
97.5% Chebyshev(Mean, Sd) UCL	120.4	99% Chebyshev(Mean, Sd) UCL	157.9

**Suggested UCL to Use**

95% Adjusted Gamma UCL 79

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.

For additional insight the user may want to consult a statistician.

RA\_SE\_Metals|Thallium

**General Statistics**

Total Number of Observations	19	Number of Distinct Observations	14
		Number of Missing Observations	0
Minimum	0.037	Mean	0.234
Maximum	0.63	Median	0.18
SD	0.14	Std. Error of Mean	0.0321
Coefficient of Variation	0.599	Skewness	1.778

**Normal GOF Test**

Shapiro Wilk Test Statistic	0.797	<b>Shapiro Wilk GOF Test</b>
5% Shapiro Wilk Critical Value	0.901	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.239	<b>Lilliefors GOF Test</b>
5% Lilliefors Critical Value	0.203	Data Not Normal at 5% Significance Level

**Data Not Normal at 5% Significance Level****Assuming Normal Distribution**

<b>95% Normal UCL</b>		<b>95% UCLs (Adjusted for Skewness)</b>	
95% Student's-t UCL	0.289	95% Adjusted-CLT UCL (Chen-1995)	0.3
		95% Modified-t UCL (Johnson-1978)	0.291

**Gamma GOF Test**

A-D Test Statistic	0.888	<b>Anderson-Darling Gamma GOF Test</b>
5% A-D Critical Value	0.747	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.177	<b>Kolmogrov-Smirnov Gamma GOF Test</b>
5% K-S Critical Value	0.2	Detected data appear Gamma Distributed at 5% Significance Level

**Detected data follow Appr. Gamma Distribution at 5% Significance Level****Gamma Statistics**

k hat (MLE)	3.435	k star (bias corrected MLE)	2.928
Theta hat (MLE)	0.068	Theta star (bias corrected MLE)	0.0798
nu hat (MLE)	130.5	nu star (bias corrected)	111.3
MLE Mean (bias corrected)	0.234	MLE Sd (bias corrected)	0.136
		Approximate Chi Square Value (0.05)	87.91
Adjusted Level of Significance	0.0369	Adjusted Chi Square Value	86.1

**Assuming Gamma Distribution**

95% Approximate Gamma UCL (use when n>=50)	0.296	<b>95% Adjusted Gamma UCL (use when n&lt;50)</b>	0.302
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**Lognormal GOF Test**

Shapiro Wilk Test Statistic	0.883	<b>Shapiro Wilk Lognormal GOF Test</b>
5% Shapiro Wilk Critical Value	0.901	Data Not Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.206	<b>Lilliefors Lognormal GOF Test</b>
5% Lilliefors Critical Value	0.203	Data Not Lognormal at 5% Significance Level

**Data Not Lognormal at 5% Significance Level****Lognormal Statistics**

Minimum of Logged Data	-3.297	Mean of logged Data	-1.607
Maximum of Logged Data	-0.462	SD of logged Data	0.589

**Assuming Lognormal Distribution**

95% H-UCL	0.319	90% Chebyshev (MVUE) UCL	0.336
95% Chebyshev (MVUE) UCL	0.382	97.5% Chebyshev (MVUE) UCL	0.445
99% Chebyshev (MVUE) UCL	0.569		

**Nonparametric Distribution Free UCL Statistics****Data appear to follow a Discernible Distribution at 5% Significance Level****Nonparametric Distribution Free UCLs**

95% CLT UCL	0.286	95% Jackknife UCL	0.289
95% Standard Bootstrap UCL	0.284	95% Bootstrap-t UCL	0.333
95% Hall's Bootstrap UCL	0.592	95% Percentile Bootstrap UCL	0.286
95% BCA Bootstrap UCL	0.301		
90% Chebyshev(Mean, Sd) UCL	0.33	95% Chebyshev(Mean, Sd) UCL	0.373
97.5% Chebyshev(Mean, Sd) UCL	0.434	99% Chebyshev(Mean, Sd) UCL	0.553

**Suggested UCL to Use**

95% Adjusted Gamma UCL 0.302

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)

and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.

For additional insight the user may want to consult a statistician.

## RA\_SE\_Metals|Vanadium

## General Statistics

Total Number of Observations	19	Number of Distinct Observations	18
		Number of Missing Observations	0
Minimum	21	Mean	107.1
Maximum	440	Median	41
SD	121.6	Std. Error of Mean	27.89
Coefficient of Variation	1.136	Skewness	1.787

## Normal GOF Test

Shapiro Wilk Test Statistic	0.725	<b>Shapiro Wilk GOF Test</b>
5% Shapiro Wilk Critical Value	0.901	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.279	<b>Lilliefors GOF Test</b>
5% Lilliefors Critical Value	0.203	Data Not Normal at 5% Significance Level

**Data Not Normal at 5% Significance Level**

## Assuming Normal Distribution

<b>95% Normal UCL</b>		<b>95% UCLs (Adjusted for Skewness)</b>	
95% Student's-t UCL	155.4	95% Adjusted-CLT UCL (Chen-1995)	165.1
		95% Modified-t UCL (Johnson-1978)	157.3

## Gamma GOF Test

A-D Test Statistic	1.207	<b>Anderson-Darling Gamma GOF Test</b>
5% A-D Critical Value	0.766	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.236	<b>Kolmogrov-Smirnov Gamma GOF Test</b>
5% K-S Critical Value	0.204	Data Not Gamma Distributed at 5% Significance Level

**Data Not Gamma Distributed at 5% Significance Level**

## Gamma Statistics

k hat (MLE)	1.145	k star (bias corrected MLE)	1
Theta hat (MLE)	93.47	Theta star (bias corrected MLE)	107.1
nu hat (MLE)	43.52	nu star (bias corrected)	37.99
MLE Mean (bias corrected)	107.1	MLE Sd (bias corrected)	107.1
		Approximate Chi Square Value (0.05)	24.87
Adjusted Level of Significance	0.0369	Adjusted Chi Square Value	23.95

## Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	163.5	95% Adjusted Gamma UCL (use when n<50)	169.8
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## Lognormal GOF Test

Shapiro Wilk Test Statistic	0.887	<b>Shapiro Wilk Lognormal GOF Test</b>
5% Shapiro Wilk Critical Value	0.901	Data Not Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.209	<b>Lilliefors Lognormal GOF Test</b>
5% Lilliefors Critical Value	0.203	Data Not Lognormal at 5% Significance Level

**Data Not Lognormal at 5% Significance Level**

## Lognormal Statistics

Minimum of Logged Data	3.045	Mean of logged Data	4.177
Maximum of Logged Data	6.087	SD of logged Data	0.976

## Assuming Lognormal Distribution

95% H-UCL	190	90% Chebyshev (MVUE) UCL	177.1
95% Chebyshev (MVUE) UCL	211.3	97.5% Chebyshev (MVUE) UCL	258.9
99% Chebyshev (MVUE) UCL	352.4		

## Nonparametric Distribution Free UCL Statistics

**Data do not follow a Discernible Distribution (0.05)**

## Nonparametric Distribution Free UCLs

95% CLT UCL	152.9	95% Jackknife UCL	155.4
95% Standard Bootstrap UCL	151.7	95% Bootstrap-t UCL	178.1
95% Hall's Bootstrap UCL	177.3	95% Percentile Bootstrap UCL	155.2
95% BCA Bootstrap UCL	167.5		
90% Chebyshev(Mean, Sd) UCL	190.7	<b>95% Chebyshev(Mean, Sd) UCL</b>	<b>228.6</b>
97.5% Chebyshev(Mean, Sd) UCL	281.2	99% Chebyshev(Mean, Sd) UCL	384.5

## Suggested UCL to Use

**95% Chebyshev (Mean, Sd) UCL 228.6**

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)

and Singh and Singh (2003). However, simulation results will not cover all Real World data sets.

For additional insight the user may want to consult a statistician.

RA\_SE\_SVOCS|Benzo(a)anthracene

**General Statistics**

Total Number of Observations	19	Number of Distinct Observations	14
		Number of Missing Observations	0
Minimum	0.16	Mean	0.495
Maximum	0.95	Median	0.48
SD	0.175	Std. Error of Mean	0.0401
Coefficient of Variation	0.353	Skewness	0.429

**Normal GOF Test**

Shapiro Wilk Test Statistic	0.937	<b>Shapiro Wilk GOF Test</b>
5% Shapiro Wilk Critical Value	0.901	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.144	<b>Lilliefors GOF Test</b>
5% Lilliefors Critical Value	0.203	Data appear Normal at 5% Significance Level

**Data appear Normal at 5% Significance Level****Assuming Normal Distribution**

<b>95% Normal UCL</b>		<b>95% UCLs (Adjusted for Skewness)</b>	
95% Student's-t UCL	0.565	95% Adjusted-CLT UCL (Chen-1995)	0.565
		95% Modified-t UCL (Johnson-1978)	0.566

**Gamma GOF Test**

A-D Test Statistic	0.736	<b>Anderson-Darling Gamma GOF Test</b>
5% A-D Critical Value	0.742	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.178	<b>Kolmogrov-Smirnov Gamma GOF Test</b>
5% K-S Critical Value	0.199	Detected data appear Gamma Distributed at 5% Significance Level

**Detected data appear Gamma Distributed at 5% Significance Level****Gamma Statistics**

k hat (MLE)	7.311	k star (bias corrected MLE)	6.192
Theta hat (MLE)	0.0677	Theta star (bias corrected MLE)	0.08
nu hat (MLE)	277.8	nu star (bias corrected)	235.3
MLE Mean (bias corrected)	0.495	MLE Sd (bias corrected)	0.199
		Approximate Chi Square Value (0.05)	200.8
Adjusted Level of Significance	0.0369	Adjusted Chi Square Value	198

**Assuming Gamma Distribution**

95% Approximate Gamma UCL (use when n>=50))	0.58	95% Adjusted Gamma UCL (use when n<50)	0.589
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**Lognormal GOF Test**

Shapiro Wilk Test Statistic	0.874	<b>Shapiro Wilk Lognormal GOF Test</b>
5% Shapiro Wilk Critical Value	0.901	Data Not Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.201	<b>Lilliefors Lognormal GOF Test</b>
5% Lilliefors Critical Value	0.203	Data appear Lognormal at 5% Significance Level

**Data appear Approximate Lognormal at 5% Significance Level****Lognormal Statistics**

Minimum of Logged Data	-1.833	Mean of logged Data	-0.773
Maximum of Logged Data	-0.0513	SD of logged Data	0.412

**Assuming Lognormal Distribution**

95% H-UCL	0.606	90% Chebyshev (MVUE) UCL	0.646
95% Chebyshev (MVUE) UCL	0.711	97.5% Chebyshev (MVUE) UCL	0.803
99% Chebyshev (MVUE) UCL	0.982		

**Nonparametric Distribution Free UCL Statistics****Data appear to follow a Discernible Distribution at 5% Significance Level****Nonparametric Distribution Free UCLs**

95% CLT UCL	0.561	95% Jackknife UCL	0.565
95% Standard Bootstrap UCL	0.56	95% Bootstrap-t UCL	0.571
95% Hall's Bootstrap UCL	0.578	95% Percentile Bootstrap UCL	0.557
95% BCA Bootstrap UCL	0.567		
90% Chebyshev(Mean, Sd) UCL	0.616	95% Chebyshev(Mean, Sd) UCL	0.67
97.5% Chebyshev(Mean, Sd) UCL	0.746	99% Chebyshev(Mean, Sd) UCL	0.895

**Suggested UCL to Use**

95% Student's-t UCL 0.565

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)

and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.

For additional insight the user may want to consult a statistician.

RA\_SE\_SVOCS|Benzo(a)pyrene

**General Statistics**

Total Number of Observations	19	Number of Distinct Observations	17
		Number of Missing Observations	0
Minimum	0.16	Mean	0.554
Maximum	0.89	Median	0.55
SD	0.185	Std. Error of Mean	0.0425
Coefficient of Variation	0.334	Skewness	-0.572

**Normal GOF Test**

Shapiro Wilk Test Statistic	0.936	<b>Shapiro Wilk GOF Test</b>
5% Shapiro Wilk Critical Value	0.901	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.195	<b>Lilliefors GOF Test</b>
5% Lilliefors Critical Value	0.203	Data appear Normal at 5% Significance Level

**Data appear Normal at 5% Significance Level****Assuming Normal Distribution**

<b>95% Normal UCL</b>		<b>95% UCLs (Adjusted for Skewness)</b>	
95% Student's-t UCL	0.628	95% Adjusted-CLT UCL (Chen-1995)	0.618
		95% Modified-t UCL (Johnson-1978)	0.627

**Gamma GOF Test**

A-D Test Statistic	1.141	<b>Anderson-Darling Gamma GOF Test</b>
5% A-D Critical Value	0.742	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.256	<b>Kolmogrov-Smirnov Gamma GOF Test</b>
5% K-S Critical Value	0.199	Data Not Gamma Distributed at 5% Significance Level

**Data Not Gamma Distributed at 5% Significance Level****Gamma Statistics**

k hat (MLE)	6.795	k star (bias corrected MLE)	5.757
Theta hat (MLE)	0.0816	Theta star (bias corrected MLE)	0.0963
nu hat (MLE)	258.2	nu star (bias corrected)	218.8
MLE Mean (bias corrected)	0.554	MLE Sd (bias corrected)	0.231
		Approximate Chi Square Value (0.05)	185.5
Adjusted Level of Significance	0.0369	Adjusted Chi Square Value	182.9

**Assuming Gamma Distribution**

95% Approximate Gamma UCL (use when n>=50))	0.653	95% Adjusted Gamma UCL (use when n<50)	0.663
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**Lognormal GOF Test**

Shapiro Wilk Test Statistic	0.806	<b>Shapiro Wilk Lognormal GOF Test</b>
5% Shapiro Wilk Critical Value	0.901	Data Not Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.283	<b>Lilliefors Lognormal GOF Test</b>
5% Lilliefors Critical Value	0.203	Data Not Lognormal at 5% Significance Level

**Data Not Lognormal at 5% Significance Level****Lognormal Statistics**

Minimum of Logged Data	-1.833	Mean of logged Data	-0.666
Maximum of Logged Data	-0.117	SD of logged Data	0.443

**Assuming Lognormal Distribution**

95% H-UCL	0.696	90% Chebyshev (MVUE) UCL	0.741
95% Chebyshev (MVUE) UCL	0.821	97.5% Chebyshev (MVUE) UCL	0.932
99% Chebyshev (MVUE) UCL	1.151		

**Nonparametric Distribution Free UCL Statistics****Data appear to follow a Discernible Distribution at 5% Significance Level****Nonparametric Distribution Free UCLs**

95% CLT UCL	0.624	95% Jackknife UCL	0.628
95% Standard Bootstrap UCL	0.622	95% Bootstrap-t UCL	0.623
95% Hall's Bootstrap UCL	0.621	95% Percentile Bootstrap UCL	0.623
95% BCA Bootstrap UCL	0.616		
90% Chebyshev(Mean, Sd) UCL	0.682	95% Chebyshev(Mean, Sd) UCL	0.74
97.5% Chebyshev(Mean, Sd) UCL	0.82	99% Chebyshev(Mean, Sd) UCL	0.977

**Suggested UCL to Use**

95% Student's-t UCL 0.628

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.

For additional insight the user may want to consult a statistician.

**Note: For highly negatively-skewed data, confidence limits (e.g., Chen, Johnson, Lognormal, and Gamma) may not be reliable. Chen's and Johnson's methods provide adjustments for positively skewed data sets.**

RA\_SE\_SVOCs|Benzo(b)fluoranthene

**General Statistics**

Total Number of Observations	19	Number of Distinct Observations	14
		Number of Missing Observations	0
Minimum	0.29	Mean	0.835
Maximum	1.5	Median	0.85
SD	0.291	Std. Error of Mean	0.0669
Coefficient of Variation	0.349	Skewness	0.0697

**Normal GOF Test**

Shapiro Wilk Test Statistic	0.963	<b>Shapiro Wilk GOF Test</b>	
5% Shapiro Wilk Critical Value	0.901	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.148	<b>Lilliefors GOF Test</b>	
5% Lilliefors Critical Value	0.203	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

**Assuming Normal Distribution**

<b>95% Normal UCL</b>		<b>95% UCLs (Adjusted for Skewness)</b>	
95% Student's-t UCL	0.951	95% Adjusted-CLT UCL (Chen-1995)	0.946
		95% Modified-t UCL (Johnson-1978)	0.951

**Gamma GOF Test**

A-D Test Statistic	0.642	<b>Anderson-Darling Gamma GOF Test</b>	
5% A-D Critical Value	0.742	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.199	<b>Kolmogrov-Smirnov Gamma GOF Test</b>	
5% K-S Critical Value	0.199	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

**Gamma Statistics**

k hat (MLE)	7.257	k star (bias corrected MLE)	6.146
Theta hat (MLE)	0.115	Theta star (bias corrected MLE)	0.136
nu hat (MLE)	275.8	nu star (bias corrected)	233.6
MLE Mean (bias corrected)	0.835	MLE Sd (bias corrected)	0.337
		Approximate Chi Square Value (0.05)	199.2
Adjusted Level of Significance	0.0369	Adjusted Chi Square Value	196.4

**Assuming Gamma Distribution**

95% Approximate Gamma UCL (use when n>=50))	0.979	95% Adjusted Gamma UCL (use when n<50)	0.993
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**Lognormal GOF Test**

Shapiro Wilk Test Statistic	0.891	<b>Shapiro Wilk Lognormal GOF Test</b>	
5% Shapiro Wilk Critical Value	0.901	Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.228	<b>Lilliefors Lognormal GOF Test</b>	
5% Lilliefors Critical Value	0.203	Data Not Lognormal at 5% Significance Level	

Data Not Lognormal at 5% Significance Level

**Lognormal Statistics**

Minimum of Logged Data	-1.238	Mean of logged Data	-0.25
Maximum of Logged Data	0.405	SD of logged Data	0.413

**Assuming Lognormal Distribution**

95% H-UCL	1.023	90% Chebyshev (MVUE) UCL	1.09
95% Chebyshev (MVUE) UCL	1.201	97.5% Chebyshev (MVUE) UCL	1.356
99% Chebyshev (MVUE) UCL	1.659		

**Nonparametric Distribution Free UCL Statistics**

Data appear to follow a Discernible Distribution at 5% Significance Level

**Nonparametric Distribution Free UCLs**

95% CLT UCL	0.945	95% Jackknife UCL	0.951
95% Standard Bootstrap UCL	0.94	95% Bootstrap-t UCL	0.946
95% Hall's Bootstrap UCL	0.959	95% Percentile Bootstrap UCL	0.944
95% BCA Bootstrap UCL	0.935		
90% Chebyshev(Mean, Sd) UCL	1.036	95% Chebyshev(Mean, Sd) UCL	1.127
97.5% Chebyshev(Mean, Sd) UCL	1.253	99% Chebyshev(Mean, Sd) UCL	1.501

**Suggested UCL to Use**

95% Student's-t UCL 0.951

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)

and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.

For additional insight the user may want to consult a statistician.



RA\_SE\_SVOCS\Dibenzo(a,h)anthracene

**General Statistics**

Total Number of Observations	19	Number of Distinct Observations	13
		Number of Missing Observations	0
Minimum	0.04	Mean	0.125
Maximum	0.2	Median	0.14
SD	0.0443	Std. Error of Mean	0.0102
Coefficient of Variation	0.356	Skewness	-0.525

**Normal GOF Test**

Shapiro Wilk Test Statistic	0.932	<b>Shapiro Wilk GOF Test</b>
5% Shapiro Wilk Critical Value	0.901	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.215	<b>Lilliefors GOF Test</b>
5% Lilliefors Critical Value	0.203	Data Not Normal at 5% Significance Level

Data appear Approximate Normal at 5% Significance Level

**Assuming Normal Distribution**

<b>95% Normal UCL</b>		<b>95% UCLs (Adjusted for Skewness)</b>	
95% Student's-t UCL	0.142	95% Adjusted-CLT UCL (Chen-1995)	0.14
		95% Modified-t UCL (Johnson-1978)	0.142

**Gamma GOF Test**

A-D Test Statistic	0.966	<b>Anderson-Darling Gamma GOF Test</b>
5% A-D Critical Value	0.742	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.246	<b>Kolmogrov-Smirnov Gamma GOF Test</b>
5% K-S Critical Value	0.199	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

**Gamma Statistics**

k hat (MLE)	6.381	k star (bias corrected MLE)	5.408
Theta hat (MLE)	0.0195	Theta star (bias corrected MLE)	0.023
nu hat (MLE)	242.5	nu star (bias corrected)	205.5
MLE Mean (bias corrected)	0.125	MLE Sd (bias corrected)	0.0535
		Approximate Chi Square Value (0.05)	173.3
Adjusted Level of Significance	0.0369	Adjusted Chi Square Value	170.8

**Assuming Gamma Distribution**

95% Approximate Gamma UCL (use when n>=50))	0.148	95% Adjusted Gamma UCL (use when n<50)	0.15
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**Lognormal GOF Test**

Shapiro Wilk Test Statistic	0.857	<b>Shapiro Wilk Lognormal GOF Test</b>
5% Shapiro Wilk Critical Value	0.901	Data Not Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.25	<b>Lilliefors Lognormal GOF Test</b>
5% Lilliefors Critical Value	0.203	Data Not Lognormal at 5% Significance Level

Data Not Lognormal at 5% Significance Level

**Lognormal Statistics**

Minimum of Logged Data	-3.219	Mean of logged Data	-2.164
Maximum of Logged Data	-1.609	SD of logged Data	0.447

**Assuming Lognormal Distribution**

95% H-UCL	0.156	90% Chebyshev (MVUE) UCL	0.166
95% Chebyshev (MVUE) UCL	0.184	97.5% Chebyshev (MVUE) UCL	0.209
99% Chebyshev (MVUE) UCL	0.259		

**Nonparametric Distribution Free UCL Statistics**

Data appear to follow a Discernible Distribution at 5% Significance Level

**Nonparametric Distribution Free UCLs**

95% CLT UCL	0.141	95% Jackknife UCL	0.142
95% Standard Bootstrap UCL	0.141	95% Bootstrap-t UCL	0.141
95% Hall's Bootstrap UCL	0.14	95% Percentile Bootstrap UCL	0.141
95% BCA Bootstrap UCL	0.14		
90% Chebyshev(Mean, Sd) UCL	0.155	95% Chebyshev(Mean, Sd) UCL	0.169
97.5% Chebyshev(Mean, Sd) UCL	0.188	99% Chebyshev(Mean, Sd) UCL	0.226

**Suggested UCL to Use**

95% Student's-t UCL 0.142

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.

For additional insight the user may want to consult a statistician.

Note: For highly negatively-skewed data, confidence limits (e.g., Chen, Johnson, Lognormal, and Gamma) may not be reliable. Chen's and Johnson's methods provide adjustments for positively skewed data sets.

RA\_SE\_SVOCS\Indeno(1,2,3-cd)pyrene

**General Statistics**

Total Number of Observations	19	Number of Distinct Observations	17
		Number of Missing Observations	0
Minimum	0.12	Mean	0.418
Maximum	0.64	Median	0.42
SD	0.152	Std. Error of Mean	0.0349
Coefficient of Variation	0.363	Skewness	-0.44

**Normal GOF Test**

Shapiro Wilk Test Statistic	0.952	<b>Shapiro Wilk GOF Test</b>
5% Shapiro Wilk Critical Value	0.901	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.116	<b>Lilliefors GOF Test</b>
5% Lilliefors Critical Value	0.203	Data appear Normal at 5% Significance Level

**Data appear Normal at 5% Significance Level****Assuming Normal Distribution**

<b>95% Normal UCL</b>		<b>95% UCLs (Adjusted for Skewness)</b>	
95% Student's-t UCL	0.479	95% Adjusted-CLT UCL (Chen-1995)	0.472
		95% Modified-t UCL (Johnson-1978)	0.478

**Gamma GOF Test**

A-D Test Statistic	0.671	<b>Anderson-Darling Gamma GOF Test</b>
5% A-D Critical Value	0.742	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.177	<b>Kolmogrov-Smirnov Gamma GOF Test</b>
5% K-S Critical Value	0.199	Detected data appear Gamma Distributed at 5% Significance Level

**Detected data appear Gamma Distributed at 5% Significance Level****Gamma Statistics**

k hat (MLE)	5.993	k star (bias corrected MLE)	5.081
Theta hat (MLE)	0.0698	Theta star (bias corrected MLE)	0.0823
nu hat (MLE)	227.7	nu star (bias corrected)	193.1
MLE Mean (bias corrected)	0.418	MLE Sd (bias corrected)	0.186
		Approximate Chi Square Value (0.05)	161.9
Adjusted Level of Significance	0.0369	Adjusted Chi Square Value	159.5

**Assuming Gamma Distribution**

95% Approximate Gamma UCL (use when n>=50))	0.499	95% Adjusted Gamma UCL (use when n<50)	0.507
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**Lognormal GOF Test**

Shapiro Wilk Test Statistic	0.855	<b>Shapiro Wilk Lognormal GOF Test</b>
5% Shapiro Wilk Critical Value	0.901	Data Not Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.211	<b>Lilliefors Lognormal GOF Test</b>
5% Lilliefors Critical Value	0.203	Data Not Lognormal at 5% Significance Level

**Data Not Lognormal at 5% Significance Level****Lognormal Statistics**

Minimum of Logged Data	-2.12	Mean of logged Data	-0.957
Maximum of Logged Data	-0.446	SD of logged Data	0.468

**Assuming Lognormal Distribution**

95% H-UCL	0.533	90% Chebyshev (MVUE) UCL	0.567
95% Chebyshev (MVUE) UCL	0.631	97.5% Chebyshev (MVUE) UCL	0.72
99% Chebyshev (MVUE) UCL	0.895		

**Nonparametric Distribution Free UCL Statistics****Data appear to follow a Discernible Distribution at 5% Significance Level****Nonparametric Distribution Free UCLs**

95% CLT UCL	0.476	95% Jackknife UCL	0.479
95% Standard Bootstrap UCL	0.475	95% Bootstrap-t UCL	0.475
95% Hall's Bootstrap UCL	0.471	95% Percentile Bootstrap UCL	0.474
95% BCA Bootstrap UCL	0.474		
90% Chebyshev(Mean, Sd) UCL	0.523	95% Chebyshev(Mean, Sd) UCL	0.57
97.5% Chebyshev(Mean, Sd) UCL	0.636	99% Chebyshev(Mean, Sd) UCL	0.765

**Suggested UCL to Use**

95% Student's-t UCL 0.479

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.

For additional insight the user may want to consult a statistician.

**Note: For highly negatively-skewed data, confidence limits (e.g., Chen, Johnson, Lognormal, and Gamma) may not be reliable. Chen's and Johnson's methods provide adjustments for positively skewed data sets.**

## RA\_SE\_PestPCBs|PCB, Total Aroclors (AECOM Calc)

**General Statistics**

Total Number of Observations	19	Number of Distinct Observations	16
		Number of Missing Observations	0
Minimum	0.077	Mean	0.558
Maximum	1.9	Median	0.39
SD	0.529	Std. Error of Mean	0.121
Coefficient of Variation	0.949	Skewness	1.645

**Normal GOF Test**

Shapiro Wilk Test Statistic	0.785	<b>Shapiro Wilk GOF Test</b>
5% Shapiro Wilk Critical Value	0.901	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.199	<b>Lilliefors GOF Test</b>
5% Lilliefors Critical Value	0.203	Data appear Normal at 5% Significance Level

Data appear Approximate Normal at 5% Significance Level

**Assuming Normal Distribution**

<b>95% Normal UCL</b>		<b>95% UCLs (Adjusted for Skewness)</b>	
95% Student's-t UCL	0.768	95% Adjusted-CLT UCL (Chen-1995)	0.806
		95% Modified-t UCL (Johnson-1978)	0.776

**Gamma GOF Test**

A-D Test Statistic	0.522	<b>Anderson-Darling Gamma GOF Test</b>
5% A-D Critical Value	0.758	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.198	<b>Kolmogrov-Smirnov Gamma GOF Test</b>
5% K-S Critical Value	0.202	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

**Gamma Statistics**

k hat (MLE)	1.445	k star (bias corrected MLE)	1.252
Theta hat (MLE)	0.386	Theta star (bias corrected MLE)	0.445
nu hat (MLE)	54.92	nu star (bias corrected)	47.58
MLE Mean (bias corrected)	0.558	MLE Sd (bias corrected)	0.498
		Approximate Chi Square Value (0.05)	32.75
Adjusted Level of Significance	0.0369	Adjusted Chi Square Value	31.67

**Assuming Gamma Distribution**

95% Approximate Gamma UCL (use when n>=50))	0.81	95% Adjusted Gamma UCL (use when n<50)	0.838
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**Lognormal GOF Test**

Shapiro Wilk Test Statistic	0.963	<b>Shapiro Wilk Lognormal GOF Test</b>
5% Shapiro Wilk Critical Value	0.901	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.168	<b>Lilliefors Lognormal GOF Test</b>
5% Lilliefors Critical Value	0.203	Data appear Lognormal at 5% Significance Level

Data appear Lognormal at 5% Significance Level

**Lognormal Statistics**

Minimum of Logged Data	-2.564	Mean of logged Data	-0.968
Maximum of Logged Data	0.642	SD of logged Data	0.905

**Assuming Lognormal Distribution**

95% H-UCL	0.97	90% Chebyshev (MVUE) UCL	0.936
95% Chebyshev (MVUE) UCL	1.108	97.5% Chebyshev (MVUE) UCL	1.347
99% Chebyshev (MVUE) UCL	1.817		

**Nonparametric Distribution Free UCL Statistics**

Data appear to follow a Discernible Distribution at 5% Significance Level

**Nonparametric Distribution Free UCLs**

95% CLT UCL	0.758	95% Jackknife UCL	0.768
95% Standard Bootstrap UCL	0.749	95% Bootstrap-t UCL	0.877
95% Hall's Bootstrap UCL	1.019	95% Percentile Bootstrap UCL	0.768
95% BCA Bootstrap UCL	0.797		
90% Chebyshev(Mean, Sd) UCL	0.922	95% Chebyshev(Mean, Sd) UCL	1.087
97.5% Chebyshev(Mean, Sd) UCL	1.316	99% Chebyshev(Mean, Sd) UCL	1.766

**Suggested UCL to Use**

95% Student's-t UCL 0.768

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.

For additional insight the user may want to consult a statistician.

RA\_SE\_SVOCS|Chrysene

**General Statistics**

Total Number of Observations	19	Number of Distinct Observations	18
		Number of Missing Observations	0
Minimum	0.27	Mean	0.777
Maximum	1.3	Median	0.79
SD	0.253	Std. Error of Mean	0.058
Coefficient of Variation	0.325	Skewness	-0.0915

**Normal GOF Test**

Shapiro Wilk Test Statistic	0.955	<b>Shapiro Wilk GOF Test</b>	
5% Shapiro Wilk Critical Value	0.901	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.155	<b>Lilliefors GOF Test</b>	
5% Lilliefors Critical Value	0.203	Data appear Normal at 5% Significance Level	

**Data appear Normal at 5% Significance Level****Assuming Normal Distribution**

<b>95% Normal UCL</b>		<b>95% UCLs (Adjusted for Skewness)</b>	
95% Student's-t UCL	0.877	95% Adjusted-CLT UCL (Chen-1995)	0.871
		95% Modified-t UCL (Johnson-1978)	0.877

**Gamma GOF Test**

A-D Test Statistic	0.718	<b>Anderson-Darling Gamma GOF Test</b>	
5% A-D Critical Value	0.742	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.167	<b>Kolmogrov-Smirnov Gamma GOF Test</b>	
5% K-S Critical Value	0.199	Detected data appear Gamma Distributed at 5% Significance Level	

**Detected data appear Gamma Distributed at 5% Significance Level****Gamma Statistics**

k hat (MLE)	8.193	k star (bias corrected MLE)	6.934
Theta hat (MLE)	0.0948	Theta star (bias corrected MLE)	0.112
nu hat (MLE)	311.3	nu star (bias corrected)	263.5
MLE Mean (bias corrected)	0.777	MLE Sd (bias corrected)	0.295
		Approximate Chi Square Value (0.05)	226.9
Adjusted Level of Significance	0.0369	Adjusted Chi Square Value	224

**Assuming Gamma Distribution**

95% Approximate Gamma UCL (use when n>=50))	0.902	95% Adjusted Gamma UCL (use when n<50)	0.914
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**Lognormal GOF Test**

Shapiro Wilk Test Statistic	0.874	<b>Shapiro Wilk Lognormal GOF Test</b>	
5% Shapiro Wilk Critical Value	0.901	Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.195	<b>Lilliefors Lognormal GOF Test</b>	
5% Lilliefors Critical Value	0.203	Data appear Lognormal at 5% Significance Level	

**Data appear Approximate Lognormal at 5% Significance Level****Lognormal Statistics**

Minimum of Logged Data	-1.309	Mean of logged Data	-0.315
Maximum of Logged Data	0.262	SD of logged Data	0.39

**Assuming Lognormal Distribution**

95% H-UCL	0.939	90% Chebyshev (MVUE) UCL	0.999
95% Chebyshev (MVUE) UCL	1.097	97.5% Chebyshev (MVUE) UCL	1.232
99% Chebyshev (MVUE) UCL	1.497		

**Nonparametric Distribution Free UCL Statistics****Data appear to follow a Discernible Distribution at 5% Significance Level****Nonparametric Distribution Free UCLs**

95% CLT UCL	0.872	95% Jackknife UCL	0.877
95% Standard Bootstrap UCL	0.871	95% Bootstrap-t UCL	0.872
95% Hall's Bootstrap UCL	0.879	95% Percentile Bootstrap UCL	0.868
95% BCA Bootstrap UCL	0.867		
90% Chebyshev(Mean, Sd) UCL	0.951	95% Chebyshev(Mean, Sd) UCL	1.029
97.5% Chebyshev(Mean, Sd) UCL	1.139	99% Chebyshev(Mean, Sd) UCL	1.353

**Suggested UCL to Use**

95% Student's-t UCL	0.877
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Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.

For additional insight the user may want to consult a statistician.

**Note: For highly negatively-skewed data, confidence limits (e.g., Chen, Johnson, Lognormal, and Gamma) may not be reliable. Chen's and Johnson's methods provide adjustments for positively skewed data sets.**

RA\_SE\_SVOCS|Benzo(k)fluoranthene

**General Statistics**

Total Number of Observations	19	Number of Distinct Observations	17
		Number of Missing Observations	0
Minimum	0.096	Mean	0.315
Maximum	0.56	Median	0.3
SD	0.129	Std. Error of Mean	0.0297
Coefficient of Variation	0.411	Skewness	0.0224

**Normal GOF Test**

Shapiro Wilk Test Statistic	0.969	<b>Shapiro Wilk GOF Test</b>	
5% Shapiro Wilk Critical Value	0.901	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.107	<b>Lilliefors GOF Test</b>	
5% Lilliefors Critical Value	0.203	Data appear Normal at 5% Significance Level	

**Data appear Normal at 5% Significance Level****Assuming Normal Distribution**

<b>95% Normal UCL</b>		<b>95% UCLs (Adjusted for Skewness)</b>	
95% Student's-t UCL	0.367	95% Adjusted-CLT UCL (Chen-1995)	0.364
		95% Modified-t UCL (Johnson-1978)	0.367

**Gamma GOF Test**

A-D Test Statistic	0.499	<b>Anderson-Darling Gamma GOF Test</b>	
5% A-D Critical Value	0.742	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.17	<b>Kolmogrov-Smirnov Gamma GOF Test</b>	
5% K-S Critical Value	0.199	Detected data appear Gamma Distributed at 5% Significance Level	

**Detected data appear Gamma Distributed at 5% Significance Level****Gamma Statistics**

k hat (MLE)	5.091	k star (bias corrected MLE)	4.322
Theta hat (MLE)	0.0619	Theta star (bias corrected MLE)	0.0729
nu hat (MLE)	193.5	nu star (bias corrected)	164.2
MLE Mean (bias corrected)	0.315	MLE Sd (bias corrected)	0.152
		Approximate Chi Square Value (0.05)	135.6
Adjusted Level of Significance	0.0369	Adjusted Chi Square Value	133.3

**Assuming Gamma Distribution**

95% Approximate Gamma UCL (use when n>=50)	0.382	95% Adjusted Gamma UCL (use when n<50)	0.388
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**Lognormal GOF Test**

Shapiro Wilk Test Statistic	0.897	<b>Shapiro Wilk Lognormal GOF Test</b>	
5% Shapiro Wilk Critical Value	0.901	Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.199	<b>Lilliefors Lognormal GOF Test</b>	
5% Lilliefors Critical Value	0.203	Data appear Lognormal at 5% Significance Level	

**Data appear Approximate Lognormal at 5% Significance Level****Lognormal Statistics**

Minimum of Logged Data	-2.343	Mean of logged Data	-1.256
Maximum of Logged Data	-0.58	SD of logged Data	0.5

**Assuming Lognormal Distribution**

95% H-UCL	0.409	90% Chebyshev (MVUE) UCL	0.434
95% Chebyshev (MVUE) UCL	0.486	97.5% Chebyshev (MVUE) UCL	0.558
99% Chebyshev (MVUE) UCL	0.699		

**Nonparametric Distribution Free UCL Statistics****Data appear to follow a Discernible Distribution at 5% Significance Level****Nonparametric Distribution Free UCLs**

95% CLT UCL	0.364	95% Jackknife UCL	0.367
95% Standard Bootstrap UCL	0.362	95% Bootstrap-t UCL	0.367
95% Hall's Bootstrap UCL	0.364	95% Percentile Bootstrap UCL	0.361
95% BCA Bootstrap UCL	0.361		
90% Chebyshev(Mean, Sd) UCL	0.404	95% Chebyshev(Mean, Sd) UCL	0.444
97.5% Chebyshev(Mean, Sd) UCL	0.5	99% Chebyshev(Mean, Sd) UCL	0.61

**Suggested UCL to Use**

95% Student's-t UCL	0.367
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Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)

and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.

For additional insight the user may want to consult a statistician.

**General Statistics on Uncensored Data**

Date/Time of Computation 2/20/2015 3:42:21 PM

**User Selected Options**

From File HH\_SED\_Nearshore\_Input\_a.xls  
Full Precision OFF

From File: HH\_SED\_Nearshore\_Input\_a.xls

**General Statistics for Censored Datasets (with NDs) using Kaplan Meier Method**

Variable	NumObs	# Missing	Num Ds	NumNDs	% NDs	Min ND	Max ND	KM Mean	KM Var	KM SD	KM CV
E_PestPCBs[alpha-BHC	9	10	0	9	100.00%	4.5000E-4	0.0019	N/A	N/A	N/A	N/A

**General Statistics for Raw Dataset using Detected Data Only**

Variable	NumObs	# Missing	Minimum	Maximum	Mean	Median	Var	SD	MAD/0.675	Skewness	CV
E_PestPCBs[alpha-BHC	0	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**Percentiles using all Detects (Ds) and Non-Detects (NDs)**

Variable	NumObs	# Missing	10%ile	20%ile	25%ile(Q1)	50%ile(Q2)	75%ile(Q3)	80%ile	90%ile	95%ile	99%ile
E_PestPCBs[alpha-BHC	9	10	6.7400E-4	7.4800E-4	7.6000E-4	8.2000E-4	0.0013	0.0013	0.00142	0.00166	0.00185

**UCL Statistics for Data Sets with Non-Detects**

User Selected Options  
 Date/Time of Computation 2/10/2015 5:02:12 PM  
 From File HH\_SW\_Input.xls  
 Full Precision OFF  
 Confidence Coefficient 95%  
 Number of Bootstrap Operations 2000

**RA\_SW\_Metals|Arsenic**

**General Statistics**

Total Number of Observations	10	Number of Distinct Observations	9
		Number of Missing Observations	70
Minimum	0.48	Mean	0.743
Maximum	1.2	Median	0.715
SD	0.199	Std. Error of Mean	0.0629
Coefficient of Variation	0.268	Skewness	1.266

**Normal GOF Test**

Shapiro Wilk Test Statistic	0.899	<b>Shapiro Wilk GOF Test</b>
5% Shapiro Wilk Critical Value	0.842	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.213	<b>Lilliefors GOF Test</b>
5% Lilliefors Critical Value	0.28	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

**Assuming Normal Distribution**

<b>95% Normal UCL</b>		<b>95% UCLs (Adjusted for Skewness)</b>	
95% Student's-t UCL	0.858	95% Adjusted-CLT UCL (Chen-1995)	0.873
		95% Modified-t UCL (Johnson-1978)	0.863

**Gamma GOF Test**

A-D Test Statistic	0.313	<b>Anderson-Darling Gamma GOF Test</b>
5% A-D Critical Value	0.725	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.175	<b>Kolmogrov-Smirnov Gamma GOF Test</b>
5% K-S Critical Value	0.266	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

**Gamma Statistics**

k hat (MLE)	17.1	k star (bias corrected MLE)	12.04
Theta hat (MLE)	0.0435	Theta star (bias corrected MLE)	0.0617
nu hat (MLE)	342	nu star (bias corrected)	240.7
MLE Mean (bias corrected)	0.743	MLE Sd (bias corrected)	0.214
		Approximate Chi Square Value (0.05)	205.8
Adjusted Level of Significance	0.0267	Adjusted Chi Square Value	200.2

**Assuming Gamma Distribution**

95% Approximate Gamma UCL (use when n>=50)	0.869	95% Adjusted Gamma UCL (use when n<50)	0.893
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**Lognormal GOF Test**

Shapiro Wilk Test Statistic	0.959	<b>Shapiro Wilk Lognormal GOF Test</b>
5% Shapiro Wilk Critical Value	0.842	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.173	<b>Lilliefors Lognormal GOF Test</b>
5% Lilliefors Critical Value	0.28	Data appear Lognormal at 5% Significance Level

Data appear Lognormal at 5% Significance Level

**Lognormal Statistics**

Minimum of Logged Data	-0.734	Mean of logged Data	-0.327
Maximum of Logged Data	0.182	SD of logged Data	0.252

**Assuming Lognormal Distribution**

95% H-UCL	0.876	90% Chebyshev (MVUE) UCL	0.921
95% Chebyshev (MVUE) UCL	1.001	97.5% Chebyshev (MVUE) UCL	1.113
99% Chebyshev (MVUE) UCL	1.334		

**Nonparametric Distribution Free UCL Statistics**

Data appear to follow a Discernible Distribution at 5% Significance Level

**Nonparametric Distribution Free UCLs**

95% CLT UCL	0.847	95% Jackknife UCL	0.858
95% Standard Bootstrap UCL	0.841	95% Bootstrap-t UCL	0.906
95% Hall's Bootstrap UCL	1.023	95% Percentile Bootstrap UCL	0.846
95% BCA Bootstrap UCL	0.869		
90% Chebyshev(Mean, Sd) UCL	0.932	95% Chebyshev(Mean, Sd) UCL	1.017
97.5% Chebyshev(Mean, Sd) UCL	1.136	99% Chebyshev(Mean, Sd) UCL	1.369

**Suggested UCL to Use**

95% Student's-t UCL 0.858

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). However, simulation results will not cover all Real World data sets. For additional insight the user may want to consult a statistician.



RA\_SW\_Metals|Chromium

**General Statistics**

Total Number of Observations	10	Number of Distinct Observations	8
		Number of Missing Observations	70
Minimum	2.3	Mean	2.93
Maximum	3.5	Median	2.9
SD	0.397	Std. Error of Mean	0.126
Coefficient of Variation	0.136	Skewness	-0.237

**Normal GOF Test**

Shapiro Wilk Test Statistic	0.951	<b>Shapiro Wilk GOF Test</b>
5% Shapiro Wilk Critical Value	0.842	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.152	<b>Lilliefors GOF Test</b>
5% Lilliefors Critical Value	0.28	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

**Assuming Normal Distribution**

<b>95% Normal UCL</b>		<b>95% UCLs (Adjusted for Skewness)</b>	
95% Student's-t UCL	3.16	95% Adjusted-CLT UCL (Chen-1995)	3.127
		95% Modified-t UCL (Johnson-1978)	3.159

**Gamma GOF Test**

A-D Test Statistic	0.299	<b>Anderson-Darling Gamma GOF Test</b>
5% A-D Critical Value	0.724	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.167	<b>Kolmogrov-Smirnov Gamma GOF Test</b>
5% K-S Critical Value	0.266	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

**Gamma Statistics**

k hat (MLE)	58.58	k star (bias corrected MLE)	41.07
Theta hat (MLE)	0.05	Theta star (bias corrected MLE)	0.0713
nu hat (MLE)	1172	nu star (bias corrected)	821.5
MLE Mean (bias corrected)	2.93	MLE Sd (bias corrected)	0.457
		Approximate Chi Square Value (0.05)	756
Adjusted Level of Significance	0.0267	Adjusted Chi Square Value	745

**Assuming Gamma Distribution**

95% Approximate Gamma UCL (use when n>=50))	3.184	95% Adjusted Gamma UCL (use when n<50)	3.231
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**Lognormal GOF Test**

Shapiro Wilk Test Statistic	0.941	<b>Shapiro Wilk Lognormal GOF Test</b>
5% Shapiro Wilk Critical Value	0.842	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.156	<b>Lilliefors Lognormal GOF Test</b>
5% Lilliefors Critical Value	0.28	Data appear Lognormal at 5% Significance Level

Data appear Lognormal at 5% Significance Level

**Lognormal Statistics**

Minimum of Logged Data	0.833	Mean of logged Data	1.066
Maximum of Logged Data	1.253	SD of logged Data	0.139

**Assuming Lognormal Distribution**

95% H-UCL	3.193	90% Chebyshev (MVUE) UCL	3.318
95% Chebyshev (MVUE) UCL	3.493	97.5% Chebyshev (MVUE) UCL	3.737
99% Chebyshev (MVUE) UCL	4.216		

**Nonparametric Distribution Free UCL Statistics**

Data appear to follow a Discernible Distribution at 5% Significance Level

**Nonparametric Distribution Free UCLs**

95% CLT UCL	3.137	95% Jackknife UCL	3.16
95% Standard Bootstrap UCL	3.127	95% Bootstrap-t UCL	3.152
95% Hall's Bootstrap UCL	3.124	95% Percentile Bootstrap UCL	3.12
95% BCA Bootstrap UCL	3.11		
90% Chebyshev(Mean, Sd) UCL	3.307	95% Chebyshev(Mean, Sd) UCL	3.478
97.5% Chebyshev(Mean, Sd) UCL	3.715	99% Chebyshev(Mean, Sd) UCL	4.18

**Suggested UCL to Use**

95% Student's-t UCL 3.16

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.

For additional insight the user may want to consult a statistician.

Note: For highly negatively-skewed data, confidence limits (e.g., Chen, Johnson, Lognormal, and Gamma) may not be reliable. Chen's and Johnson's methods provide adjustments for positively skewed data sets.

RA\_SW\_Metals|Cobalt

**General Statistics**

Total Number of Observations	10	Number of Distinct Observations	8
		Number of Missing Observations	70
Minimum	0.8	Mean	0.983
Maximum	1.1	Median	0.975
SD	0.0983	Std. Error of Mean	0.0311
Coefficient of Variation	0.1	Skewness	-0.334

**Normal GOF Test**

Shapiro Wilk Test Statistic	0.92	<b>Shapiro Wilk GOF Test</b>
5% Shapiro Wilk Critical Value	0.842	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.183	<b>Lilliefors GOF Test</b>
5% Lilliefors Critical Value	0.28	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

**Assuming Normal Distribution**

<b>95% Normal UCL</b>		<b>95% UCLs (Adjusted for Skewness)</b>	
95% Student's-t UCL	1.04	95% Adjusted-CLT UCL (Chen-1995)	1.031
		95% Modified-t UCL (Johnson-1978)	1.039

**Gamma GOF Test**

A-D Test Statistic	0.377	<b>Anderson-Darling Gamma GOF Test</b>
5% A-D Critical Value	0.724	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.189	<b>Kolmogrov-Smirnov Gamma GOF Test</b>
5% K-S Critical Value	0.266	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

**Gamma Statistics**

k hat (MLE)	108.1	k star (bias corrected MLE)	75.71
Theta hat (MLE)	0.0091	Theta star (bias corrected MLE)	0.013
nu hat (MLE)	2161	nu star (bias corrected)	1514
MLE Mean (bias corrected)	0.983	MLE Sd (bias corrected)	0.113
		Approximate Chi Square Value (0.05)	1425
Adjusted Level of Significance	0.0267	Adjusted Chi Square Value	1410

**Assuming Gamma Distribution**

95% Approximate Gamma UCL (use when n>=50)	1.045	95% Adjusted Gamma UCL (use when n<50)	1.056
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**Lognormal GOF Test**

Shapiro Wilk Test Statistic	0.917	<b>Shapiro Wilk Lognormal GOF Test</b>
5% Shapiro Wilk Critical Value	0.842	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.174	<b>Lilliefors Lognormal GOF Test</b>
5% Lilliefors Critical Value	0.28	Data appear Lognormal at 5% Significance Level

Data appear Lognormal at 5% Significance Level

**Lognormal Statistics**

Minimum of Logged Data	-0.223	Mean of logged Data	-0.0218
Maximum of Logged Data	0.0953	SD of logged Data	0.102

**Assuming Lognormal Distribution**

95% H-UCL	1.046	90% Chebyshev (MVUE) UCL	1.079
95% Chebyshev (MVUE) UCL	1.122	97.5% Chebyshev (MVUE) UCL	1.182
99% Chebyshev (MVUE) UCL	1.3		

**Nonparametric Distribution Free UCL Statistics**

Data appear to follow a Discernible Distribution at 5% Significance Level

**Nonparametric Distribution Free UCLs**

95% CLT UCL	1.034	95% Jackknife UCL	1.04
95% Standard Bootstrap UCL	1.032	95% Bootstrap-t UCL	1.038
95% Hall's Bootstrap UCL	1.03	95% Percentile Bootstrap UCL	1.032
95% BCA Bootstrap UCL	1.027		
90% Chebyshev(Mean, Sd) UCL	1.076	95% Chebyshev(Mean, Sd) UCL	1.119
97.5% Chebyshev(Mean, Sd) UCL	1.177	99% Chebyshev(Mean, Sd) UCL	1.292

**Suggested UCL to Use**

95% Student's-t UCL 1.04

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.

For additional insight the user may want to consult a statistician.

Note: For highly negatively-skewed data, confidence limits (e.g., Chen, Johnson, Lognormal, and Gamma) may not be reliable. Chen's and Johnson's methods provide adjustments for positively skewed data sets.

RA\_SW\_Metals|Manganese

**General Statistics**

Total Number of Observations	10	Number of Distinct Observations	5
		Number of Missing Observations	70
Minimum	120	Mean	140
Maximum	170	Median	140
SD	13.33	Std. Error of Mean	4.216
Coefficient of Variation	0.0952	Skewness	1.055

**Normal GOF Test**

Shapiro Wilk Test Statistic	0.875	<b>Shapiro Wilk GOF Test</b>
5% Shapiro Wilk Critical Value	0.842	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.3	<b>Lilliefors GOF Test</b>
5% Lilliefors Critical Value	0.28	Data Not Normal at 5% Significance Level

Data appear Approximate Normal at 5% Significance Level

**Assuming Normal Distribution**

<b>95% Normal UCL</b>		<b>95% UCLs (Adjusted for Skewness)</b>	
95% Student's-t UCL	147.7	95% Adjusted-CLT UCL (Chen-1995)	148.4
		95% Modified-t UCL (Johnson-1978)	148

**Gamma GOF Test**

A-D Test Statistic	0.651	<b>Anderson-Darling Gamma GOF Test</b>
5% A-D Critical Value	0.724	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.288	<b>Kolmogrov-Smirnov Gamma GOF Test</b>
5% K-S Critical Value	0.266	Data Not Gamma Distributed at 5% Significance Level

Detected data follow Appr. Gamma Distribution at 5% Significance Level

**Gamma Statistics**

k hat (MLE)	127.7	k star (bias corrected MLE)	89.43
Theta hat (MLE)	1.097	Theta star (bias corrected MLE)	1.565
nu hat (MLE)	2553	nu star (bias corrected)	1789
MLE Mean (bias corrected)	140	MLE Sd (bias corrected)	14.8
		Approximate Chi Square Value (0.05)	1691
Adjusted Level of Significance	0.0267	Adjusted Chi Square Value	1675

**Assuming Gamma Distribution**

95% Approximate Gamma UCL (use when n>=50)	148	95% Adjusted Gamma UCL (use when n<50)	149.5
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**Lognormal GOF Test**

Shapiro Wilk Test Statistic	0.897	<b>Shapiro Wilk Lognormal GOF Test</b>
5% Shapiro Wilk Critical Value	0.842	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.283	<b>Lilliefors Lognormal GOF Test</b>
5% Lilliefors Critical Value	0.28	Data Not Lognormal at 5% Significance Level

Data appear Approximate Lognormal at 5% Significance Level

**Lognormal Statistics**

Minimum of Logged Data	4.787	Mean of logged Data	4.938
Maximum of Logged Data	5.136	SD of logged Data	0.0925

**Assuming Lognormal Distribution**

95% H-UCL	N/A	90% Chebyshev (MVUE) UCL	152.3
95% Chebyshev (MVUE) UCL	157.9	97.5% Chebyshev (MVUE) UCL	165.6
99% Chebyshev (MVUE) UCL	180.8		

**Nonparametric Distribution Free UCL Statistics**

**Data appear to follow a Discernible Distribution at 5% Significance Level**

**Nonparametric Distribution Free UCLs**

95% CLT UCL	146.9	95% Jackknife UCL	147.7
95% Standard Bootstrap UCL	146.4	95% Bootstrap-t UCL	149.8
95% Hall's Bootstrap UCL	158.3	95% Percentile Bootstrap UCL	147
95% BCA Bootstrap UCL	147		
90% Chebyshev(Mean, Sd) UCL	152.6	95% Chebyshev(Mean, Sd) UCL	158.4
97.5% Chebyshev(Mean, Sd) UCL	166.3	99% Chebyshev(Mean, Sd) UCL	182

**Suggested UCL to Use**

95% Student's-t UCL 147.7

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). However, simulation results will not cover all Real World data sets.

For additional insight the user may want to consult a statistician.

**UCL Statistics for Data Sets with Non-Detects**

User Selected Options  
 Date/Time of Computation 2/12/2015 3:40:33 PM  
 From File HH\_SW\_Input.xls  
 Full Precision OFF  
 Confidence Coefficient 95%  
 Number of Bootstrap Operations 2000

RA\_SW\_DioxinFuransTCDD TEQ HH

General Statistics			
Total Number of Observations	5	Number of Distinct Observations	5
		Number of Missing Observations	73
Minimum	2.4000E-7	Mean	3.7760E-7
Maximum	6.1200E-7	Median	3.7800E-7
SD	1.5090E-7	Std. Error of Mean	6.7485E-8
Coefficient of Variation	N/A	Skewness	0.997

**Note: Sample size is small (e.g., <10), if data are collected using ISM approach, you should use guidance provided in ITRC Tech Reg Guide on ISM (ITRC, 2012) to compute statistics of interest. For example, you may want to use Chebyshev UCL to estimate EPC (ITRC, 2012). Chebyshev UCL can be computed using the Nonparametric and All UCL Options of ProUCL 5.0**

Normal GOF Test		Shapiro Wilk GOF Test	
Shapiro Wilk Test Statistic	0.894	Data appear Normal at 5% Significance Level	
5% Shapiro Wilk Critical Value	0.762		
Lilliefors Test Statistic	0.22	Lilliefors GOF Test	
5% Lilliefors Critical Value	0.396	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Assuming Normal Distribution		95% UCLs (Adjusted for Skewness)	
<b>95% Normal UCL</b>		95% Adjusted-CLT UCL (Chen-1995)	5.2076E-7
95% Student's-t UCL	5.2147E-7	95% Modified-t UCL (Johnson-1978)	5.2648E-7

Gamma GOF Test		Anderson-Darling Gamma GOF Test	
A-D Test Statistic	0.332	Detected data appear Gamma Distributed at 5% Significance Level	
5% A-D Critical Value	0.679		
K-S Test Statistic	0.241	Kolmogrov-Smirnov Gamma GOF Test	
5% K-S Critical Value	0.358	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics			
k hat (MLE)	8.382	k star (bias corrected MLE)	3.486
Theta hat (MLE)	4.5049E-8	Theta star (bias corrected MLE)	1.0832E-7
nu hat (MLE)	83.82	nu star (bias corrected)	34.86
MLE Mean (bias corrected)	3.7760E-7	MLE Sd (bias corrected)	2.0224E-7
Adjusted Level of Significance	0.0086	Approximate Chi Square Value (0.05)	22.35
		Adjusted Chi Square Value	18.11

**Assuming Gamma Distribution**

95% Approximate Gamma UCL (use when  $n > 50$ ) 5.8888E-7      95% Adjusted Gamma UCL (use when  $n < 50$ ) 7.2695E-7

**Lognormal GOF Test**

Shapiro Wilk Test Statistic	0.919	<b>Shapiro Wilk Lognormal GOF Test</b>
5% Shapiro Wilk Critical Value	0.762	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.219	<b>Lilliefors Lognormal GOF Test</b>
5% Lilliefors Critical Value	0.396	Data appear Lognormal at 5% Significance Level

**Data appear Lognormal at 5% Significance Level**

**Lognormal Statistics**

Minimum of Logged Data	-15.24	Mean of logged Data	-14.85
Maximum of Logged Data	-14.31	SD of logged Data	0.386

**Assuming Lognormal Distribution**

95% H-UCL	6.3396E-7	90% Chebyshev (MVUE) UCL	5.7112E-7
95% Chebyshev (MVUE) UCL	6.5908E-7	97.5% Chebyshev (MVUE) UCL	7.8117E-7
99% Chebyshev (MVUE) UCL	1.0210E-6		

**Nonparametric Distribution Free UCL Statistics**

**Data appear to follow a Discernible Distribution at 5% Significance Level**

**Nonparametric Distribution Free UCLs**

95% CLT UCL	4.8860E-7	95% Jackknife UCL	5.2147E-7
95% Standard Bootstrap UCL	4.7752E-7	95% Bootstrap-t UCL	5.8325E-7
95% Hall's Bootstrap UCL	6.0587E-7	95% Percentile Bootstrap UCL	4.9080E-7
95% BCA Bootstrap UCL	4.9280E-7		
90% Chebyshev(Mean, Sd) UCL	5.8005E-7	95% Chebyshev(Mean, Sd) UCL	6.7176E-7
97.5% Chebyshev(Mean, Sd) UCL	7.9904E-7	99% Chebyshev(Mean, Sd) UCL	1.0491E-6

**Suggested UCL to Use**

95% Student's-t UCL 5.2147E-7

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.

For additional insight the user may want to consult a statistician.

RA\_SW\_PestPCBej4,4'-DDT

**General Statistics**

Total Number of Observations	5	Number of Distinct Observations	3
		Number of Missing Observations	73
Minimum	0.0011	Mean	0.00126
Maximum	0.0016	Median	0.0011
SD	2.3022E-4	Std. Error of Mean	1.0296E-4
Coefficient of Variation	0.183	Skewness	1.016

**Note: Sample size is small (e.g., <10), if data are collected using ISM approach, you should use guidance provided in ITRC Tech Reg Guide on ISM (ITRC, 2012) to compute statistics of interest.**

**For example, you may want to use Chebyshev UCL to estimate EPC (ITRC, 2012).**

**Chebyshev UCL can be computed using the Nonparametric and All UCL Options of ProUCL 5.0**

**Normal GOF Test**

Shapiro Wilk Test Statistic	0.773	<b>Shapiro Wilk GOF Test</b>
5% Shapiro Wilk Critical Value	0.762	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.356	<b>Lilliefors GOF Test</b>
5% Lilliefors Critical Value	0.396	Data appear Normal at 5% Significance Level

**Data appear Normal at 5% Significance Level**

**Assuming Normal Distribution**

<b>95% Normal UCL</b>		<b>95% UCLs (Adjusted for Skewness)</b>	
95% Student's-t UCL	0.00148	95% Adjusted-CLT UCL (Chen-1995)	0.00148
		95% Modified-t UCL (Johnson-1978)	0.00149

**Gamma GOF Test**

A-D Test Statistic	0.71	<b>Anderson-Darling Gamma GOF Test</b>
5% A-D Critical Value	0.678	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.383	<b>Kolmogrov-Smirnov Gamma GOF Test</b>
5% K-S Critical Value	0.357	Data Not Gamma Distributed at 5% Significance Level

**Data Not Gamma Distributed at 5% Significance Level**

**Gamma Statistics**

k hat (MLE)	39.75	k star (bias corrected MLE)	16.03
Theta hat (MLE)	3.1696E-5	Theta star (bias corrected MLE)	7.8581E-5
nu hat (MLE)	397.5	nu star (bias corrected)	160.3
MLE Mean (bias corrected)	0.00126	MLE Sd (bias corrected)	3.1466E-4
Adjusted Level of Significance	0.0086	Approximate Chi Square Value (0.05)	132.1
		Adjusted Chi Square Value	120.8

**Assuming Gamma Distribution**

95% Approximate Gamma UCL (use when n>=50))	0.00153	95% Adjusted Gamma UCL (use when n<50)	0.00167
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**Lognormal GOF Test**

Shapiro Wilk Test Statistic	0.769	<b>Shapiro Wilk Lognormal GOF Test</b>
5% Shapiro Wilk Critical Value	0.762	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.359	<b>Lilliefors Lognormal GOF Test</b>
5% Lilliefors Critical Value	0.396	Data appear Lognormal at 5% Significance Level

**Data appear Lognormal at 5% Significance Level**

**Lognormal Statistics**

Minimum of Logged Data	-6.812	Mean of logged Data	-6.689
Maximum of Logged Data	-6.438	SD of logged Data	0.175

**Assuming Lognormal Distribution**

95% H-UCL	0.00153	90% Chebyshev (MVUE) UCL	0.00156
95% Chebyshev (MVUE) UCL	0.00169	97.5% Chebyshev (MVUE) UCL	0.00187
99% Chebyshev (MVUE) UCL	0.00224		

**Nonparametric Distribution Free UCL Statistics**

**Data appear to follow a Discernible Distribution at 5% Significance Level**

**Nonparametric Distribution Free UCLs**

95% CLT UCL	0.00143	95% Jackknife UCL	0.00148
95% Standard Bootstrap UCL	N/A	95% Bootstrap-t UCL	N/A
95% Hall's Bootstrap UCL	N/A	95% Percentile Bootstrap UCL	N/A
95% BCA Bootstrap UCL	N/A		
90% Chebyshev(Mean, Sd) UCL	0.00157	95% Chebyshev(Mean, Sd) UCL	0.00171
97.5% Chebyshev(Mean, Sd) UCL	0.0019	99% Chebyshev(Mean, Sd) UCL	0.00228

**Suggested UCL to Use**

95% Student's-t UCL	0.00148
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**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**

**and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.**

**For additional insight the user may want to consult a statistician.**



## **Attachment C**

### **Risk Calculation Spreadsheets**



## **Risk Calculation Spreadsheets – Angler Receptor**

**Table C-1.1**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Angler (Catfish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: Angler Receptor Age: Adult
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Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations						Noncancer Hazard Calculations											
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient							
							Value	Units	Value	Units			Value	Units	Value	Units		Value	Units					
Sediment	Surface Sediment	Nearshore Surface Sediment	Ingestion	<b>Dioxin</b>																				
				2,3,7,8-TCDD-TEQ	4.49E-04	mg/kg	5.71E-12	mg/kg-day	1.30E+05	kg-day/mg		7.43E-07	2.00E-11	mg/kg-day	7.00E-10	mg/kg-day							2.86E-02	
				<b>Metals</b>																				
				Aluminum	9.05E+03	mg/kg	1.15E-04	mg/kg-day	NA	kg-day/mg		NA	4.03E-04	mg/kg-day	1.00E+00	mg/kg-day	4.03E-04	mg/kg-day						4.03E-04
				Arsenic	7.54E+00	mg/kg	5.75E-08	mg/kg-day	1.50E+00	kg-day/mg		8.63E-08	2.01E-07	mg/kg-day	3.00E-04	mg/kg-day	3.00E-04	mg/kg-day						6.71E-04
				Chromium	4.67E+01	mg/kg	5.93E-07	mg/kg-day	5.00E-01	kg-day/mg	1	2.96E-07	2.08E-06	mg/kg-day	3.00E-03	mg/kg-day	3.00E-03	mg/kg-day						6.92E-04
				Cobalt	1.79E+01	mg/kg	2.28E-07	mg/kg-day	NA	kg-day/mg		NA	7.96E-07	mg/kg-day	3.00E-04	mg/kg-day	3.00E-04	mg/kg-day						2.65E-03
				Manganese	2.57E+02	mg/kg	3.27E-06	mg/kg-day	NA	kg-day/mg		NA	1.14E-05	mg/kg-day	2.40E-02	mg/kg-day	2.40E-02	mg/kg-day						4.76E-04
				Nickel	7.90E+01	mg/kg	1.00E-06	mg/kg-day	NA	kg-day/mg		NA	3.51E-06	mg/kg-day	2.00E-02	mg/kg-day	2.00E-02	mg/kg-day						1.76E-04
				Thallium	3.02E-01	mg/kg	3.84E-09	mg/kg-day	NA	kg-day/mg		NA	1.34E-08	mg/kg-day	1.00E-05	mg/kg-day	1.00E-05	mg/kg-day						1.34E-03
				Vanadium	2.29E+02	mg/kg	2.91E-06	mg/kg-day	NA	kg-day/mg		NA	1.02E-05	mg/kg-day	5.04E-03	mg/kg-day	5.04E-03	mg/kg-day						2.02E-03
				<b>PCBs</b>																				
				Total PCBs	7.68E-01	mg/kg	9.76E-09	mg/kg-day	2.00E+00	kg-day/mg		1.95E-08	3.42E-08	mg/kg-day	2.00E-05	mg/kg-day	2.00E-05	mg/kg-day						1.71E-03
				<b>SVOCs</b>																				
				Benzo(a)anthracene	5.65E-01	mg/kg	7.18E-09	mg/kg-day	7.30E-01	kg-day/mg	1	5.24E-09	2.51E-08	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day						NA
				Benzo(a)pyrene	6.28E-01	mg/kg	7.98E-09	mg/kg-day	7.30E+00	kg-day/mg	1	5.83E-08	2.79E-08	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day						NA
				Benzo(b)fluoranthene	9.51E-01	mg/kg	1.21E-08	mg/kg-day	7.30E-01	kg-day/mg	1	8.82E-09	4.23E-08	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day						NA
				Benzo(k)fluoranthene	3.67E-01	mg/kg	4.66E-09	mg/kg-day	7.30E-02	kg-day/mg	1	3.41E-10	1.63E-08	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day						NA
				Chrysene	8.77E-01	mg/kg	1.11E-08	mg/kg-day	7.30E-03	kg-day/mg	1	8.14E-11	3.90E-08	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day						NA
				Dibenzo(a,h)anthracene	1.42E-01	mg/kg	1.80E-09	mg/kg-day	7.30E+00	kg-day/mg	1	1.32E-08	6.32E-09	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day						NA
				Indeno(1,2,3-cd)pyrene	4.79E-01	mg/kg	6.09E-09	mg/kg-day	7.30E-01	kg-day/mg	1	4.44E-09	2.13E-08	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day						NA
			<b>Exp. Route Total</b>																		3.87E-02			

**Table C-1.1**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Angler (Catfish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Angler
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations						Noncancer Hazard Calculations									
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient					
							Value	Units	Value	Units			Value	Units	Value	Units		Value	Units			
Sediment	Surface Sediment	Nearshore Surface Sediment	Dermal	<b>Dioxin</b>																		
				2,3,7,8-TCDD-TEQ	4.49E-04	mg/kg	3.91E-12	mg/kg-day	1.30E+05	kg-day/mg		5.08E-07	1.37E-11	mg/kg-day	7.00E-10	mg/kg-day	1.95E-02					
				<b>Metals</b>																		
				Aluminum	9.05E+03	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E+00	mg/kg-day	NA					
				Arsenic	7.54E+00	mg/kg	6.56E-08	mg/kg-day	1.50E+00	kg-day/mg		9.84E-08	2.30E-07	mg/kg-day	3.00E-04	mg/kg-day	7.65E-04					
				Chromium	4.67E+01	mg/kg	NA	mg/kg-day	2.00E+01	kg-day/mg	1	NA	NA	mg/kg-day	7.50E-05	mg/kg-day	NA					
				Cobalt	1.79E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	3.00E-04	mg/kg-day	NA					
				Manganese	2.57E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	9.60E-04	mg/kg-day	NA					
				Nickel	7.90E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	8.00E-04	mg/kg-day	NA					
				Thallium	3.02E-01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E-05	mg/kg-day	NA					
				Vanadium	2.29E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.31E-04	mg/kg-day	NA					
				<b>PCBs</b>																		
				Total PCBs	7.68E-01	mg/kg	3.12E-08	mg/kg-day	2.00E+00	kg-day/mg		6.23E-08	1.09E-07	mg/kg-day	2.00E-05	mg/kg-day	5.45E-03					
				<b>SVOCs</b>																		
				Benzo(a)anthracene	5.65E-01	mg/kg	2.13E-08	mg/kg-day	7.30E-01	kg-day/mg	1	1.55E-08	7.45E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(a)pyrene	6.28E-01	mg/kg	2.37E-08	mg/kg-day	7.30E+00	kg-day/mg	1	1.73E-07	8.28E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(b)fluoranthene	9.51E-01	mg/kg	3.58E-08	mg/kg-day	7.30E-01	kg-day/mg	1	2.62E-08	1.25E-07	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(k)fluoranthene	3.67E-01	mg/kg	1.38E-08	mg/kg-day	7.30E-02	kg-day/mg	1	1.01E-09	4.84E-08	mg/kg-day	NA	mg/kg-day	NA					
				Chrysene	8.77E-01	mg/kg	3.30E-08	mg/kg-day	7.30E-03	kg-day/mg	1	2.41E-10	1.16E-07	mg/kg-day	NA	mg/kg-day	NA					
				Dibenzo(a,h)anthracene	1.42E-01	mg/kg	5.35E-09	mg/kg-day	7.30E+00	kg-day/mg	1	3.91E-08	1.87E-08	mg/kg-day	NA	mg/kg-day	NA					
				Indeno(1,2,3-cd)pyrene	4.79E-01	mg/kg	1.80E-08	mg/kg-day	7.30E-01	kg-day/mg	1	1.32E-08	6.32E-08	mg/kg-day	NA	mg/kg-day	NA					
			Exp. Route Total							9.36E-07				2.58E-02								
			Exposure Point Total							2.17E-06				6.45E-02								
			Exposure Medium Total							2.17E-06				6.45E-02								
			Sediment Total							2.17E-06				6.45E-02								



**Table C-1.1**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Angler (Catfish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Angler
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations					
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient
							Value	Units	Value	Units			Value	Units	Value	Units	

**Notes:**

ADAF - Age-Dependent Adjustment Factor.

CSF - Cancer Slope Factor.

EPC - Exposure Point Concentration.

NA - Not applicable.

NC - Not calculated

PCB - Polychlorinated Biphenyl.

RfD - Oral Reference Dose.

SVOC - Semivolatile Organic Compound.

TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.

(1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.

(2) Assumes a diet of 100% catfish fillet.

(3) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.

(4) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

**Table C-1.2  
Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Angler (Catfish Diet)  
Central Tendency Exposure  
Benning Road Facility RI/FS Project  
3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Angler
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations																									
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient																				
							Value	Units	Value	Units			Value	Units	Value	Units																					
Sediment	Surface Sediment	Nearshore Surface Sediment	Ingestion	<b>Dioxin</b>																																	
				2,3,7,8-TCDD-TEQ	1.11E-04	mg/kg	1.76E-13	mg/kg-day	1.30E+05	kg-day/mg				2.29E-08	1.23E-12	mg/kg-day	7.00E-10	mg/kg-day															1.76E-03				
				<b>Metals</b>																																	
				Aluminum	7.78E+03	mg/kg	1.24E-05	mg/kg-day	NA	kg-day/mg					NA	8.65E-05	mg/kg-day	1.00E+00	mg/kg-day																8.65E-05		
				Arsenic	5.49E+00	mg/kg	5.23E-09	mg/kg-day	1.50E+00	kg-day/mg					7.85E-09	3.66E-08	mg/kg-day	3.00E-04	mg/kg-day																	1.22E-04	
				Chromium	4.02E+01	mg/kg	6.38E-08	mg/kg-day	5.00E-01	kg-day/mg				1	3.19E-08	4.47E-07	mg/kg-day	3.00E-03	mg/kg-day																	1.49E-04	
				Cobalt	1.59E+01	mg/kg	2.52E-08	mg/kg-day	NA	kg-day/mg					NA	1.76E-07	mg/kg-day	3.00E-04	mg/kg-day																	5.88E-04	
				Manganese	2.24E+02	mg/kg	3.56E-07	mg/kg-day	NA	kg-day/mg					NA	2.49E-06	mg/kg-day	2.40E-02	mg/kg-day																	1.04E-04	
				Nickel	5.71E+01	mg/kg	9.07E-08	mg/kg-day	NA	kg-day/mg					NA	6.35E-07	mg/kg-day	2.00E-02	mg/kg-day																	3.18E-05	
				Thallium	2.34E-01	mg/kg	3.72E-10	mg/kg-day	NA	kg-day/mg					NA	2.60E-09	mg/kg-day	1.00E-05	mg/kg-day																	2.60E-04	
				Vanadium	1.07E+02	mg/kg	1.70E-07	mg/kg-day	NA	kg-day/mg					NA	1.19E-06	mg/kg-day	5.04E-03	mg/kg-day																	2.36E-04	
				<b>PCBs</b>																																	
				Total PCBs	5.58E-01	mg/kg	8.87E-10	mg/kg-day	1.00E+00	kg-day/mg						8.87E-10	6.21E-09	mg/kg-day	2.00E-05	mg/kg-day																3.10E-04	
				<b>SVOCs</b>																																	
				Benzo(a)anthracene	4.95E-01	mg/kg	7.86E-10	mg/kg-day	7.30E-01	kg-day/mg				1	5.74E-10	5.51E-09	mg/kg-day	NA	mg/kg-day																	NA	
				Benzo(a)pyrene	5.54E-01	mg/kg	8.80E-10	mg/kg-day	7.30E+00	kg-day/mg				1	6.43E-09	6.16E-09	mg/kg-day	NA	mg/kg-day																		NA
				Benzo(b)fluoranthene	8.35E-01	mg/kg	1.33E-09	mg/kg-day	7.30E-01	kg-day/mg				1	9.68E-10	9.29E-09	mg/kg-day	NA	mg/kg-day																		NA
				Benzo(k)fluoranthene	3.15E-01	mg/kg	5.01E-10	mg/kg-day	7.30E-02	kg-day/mg				1	3.65E-11	3.50E-09	mg/kg-day	NA	mg/kg-day																	NA	
				Chrysene	7.77E-01	mg/kg	1.23E-09	mg/kg-day	7.30E-03	kg-day/mg				1	9.01E-12	8.64E-09	mg/kg-day	NA	mg/kg-day																	NA	
				Dibenzo(a,h)anthracene	1.25E-01	mg/kg	1.99E-10	mg/kg-day	7.30E+00	kg-day/mg				1	1.45E-09	1.39E-09	mg/kg-day	NA	mg/kg-day																	NA	
				Indeno(1,2,3-cd)pyrene	4.18E-01	mg/kg	6.64E-10	mg/kg-day	7.30E-01	kg-day/mg				1	4.85E-10	4.65E-09	mg/kg-day	NA	mg/kg-day																	NA	
				<b>Exp. Route Total</b>																																	3.65E-03

**Table C-1.2**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Angler (Catfish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Angler
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations						Noncancer Hazard Calculations							
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient			
							Value	Units	Value	Units			Value	Units	Value	Units				
Sediment	Surface Sediment	Nearshore Surface Sediment	Dermal	<b>Dioxin</b>	1.11E-04	mg/kg	2.41E-13	mg/kg-day	1.30E+05	kg-day/mg		3.14E-08	1.69E-12	mg/kg-day	7.00E-10	mg/kg-day	2.41E-03			
				<b>Metals</b>																
				Aluminum	7.78E+03	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E+00	mg/kg-day	NA	mg/kg-day	NA	
				Arsenic	5.49E+00	mg/kg	1.19E-08	mg/kg-day	1.50E+00	kg-day/mg		1.79E-08	8.35E-08	mg/kg-day	3.00E-04	mg/kg-day	2.78E-04	mg/kg-day	NA	
				Chromium	4.02E+01	mg/kg	NA	mg/kg-day	2.00E+01	kg-day/mg	1	NA	NA	mg/kg-day	7.50E-05	mg/kg-day	NA	mg/kg-day	NA	
				Cobalt	1.59E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	3.00E-04	mg/kg-day	NA	mg/kg-day	NA	
				Manganese	2.24E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	9.60E-04	mg/kg-day	NA	mg/kg-day	NA	
				Nickel	5.71E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	8.00E-04	mg/kg-day	NA	mg/kg-day	NA	
				Thallium	2.34E-01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E-05	mg/kg-day	NA	mg/kg-day	NA	
				Vanadium	1.07E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.31E-04	mg/kg-day	NA	mg/kg-day	NA	
				<b>PCBs</b>																
				Total PCBs	5.58E-01	mg/kg	5.66E-09	mg/kg-day	1.00E+00	kg-day/mg		5.66E-09	3.96E-08	mg/kg-day	2.00E-05	mg/kg-day	1.98E-03	mg/kg-day	NA	
				<b>SVOCs</b>																
				Benzo(a)anthracene	4.95E-01	mg/kg	4.66E-09	mg/kg-day	7.30E-01	kg-day/mg	1	3.40E-09	3.26E-08	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day	NA	
				Benzo(a)pyrene	5.54E-01	mg/kg	5.22E-09	mg/kg-day	7.30E+00	kg-day/mg	1	3.81E-08	3.65E-08	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day	NA	
				Benzo(b)fluoranthene	8.35E-01	mg/kg	7.86E-09	mg/kg-day	7.30E-01	kg-day/mg	1	5.74E-09	5.51E-08	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day	NA	
				Benzo(k)fluoranthene	3.15E-01	mg/kg	2.97E-09	mg/kg-day	7.30E-02	kg-day/mg	1	2.17E-10	2.08E-08	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day	NA	
				Chrysene	7.77E-01	mg/kg	7.32E-09	mg/kg-day	7.30E-03	kg-day/mg	1	5.34E-11	5.12E-08	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day	NA	
				Dibenzo(a,h)anthracene	1.25E-01	mg/kg	1.18E-09	mg/kg-day	7.30E+00	kg-day/mg	1	8.59E-09	8.24E-09	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day	NA	
				Indeno(1,2,3-cd)pyrene	4.18E-01	mg/kg	3.94E-09	mg/kg-day	7.30E-01	kg-day/mg	1	2.87E-09	2.76E-08	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day	NA	
							Exp. Route Total								1.14E-07					4.67E-03
							Exposure Point Total								1.87E-07					8.32E-03
							Exposure Medium Total								1.87E-07					8.32E-03
							Sediment Total								1.87E-07					8.32E-03

**Table C-1.2**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Angler (Catfish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: Angler Receptor Age: Adult
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Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations						Noncancer Hazard Calculations							
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient			
							Value	Units	Value	Units			Value	Units	Value	Units				
Surface Water	Surface Water	Surface Water	Ingestion	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	3.78E-07	ug/L	9.61E-17	mg/kg-day	1.30E+05	kg-day/mg		1.25E-11	6.73E-16	mg/kg-day	7.00E-10	mg/kg-day	9.61E-07			
				<b>Metals</b>																
				Arsenic	7.40E-01	ug/L	1.88E-10	mg/kg-day	1.50E+00	kg-day/mg	1	2.82E-10	1.32E-09	mg/kg-day	3.00E-04	mg/kg-day	4.39E-06			
				Chromium	2.90E+00	ug/L	7.37E-10	mg/kg-day	5.00E-01	kg-day/mg		3.69E-10	5.16E-09	mg/kg-day	3.00E-03	mg/kg-day	1.72E-06			
				Cobalt	9.80E-01	ug/L	2.49E-10	mg/kg-day	NA	kg-day/mg		NA	1.74E-09	mg/kg-day	3.00E-04	mg/kg-day	5.81E-06			
				Manganese	1.40E+02	ug/L	3.56E-08	mg/kg-day	NA	kg-day/mg		NA	2.49E-07	mg/kg-day	2.40E-02	mg/kg-day	1.04E-05			
				<b>Pesticides</b>																
				4,4'-DDT	1.30E-03	ug/L	3.30E-13	mg/kg-day	3.40E-01	kg-day/mg		1.12E-13	2.31E-12	mg/kg-day	5.00E-04	mg/kg-day	4.63E-09			
				<b>PCBs</b>																
				Total PCBs	9.40E-03	ug/L	2.39E-12	mg/kg-day	3.00E-01	kg-day/mg		7.17E-13	1.67E-11	mg/kg-day	2.00E-05	mg/kg-day	8.36E-07			
				<b>Exp. Route Total</b>																2.41E-05
				Dermal	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	3.78E-07	ug/L	1.88E-13	mg/kg-day	1.30E+05	kg-day/mg		2.45E-08	1.32E-12	mg/kg-day	7.00E-10	mg/kg-day	1.88E-03		
					<b>Metals</b>															
					Arsenic	7.40E-01	ug/L	8.94E-11	mg/kg-day	1.50E+00	kg-day/mg	1	1.34E-10	6.25E-10	mg/kg-day	3.00E-04	mg/kg-day	2.08E-06		
					Chromium	2.90E+00	ug/L	7.00E-10	mg/kg-day	2.00E+01	kg-day/mg		1.40E-08	4.90E-09	mg/kg-day	7.50E-05	mg/kg-day	6.54E-05		
Cobalt	9.80E-01	ug/L	4.73E-11		mg/kg-day	NA	kg-day/mg	NA	3.31E-10	mg/kg-day	3.00E-04		mg/kg-day	1.10E-06						
Manganese	1.40E+02	ug/L	1.69E-08		mg/kg-day	NA	kg-day/mg	NA	1.18E-07	mg/kg-day	9.60E-04		mg/kg-day	1.23E-04						
<b>Pesticides</b>																				
4,4'-DDT	1.30E-03	ug/L	3.73E-10		mg/kg-day	3.40E-01	kg-day/mg		1.27E-10	2.61E-09	mg/kg-day	5.00E-04	mg/kg-day	5.23E-06						
<b>PCBs</b>																				
Total PCBs	9.40E-03	ug/L	2.27E-09		mg/kg-day	3.00E-01	kg-day/mg		6.81E-10	1.59E-08	mg/kg-day	2.00E-05	mg/kg-day	7.95E-04						
<b>Exp. Route Total</b>																2.87E-03				
<b>Exposure Point Total</b>																	2.90E-03			
<b>Exposure Medium Total</b>																	2.90E-03			
<b>Surface Water Total</b>																	2.90E-03			
Fish Tissue	Fish Fillet Tissue - Catfish <sup>(2)</sup>	Upper Anacostia Lower Anacostia Upstream Upstream	Ingestion	<b>PCBs</b>																
				Total PCBs	1.98E-01	mg/kg	6.17E-07	mg/kg-day	1.00E+00	kg-day/mg		6.17E-07	4.32E-06	mg/kg-day	2.00E-05	mg/kg-day	2.16E-01			
				PCB-TEQ	4.09E-06	mg/kg	1.28E-11	mg/kg-day	1.30E+05	kg-day/mg		1.66E-06	8.95E-11	mg/kg-day	7.00E-10	mg/kg-day	1.28E-01			
				Total PCBs	2.86E-01	mg/kg	8.94E-07	mg/kg-day	1.00E+00	kg-day/mg		8.94E-07	6.26E-06	mg/kg-day	2.00E-05	mg/kg-day	3.13E-01			
				PCB-TEQ	1.80E-06	mg/kg	5.62E-12	mg/kg-day	1.30E+05	kg-day/mg		7.30E-07	3.93E-11	mg/kg-day	7.00E-10	mg/kg-day	5.62E-02			
				Total PCBs	5.06E-01	mg/kg	1.58E-06	mg/kg-day	1.00E+00	kg-day/mg		1.58E-06	1.11E-05	mg/kg-day	2.00E-05	mg/kg-day	5.54E-01			
				PCB-TEQ	NC		NC		NC			NC	NC		NC		NC			
				<b>Total Receptor Risk/Hazard - Upper Anacostia (Total PCBs)<sup>*</sup></b>																
<b>Total Receptor Risk/Hazard - Upper Anacostia (PCB-TEQ)<sup>*</sup></b>																		1.39E-01		
<b>Total Receptor Risk/Hazard - Lower Anacostia (Total PCBs)<sup>*</sup></b>																		3.24E-01		
<b>Total Receptor Risk/Hazard - Lower Anacostia (PCB-TEQ)<sup>*</sup></b>																		6.74E-02		
<b>Total Receptor Risk/Hazard - Upstream (Total PCBs)<sup>*</sup></b>																		5.65E-01		
<b>Total Receptor Risk/Hazard - Upstream (PCB-TEQ)<sup>*</sup></b>																		NC		



**Table C-1.2**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Angler (Catfish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: Angler Receptor Age: Adult
--

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations					
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient
							Value	Units	Value	Units			Value	Units	Value	Units	

**Notes:**

ADAF - Age-Dependent Adjustment Factor.

CSF - Cancer Slope Factor.

EPC - Exposure Point Concentration.

NA - Not applicable.

NC - Not calculated.

PCB - Polychlorinated Biphenyl.

RfD - Oral Reference Dose.

SVOC - Semivolatile Organic Compound.

TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.

(1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.

(2) Assumes a diet of 100% catfish fillet.

(3) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.

(4) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

**Table C-1.3**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Angler (Mixed Fish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: Angler Receptor Age: Adult
--

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations									
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient				
							Value	Units	Value	Units			Value	Units	Value	Units					
Sediment	Surface Sediment	Nearshore Surface Sediment	Ingestion	<b>Dioxin</b>																	
				2,3,7,8-TCDD-TEQ	4.49E-04	mg/kg	5.71E-12	mg/kg-day	1.30E+05	kg-day/mg		7.43E-07	2.00E-11	mg/kg-day	7.00E-10	mg/kg-day	2.86E-02				
				<b>Metals</b>																	
				Aluminum	9.05E+03	mg/kg	1.15E-04	mg/kg-day	NA	kg-day/mg		NA	4.03E-04	mg/kg-day	1.00E+00	mg/kg-day	4.03E-04				
				Arsenic	7.54E+00	mg/kg	5.75E-08	mg/kg-day	1.50E+00	kg-day/mg		8.63E-08	2.01E-07	mg/kg-day	3.00E-04	mg/kg-day	6.71E-04				
				Chromium	4.67E+01	mg/kg	5.93E-07	mg/kg-day	5.00E-01	kg-day/mg	1	2.96E-07	2.08E-06	mg/kg-day	3.00E-03	mg/kg-day	6.92E-04				
				Cobalt	1.79E+01	mg/kg	2.28E-07	mg/kg-day	NA	kg-day/mg		NA	7.96E-07	mg/kg-day	3.00E-04	mg/kg-day	2.65E-03				
				Manganese	2.57E+02	mg/kg	3.27E-06	mg/kg-day	NA	kg-day/mg		NA	1.14E-05	mg/kg-day	2.40E-02	mg/kg-day	4.76E-04				
				Nickel	7.90E+01	mg/kg	1.00E-06	mg/kg-day	NA	kg-day/mg		NA	3.51E-06	mg/kg-day	2.00E-02	mg/kg-day	1.76E-04				
				Thallium	3.02E-01	mg/kg	3.84E-09	mg/kg-day	NA	kg-day/mg		NA	1.34E-08	mg/kg-day	1.00E-05	mg/kg-day	1.34E-03				
				Vanadium	2.29E+02	mg/kg	2.91E-06	mg/kg-day	NA	kg-day/mg		NA	1.02E-05	mg/kg-day	5.04E-03	mg/kg-day	2.02E-03				
				<b>PCBs</b>																	
				Total PCBs	7.68E-01	mg/kg	9.76E-09	mg/kg-day	2.00E+00	kg-day/mg		1.95E-08	3.42E-08	mg/kg-day	2.00E-05	mg/kg-day	1.71E-03				
				<b>SVOCs</b>																	
				Benzo(a)anthracene	5.65E-01	mg/kg	7.18E-09	mg/kg-day	7.30E-01	kg-day/mg	1	5.24E-09	2.51E-08	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(a)pyrene	6.28E-01	mg/kg	7.98E-09	mg/kg-day	7.30E+00	kg-day/mg	1	5.83E-08	2.79E-08	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(k)fluoranthene	3.67E-01	mg/kg	4.66E-09	mg/kg-day	7.30E-02	kg-day/mg	1	3.41E-10	1.63E-08	mg/kg-day	NA	mg/kg-day	NA				
				Chrysene	8.77E-01	mg/kg	1.11E-08	mg/kg-day	7.30E-03	kg-day/mg	1	8.14E-11	3.90E-08	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(b)fluoranthene	9.51E-01	mg/kg	1.21E-08	mg/kg-day	7.30E-01	kg-day/mg	1	8.82E-09	4.23E-08	mg/kg-day	NA	mg/kg-day	NA				
				Dibenzo(a,h)anthracene	1.42E-01	mg/kg	1.80E-09	mg/kg-day	7.30E+00	kg-day/mg	1	1.32E-08	6.32E-09	mg/kg-day	NA	mg/kg-day	NA				
				Indeno(1,2,3-cd)pyrene	4.79E-01	mg/kg	6.09E-09	mg/kg-day	7.30E-01	kg-day/mg	1	4.44E-09	2.13E-08	mg/kg-day	NA	mg/kg-day	NA				
<b>Exp. Route Total</b>																					
										1.24E-06					3.87E-02						

**Table C-1.3**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Angler (Mixed Fish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Angler
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations									
					Value	Units	Intake/Exposure Concentration		CSF		ADAF (1)	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient				
							Value	Units	Value	Units			Value	Units	Value	Units		Value	Units		
Sediment	Surface Sediment	Nearshore Surface Sediment	Dermal	<b>Dioxin</b>																	
				2,3,7,8-TCDD-TEQ	4.49E-04	mg/kg	3.91E-12	mg/kg-day	1.30E+05	kg-day/mg		5.08E-07	1.37E-11	mg/kg-day	7.00E-10	mg/kg-day	1.95E-02				
				<b>Metals</b>																	
				Aluminum	9.05E+03	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E+00	mg/kg-day	NA				
				Arsenic	7.54E+00	mg/kg	6.56E-08	mg/kg-day	1.50E+00	kg-day/mg		9.84E-08	2.30E-07	mg/kg-day	3.00E-04	mg/kg-day	7.65E-04				
				Chromium	4.67E+01	mg/kg	NA	mg/kg-day	2.00E+01	kg-day/mg	1	NA	NA	mg/kg-day	7.50E-05	mg/kg-day	NA				
				Cobalt	1.79E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	3.00E-04	mg/kg-day	NA				
				Manganese	2.57E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	9.60E-04	mg/kg-day	NA				
				Nickel	7.90E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	8.00E-04	mg/kg-day	NA				
				Thallium	3.02E-01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E-05	mg/kg-day	NA				
				Vanadium	2.29E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.31E-04	mg/kg-day	NA				
				<b>PCBs</b>																	
				Total PCBs	7.68E-01	mg/kg	3.12E-08	mg/kg-day	2.00E+00	kg-day/mg		6.23E-08	1.09E-07	mg/kg-day	2.00E-05	mg/kg-day	5.45E-03				
				<b>SVOCs</b>																	
				Benzo(a)anthracene	5.65E-01	mg/kg	2.13E-08	mg/kg-day	7.30E-01	kg-day/mg	1	1.55E-08	7.45E-08	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(a)pyrene	6.28E-01	mg/kg	2.37E-08	mg/kg-day	7.30E+00	kg-day/mg	1	1.73E-07	8.28E-08	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(b)fluoranthene	9.51E-01	mg/kg	3.58E-08	mg/kg-day	7.30E-01	kg-day/mg	1	2.62E-08	1.25E-07	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(k)fluoranthene	3.67E-01	mg/kg	1.38E-08	mg/kg-day	7.30E-02	kg-day/mg	1	1.01E-09	4.84E-08	mg/kg-day	NA	mg/kg-day	NA				
				Chrysene	8.77E-01	mg/kg	3.30E-08	mg/kg-day	7.30E-03	kg-day/mg	1	2.41E-10	1.16E-07	mg/kg-day	NA	mg/kg-day	NA				
				Dibenzo(a,h)anthracene	1.42E-01	mg/kg	5.35E-09	mg/kg-day	7.30E+00	kg-day/mg	1	3.91E-08	1.87E-08	mg/kg-day	NA	mg/kg-day	NA				
				Indeno(1,2,3-cd)pyrene	4.79E-01	mg/kg	1.80E-08	mg/kg-day	7.30E-01	kg-day/mg	1	1.32E-08	6.32E-08	mg/kg-day	NA	mg/kg-day	NA				
							Exp. Route Total							9.36E-07				2.58E-02			
							Exposure Point Total							2.17E-06				6.45E-02			
			Exposure Medium Total							2.17E-06				6.45E-02							
			Sediment Total							2.17E-06				6.45E-02							



**Table C-1.3**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Angler (Mixed Fish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Angler
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations					
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient
							Value	Units	Value	Units			Value	Units	Value	Units	

**Notes:**

ADAF - Age-Dependent Adjustment Factor.

CSF - Cancer Slope Factor.

EPC - Exposure Point Concentration.

NA - Not applicable.

NC - Not calculated.

PCB - Polychlorinated Biphenyl.

RfD - Oral Reference Dose.

SVOC - Semivolatile Organic Compound.

TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.

(1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.

(2) Assumes a mixed fish diet of equal amounts of each of the species with available filelet data (American eel, catfish, carp, largemouth bass, and sunfish).

(3) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.

(4) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

**Table C-1.4**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Angler (Mixed Fish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
Receptor Population: Angler  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations						Noncancer Hazard Calculations									
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient					
							Value	Units	Value	Units			Value	Units	Value	Units						
Sediment	Surface Sediment	Nearshore Surface Sediment	Ingestion	<b>Dioxin</b>																		
				2,3,7,8-TCDD-TEQ	1.11E-04	mg/kg	1.76E-13	mg/kg-day	1.30E+05	kg-day/mg		2.29E-08	1.23E-12	mg/kg-day	7.00E-10	mg/kg-day	1.76E-03					
				<b>Metals</b>																		
				Aluminum	7.78E+03	mg/kg	1.24E-05	mg/kg-day	NA	kg-day/mg		NA	8.65E-05	mg/kg-day	1.00E+00	mg/kg-day	8.65E-05					
				Arsenic	5.49E+00	mg/kg	5.23E-09	mg/kg-day	1.50E+00	kg-day/mg		7.85E-09	3.66E-08	mg/kg-day	3.00E-04	mg/kg-day	1.22E-04					
				Chromium	4.02E+01	mg/kg	6.38E-08	mg/kg-day	5.00E-01	kg-day/mg	1	3.19E-08	4.47E-07	mg/kg-day	3.00E-03	mg/kg-day	1.49E-04					
				Cobalt	1.59E+01	mg/kg	2.52E-08	mg/kg-day	NA	kg-day/mg		NA	1.76E-07	mg/kg-day	3.00E-04	mg/kg-day	5.88E-04					
				Manganese	2.24E+02	mg/kg	3.56E-07	mg/kg-day	NA	kg-day/mg		NA	2.49E-06	mg/kg-day	2.40E-02	mg/kg-day	1.04E-04					
				Nickel	5.71E+01	mg/kg	9.07E-08	mg/kg-day	NA	kg-day/mg		NA	6.35E-07	mg/kg-day	2.00E-02	mg/kg-day	3.18E-05					
				Thallium	2.34E-01	mg/kg	3.72E-10	mg/kg-day	NA	kg-day/mg		NA	2.60E-09	mg/kg-day	1.00E-05	mg/kg-day	2.60E-04					
				Vanadium	1.07E+02	mg/kg	1.70E-07	mg/kg-day	NA	kg-day/mg		NA	1.19E-06	mg/kg-day	5.04E-03	mg/kg-day	2.36E-04					
				<b>PCBs</b>																		
				Total PCBs	5.58E-01	mg/kg	8.87E-10	mg/kg-day	1.00E+00	kg-day/mg		8.87E-10	6.21E-09	mg/kg-day	2.00E-05	mg/kg-day	3.10E-04					
				<b>SVOCs</b>																		
				Benzo(a)anthracene	4.95E-01	mg/kg	7.86E-10	mg/kg-day	7.30E-01	kg-day/mg	1	5.74E-10	5.51E-09	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(a)pyrene	5.54E-01	mg/kg	8.80E-10	mg/kg-day	7.30E+00	kg-day/mg	1	6.43E-09	6.16E-09	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(b)fluoranthene	8.35E-01	mg/kg	1.33E-09	mg/kg-day	7.30E-01	kg-day/mg	1	9.68E-10	9.29E-09	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(k)fluoranthene	3.15E-01	mg/kg	5.01E-10	mg/kg-day	7.30E-02	kg-day/mg	1	3.65E-11	3.50E-09	mg/kg-day	NA	mg/kg-day	NA					
				Chrysene	7.77E-01	mg/kg	1.23E-09	mg/kg-day	7.30E-03	kg-day/mg	1	9.01E-12	8.64E-09	mg/kg-day	NA	mg/kg-day	NA					
				Dibenzo(a,h)anthracene	1.25E-01	mg/kg	1.99E-10	mg/kg-day	7.30E+00	kg-day/mg	1	1.45E-09	1.39E-09	mg/kg-day	NA	mg/kg-day	NA					
				Indeno(1,2,3-cd)pyrene	4.18E-01	mg/kg	6.64E-10	mg/kg-day	7.30E-01	kg-day/mg	1	4.85E-10	4.65E-09	mg/kg-day	NA	mg/kg-day	NA					
				<b>Exp. Route Total</b>																		
											<b>7.35E-08</b>						<b>3.65E-03</b>					

**Table C-1.4**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Angler (Mixed Fish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Angler
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations								
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient			
							Value	Units	Value	Units			Value	Units	Value	Units				
Sediment	Surface Sediment	Nearshore Surface Sediment	Dermal	<b>Dioxin</b>	1.11E-04	mg/kg	2.41E-13	mg/kg-day	1.30E+05	kg-day/mg		3.14E-08	1.69E-12	mg/kg-day	7.00E-10	mg/kg-day	2.41E-03			
				<b>Metals</b>																
				Aluminum	7.78E+03	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E+00	mg/kg-day	NA	mg/kg-day	NA	
				Arsenic	5.49E+00	mg/kg	1.19E-08	mg/kg-day	1.50E+00	kg-day/mg		1.79E-08	8.35E-08	mg/kg-day	3.00E-04	mg/kg-day	2.78E-04	mg/kg-day	NA	
				Chromium	4.02E+01	mg/kg	NA	mg/kg-day	2.00E+01	kg-day/mg	1	NA	NA	mg/kg-day	7.50E-05	mg/kg-day	NA	mg/kg-day	NA	
				Cobalt	1.59E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	3.00E-04	mg/kg-day	NA	mg/kg-day	NA	
				Manganese	2.24E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	9.60E-04	mg/kg-day	NA	mg/kg-day	NA	
				Nickel	5.71E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	8.00E-04	mg/kg-day	NA	mg/kg-day	NA	
				Thallium	2.34E-01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E-05	mg/kg-day	NA	mg/kg-day	NA	
				Vanadium	1.07E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.31E-04	mg/kg-day	NA	mg/kg-day	NA	
				<b>PCBs</b>																
				Total PCBs	5.58E-01	mg/kg	5.66E-09	mg/kg-day	1.00E+00	kg-day/mg		5.66E-09	3.96E-08	mg/kg-day	2.00E-05	mg/kg-day	1.98E-03	mg/kg-day	NA	
				<b>SVOCs</b>																
				Benzo(a)anthracene	4.95E-01	mg/kg	4.66E-09	mg/kg-day	7.30E-01	kg-day/mg	1	3.40E-09	3.26E-08	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day	NA	
				Benzo(a)pyrene	5.54E-01	mg/kg	5.22E-09	mg/kg-day	7.30E+00	kg-day/mg	1	3.81E-08	3.65E-08	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day	NA	
				Benzo(b)fluoranthene	8.35E-01	mg/kg	7.86E-09	mg/kg-day	7.30E-01	kg-day/mg	1	5.74E-09	5.51E-08	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day	NA	
				Benzo(k)fluoranthene	3.15E-01	mg/kg	2.97E-09	mg/kg-day	7.30E-02	kg-day/mg	1	2.17E-10	2.08E-08	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day	NA	
				Chrysene	7.77E-01	mg/kg	7.32E-09	mg/kg-day	7.30E-03	kg-day/mg	1	5.34E-11	5.12E-08	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day	NA	
				Dibenzo(a,h)anthracene	1.25E-01	mg/kg	1.18E-09	mg/kg-day	7.30E+00	kg-day/mg	1	8.59E-09	8.24E-09	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day	NA	
				Indeno(1,2,3-cd)pyrene	4.18E-01	mg/kg	3.94E-09	mg/kg-day	7.30E-01	kg-day/mg	1	2.87E-09	2.76E-08	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day	NA	
							<b>Exp. Route Total</b>								1.14E-07					4.67E-03
							<b>Exposure Point Total</b>								1.87E-07					8.32E-03
							<b>Exposure Medium Total</b>								1.87E-07					8.32E-03
<b>Sediment Total</b>											1.87E-07					8.32E-03				

**Table C-1.4**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Angler (Mixed Fish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Angler  
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations						Noncancer Hazard Calculations									
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient					
							Value	Units	Value	Units			Value	Units	Value	Units						
Surface Water	Surface Water	Surface Water	Ingestion	Dioxin 2,3,7,8-TCDD-TEQ	3.78E-07	ug/L	9.61E-17	mg/kg-day	1.30E+05	kg-day/mg		1.25E-11	6.73E-16	mg/kg-day	7.00E-10	mg/kg-day	9.61E-07					
				<b>Metals</b>																		
				Arsenic	7.40E-01	ug/L	1.88E-10	mg/kg-day	1.50E+00	kg-day/mg		2.82E-10	1.32E-09	mg/kg-day	3.00E-04	mg/kg-day	4.39E-06					
				Chromium	2.90E+00	ug/L	7.37E-10	mg/kg-day	5.00E-01	kg-day/mg	1	3.69E-10	5.16E-09	mg/kg-day	3.00E-03	mg/kg-day	1.72E-06					
				Cobalt	9.80E-01	ug/L	2.49E-10	mg/kg-day	NA	kg-day/mg		NA	1.74E-09	mg/kg-day	3.00E-04	mg/kg-day	5.81E-06					
				Manganese	1.40E+02	ug/L	3.56E-08	mg/kg-day	NA	kg-day/mg		NA	2.49E-07	mg/kg-day	2.40E-02	mg/kg-day	1.04E-05					
				<b>Pesticides</b>																		
				4,4'-DDT	1.30E-03	ug/L	3.30E-13	mg/kg-day	3.40E-01	kg-day/mg		1.12E-13	2.31E-12	mg/kg-day	5.00E-04	mg/kg-day	4.63E-09					
				<b>PCBs</b>																		
			Total PCBs	9.40E-03	ug/L	2.39E-12	mg/kg-day	3.00E-01	kg-day/mg		7.17E-13	1.67E-11	mg/kg-day	2.00E-05	mg/kg-day	8.36E-07						
			<b>Exp. Route Total</b>																2.41E-05			
			Dermal	Dioxin 2,3,7,8-TCDD-TEQ	3.78E-07	ug/L	1.88E-13	mg/kg-day	1.30E+05	kg-day/mg		2.45E-08	1.32E-12	mg/kg-day	7.00E-10	mg/kg-day	1.88E-03					
				<b>Metals</b>																		
				Arsenic	7.40E-01	ug/L	8.94E-11	mg/kg-day	1.50E+00	kg-day/mg		1.34E-10	6.25E-10	mg/kg-day	3.00E-04	mg/kg-day	2.08E-06					
				Chromium	2.90E+00	ug/L	7.00E-10	mg/kg-day	2.00E+01	kg-day/mg	1	1.40E-08	4.90E-09	mg/kg-day	7.50E-05	mg/kg-day	6.54E-05					
				Cobalt	9.80E-01	ug/L	4.73E-11	mg/kg-day	NA	kg-day/mg		NA	3.31E-10	mg/kg-day	3.00E-04	mg/kg-day	1.10E-06					
				Manganese	1.40E+02	ug/L	1.69E-08	mg/kg-day	NA	kg-day/mg		NA	1.18E-07	mg/kg-day	9.60E-04	mg/kg-day	1.23E-04					
				<b>Pesticides</b>																		
4,4'-DDT	1.30E-03	ug/L		3.73E-10	mg/kg-day	3.40E-01	kg-day/mg		1.27E-10	2.61E-09	mg/kg-day	5.00E-04	mg/kg-day	5.23E-06								
<b>PCBs</b>																						
Total PCBs	9.40E-03	ug/L	2.27E-09	mg/kg-day	3.00E-01	kg-day/mg		6.81E-10	1.59E-08	mg/kg-day	2.00E-05	mg/kg-day	7.95E-04									
<b>Exp. Route Total</b>																2.87E-03						
<b>Exposure Point Total</b>																	2.90E-03					
<b>Exposure Medium Total</b>																	2.90E-03					
<b>Surface Water Total</b>																	4.01E-08					2.90E-03
Fish Tissue	Fish Fillet Tissue - Mixed Diet <sup>(2)</sup>	Upper Anacostia Lower Anacostia Upstream Upstream	Ingestion	<b>PCBs</b>																		
				Total PCBs	1.15E-01	mg/kg	3.60E-07	mg/kg-day	1.00E+00	kg-day/mg		3.60E-07	2.52E-06	mg/kg-day	2.00E-05	mg/kg-day	1.26E-01					
				PCB-TEQ	4.58E-06	mg/kg	1.43E-11	mg/kg-day	1.30E+05	kg-day/mg		1.86E-06	1.00E-10	mg/kg-day	7.00E-10	mg/kg-day	1.43E-01					
				Total PCBs	3.26E-01	mg/kg	1.02E-06	mg/kg-day	1.00E+00	kg-day/mg		1.02E-06	7.12E-06	mg/kg-day	2.00E-05	mg/kg-day	3.56E-01					
				PCB-TEQ	4.63E-06	mg/kg	1.45E-11	mg/kg-day	1.30E+05	kg-day/mg		1.88E-06	1.01E-10	mg/kg-day	7.00E-10	mg/kg-day	1.45E-01					
				Total PCBs	6.66E-01	mg/kg	2.08E-06	mg/kg-day	1.00E+00	kg-day/mg		2.08E-06	1.46E-05	mg/kg-day	2.00E-05	mg/kg-day	7.28E-01					
				PCB-TEQ	NC		NC		NC			NC	NC		NC		NC					
				<b>Total Receptor Risk/Hazard - Upper Anacostia (Total PCBs)*</b>																1.37E-01		
				<b>Total Receptor Risk/Hazard - Upper Anacostia (PCB-TEQ)*</b>																1.54E-01		
				<b>Total Receptor Risk/Hazard - Lower Anacostia (Total PCBs)*</b>																3.67E-01		
<b>Total Receptor Risk/Hazard - Lower Anacostia (PCB-TEQ)*</b>																1.56E-01						
<b>Total Receptor Risk/Hazard - Upstream (Total PCBs)*</b>																7.40E-01						
<b>Total Receptor Risk/Hazard - Upstream (PCB-TEQ)*</b>																NC						



**Table C-1.4**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Angler (Mixed Fish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: Angler Receptor Age: Adult
--

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations					
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient
							Value	Units	Value	Units			Value	Units	Value	Units	

- Notes:**  
 ADAF - Age-Dependent Adjustment Factor.  
 CSF - Cancer Slope Factor.  
 EPC - Exposure Point Concentration.  
 NA - Not applicable.  
 NC - Not calculated.  
 PCB - Polychlorinated Biphenyl.  
 RfD - Oral Reference Dose.  
 SVOC - Semivolatile Organic Compound.  
 TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.
- (1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.
  - (2) Assumes a mixed fish diet of equal amounts of each of the species with available fillet data (American eel, catfish, carp, largemouth bass, and sunfish).
  - (3) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.
  - (4) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

**Table C-1.5**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Child Angler (Catfish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: Angler Receptor Age: Child
--

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations							
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient		
							Value	Units	Value	Units			Value	Units	Value	Units			
Fish Tissue	Fish Fillet Tissue - Catfish <sup>(2)</sup>	Upper Anacostia	Ingestion	<b>PCBs</b>															
				Total PCBs	2.54E-01	mg/kg	3.90E-06	mg/kg-day	2.00E+00	kg-day/mg		7.80E-06	4.55E-05	mg/kg-day	2.00E-05	mg/kg-day		2.27E+00	
				PCB-TEQ	5.14E-06	mg/kg	7.88E-11	mg/kg-day	1.30E+05	kg-day/mg		1.02E-05	9.20E-10	mg/kg-day	7.00E-10	mg/kg-day		1.31E+00	
				Lower Anacostia	Total PCBs	4.52E-01	mg/kg	6.94E-06	mg/kg-day	2.00E+00	kg-day/mg		1.39E-05	8.10E-05	mg/kg-day	2.00E-05	mg/kg-day		4.05E+00
				Lower Anacostia	PCB-TEQ	1.84E-06	mg/kg	2.82E-11	mg/kg-day	1.30E+05	kg-day/mg		3.67E-06	3.29E-10	mg/kg-day	7.00E-10	mg/kg-day		4.70E-01
				Upstream	Total PCBs	7.11E-01	mg/kg	1.09E-05	mg/kg-day	2.00E+00	kg-day/mg		2.18E-05	1.27E-04	mg/kg-day	2.00E-05	mg/kg-day		6.37E+00
				Upstream	PCB-TEQ	NC		NC		NC			NC	NC		NC			NC
Total Receptor Risk/Hazard - Upper Anacostia (Total PCBs) <sup>3</sup>															7.80E-06		2.27E+00		
Total Receptor Risk/Hazard - Upper Anacostia (PCB-TEQ) <sup>4</sup>															1.02E-05		1.31E+00		
Total Receptor Risk/Hazard - Lower Anacostia (Total PCBs) <sup>3</sup>															1.39E-05		4.05E+00		
Total Receptor Risk/Hazard - Lower Anacostia (PCB-TEQ) <sup>4</sup>															3.67E-06		4.70E-01		
Total Receptor Risk/Hazard - Upstream (Total PCBs) <sup>3</sup>															2.18E-05		6.37E+00		
Total Receptor Risk/Hazard - Upstream (PCB-TEQ) <sup>4</sup>															NC		NC		

**Notes:**  
 ADAF - Age-Dependent Adjustment Factor.  
 CSF - Cancer Slope Factor.  
 EPC - Exposure Point Concentration.  
 NA - Not applicable.  
 NC - Not calculated.  
 PCB - Polychlorinated Biphenyl.  
 RfD - Oral Reference Dose.  
 (1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.  
 (2) Assumes a diet of 100% catfish.  
 (3) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.  
 (4) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

**Table C-1.6**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Child Angler (Catfish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: Angler Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations						
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient	
							Value	Units	Value	Units			Value	Units	Value	Units		
Fish Tissue	Fish Fillet Tissue - Catfish <sup>(2)</sup>	Upper Anacostia	Ingestion	<b>PCBs</b>														
				Total PCBs	1.98E-01	mg/kg	1.74E-07	mg/kg-day	1.00E+00	kg-day/mg		1.74E-07	6.10E-06	mg/kg-day	2.00E-05	mg/kg-day	3.05E-01	
				PCB-TEQ	4.09E-06	mg/kg	3.61E-12	mg/kg-day	1.30E+05	kg-day/mg		4.69E-07	1.26E-10	mg/kg-day	7.00E-10	mg/kg-day	1.81E-01	
				Lower Anacostia	Total PCBs	2.86E-01	mg/kg	2.52E-07	mg/kg-day	1.00E+00	kg-day/mg		2.52E-07	8.83E-06	mg/kg-day	2.00E-05	mg/kg-day	4.42E-01
				Lower Anacostia	PCB-TEQ	1.80E-06	mg/kg	1.59E-12	mg/kg-day	1.30E+05	kg-day/mg		2.06E-07	5.55E-11	mg/kg-day	7.00E-10	mg/kg-day	7.93E-02
				Upstream	Total PCBs	5.06E-01	mg/kg	4.47E-07	mg/kg-day	1.00E+00	kg-day/mg		4.47E-07	1.56E-05	mg/kg-day	2.00E-05	mg/kg-day	7.82E-01
				Upstream	PCB-TEQ	NC		NC		NC		NC		NC		NC		NC
Total Receptor Risk/Hazard - Upper Anacostia (Total PCBs) <sup>3</sup>															1.74E-07		3.05E-01	
Total Receptor Risk/Hazard - Upper Anacostia (PCB-TEQ) <sup>4</sup>															4.69E-07			1.81E-01
Total Receptor Risk/Hazard - Lower Anacostia (Total PCBs) <sup>3</sup>															2.52E-07			4.42E-01
Total Receptor Risk/Hazard - Lower Anacostia (PCB-TEQ) <sup>4</sup>															2.06E-07			7.93E-02
Total Receptor Risk/Hazard - Upstream (Total PCBs) <sup>3</sup>															4.47E-07			7.82E-01
Total Receptor Risk/Hazard - Upstream (PCB-TEQ) <sup>4</sup>															NC			NC

**Notes:**

ADAF - Age-Dependent Adjustment Factor.

CSF - Cancer Slope Factor.

EPC - Exposure Point Concentration.

NA - Not applicable.

NC - Not calculated

PCB - Polychlorinated Biphenyl.

RfD - Oral Reference Dose.

(1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.

(2) Assumes a diet of 100% catfish.

(3) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.

(4) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

**Table C-1.7**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Child Angler (Mixed Fish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: Angler Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations						
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient	
							Value	Units	Value	Units			Value	Units	Value	Units		
Fish Tissue	Fish Fillet Tissue - Mixed Diet <sup>(2)</sup>	Upper Anacostia	Ingestion	<b>PCBs</b>														
				Total PCBs	1.29E-01	mg/kg	1.98E-06	mg/kg-day	2.00E+00	kg-day/mg		3.97E-06	2.31E-05	mg/kg-day	2.00E-05	mg/kg-day	1.16E+00	
				PCB-TEQ	4.84E-06	mg/kg	7.43E-11	mg/kg-day	1.30E+05	kg-day/mg		9.66E-06	8.67E-10	mg/kg-day	7.00E-10	mg/kg-day	1.24E+00	
				Lower Anacostia	Total PCBs	3.59E-01	mg/kg	5.51E-06	mg/kg-day	2.00E+00	kg-day/mg		1.10E-05	6.43E-05	mg/kg-day	2.00E-05	mg/kg-day	3.21E+00
				Lower Anacostia	PCB-TEQ	4.64E-06	mg/kg	7.12E-11	mg/kg-day	1.30E+05	kg-day/mg		9.26E-06	8.31E-10	mg/kg-day	7.00E-10	mg/kg-day	1.19E+00
				Upstream	Total PCBs	7.64E-01	mg/kg	1.17E-05	mg/kg-day	2.00E+00	kg-day/mg		2.34E-05	1.37E-04	mg/kg-day	2.00E-05	mg/kg-day	6.84E+00
				Upstream	PCB-TEQ	NC		NC		NC		NC		NC		NC		NC
Total Receptor Risk/Hazard - Upper Anacostia (Total PCBs) <sup>3</sup>											3.97E-06			1.16E+00				
Total Receptor Risk/Hazard - Upper Anacostia (PCB-TEQ) <sup>4</sup>											9.66E-06			1.24E+00				
Total Receptor Risk/Hazard - Lower Anacostia (Total PCBs) <sup>3</sup>											1.10E-05			3.21E+00				
Total Receptor Risk/Hazard - Lower Anacostia (PCB-TEQ) <sup>4</sup>											9.26E-06			1.19E+00				
Total Receptor Risk/Hazard - Upstream (Total PCBs) <sup>3</sup>											2.34E-05			6.84E+00				
Total Receptor Risk/Hazard - Upstream (PCB-TEQ) <sup>4</sup>											NC			NC				

**Notes:**

- ADAF - Age-Dependent Adjustment Factor.
- CSF - Cancer Slope Factor.
- EPC - Exposure Point Concentration.
- NA - Not applicable.
- NC - Not calculated
- PCB - Polychlorinated Biphenyl.
- RfD - Oral Reference Dose.

(1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.  
 (2) Assumes a mixed fish diet of equal amounts of each of the species with available fillet data (American eel, catfish, carp, largemouth bass, and sunfish).  
 (3) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.  
 (4) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

**Table C-1.8**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Child Angler (Mixed Fish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: Angler Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations						
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient	
							Value	Units	Value	Units			Value	Units	Value	Units		
Fish Tissue	Fish Fillet Tissue - Mixed Diet <sup>(2)</sup>	Upper Anacostia	Ingestion	<b>PCBs</b>														
				Total PCBs	1.15E-01	mg/kg	1.02E-07	mg/kg-day	1.00E+00	kg-day/mg		1.02E-07	3.55E-06	mg/kg-day	2.00E-05	mg/kg-day	1.78E-01	
				PCB-TEQ	4.58E-06	mg/kg	4.04E-12	mg/kg-day	1.30E+05	kg-day/mg		5.25E-07	1.41E-10	mg/kg-day	7.00E-10	mg/kg-day	2.02E-01	
				Lower Anacostia	Total PCBs	3.26E-01	mg/kg	2.87E-07	mg/kg-day	1.00E+00	kg-day/mg		2.87E-07	1.01E-05	mg/kg-day	2.00E-05	mg/kg-day	5.03E-01
				Lower Anacostia	PCB-TEQ	4.63E-06	mg/kg	4.08E-12	mg/kg-day	1.30E+05	kg-day/mg		5.31E-07	1.43E-10	mg/kg-day	7.00E-10	mg/kg-day	2.04E-01
				Upstream	Total PCBs	6.66E-01	mg/kg	5.88E-07	mg/kg-day	1.00E+00	kg-day/mg		5.88E-07	2.06E-05	mg/kg-day	2.00E-05	mg/kg-day	1.03E+00
				Upstream	PCB-TEQ	NC		NC		NC		NC		NC		NC		NC
Total Receptor Risk/Hazard - Upper Anacostia (Total PCBs) <sup>3</sup>															1.02E-07		1.78E-01	
Total Receptor Risk/Hazard - Upper Anacostia (PCB-TEQ) <sup>4</sup>															5.25E-07			2.02E-01
Total Receptor Risk/Hazard - Lower Anacostia (Total PCBs) <sup>3</sup>															2.87E-07			5.03E-01
Total Receptor Risk/Hazard - Lower Anacostia (PCB-TEQ) <sup>4</sup>															5.31E-07			2.04E-01
Total Receptor Risk/Hazard - Upstream (Total PCBs) <sup>3</sup>															5.88E-07			1.03E+00
Total Receptor Risk/Hazard - Upstream (PCB-TEQ) <sup>4</sup>															NC			NC

**Notes:**  
 ADAF - Age-Dependent Adjustment Factor.  
 CSF - Cancer Slope Factor.  
 EPC - Exposure Point Concentration.  
 NA - Not applicable.  
 NC - Not calculated.  
 PCB - Polychlorinated Biphenyl.  
 RfD - Oral Reference Dose.

(1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.  
 (2) Assumes a mixed fish diet of equal amounts of each of the species with available fillet data (American eel, catfish, carp, largemouth bass, and sunfish).  
 (3) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.  
 (4) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

**Table C-1.9**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Angler (Catfish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Angler
Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations															
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient										
							Value	Units	Value	Units			Value	Units	Value	Units											
Sediment	Surface Sediment	Nearshore Surface Sediment	Ingestion	<b>Dioxin</b>																							
				2,3,7,8-TCDD-TEQ	4.49E-04	mg/kg	5.17E-12	mg/kg-day	1.30E+05	kg-day/mg		6.73E-07	3.02E-11	mg/kg-day	7.00E-10	mg/kg-day	4.31E-02										
				<b>Metals</b>																							
				Aluminum	9.05E+03	mg/kg	1.04E-04	mg/kg-day	NA	kg-day/mg		NA	6.08E-04	mg/kg-day	1.00E+00	mg/kg-day	6.08E-04										
				Arsenic	7.54E+00	mg/kg	5.21E-08	mg/kg-day	1.50E+00	kg-day/mg		7.81E-08	3.04E-07	mg/kg-day	3.00E-04	mg/kg-day	1.01E-03										
				Chromium	4.67E+01	mg/kg	5.37E-07	mg/kg-day	5.00E-01	kg-day/mg	2.5	6.71E-07	3.13E-06	mg/kg-day	3.00E-03	mg/kg-day	1.04E-03										
				Cobalt	1.79E+01	mg/kg	2.06E-07	mg/kg-day	NA	kg-day/mg		NA	1.20E-06	mg/kg-day	3.00E-04	mg/kg-day	4.01E-03										
				Manganese	2.57E+02	mg/kg	2.96E-06	mg/kg-day	NA	kg-day/mg		NA	1.73E-05	mg/kg-day	2.40E-02	mg/kg-day	7.19E-04										
				Nickel	7.90E+01	mg/kg	9.09E-07	mg/kg-day	NA	kg-day/mg		NA	5.30E-06	mg/kg-day	2.00E-02	mg/kg-day	2.65E-04										
				Thallium	3.02E-01	mg/kg	3.48E-09	mg/kg-day	NA	kg-day/mg		NA	2.03E-08	mg/kg-day	1.00E-05	mg/kg-day	2.03E-03										
				Vanadium	2.29E+02	mg/kg	2.63E-06	mg/kg-day	NA	kg-day/mg		NA	1.54E-05	mg/kg-day	5.04E-03	mg/kg-day	3.05E-03										
				<b>PCBs</b>																							
				Total PCBs	7.68E-01	mg/kg	8.84E-09	mg/kg-day	2.00E+00	kg-day/mg		1.77E-08	5.16E-08	mg/kg-day	2.00E-05	mg/kg-day	2.58E-03										
				<b>SVOCs</b>																							
				Benzo(a)anthracene	5.65E-01	mg/kg	6.50E-09	mg/kg-day	7.30E-01	kg-day/mg	2.5	1.19E-08	3.79E-08	mg/kg-day	NA	mg/kg-day	NA										
				Benzo(a)pyrene	6.28E-01	mg/kg	7.23E-09	mg/kg-day	7.30E+00	kg-day/mg	2.5	1.32E-07	4.22E-08	mg/kg-day	NA	mg/kg-day	NA										
				Benzo(b)fluoranthene	9.51E-01	mg/kg	1.09E-08	mg/kg-day	7.30E-01	kg-day/mg	2.5	2.00E-08	6.39E-08	mg/kg-day	NA	mg/kg-day	NA										
				Benzo(k)fluoranthene	3.67E-01	mg/kg	4.22E-09	mg/kg-day	7.30E-02	kg-day/mg	2.5	7.71E-10	2.46E-08	mg/kg-day	NA	mg/kg-day	NA										
				Chrysene	8.77E-01	mg/kg	1.01E-08	mg/kg-day	7.30E-03	kg-day/mg	2.5	1.84E-10	5.89E-08	mg/kg-day	NA	mg/kg-day	NA										
				Dibenzo(a,h)anthracene	1.42E-01	mg/kg	1.63E-09	mg/kg-day	7.30E+00	kg-day/mg	2.5	2.98E-08	9.54E-09	mg/kg-day	NA	mg/kg-day	NA										
				Indeno(1,2,3-cd)pyrene	4.79E-01	mg/kg	5.51E-09	mg/kg-day	7.30E-01	kg-day/mg	2.5	1.01E-08	3.22E-08	mg/kg-day	NA	mg/kg-day	NA										
				<b>Exp. Route Total</b>																							
															1.64E-06					5.84E-02							

**Table C-1.9**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Angler (Catfish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Angler
Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations										
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient					
							Value	Units	Value	Units			Value	Units	Value	Units						
Sediment	Surface Sediment	Nearshore Surface Sediment	Dermal	<b>Dioxin</b>																		
				2,3,7,8-TCDD-TEQ	4.49E-04	mg/kg	2.10E-12	mg/kg-day	1.30E+05	kg-day/mg		2.73E-07	1.23E-11	mg/kg-day	7.00E-10	mg/kg-day	1.75E-02					
				<b>Metals</b>																		
				Aluminum	9.05E+03	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E+00	mg/kg-day	NA	mg/kg-day	NA			
				Arsenic	7.54E+00	mg/kg	3.53E-08	mg/kg-day	1.50E+00	kg-day/mg		5.29E-08	2.06E-07	mg/kg-day	3.00E-04	mg/kg-day	6.86E-04					
				Chromium	4.67E+01	mg/kg	NA	mg/kg-day	2.00E+01	kg-day/mg	2.5	NA	NA	mg/kg-day	7.50E-05	mg/kg-day	NA					
				Cobalt	1.79E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	3.00E-04	mg/kg-day	NA					
				Manganese	2.57E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	9.60E-04	mg/kg-day	NA					
				Nickel	7.90E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	8.00E-04	mg/kg-day	NA					
				Thallium	3.02E-01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E-05	mg/kg-day	NA					
				Vanadium	2.29E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.31E-04	mg/kg-day	NA					
				<b>PCBs</b>																		
				Total PCBs	7.68E-01	mg/kg	1.68E-08	mg/kg-day	2.00E+00	kg-day/mg		3.35E-08	9.78E-08	mg/kg-day	2.00E-05	mg/kg-day	4.89E-03					
				<b>SVOCs</b>																		
				Benzo(a)anthracene	5.65E-01	mg/kg	1.15E-08	mg/kg-day	7.30E-01	kg-day/mg	2.5	2.09E-08	6.68E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(a)pyrene	6.28E-01	mg/kg	1.27E-08	mg/kg-day	7.30E+00	kg-day/mg	2.5	2.32E-07	7.43E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(b)fluoranthene	9.51E-01	mg/kg	1.93E-08	mg/kg-day	7.30E-01	kg-day/mg	2.5	3.52E-08	1.12E-07	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(k)fluoranthene	3.67E-01	mg/kg	7.44E-09	mg/kg-day	7.30E-02	kg-day/mg	2.5	1.36E-09	4.34E-08	mg/kg-day	NA	mg/kg-day	NA					
				Chrysene	8.77E-01	mg/kg	1.78E-08	mg/kg-day	7.30E-03	kg-day/mg	2.5	3.25E-10	1.04E-07	mg/kg-day	NA	mg/kg-day	NA					
				Dibenzo(a,h)anthracene	1.42E-01	mg/kg	2.88E-09	mg/kg-day	7.30E+00	kg-day/mg	2.5	5.25E-08	1.68E-08	mg/kg-day	NA	mg/kg-day	NA					
				Indeno(1,2,3-cd)pyrene	4.79E-01	mg/kg	9.71E-09	mg/kg-day	7.30E-01	kg-day/mg	2.5	1.77E-08	5.67E-08	mg/kg-day	NA	mg/kg-day	NA					
							Exp. Route Total							7.20E-07				2.31E-02				
							Exposure Point Total							2.36E-06				8.15E-02				
			Exposure Medium Total							2.36E-06				8.15E-02								
			Sediment Total							2.36E-06				8.15E-02								





**Table C-1.9  
 Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Angler (Catfish Diet)  
 Reasonable Maximum Exposure  
 Benning Road Facility RI/FS Project  
 3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: Angler Receptor Age: Teen
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Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations					
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient
							Value	Units	Value	Units			Value	Units	Value	Units	

**Notes:**

- ADAF - Age-Dependent Adjustment Factor.
- CSF - Cancer Slope Factor.
- EPC - Exposure Point Concentration.
- NA - Not applicable.
- NC - Not calculated.
- PCB - Polychlorinated Biphenyl.
- RfD - Oral Reference Dose.
- SVOC - Semivolatile Organic Compound.
- TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.
- (1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.
- (2) Assumes diet of 100% catfish.
- (3) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.
- (4) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

**Table C-1.10**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Angler (Catfish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Angler
Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations						Noncancer Hazard Calculations									
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient					
							Value	Units	Value	Units			Value	Units	Value	Units		Value	Units			
Sediment	Surface Sediment	Nearshore Surface Sediment	Ingestion	<b>Dioxin</b>																		
				2,3,7,8-TCDD-TEQ	1.11E-04	mg/kg	1.60E-13	mg/kg-day	1.30E+05	kg-day/mg		2.08E-08	1.86E-12	mg/kg-day	7.00E-10	mg/kg-day	2.66E-03					
				<b>Metals</b>																		
				Aluminum	7.78E+03	mg/kg	1.12E-05	mg/kg-day	NA	kg-day/mg		NA	1.31E-04	mg/kg-day	1.00E+00	mg/kg-day	1.31E-04					
				Arsenic	5.49E+00	mg/kg	4.74E-09	mg/kg-day	1.50E+00	kg-day/mg		7.11E-09	5.53E-08	mg/kg-day	3.00E-04	mg/kg-day	1.84E-04					
				Chromium	4.02E+01	mg/kg	5.78E-08	mg/kg-day	5.00E-01	kg-day/mg	2.5	7.22E-08	6.74E-07	mg/kg-day	3.00E-03	mg/kg-day	2.25E-04					
				Cobalt	1.59E+01	mg/kg	2.28E-08	mg/kg-day	NA	kg-day/mg		NA	2.66E-07	mg/kg-day	3.00E-04	mg/kg-day	8.87E-04					
				Manganese	2.24E+02	mg/kg	3.23E-07	mg/kg-day	NA	kg-day/mg		NA	3.76E-06	mg/kg-day	2.40E-02	mg/kg-day	1.57E-04					
				Nickel	5.71E+01	mg/kg	8.22E-08	mg/kg-day	NA	kg-day/mg		NA	9.59E-07	mg/kg-day	2.00E-02	mg/kg-day	4.79E-05					
				Thallium	2.34E-01	mg/kg	3.37E-10	mg/kg-day	NA	kg-day/mg		NA	3.93E-09	mg/kg-day	1.00E-05	mg/kg-day	3.93E-04					
				Vanadium	1.07E+02	mg/kg	1.54E-07	mg/kg-day	NA	kg-day/mg		NA	1.80E-06	mg/kg-day	5.04E-03	mg/kg-day	3.57E-04					
				<b>PCBs</b>																		
				Total PCBs	5.58E-01	mg/kg	8.03E-10	mg/kg-day	1.00E+00	kg-day/mg		8.03E-10	9.37E-09	mg/kg-day	2.00E-05	mg/kg-day	4.68E-04					
				<b>SVOCs</b>																		
				Benzo(a)anthracene	4.95E-01	mg/kg	7.12E-10	mg/kg-day	7.30E-01	kg-day/mg	2.5	1.30E-09	8.31E-09	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(a)pyrene	5.54E-01	mg/kg	7.97E-10	mg/kg-day	7.30E+00	kg-day/mg	2.5	1.45E-08	9.30E-09	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(b)fluoranthene	8.35E-01	mg/kg	1.20E-09	mg/kg-day	7.30E-01	kg-day/mg	2.5	2.19E-09	1.40E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(k)fluoranthene	3.15E-01	mg/kg	4.53E-10	mg/kg-day	7.30E-02	kg-day/mg	2.5	8.27E-11	5.29E-09	mg/kg-day	NA	mg/kg-day	NA					
				Chrysene	7.77E-01	mg/kg	1.12E-09	mg/kg-day	7.30E-03	kg-day/mg	2.5	2.04E-11	1.30E-08	mg/kg-day	NA	mg/kg-day	NA					
				Dibenzo(a,h)anthracene	1.25E-01	mg/kg	1.80E-10	mg/kg-day	7.30E+00	kg-day/mg	2.5	3.28E-09	2.10E-09	mg/kg-day	NA	mg/kg-day	NA					
				Indeno(1,2,3-cd)pyrene	4.18E-01	mg/kg	6.01E-10	mg/kg-day	7.30E-01	kg-day/mg	2.5	1.10E-09	7.02E-09	mg/kg-day	NA	mg/kg-day	NA					
				<b>Exp. Route Total</b>																		

**Table C-1.10**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Angler (Catfish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Angler
Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations						Noncancer Hazard Calculations									
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient					
							Value	Units	Value	Units			Value	Units	Value	Units		Value	Units			
Sediment	Surface Sediment	Nearshore Surface Sediment	Dermal	<b>Dioxin</b>																		
				2,3,7,8-TCDD-TEQ	1.11E-04	mg/kg	1.30E-13	mg/kg-day	1.30E+05	kg-day/mg		1.69E-08	1.51E-12	mg/kg-day	7.00E-10	mg/kg-day	2.16E-03					
				<b>Metals</b>																		
				Aluminum	7.78E+03	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E+00	mg/kg-day	NA					
				Arsenic	5.49E+00	mg/kg	6.42E-09	mg/kg-day	1.50E+00	kg-day/mg		9.63E-09	7.49E-08	mg/kg-day	3.00E-04	mg/kg-day	2.50E-04					
				Chromium	4.02E+01	mg/kg	NA	mg/kg-day	2.00E+01	kg-day/mg	2.5	NA	NA	mg/kg-day	7.50E-05	mg/kg-day	NA					
				Cobalt	1.59E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	3.00E-04	mg/kg-day	NA					
				Manganese	2.24E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	9.60E-04	mg/kg-day	NA					
				Nickel	5.71E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	8.00E-04	mg/kg-day	NA					
				Thallium	2.34E-01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E-05	mg/kg-day	NA					
				Vanadium	1.07E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.31E-04	mg/kg-day	NA					
				<b>PCBs</b>																		
				Total PCBs	5.58E-01	mg/kg	3.05E-09	mg/kg-day	1.00E+00	kg-day/mg		3.05E-09	3.55E-08	mg/kg-day	2.00E-05	mg/kg-day	1.78E-03					
				<b>SVOCs</b>																		
				Benzo(a)anthracene	4.95E-01	mg/kg	2.51E-09	mg/kg-day	7.30E-01	kg-day/mg	2.5	4.58E-09	2.93E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(a)pyrene	5.54E-01	mg/kg	2.81E-09	mg/kg-day	7.30E+00	kg-day/mg	2.5	5.13E-08	3.28E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(b)fluoranthene	8.35E-01	mg/kg	4.23E-09	mg/kg-day	7.30E-01	kg-day/mg	2.5	7.72E-09	4.94E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(k)fluoranthene	3.15E-01	mg/kg	1.60E-09	mg/kg-day	7.30E-02	kg-day/mg	2.5	2.91E-10	1.86E-08	mg/kg-day	NA	mg/kg-day	NA					
				Chrysene	7.77E-01	mg/kg	3.94E-09	mg/kg-day	7.30E-03	kg-day/mg	2.5	7.19E-11	4.59E-08	mg/kg-day	NA	mg/kg-day	NA					
				Dibenzo(a,h)anthracene	1.25E-01	mg/kg	6.34E-10	mg/kg-day	7.30E+00	kg-day/mg	2.5	1.16E-08	7.39E-09	mg/kg-day	NA	mg/kg-day	NA					
				Indeno(1,2,3-cd)pyrene	4.18E-01	mg/kg	2.12E-09	mg/kg-day	7.30E-01	kg-day/mg	2.5	3.87E-09	2.47E-08	mg/kg-day	NA	mg/kg-day	NA					
							Exp. Route Total															4.19E-03
							Exposure Point Total															9.70E-03
							Exposure Medium Total															9.70E-03
							Sediment Total															9.70E-03

**Table C-1.10**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Angler (Catfish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Angler  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations								
					Value	Units	Intake/Exposure Concentration	CSF	ADAF (1)	Cancer Risk	Intake/Exposure Concentration	RfD	Hazard Quotient							
Surface Water	Surface Water	Surface Water	Ingestion	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	3.78E-07	ug/L	8.70E-17	mg/kg-day	1.30E+05	kg-day/mg	2.5	1.13E-11	1.02E-15	mg/kg-day	7.00E-10	mg/kg-day	1.45E-06			
				<b>Metals</b> Arsenic	7.40E-01	ug/L	1.70E-10	mg/kg-day	1.50E+00	kg-day/mg		2.56E-10	1.99E-09	mg/kg-day	3.00E-04	mg/kg-day	6.63E-06			
				Chromium	2.90E+00	ug/L	6.68E-10	mg/kg-day	5.00E-01	kg-day/mg		8.35E-10	7.79E-09	mg/kg-day	3.00E-03	mg/kg-day	2.60E-06			
				Cobalt	9.80E-01	ug/L	2.26E-10	mg/kg-day	NA	kg-day/mg		NA	2.63E-09	mg/kg-day	3.00E-04	mg/kg-day	8.77E-06			
				Manganese	1.40E+02	ug/L	3.22E-08	mg/kg-day	NA	kg-day/mg		NA	3.76E-07	mg/kg-day	2.40E-02	mg/kg-day	1.57E-05			
				<b>Pesticides</b> 4,4'-DDT	1.30E-03	ug/L	2.99E-13	mg/kg-day	3.40E-01	kg-day/mg		1.02E-13	3.49E-12	mg/kg-day	5.00E-04	mg/kg-day	6.98E-09			
				<b>PCBs</b> Total PCBs	9.40E-03	ug/L	2.16E-12	mg/kg-day	3.00E-01	kg-day/mg		6.49E-13	2.52E-11	mg/kg-day	2.00E-05	mg/kg-day	1.26E-06			
			<b>Exp. Route Total</b>									1.10E-09					3.64E-05			
			Dermal	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	3.78E-07	ug/L	1.22E-13	mg/kg-day	1.30E+05	kg-day/mg	2.5	1.58E-08	1.42E-12	mg/kg-day	7.00E-10	mg/kg-day	2.03E-03			
				<b>Metals</b> Arsenic	7.40E-01	ug/L	5.77E-11	mg/kg-day	1.50E+00	kg-day/mg			8.66E-11	6.73E-10	mg/kg-day	3.00E-04	mg/kg-day	2.24E-06		
				Chromium	2.90E+00	ug/L	4.52E-10	mg/kg-day	2.00E+01	kg-day/mg		2.26E-08	5.28E-09	mg/kg-day	7.50E-05	mg/kg-day	7.04E-05			
				Cobalt	9.80E-01	ug/L	3.06E-11	mg/kg-day	NA	kg-day/mg		NA	3.57E-10	mg/kg-day	3.00E-04	mg/kg-day	1.19E-06			
				Manganese	1.40E+02	ug/L	1.09E-08	mg/kg-day	NA	kg-day/mg		NA	1.27E-07	mg/kg-day	9.60E-04	mg/kg-day	1.33E-04			
				<b>Pesticides</b> 4,4'-DDT	1.30E-03	ug/L	2.41E-10	mg/kg-day	3.40E-01	kg-day/mg		8.20E-11	2.81E-09	mg/kg-day	5.00E-04	mg/kg-day	5.63E-06			
				<b>PCBs</b> Total PCBs	9.40E-03	ug/L	1.47E-09	mg/kg-day	3.00E-01	kg-day/mg		4.40E-10	1.71E-08	mg/kg-day	2.00E-05	mg/kg-day	8.55E-04			
			<b>Exp. Route Total</b>									3.90E-08					3.09E-03			
		<b>Exposure Point Total</b>										4.01E-08					3.13E-03			
	<b>Exposure Medium Total</b>											4.01E-08					3.13E-03			
<b>Surface Water Total</b>												4.01E-08					3.13E-03			
Fish Tissue	Fish Fillet Tissue - Catfish Diet (2)	Upper Anacostia	Ingestion	<b>PCBs</b> Total PCBs	1.98E-01	mg/kg	3.91E-07	mg/kg-day	1.00E+00	kg-day/mg		3.91E-07	4.56E-06	mg/kg-day	2.00E-05	mg/kg-day	2.28E-01			
		Upper Anacostia		PCB-TEQ	4.09E-06	mg/kg	8.11E-12	mg/kg-day	1.30E+05	kg-day/mg		1.05E-06	9.46E-11	mg/kg-day	7.00E-10	mg/kg-day	1.35E-01			
		Lower Anacostia		Total PCBs	2.86E-01	mg/kg	5.67E-07	mg/kg-day	1.00E+00	kg-day/mg		5.67E-07	6.61E-06	mg/kg-day	2.00E-05	mg/kg-day	3.31E-01			
		Lower Anacostia		PCB-TEQ	1.80E-06	mg/kg	3.56E-12	mg/kg-day	1.30E+05	kg-day/mg		4.63E-07	4.15E-11	mg/kg-day	7.00E-10	mg/kg-day	5.93E-02			
		Upstream		Total PCBs	5.06E-01	mg/kg	1.00E-06	mg/kg-day	1.00E+00	kg-day/mg		1.00E-06	1.17E-05	mg/kg-day	2.00E-05	mg/kg-day	5.85E-01			
		Upstream		PCB-TEQ	NC	NC	NC	NC	NC	NC		NC	NC	mg/kg-day	NC	mg/kg-day	NC			
		<b>Total Receptor Risk/Hazard - Upper Anacostia (Total PCBs)*</b>												6.64E-07					2.41E-01	
		<b>Total Receptor Risk/Hazard - Upper Anacostia (PCB-TEQ)*</b>												1.33E-06						1.48E-01
<b>Total Receptor Risk/Hazard - Lower Anacostia (Total PCBs)*</b>												8.39E-07						3.43E-01		
<b>Total Receptor Risk/Hazard - Lower Anacostia (PCB-TEQ)*</b>												7.35E-07						7.22E-02		
<b>Total Receptor Risk/Hazard - Upstream (Total PCBs)*</b>												1.28E-06						5.98E-01		
<b>Total Receptor Risk/Hazard - Upstream (PCB-TEQ)*</b>												NC						NC		

**Table C-1.10**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Angler (Catfish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: Angler Receptor Age: Teen
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Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations					
					EPC		Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient
					Value	Units	Value	Units	Value	Units			Value	Units	Value	Units	

**Notes:**

ADAF - Age-Dependent Adjustment Factor.

CSF - Cancer Slope Factor.

EPC - Exposure Point Concentration.

NA - Not applicable.

NC - Not calculated.

PCB - Polychlorinated Biphenyl.

RfD - Oral Reference Dose.

SVOC - Semivolatile Organic Compound.

TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.

(1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.

(2) Assumes diet of 100% catfish.

(3) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.

(4) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

**Table C-1.11**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Angler (Mixed Fish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Angler
Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations										
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient					
							Value	Units	Value	Units			Value	Units	Value	Units						
Sediment	Surface Sediment	Nearshore Surface Sediment	Ingestion	<b>Dioxin</b>																		
				2,3,7,8-TCDD-TEQ	4.49E-04	mg/kg	5.17E-12	mg/kg-day	1.30E+05	kg-day/mg		6.73E-07	3.02E-11	mg/kg-day	7.00E-10	mg/kg-day	4.31E-02					
				<b>Metals</b>																		
				Aluminum	9.05E+03	mg/kg	1.04E-04	mg/kg-day	NA	kg-day/mg		NA	6.08E-04	mg/kg-day	1.00E+00	mg/kg-day	6.08E-04					
				Arsenic	7.54E+00	mg/kg	5.21E-08	mg/kg-day	1.50E+00	kg-day/mg		7.81E-08	3.04E-07	mg/kg-day	3.00E-04	mg/kg-day	1.01E-03					
				Chromium	4.67E+01	mg/kg	5.37E-07	mg/kg-day	5.00E-01	kg-day/mg	2.5	6.71E-07	3.13E-06	mg/kg-day	3.00E-03	mg/kg-day	1.04E-03					
				Cobalt	1.79E+01	mg/kg	2.06E-07	mg/kg-day	NA	kg-day/mg		NA	1.20E-06	mg/kg-day	3.00E-04	mg/kg-day	4.01E-03					
				Manganese	2.57E+02	mg/kg	2.96E-06	mg/kg-day	NA	kg-day/mg		NA	1.73E-05	mg/kg-day	2.40E-02	mg/kg-day	7.19E-04					
				Nickel	7.90E+01	mg/kg	9.09E-07	mg/kg-day	NA	kg-day/mg		NA	5.30E-06	mg/kg-day	2.00E-02	mg/kg-day	2.65E-04					
				Thallium	3.02E-01	mg/kg	3.48E-09	mg/kg-day	NA	kg-day/mg		NA	2.03E-08	mg/kg-day	1.00E-05	mg/kg-day	2.03E-03					
				Vanadium	2.29E+02	mg/kg	2.63E-06	mg/kg-day	NA	kg-day/mg		NA	1.54E-05	mg/kg-day	5.04E-03	mg/kg-day	3.05E-03					
				<b>PCBs</b>																		
				Total PCBs	7.68E-01	mg/kg	8.84E-09	mg/kg-day	2.00E+00	kg-day/mg		1.77E-08	5.16E-08	mg/kg-day	2.00E-05	mg/kg-day	2.58E-03					
				<b>SVOCs</b>																		
				Benzo(a)anthracene	5.65E-01	mg/kg	6.50E-09	mg/kg-day	7.30E-01	kg-day/mg	2.5	1.19E-08	3.79E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(a)pyrene	6.28E-01	mg/kg	7.23E-09	mg/kg-day	7.30E+00	kg-day/mg	2.5	1.32E-07	4.22E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(b)fluoranthene	9.51E-01	mg/kg	1.09E-08	mg/kg-day	7.30E-01	kg-day/mg	2.5	2.00E-08	6.39E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(k)fluoranthene	3.67E-01	mg/kg	4.22E-09	mg/kg-day	7.30E-02	kg-day/mg	2.5	7.71E-10	2.46E-08	mg/kg-day	NA	mg/kg-day	NA					
				Chrysene	8.77E-01	mg/kg	1.01E-08	mg/kg-day	7.30E-03	kg-day/mg	2.5	1.84E-10	5.89E-08	mg/kg-day	NA	mg/kg-day	NA					
				Dibenzo(a,h)anthracene	1.42E-01	mg/kg	1.63E-09	mg/kg-day	7.30E+00	kg-day/mg	2.5	2.98E-08	9.54E-09	mg/kg-day	NA	mg/kg-day	NA					
				Indeno(1,2,3-cd)pyrene	4.79E-01	mg/kg	5.51E-09	mg/kg-day	7.30E-01	kg-day/mg	2.5	1.01E-08	3.22E-08	mg/kg-day	NA	mg/kg-day	NA					
				<b>Exp. Route Total</b>																		
										1.64E-06						5.84E-02						

**Table C-1.11**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Angler (Mixed Fish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Angler
Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations								
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient			
							Value	Units	Value	Units			Value	Units	Value	Units				
Sediment	Surface Sediment	Nearshore Surface Sediment	Dermal	<b>Dioxin</b>	4.49E-04	mg/kg	2.10E-12	mg/kg-day	1.30E+05	kg-day/mg		2.73E-07	1.23E-11	mg/kg-day	7.00E-10	mg/kg-day	1.75E-02			
				<b>Metals</b>																
				Aluminum	9.05E+03	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E+00	mg/kg-day	NA	mg/kg-day	NA	
				Arsenic	7.54E+00	mg/kg	3.53E-08	mg/kg-day	1.50E+00	kg-day/mg		5.29E-08	2.06E-07	mg/kg-day	3.00E-04	mg/kg-day	6.86E-04	mg/kg-day	NA	
				Chromium	4.67E+01	mg/kg	NA	mg/kg-day	2.00E+01	kg-day/mg	2.5	NA	NA	mg/kg-day	7.50E-05	mg/kg-day	NA	mg/kg-day	NA	
				Cobalt	1.79E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	3.00E-04	mg/kg-day	NA	mg/kg-day	NA	
				Manganese	2.57E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	9.60E-04	mg/kg-day	NA	mg/kg-day	NA	
				Nickel	7.90E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	8.00E-04	mg/kg-day	NA	mg/kg-day	NA	
				Thallium	3.02E-01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E-05	mg/kg-day	NA	mg/kg-day	NA	
				Vanadium	2.29E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.31E-04	mg/kg-day	NA	mg/kg-day	NA	
				<b>PCBs</b>																
				Total PCBs	7.68E-01	mg/kg	1.68E-08	mg/kg-day	2.00E+00	kg-day/mg		3.35E-08	9.78E-08	mg/kg-day	2.00E-05	mg/kg-day	4.89E-03	mg/kg-day	NA	
				<b>SVOCs</b>																
				Benzo(a)anthracene	5.65E-01	mg/kg	1.15E-08	mg/kg-day	7.30E-01	kg-day/mg	2.5	2.09E-08	6.68E-08	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day	NA	
				Benzo(a)pyrene	6.28E-01	mg/kg	1.27E-08	mg/kg-day	7.30E+00	kg-day/mg	2.5	2.32E-07	7.43E-08	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day	NA	
				Benzo(b)fluoranthene	9.51E-01	mg/kg	1.93E-08	mg/kg-day	7.30E-01	kg-day/mg	2.5	3.52E-08	1.12E-07	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day	NA	
				Benzo(k)fluoranthene	3.67E-01	mg/kg	7.44E-09	mg/kg-day	7.30E-02	kg-day/mg	2.5	1.36E-09	4.34E-08	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day	NA	
				Chrysene	8.77E-01	mg/kg	1.78E-08	mg/kg-day	7.30E-03	kg-day/mg	2.5	3.25E-10	1.04E-07	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day	NA	
				Dibenzo(a,h)anthracene	1.42E-01	mg/kg	2.88E-09	mg/kg-day	7.30E+00	kg-day/mg	2.5	5.25E-08	1.68E-08	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day	NA	
				Indeno(1,2,3-cd)pyrene	4.79E-01	mg/kg	9.71E-09	mg/kg-day	7.30E-01	kg-day/mg	2.5	1.77E-08	5.67E-08	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day	NA	
							Exp. Route Total								7.20E-07					2.31E-02
							Exposure Point Total								2.36E-06					8.15E-02
							Exposure Medium Total								2.36E-06					8.15E-02
				Sediment Total											2.36E-06					8.15E-02

**Table C-1.11**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Angler (Mixed Fish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Angler  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations						Noncancer Hazard Calculations					
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient	
							Value	Units	Value	Units			Value	Units	Value	Units		
Surface Water	Surface Water	Surface Water	Ingestion	Dioxin 2,3,7,8-TCDD-TEQ	6.12E-07	ug/L	1.83E-15	mg/kg-day	1.30E+05	kg-day/mg	2.5	2.38E-10	1.07E-14	mg/kg-day	7.00E-10	mg/kg-day	1.53E-05	
				<b>Metals</b>														
				Arsenic	8.58E-01	ug/L	2.57E-09	mg/kg-day	1.50E+00	kg-day/mg		3.85E-09	1.50E-08	mg/kg-day	3.00E-04	mg/kg-day	4.99E-05	
				Chromium	3.16E+00	ug/L	9.46E-09	mg/kg-day	5.00E-01	kg-day/mg		1.18E-08	5.52E-08	mg/kg-day	3.00E-03	mg/kg-day	1.84E-05	
				Cobalt	1.04E+00	ug/L	3.11E-09	mg/kg-day	NA	kg-day/mg		NA	1.82E-08	mg/kg-day	3.00E-04	mg/kg-day	6.05E-05	
				Manganese	1.48E+02	ug/L	4.42E-07	mg/kg-day	NA	kg-day/mg		NA	2.58E-06	mg/kg-day	2.40E-02	mg/kg-day	1.07E-04	
				<b>Pesticides</b>														
				4,4'-DDT	1.60E-03	ug/L	4.79E-12	mg/kg-day	3.40E-01	kg-day/mg		1.63E-12	2.79E-11	mg/kg-day	5.00E-04	mg/kg-day	5.59E-08	
				<b>PCBs</b>														
				Total PCBs	9.40E-03	ug/L	2.81E-11	mg/kg-day	4.00E-01	kg-day/mg		1.13E-11	1.64E-10	mg/kg-day	2.00E-05	mg/kg-day	8.21E-06	
			<b>Exp. Route Total</b>									1.59E-08					2.60E-04	
			Dermal	Dioxin 2,3,7,8-TCDD-TEQ	6.12E-07	ug/L	1.11E-12	mg/kg-day	1.30E+05	kg-day/mg	2.5	1.45E-07	6.49E-12	mg/kg-day	7.00E-10	mg/kg-day	9.27E-03	
				<b>Metals</b>														
				Arsenic	8.58E-01	ug/L	5.35E-10	mg/kg-day	1.50E+00	kg-day/mg		8.03E-10	3.12E-09	mg/kg-day	3.00E-04	mg/kg-day	1.04E-05	
				Chromium	3.16E+00	ug/L	3.94E-09	mg/kg-day	2.00E+01	kg-day/mg		1.97E-07	2.30E-08	mg/kg-day	7.50E-05	mg/kg-day	3.07E-04	
				Cobalt	1.04E+00	ug/L	2.60E-10	mg/kg-day	NA	kg-day/mg		NA	1.51E-09	mg/kg-day	3.00E-04	mg/kg-day	5.05E-06	
				Manganese	1.48E+02	ug/L	9.22E-08	mg/kg-day	NA	kg-day/mg		NA	5.38E-07	mg/kg-day	9.60E-04	mg/kg-day	5.60E-04	
				<b>Pesticides</b>														
				4,4'-DDT	1.60E-03	ug/L	1.68E-09	mg/kg-day	3.40E-01	kg-day/mg		5.71E-10	9.79E-09	mg/kg-day	5.00E-04	mg/kg-day	1.96E-05	
				<b>PCBs</b>														
				Total PCBs	9.40E-03	ug/L	5.86E-09	mg/kg-day	4.00E-01	kg-day/mg		2.35E-09	3.42E-08	mg/kg-day	2.00E-05	mg/kg-day	1.71E-03	
			<b>Exp. Route Total</b>									3.46E-07					1.19E-02	
			<b>Exposure Point Total</b>									3.61E-07					1.21E-02	
			<b>Exposure Medium Total</b>									3.61E-07					1.21E-02	
			<b>Surface Water Total</b>									3.61E-07					1.21E-02	
Fish Tissue	Fish Fillet Tissue - Mixed Diet <sup>(2)</sup>	Upper Anacostia Upper Anacostia Lower Anacostia Lower Anacostia Upstream Upstream	Ingestion	<b>PCBs</b>														
				Total PCBs	1.29E-01	mg/kg	2.36E-06	mg/kg-day	2.00E+00	kg-day/mg		4.73E-06	1.38E-05	mg/kg-day	2.00E-05	mg/kg-day	6.89E-01	
				PCB-TEQ	4.84E-06	mg/kg	8.85E-11	mg/kg-day	1.30E+05	kg-day/mg		1.15E-05	5.16E-10	mg/kg-day	7.00E-10	mg/kg-day	7.38E-01	
				Total PCBs	3.59E-01	mg/kg	6.56E-06	mg/kg-day	2.00E+00	kg-day/mg		1.31E-05	3.83E-05	mg/kg-day	2.00E-05	mg/kg-day	1.91E+00	
				PCB-TEQ	4.64E-06	mg/kg	8.48E-11	mg/kg-day	1.30E+05	kg-day/mg		1.10E-05	4.95E-10	mg/kg-day	7.00E-10	mg/kg-day	7.07E-01	
				Total PCBs	7.64E-01	mg/kg	1.40E-05	mg/kg-day	2.00E+00	kg-day/mg		2.79E-05	8.15E-05	mg/kg-day	2.00E-05	mg/kg-day	4.07E+00	
				PCB-TEQ	NC		NC	NC	NC	NC		NC	NC	NC	NC	NC	NC	NC
Total Receptor Risk/Hazard - Upper Anacostia (Total PCBs) <sup>3</sup>											7.45E-06				7.83E-01			
Total Receptor Risk/Hazard - Upper Anacostia (PCB-TEQ) <sup>4</sup>											1.42E-05				8.31E-01			
Total Receptor Risk/Hazard - Lower Anacostia (Total PCBs) <sup>3</sup>											1.59E-05				2.01E+00			
Total Receptor Risk/Hazard - Lower Anacostia (PCB-TEQ) <sup>4</sup>											1.38E-05				8.01E-01			
Total Receptor Risk/Hazard - Upstream (Total PCBs) <sup>3</sup>											3.07E-05				4.17E+00			
Total Receptor Risk/Hazard - Upstream (PCB-TEQ) <sup>4</sup>											NC				NC			



**Table C-1.11**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Angler (Mixed Fish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Angler
Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations					
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient
							Value	Units	Value	Units			Value	Units	Value	Units	

**Notes:**

ADAF - Age-Dependent Adjustment Factor.

CSF - Cancer Slope Factor.

EPC - Exposure Point Concentration.

NA - Not applicable.

NC - Not calculated.

PCB - Polychlorinated Biphenyl.

RfD - Oral Reference Dose.

SVOC - Semivolatile Organic Compound.

TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.

(1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.

(2) Assumes a mixed fish diet of equal amounts of each of the species with available fillet data (American eel, catfish, carp, largemouth bass, and sunfish).

(3) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.

(4) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

**Table C-1.12**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Angler (Mixed Fish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: Angler Receptor Age: Teen
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Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations											
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient						
							Value	Units	Value	Units			Value	Units	Value	Units							
Sediment	Surface Sediment	Nearshore Surface Sediment	Ingestion	<b>Dioxin</b>																			
				2,3,7,8-TCDD-TEQ	1.11E-04	mg/kg	1.60E-13	mg/kg-day	1.30E+05	kg-day/mg		2.08E-08	1.86E-12	mg/kg-day	7.00E-10	mg/kg-day				2.66E-03			
				<b>Metals</b>																			
				Aluminum	7.78E+03	mg/kg	1.12E-05	mg/kg-day	NA	kg-day/mg		NA	1.31E-04	mg/kg-day	1.00E+00	mg/kg-day	1.31E-04	mg/kg-day				1.84E-04	
				Arsenic	5.49E+00	mg/kg	4.74E-09	mg/kg-day	1.50E+00	kg-day/mg		7.11E-09	5.53E-08	mg/kg-day	3.00E-04	mg/kg-day	1.84E-04	mg/kg-day				2.25E-04	
				Chromium	4.02E+01	mg/kg	5.78E-08	mg/kg-day	5.00E-01	kg-day/mg	2.5	7.22E-08	6.74E-07	mg/kg-day	3.00E-03	mg/kg-day	2.25E-04	mg/kg-day				8.87E-04	
				Cobalt	1.59E+01	mg/kg	2.28E-08	mg/kg-day	NA	kg-day/mg		NA	2.66E-07	mg/kg-day	3.00E-04	mg/kg-day	8.87E-04	mg/kg-day				1.57E-04	
				Manganese	2.24E+02	mg/kg	3.23E-07	mg/kg-day	NA	kg-day/mg		NA	3.76E-06	mg/kg-day	2.40E-02	mg/kg-day	1.57E-04	mg/kg-day				4.79E-05	
				Nickel	5.71E+01	mg/kg	8.22E-08	mg/kg-day	NA	kg-day/mg		NA	9.59E-07	mg/kg-day	2.00E-02	mg/kg-day	4.79E-05	mg/kg-day				3.93E-04	
				Thallium	2.34E-01	mg/kg	3.37E-10	mg/kg-day	NA	kg-day/mg		NA	3.93E-09	mg/kg-day	1.00E-05	mg/kg-day	3.93E-04	mg/kg-day				3.57E-04	
				Vanadium	1.07E+02	mg/kg	1.54E-07	mg/kg-day	NA	kg-day/mg		NA	1.80E-06	mg/kg-day	5.04E-03	mg/kg-day	3.57E-04	mg/kg-day					
				<b>PCBs</b>																			
				Total PCBs	5.58E-01	mg/kg	8.03E-10	mg/kg-day	1.00E+00	kg-day/mg		8.03E-10	9.37E-09	mg/kg-day	2.00E-05	mg/kg-day	4.68E-04	mg/kg-day					
				<b>SVOCs</b>																			
				Benzo(a)anthracene	4.95E-01	mg/kg	7.12E-10	mg/kg-day	7.30E-01	kg-day/mg	2.5	1.30E-09	8.31E-09	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day				NA	
				Benzo(a)pyrene	5.54E-01	mg/kg	7.97E-10	mg/kg-day	7.30E+00	kg-day/mg	2.5	1.45E-08	9.30E-09	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day				NA	
				Benzo(b)fluoranthene	8.35E-01	mg/kg	1.20E-09	mg/kg-day	7.30E-01	kg-day/mg	2.5	2.19E-09	1.40E-08	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day				NA	
				Benzo(k)fluoranthene	3.15E-01	mg/kg	4.53E-10	mg/kg-day	7.30E-02	kg-day/mg	2.5	8.27E-11	5.29E-09	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day				NA	
				Chrysene	7.77E-01	mg/kg	1.12E-09	mg/kg-day	7.30E-03	kg-day/mg	2.5	2.04E-11	1.30E-08	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day				NA	
				Dibenzo(a,h)anthracene	1.25E-01	mg/kg	1.80E-10	mg/kg-day	7.30E+00	kg-day/mg	2.5	3.28E-09	2.10E-09	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day				NA	
				Indeno(1,2,3-cd)pyrene	4.18E-01	mg/kg	6.01E-10	mg/kg-day	7.30E-01	kg-day/mg	2.5	1.10E-09	7.02E-09	mg/kg-day	NA	mg/kg-day	NA	mg/kg-day				NA	
							<b>Exp. Route Total</b>									1.23E-07							5.51E-03

**Table C-1.12**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Angler (Mixed Fish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Angler  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations						Noncancer Hazard Calculations									
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient					
							Value	Units	Value	Units			Value	Units	Value	Units						
Sediment	Surface Sediment	Nearshore Surface Sediment	Dermal	<b>Dioxin</b>																		
				2,3,7,8-TCDD-TEQ	1.11E-04	mg/kg	1.30E-13	mg/kg-day	1.30E+05	kg-day/mg		1.69E-08	1.51E-12	mg/kg-day	7.00E-10	mg/kg-day	2.16E-03					
				<b>Metals</b>																		
				Aluminum	7.78E+03	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E+00	mg/kg-day	NA	mg/kg-day	NA			
				Arsenic	5.49E+00	mg/kg	6.42E-09	mg/kg-day	1.50E+00	kg-day/mg		9.63E-09	7.49E-08	mg/kg-day	3.00E-04	mg/kg-day	2.50E-04					
				Chromium	4.02E+01	mg/kg	NA	mg/kg-day	2.00E+01	kg-day/mg	2.5	NA	NA	mg/kg-day	7.50E-05	mg/kg-day	NA					
				Cobalt	1.59E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	3.00E-04	mg/kg-day	NA					
				Manganese	2.24E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	9.60E-04	mg/kg-day	NA					
				Nickel	5.71E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	8.00E-04	mg/kg-day	NA					
				Thallium	2.34E-01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E-05	mg/kg-day	NA					
				Vanadium	1.07E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.31E-04	mg/kg-day	NA					
				<b>PCBs</b>																		
				Total PCBs	5.58E-01	mg/kg	3.05E-09	mg/kg-day	1.00E+00	kg-day/mg		3.05E-09	3.55E-08	mg/kg-day	2.00E-05	mg/kg-day	1.78E-03					
				<b>SVOCs</b>																		
				Benzo(a)anthracene	4.95E-01	mg/kg	2.51E-09	mg/kg-day	7.30E-01	kg-day/mg	2.5	4.58E-09	2.93E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(a)pyrene	5.54E-01	mg/kg	2.81E-09	mg/kg-day	7.30E+00	kg-day/mg	2.5	5.13E-08	3.28E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(b)fluoranthene	8.35E-01	mg/kg	4.23E-09	mg/kg-day	7.30E-01	kg-day/mg	2.5	7.72E-09	4.94E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(k)fluoranthene	3.15E-01	mg/kg	1.60E-09	mg/kg-day	7.30E-02	kg-day/mg	2.5	2.91E-10	1.86E-08	mg/kg-day	NA	mg/kg-day	NA					
				Chrysene	7.77E-01	mg/kg	3.94E-09	mg/kg-day	7.30E-03	kg-day/mg	2.5	7.19E-11	4.59E-08	mg/kg-day	NA	mg/kg-day	NA					
				Dibenzo(a,h)anthracene	1.25E-01	mg/kg	6.34E-10	mg/kg-day	7.30E+00	kg-day/mg	2.5	1.16E-08	7.39E-09	mg/kg-day	NA	mg/kg-day	NA					
				Indeno(1,2,3-cd)pyrene	4.18E-01	mg/kg	2.12E-09	mg/kg-day	7.30E-01	kg-day/mg	2.5	3.87E-09	2.47E-08	mg/kg-day	NA	mg/kg-day	NA					
				<b>Exp. Route Total</b>											1.09E-07				4.19E-03			
				<b>Exposure Point Total</b>												2.32E-07				9.70E-03		
				<b>Exposure Medium Total</b>												2.32E-07				9.70E-03		
				<b>Sediment Total</b>												2.32E-07				9.70E-03		

**Table C-1.12**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Angler (Mixed Fish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Angler  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations						Noncancer Hazard Calculations								
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient				
							Value	Units	Value	Units			Value	Units	Value	Units					
Surface Water	Surface Water	Surface Water	Ingestion	Dioxin 2,3,7,8-TCDD-TEQ	3.78E-07	ug/L	8.70E-17	mg/kg-day	1.30E+05	kg-day/mg	2.5	1.13E-11	1.02E-15	mg/kg-day	7.00E-10	mg/kg-day	1.45E-06				
				<b>Metals</b>																	
				Arsenic	7.40E-01	ug/L	1.70E-10	mg/kg-day	1.50E+00	kg-day/mg		2.56E-10	1.99E-09	mg/kg-day	3.00E-04	mg/kg-day	6.63E-06				
				Chromium	2.90E+00	ug/L	6.68E-10	mg/kg-day	5.00E-01	kg-day/mg		8.35E-10	7.79E-09	mg/kg-day	3.00E-03	mg/kg-day	2.60E-06				
				Cobalt	9.80E-01	ug/L	2.26E-10	mg/kg-day	NA	kg-day/mg		NA	2.63E-09	mg/kg-day	3.00E-04	mg/kg-day	8.77E-06				
				Manganese	1.40E+02	ug/L	3.22E-08	mg/kg-day	NA	kg-day/mg		NA	3.76E-07	mg/kg-day	2.40E-02	mg/kg-day	1.57E-05				
				<b>Pesticides</b>																	
				4,4'-DDT	1.30E-03	ug/L	2.99E-13	mg/kg-day	3.40E-01	kg-day/mg		1.02E-13	3.49E-12	mg/kg-day	5.00E-04	mg/kg-day	6.98E-09				
				<b>PCBs</b>																	
				Total PCBs	9.40E-03	ug/L	2.16E-12	mg/kg-day	3.00E-01	kg-day/mg		6.49E-13	2.52E-11	mg/kg-day	2.00E-05	mg/kg-day	1.26E-06				
				<b>Exp. Route Total</b>																	
					Dermal																
				Dioxin 2,3,7,8-TCDD-TEQ	3.78E-07	ug/L	1.22E-13	mg/kg-day	1.30E+05	kg-day/mg		1.58E-08	1.42E-12	mg/kg-day	7.00E-10	mg/kg-day	2.03E-03				
				<b>Metals</b>																	
				Arsenic	7.40E-01	ug/L	5.77E-11	mg/kg-day	1.50E+00	kg-day/mg		8.66E-11	6.73E-10	mg/kg-day	3.00E-04	mg/kg-day	2.24E-06				
				Chromium	2.90E+00	ug/L	4.52E-10	mg/kg-day	2.00E+01	kg-day/mg		2.26E-08	5.28E-09	mg/kg-day	7.50E-05	mg/kg-day	7.04E-05				
				Cobalt	9.80E-01	ug/L	3.06E-11	mg/kg-day	NA	kg-day/mg		NA	3.57E-10	mg/kg-day	3.00E-04	mg/kg-day	1.19E-06				
Manganese	1.40E+02	ug/L	1.09E-08	mg/kg-day	NA	kg-day/mg	NA	1.27E-07	mg/kg-day	9.60E-04	mg/kg-day	1.33E-04									
<b>Pesticides</b>																					
4,4'-DDT	1.30E-03	ug/L	2.41E-10	mg/kg-day	3.40E-01	kg-day/mg	8.20E-11	2.81E-09	mg/kg-day	5.00E-04	mg/kg-day	5.63E-06									
<b>PCBs</b>																					
Total PCBs	9.40E-03	ug/L	1.47E-09	mg/kg-day	3.00E-01	kg-day/mg	4.40E-10	1.71E-08	mg/kg-day	2.00E-05	mg/kg-day	8.55E-04									
<b>Exp. Route Total</b>																					
	<b>Exposure Point Total</b>																				
	<b>Exposure Medium Total</b>																				
	<b>Surface Water Total</b>																				
Fish Tissue	Fish Fillet Tissue - Mixed Diet <sup>(2)</sup>	Upper Anacostia Upper Anacostia Lower Anacostia Lower Anacostia Upstream Upstream	Ingestion	<b>PCBs</b>																	
				Total PCBs	1.15E-01	mg/kg	2.28E-07	mg/kg-day	1.00E+00	kg-day/mg	2.28E-07	2.66E-06	mg/kg-day	2.00E-05	mg/kg-day	1.33E-01					
				PCB-TEQ	4.58E-06	mg/kg	9.07E-12	mg/kg-day	1.30E+05	kg-day/mg	1.18E-06	1.06E-10	mg/kg-day	7.00E-10	mg/kg-day	1.51E-01					
				Total PCBs	3.26E-01	mg/kg	6.45E-07	mg/kg-day	1.00E+00	kg-day/mg	6.45E-07	7.53E-06	mg/kg-day	2.00E-05	mg/kg-day	3.76E-01					
				PCB-TEQ	4.63E-06	mg/kg	9.17E-12	mg/kg-day	1.30E+05	kg-day/mg	1.19E-06	1.07E-10	mg/kg-day	7.00E-10	mg/kg-day	1.53E-01					
				Total PCBs	6.66E-01	mg/kg	1.32E-06	mg/kg-day	1.00E+00	kg-day/mg	1.32E-06	1.54E-05	mg/kg-day	2.00E-05	mg/kg-day	7.70E-01					
				PCB-TEQ	NA		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC					
				<b>Total Receptor Risk/Hazard - Upper Anacostia (Total PCBs)*</b>																	
				<b>Total Receptor Risk/Hazard - Upper Anacostia (PCB-TEQ)*</b>																	
				<b>Total Receptor Risk/Hazard - Lower Anacostia (Total PCBs)*</b>																	
				<b>Total Receptor Risk/Hazard - Lower Anacostia (PCB-TEQ)*</b>																	
				<b>Total Receptor Risk/Hazard - Upstream (Total PCBs)*</b>																	
<b>Total Receptor Risk/Hazard - Upstream (PCB-TEQ)*</b>																					

**Table C-1.12**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Angler (Mixed Fish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: Angler Receptor Age: Teen
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Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations					
					EPC		Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient
					Value	Units	Value	Units	Value	Units			Value	Units	Value	Units	

**Notes:**

- ADAF - Age-Dependent Adjustment Factor.
- CSF - Cancer Slope Factor.
- EPC - Exposure Point Concentration.
- NA - Not applicable.
- NC - Not calculated.
- PCB - Polychlorinated Biphenyl.
- RfD - Oral Reference Dose.
- SVOC - Semivolatile Organic Compound.
- TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.
- (1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.
- (2) Assumes a mixed fish diet of equal amounts of each of the species with available fillet data (American eel, catfish, carp, largemouth bass, and sunfish).
- (3) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.
- (4) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

**Table C-1.13**  
**Summary of Receptor Risks and Hazards for COPCs - Adult Angler (Catfish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Angler
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Sediment	Surface Sediment	Nearshore Surface Sediment	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	7.43E-07	5.08E-07	1.25E-06	Reproductive, Developmental	2.86E-02	1.95E-02	4.81E-02	
			<b>Metals</b>								
			Aluminum	NA	NA	NA	Neurological	4.03E-04	NA	4.03E-04	
			Arsenic	8.63E-08	9.84E-08	1.85E-07	Skin, Vascular	6.71E-04	7.65E-04	1.44E-03	
			Chromium	2.96E-07	NA	2.96E-07	None reported	6.92E-04	NA	6.92E-04	
			Cobalt	NA	NA	NA	Thyroid	2.65E-03	NA	2.65E-03	
			Manganese	NA	NA	NA	Neurological	4.76E-04	NA	4.76E-04	
			Nickel	NA	NA	NA	Decreased body and organ weights	1.76E-04	NA	1.76E-04	
			Thallium	NA	NA	NA	Hair	1.34E-03	NA	1.34E-03	
			Vanadium	NA	NA	NA	Hair	2.02E-03	NA	2.02E-03	
			<b>PCBs</b>	0.00E+00							
			Total PCBs	1.95E-08	6.23E-08	8.18E-08	Eye, Nails, Immune	1.71E-03	5.45E-03	7.16E-03	
			<b>SVOCs</b>	0.00E+00							
			Benzo(a)anthracene	5.24E-09	1.55E-08	2.08E-08	NA	NA	NA	NA	
			Benzo(a)pyrene	5.83E-08	1.73E-07	2.31E-07	NA	NA	NA	NA	
			Benzo(b)fluoranthene	8.82E-09	2.62E-08	3.50E-08	NA	NA	NA	NA	
			Benzo(k)fluoranthene	3.41E-10	1.01E-09	1.35E-09	NA	NA	NA	NA	
			Chrysene	8.14E-11	2.41E-10	3.23E-10	NA	NA	NA	NA	
			Dibenzo(a,h)anthracene	1.32E-08	3.91E-08	5.22E-08	NA	NA	NA	NA	
			Indeno(1,2,3-cd)pyrene	4.44E-09	1.32E-08	1.76E-08	NA	NA	NA	NA	
			Chemical Total	1.24E-06	9.36E-07	2.17E-06		3.87E-02	2.58E-02	6.45E-02	
					Exposure Point Total					6.45E-02	
				Exposure Medium Total						6.45E-02	
			Sediment Total							6.45E-02	

**Table C-1.13**  
**Summary of Receptor Risks and Hazards for COPCs - Adult Angler (Catfish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Angler  
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Surface Water	Surface Water	Surface Water	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	2.63E-10	2.24E-07	2.24E-07	Reproductive, Developmental	1.01E-05	8.62E-03	8.63E-03	
			<b>Metals</b>								
			Arsenic	4.25E-09	1.24E-09	5.50E-09	Skin, Vascular	3.31E-05	9.67E-06	4.27E-05	
			Chromium	5.22E-09	1.22E-07	1.27E-07	None reported	1.22E-05	2.85E-04	2.97E-04	
			Cobalt	NA	NA	NA	Thyroid	4.01E-05	4.69E-06	4.48E-05	
			Manganese	NA	NA	NA	Neurological	7.12E-05	5.20E-04	5.91E-04	
			<b>Pesticides</b>								
			4,4'-DDT	1.80E-12	8.84E-10	8.85E-10	Liver	3.70E-08	1.82E-05	1.82E-05	
			<b>PCBs</b>								
			Total PCBs	1.24E-11	3.63E-09	3.64E-09	Eye, Nails, Immune	5.44E-06	1.59E-03	1.59E-03	
			Chemical Total	9.75E-09	3.52E-07	3.62E-07		1.72E-04	1.10E-02	1.12E-02	
			<b>Exposure Point Total</b>			3.62E-07				1.12E-02	
			<b>Exposure Medium Total</b>			3.62E-07				1.12E-02	
<b>Surface Water Total</b>						3.62E-07				1.12E-02	
Fish Tissue	Fish Fillet Tissue - Catfish	Fish Tissue Upper Anacostia Upper Anacostia Lower Anacostia Lower Anacostia Upstream Upstream	<b>PCBs</b>								
			Total PCBs	1.58E-05	NA	1.58E-05	Eye, Nails, Immune	1.38E+00	NA	1.38E+00	
			PCB-TEQ	2.07E-05	NA	2.07E-05	Reproductive, Developmental	7.98E-01	NA	7.98E-01	
			Total PCBs	2.81E-05	NA	2.81E-05	Eye, Nails, Immune	2.46E+00	NA	2.46E+00	
			PCB-TEQ	7.42E-06	NA	7.42E-06	Reproductive, Developmental	2.86E-01	NA	2.86E-01	
			Total PCBs	4.42E-05	NA	4.42E-05	Eye, Nails, Immune	3.87E+00	NA	3.87E+00	
			PCB-TEQ	NC	NA	NC	NA	NC	NA	NC	
Receptor Total - Upper Anacostia (Total PCBs) <sup>1</sup>						1.83E-05				1.46E+00	
Receptor Total - Upper Anacostia (PCB-TEQ) <sup>2</sup>						2.33E-05				8.73E-01	
Receptor Total - Lower Anacostia (Total PCBs) <sup>1</sup>						3.06E-05				2.53E+00	
Receptor Total - Lower Anacostia (PCB-TEQ) <sup>2</sup>						9.96E-06				3.61E-01	
Receptor Total - Upstream (Total PCBs) <sup>1</sup>						4.67E-05				3.94E+00	
Receptor Total - Upstream (PCB-TEQ) <sup>2</sup>						NC				NC	

**Table C-1.13**  
**Summary of Receptor Risks and Hazards for COPCs - Adult Angler (Catfish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: Angler Receptor Age: Adult
--

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient			
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total

**Notes**

NA - Not Applicable

- (1) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.
- (2) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

Target Organ HI - Upper Anacostia				
Organ	Sediment	Surface Water	Fish Tissue	Total
Decreased body and organ weights	1.76E-04	--	--	1.76E-04
Developmental	4.81E-02	8.63E-03	7.98E-01	8.54E-01
Eye	7.16E-03	1.59E-03	1.38E+00	1.39E+00
Hair	3.36E-03	--	--	3.36E-03
Immune	7.16E-03	1.59E-03	1.38E+00	1.39E+00
Liver	--	1.82E-05	--	1.82E-05
Nails	7.16E-03	1.59E-03	1.38E+00	1.39E+00
Neurological	8.79E-04	5.91E-04	--	1.47E-03
None Reported	6.92E-04	2.97E-04	--	9.89E-04
Reproductive	4.81E-02	8.63E-03	7.98E-01	8.54E-01
Skin	1.44E-03	4.27E-05	--	1.48E-03
Thyroid	2.65E-03	4.48E-05	--	2.70E-03
Vascular	1.44E-03	4.27E-05	--	1.48E-03

Target Organ HI - Lower Anacostia				
Organ	Sediment	Surface Water	Fish Tissue	Total
Decreased body and organ weights	1.76E-04	--	--	1.76E-04
Developmental	4.81E-02	8.63E-03	2.86E-01	3.42E-01
Eye	7.16E-03	1.59E-03	2.46E+00	2.47E+00
Hair	3.36E-03	--	--	3.36E-03
Immune	7.16E-03	1.59E-03	2.46E+00	2.47E+00
Liver	--	1.82E-05	--	1.82E-05
Nails	7.16E-03	1.59E-03	2.46E+00	2.47E+00
Neurological	8.79E-04	5.91E-04	--	1.47E-03
None Reported	6.92E-04	2.97E-04	--	9.89E-04
Reproductive	4.81E-02	8.63E-03	2.86E-01	3.42E-01
Skin	1.44E-03	4.27E-05	--	1.48E-03
Thyroid	2.65E-03	4.48E-05	--	2.70E-03
Vascular	1.44E-03	4.27E-05	--	1.48E-03

Target Organ HI - Upstream				
Organ	Sediment	Surface Water	Fish Tissue	Total
Decreased body and organ weights	1.76E-04	--	--	1.76E-04
Developmental	4.81E-02	8.63E-03	NC	5.67E-02
Eye	7.16E-03	1.59E-03	3.87E+00	3.87E+00
Hair	3.36E-03	--	--	3.36E-03
Immune	7.16E-03	1.59E-03	3.87E+00	3.87E+00
Liver	--	1.82E-05	--	1.82E-05
Nails	7.16E-03	1.59E-03	3.87E+00	3.87E+00
Neurological	8.79E-04	5.91E-04	--	1.47E-03
None Reported	6.92E-04	2.97E-04	--	9.89E-04
Reproductive	4.81E-02	8.63E-03	NC	5.67E-02
Skin	1.44E-03	4.27E-05	--	1.48E-03
Thyroid	2.65E-03	4.48E-05	--	2.70E-03
Vascular	1.44E-03	4.27E-05	--	1.48E-03



**Table C-1.14**  
**Summary of Receptor Risks and Hazards for COPCs - Adult Angler (Catfish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Angler  
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Sediment	Surface Sediment	Nearshore Surface Sediment	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	2.29E-08	3.14E-08	5.43E-08	Reproductive, Developmental	1.76E-03	2.41E-03	4.18E-03	
			<b>Metals</b>								
			Aluminum	NA	NA	NA	Neurological	8.65E-05	NA	8.65E-05	
			Arsenic	7.85E-09	1.79E-08	2.57E-08	Skin, Vascular	1.22E-04	2.78E-04	4.00E-04	
			Chromium	3.19E-08	NA	3.19E-08	None reported	1.49E-04	NA	1.49E-04	
			Cobalt	NA	NA	NA	Thyroid	5.88E-04	NA	5.88E-04	
			Manganese	NA	NA	NA	Neurological	1.04E-04	NA	1.04E-04	
			Nickel	NA	NA	NA	Decreased body and organ weights	3.18E-05	NA	3.18E-05	
			Thallium	NA	NA	NA	Hair	2.60E-04	NA	2.60E-04	
			Vanadium	NA	NA	NA	Hair	2.36E-04	NA	2.36E-04	
			<b>PCBs</b>								
			Total PCBs	8.87E-10	5.66E-09	6.55E-09	Eye, Nails, Immune	3.10E-04	1.98E-03	2.29E-03	
			<b>SVOCs</b>								
			Benzo(a)anthracene	5.74E-10	3.40E-09	3.98E-09	NA	NA	NA	NA	
			Benzo(a)pyrene	6.43E-09	3.81E-08	4.45E-08	NA	NA	NA	NA	
			Benzo(b)fluoranthene	9.68E-10	5.74E-09	6.71E-09	NA	NA	NA	NA	
			Benzo(k)fluoranthene	3.65E-11	2.17E-10	2.53E-10	NA	NA	NA	NA	
			Chrysene	9.01E-12	5.34E-11	6.24E-11	NA	NA	NA	NA	
			Dibenzo(a,h)anthracene	1.45E-09	8.59E-09	1.00E-08	NA	NA	NA	NA	
			Indeno(1,2,3-cd)pyrene	4.85E-10	2.87E-09	3.36E-09	NA	NA	NA	NA	
			Chemical Total	7.35E-08	1.14E-07	1.87E-07		3.65E-03	4.67E-03	8.32E-03	
					Exposure Point Total					8.32E-03	
				Exposure Medium Total						8.32E-03	
			Sediment Total							8.32E-03	

**Table C-1.14**  
**Summary of Receptor Risks and Hazards for COPCs - Adult Angler (Catfish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Angler  
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Surface Water	Surface Water	Surface Water	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	1.25E-11	2.45E-08	2.45E-08	Reproductive, Developmental	9.61E-07	1.88E-03	1.88E-03	
			<b>Metals</b>								
			Arsenic	2.82E-10	1.34E-10	4.16E-10	Skin, Vascular	4.39E-06	2.08E-06	6.47E-06	
			Chromium	3.69E-10	1.40E-08	1.44E-08	None reported	1.72E-06	6.54E-05	6.71E-05	
			Cobalt	NA	NA	NA	Thyroid	5.81E-06	1.10E-06	6.92E-06	
			Manganese	NA	NA	NA	Neurological	1.04E-05	1.23E-04	1.34E-04	
			<b>Pesticides</b>								
			4,4'-DDT	1.12E-13	1.27E-10	1.27E-10	Liver	4.63E-09	5.23E-06	5.23E-06	
			<b>PCBs</b>								
			Total PCBs	7.17E-13	6.81E-10	6.82E-10	Eye, Nails, Immune	8.36E-07	7.95E-04	7.95E-04	
			Chemical Total	6.64E-10	3.94E-08	4.01E-08		2.41E-05	2.87E-03	2.90E-03	
					Exposure Point Total						2.90E-03
		Exposure Medium Total						2.90E-03			
<b>Surface Water Total</b>						4.01E-08				2.90E-03	
Fish Tissue	Fish Fillet Tissue - Catfish	Fish Tissue	<b>PCBs</b>								
			Total PCBs	6.17E-07	NA	6.17E-07	Eye, Nails, Immune	2.16E-01	NA	2.16E-01	
			PCB-TEQ	1.66E-06	NA	1.66E-06	Reproductive, Developmental	1.28E-01	NA	1.28E-01	
			Total PCBs	8.94E-07	NA	8.94E-07	Eye, Nails, Immune	3.13E-01	NA	3.13E-01	
			PCB-TEQ	7.30E-07	NA	7.30E-07	Reproductive, Developmental	5.62E-02	NA	5.62E-02	
			Total PCBs	1.58E-06	NA	1.58E-06	Eye, Nails, Immune	5.54E-01	NA	5.54E-01	
			PCB-TEQ	NC	NA	NC	NA	NC	NA	NC	
Receptor Total - Upper Anacostia (Total PCBs) <sup>1</sup>					8.45E-07				2.27E-01		
Receptor Total - Upper Anacostia (PCB-TEQ) <sup>2</sup>					1.89E-06				1.39E-01		
Receptor Total - Lower Anacostia (Total PCBs)					1.12E-06				3.24E-01		
Receptor Total - Lower Anacostia (PCB-TEQ) <sup>2</sup>					9.57E-07				6.74E-02		
Receptor Total - Upstream (Total PCBs) <sup>1</sup>					1.81E-06				5.65E-01		
Receptor Total - Upstream (PCB-TEQ) <sup>2</sup>					NC				NC		

**Table C-1.14**  
**Summary of Receptor Risks and Hazards for COPCs - Adult Angler (Catfish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Angler  
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient			
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total
<b>Notes</b>				<b>Target Organ HI - Upper Anacostia</b>						
NA - Not Applicable				<b>Organ</b>						
(1) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.				<b>Sediment</b>						
(2) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.				<b>Surface Water</b>						
				<b>Fish Tissue</b>						
				<b>Total</b>						
				Decreased body and organ weights						
				Developmental						
				Eye						
				Hair						
				Immune						
				Liver						
				Nails						
				Neurological						
				None Reported						
				Reproductive						
				Skin						
				Thyroid						
				Vascular						
				<b>Target Organ HI - Lower Anacostia</b>						
				<b>Organ</b>						
				<b>Sediment</b>						
				<b>Surface Water</b>						
				<b>Fish Tissue</b>						
				<b>Total</b>						
				Decreased body and organ weights						
				Developmental						
				Eye						
				Hair						
				Immune						
				Liver						
				Nails						
				Neurological						
				None Reported						
				Reproductive						
				Skin						
				Thyroid						
				Vascular						
				<b>Target Organ HI - Upstream</b>						
				<b>Organ</b>						
				<b>Sediment</b>						
				<b>Surface Water</b>						
				<b>Fish Tissue</b>						
				<b>Total</b>						
				Decreased body and organ weights						
				Developmental						
				Eye						
				Hair						
				Immune						
				Liver						
				Nails						
				Neurological						
				None Reported						
				Reproductive						
				Skin						
				Thyroid						
				Vascular						

**Table C-1.15**  
**Summary of Receptor Risks and Hazards for COPCs - Adult Angler (Mixed Fish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Angler  
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Sediment	Surface Sediment	Nearshore Surface Sediment	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	7.43E-07	5.08E-07	1.25E-06	Reproductive, Developmental	2.86E-02	1.95E-02	4.81E-02	
			<b>Metals</b>								
			Aluminum	NA	NA	NA	Neurological	4.03E-04	NA	4.03E-04	
			Arsenic	8.63E-08	9.84E-08	1.85E-07	Skin, Vascular	6.71E-04	7.65E-04	1.44E-03	
			Chromium	2.96E-07	NA	2.96E-07	None reported	6.92E-04	NA	6.92E-04	
			Cobalt	NA	NA	NA	Thyroid	2.65E-03	NA	2.65E-03	
			Manganese	NA	NA	NA	Neurological	4.76E-04	NA	4.76E-04	
			Nickel	NA	NA	NA	Decreased body and organ weights	1.76E-04	NA	1.76E-04	
			Thallium	NA	NA	NA	Hair	1.34E-03	NA	1.34E-03	
			Vanadium	NA	NA	NA	Hair	2.02E-03	NA	2.02E-03	
			<b>PCBs</b>								
			Total PCBs	1.95E-08	6.23E-08	8.18E-08	Eye, Nails, Immune	1.71E-03	5.45E-03	7.16E-03	
			<b>SVOCs</b>								
			Benzo(a)anthracene	5.24E-09	1.55E-08	2.08E-08	NA	NA	NA	NA	
			Benzo(a)pyrene	5.83E-08	1.73E-07	2.31E-07	NA	NA	NA	NA	
			Benzo(b)fluoranthene	8.82E-09	2.62E-08	3.50E-08	NA	NA	NA	NA	
			Benzo(k)fluoranthene	3.41E-10	1.01E-09	1.35E-09	NA	NA	NA	NA	
			Chrysene	8.14E-11	2.41E-10	3.23E-10	NA	NA	NA	NA	
			Dibenzo(a,h)anthracene	1.32E-08	3.91E-08	5.22E-08	NA	NA	NA	NA	
			Indeno(1,2,3-cd)pyrene	4.44E-09	1.32E-08	1.76E-08	NA	NA	NA	NA	
			Chemical Total	1.24E-06	9.36E-07	2.17E-06		3.87E-02	2.58E-02	6.45E-02	
					<b>Exposure Point Total</b>					6.45E-02	
				<b>Exposure Medium Total</b>						6.45E-02	
			<b>Sediment Total</b>							6.45E-02	

**Table C-1.15**  
**Summary of Receptor Risks and Hazards for COPCs - Adult Angler (Mixed Fish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Angler  
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient					
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total		
Surface Water	Surface Water	Surface Water	<b>Dioxin</b>									
			2,3,7,8-TCDD-TEQ	2.63E-10	2.24E-07	2.24E-07	Reproductive, Developmental	1.01E-05	8.62E-03	8.63E-03		
			<b>Metals</b>									
			Arsenic	4.25E-09	1.24E-09	5.50E-09	Skin, Vascular	3.31E-05	9.67E-06	4.27E-05		
			Chromium	5.22E-09	1.22E-07	1.27E-07	None reported	1.22E-05	2.85E-04	2.97E-04		
			Cobalt	NA	NA	NA	Thyroid	4.01E-05	4.69E-06	4.48E-05		
			Manganese	NA	NA	NA	Neurological	7.12E-05	5.20E-04	5.91E-04		
			<b>Pesticides</b>									
			4,4'-DDT	1.80E-12	8.84E-10	8.85E-10	Liver	3.70E-08	1.82E-05	1.82E-05		
			<b>PCBs</b>									
			Total PCBs	1.24E-11	3.63E-09	3.64E-09	Eye, Nails, Immune	5.44E-06	1.59E-03	1.59E-03		
			Chemical Total	9.75E-09	3.52E-07	3.62E-07		1.72E-04	1.10E-02	1.12E-02		
				<b>Exposure Point Total</b>								
				<b>Exposure Medium Total</b>								
<b>Surface Water Total</b>												
Fish Tissue	Fish Fillet Tissue - Mixed Diet (1)	Fish Tissue Upper Anacostia Upper Anacostia Lower Anacostia Lower Anacostia Upstream Upstream	<b>PCBs</b>									
			Total PCBs	8.03E-06	NA	8.03E-06	Eye, Nails, Immune	7.03E-01	NA	7.03E-01		
			PCB-TEQ	1.95E-05	NA	1.95E-05	Reproductive, Developmental	7.52E-01	NA	7.52E-01		
			Total PCBs	2.23E-05	NA	2.23E-05	Eye, Nails, Immune	1.95E+00	NA	1.95E+00		
			PCB-TEQ	1.87E-05	NA	1.87E-05	Reproductive, Developmental	7.20E-01	NA	7.20E-01		
			Total PCBs	4.74E-05	NA	4.74E-05	Eye, Nails, Immune	4.15E+00	NA	4.15E+00		
			PCB-TEQ	NC	NA	NC	NA	NC	NA	NC		
Receptor Total - Upper Anacostia (Total PCBs) <sup>1</sup>					1.06E-05						7.78E-01	
Receptor Total - Upper Anacostia (PCB-TEQs) <sup>3</sup>					2.21E-05						8.28E-01	
Receptor Total - Lower Anacostia (Total PCBs) <sup>1</sup>					2.48E-05						2.03E+00	
Receptor Total - Lower Anacostia (PCB-TEQs) <sup>3</sup>					2.13E-05						7.96E-01	
Receptor Total - Upstream (Total PCBs) <sup>2</sup>					5.00E-05						4.23E+00	
Receptor Total - Upstream (PCB-TEQs) <sup>3</sup>					NC						NC	

**Table C-1.15**  
**Summary of Receptor Risks and Hazards for COPCs - Adult Angler (Mixed Fish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Angler
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient			
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total

**Notes**

NA - Not Applicable

(1) - Assumes equal portions of available species, including American eel, catfish, carp, largemouth bass, and sunfish.

(2) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.

(3) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

Target Organ HI - Upper Anacostia				
Organ	Sediment	Surface Water	Fish Tissue	Total
Decreased body and organ weights	1.76E-04	--	--	1.76E-04
Developmental	4.81E-02	8.63E-03	7.52E-01	8.09E-01
Eye	7.16E-03	1.59E-03	7.03E-01	7.11E-01
Hair	3.36E-03	--	--	3.36E-03
Immune	7.16E-03	1.59E-03	7.03E-01	7.11E-01
Liver	--	1.82E-05	--	1.82E-05
Nails	7.16E-03	1.59E-03	7.03E-01	7.11E-01
Neurological	8.79E-04	5.91E-04	--	1.47E-03
None Reported	6.92E-04	2.97E-04	--	9.89E-04
Reproductive	4.81E-02	8.63E-03	7.52E-01	8.09E-01
Skin	1.44E-03	4.27E-05	--	1.48E-03
Thyroid	2.65E-03	4.48E-05	--	2.70E-03
Vascular	1.44E-03	4.27E-05	--	1.48E-03

Target Organ HI - Lower Anacostia				
Organ	Sediment	Surface Water	Fish Tissue	Total
Decreased body and organ weights	1.76E-04	--	--	1.76E-04
Developmental	4.81E-02	8.63E-03	7.20E-01	7.77E-01
Eye	7.16E-03	1.59E-03	1.95E+00	1.96E+00
Hair	3.36E-03	--	--	3.36E-03
Immune	7.16E-03	1.59E-03	1.95E+00	1.96E+00
Liver	--	1.82E-05	--	1.82E-05
Nails	7.16E-03	1.59E-03	1.95E+00	1.96E+00
Neurological	8.79E-04	5.91E-04	--	1.47E-03
None Reported	6.92E-04	2.97E-04	--	9.89E-04
Reproductive	4.81E-02	8.63E-03	7.20E-01	7.77E-01
Skin	1.44E-03	4.27E-05	--	1.48E-03
Thyroid	2.65E-03	4.48E-05	--	2.70E-03
Vascular	1.44E-03	4.27E-05	--	1.48E-03

Target Organ HI - Upstream				
Organ	Sediment	Surface Water	Fish Tissue	Total
Decreased body and organ weights	1.76E-04	--	--	1.76E-04
Developmental	4.81E-02	8.63E-03	NC	5.67E-02
Eye	7.16E-03	1.59E-03	4.15E+00	4.16E+00
Hair	3.36E-03	--	--	3.36E-03
Immune	7.16E-03	1.59E-03	4.15E+00	4.16E+00
Liver	--	1.82E-05	--	1.82E-05
Nails	7.16E-03	1.59E-03	4.15E+00	4.16E+00
Neurological	8.79E-04	5.91E-04	--	1.47E-03
None Reported	6.92E-04	2.97E-04	--	9.89E-04
Reproductive	4.81E-02	8.63E-03	NC	5.67E-02
Skin	1.44E-03	4.27E-05	--	1.48E-03
Thyroid	2.65E-03	4.48E-05	--	2.70E-03
Vascular	1.44E-03	4.27E-05	--	1.48E-03

**Table C-1.16**  
**Summary of Receptor Risks and Hazards for COPCs - Adult Angler (Mixed Fish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Angler  
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Sediment	Surface Sediment	Nearshore Surface Sediment	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	2.29E-08	3.14E-08	5.43E-08	Reproductive, Developmental	1.76E-03	2.41E-03	4.18E-03	
			<b>Metals</b>								
			Aluminum	NA	NA	NA	Neurological	8.65E-05	NA	8.65E-05	
			Arsenic	7.85E-09	1.79E-08	2.57E-08	Skin, Vascular	1.22E-04	2.78E-04	4.00E-04	
			Chromium	3.19E-08	NA	3.19E-08	None reported	1.49E-04	NA	1.49E-04	
			Cobalt	NA	NA	NA	Thyroid	5.88E-04	NA	5.88E-04	
			Manganese	NA	NA	NA	Neurological	1.04E-04	NA	1.04E-04	
			Nickel	NA	NA	NA	Decreased body and organ weights	3.18E-05	NA	3.18E-05	
			Thallium	NA	NA	NA	Hair	2.60E-04	NA	2.60E-04	
			Vanadium	NA	NA	NA	Hair	2.36E-04	NA	2.36E-04	
			<b>PCBs</b>								
			Total PCBs	8.87E-10	5.66E-09	6.55E-09	Eye, Nails, Immune	3.10E-04	1.98E-03	2.29E-03	
			<b>SVOCs</b>								
			Benzo(a)anthracene	5.74E-10	3.40E-09	3.98E-09	NA	NA	NA	NA	
			Benzo(a)pyrene	6.43E-09	3.81E-08	4.45E-08	NA	NA	NA	NA	
			Benzo(b)fluoranthene	9.68E-10	5.74E-09	6.71E-09	NA	NA	NA	NA	
			Benzo(k)fluoranthene	3.65E-11	2.17E-10	2.53E-10	NA	NA	NA	NA	
			Chrysene	9.01E-12	5.34E-11	6.24E-11	NA	NA	NA	NA	
			Dibenzo(a,h)anthracene	1.45E-09	8.59E-09	1.00E-08	NA	NA	NA	NA	
			Indeno(1,2,3-cd)pyrene	4.85E-10	2.87E-09	3.36E-09	NA	NA	NA	NA	
			Chemical Total	7.35E-08	1.14E-07	1.87E-07		3.65E-03	4.67E-03	8.32E-03	
					Exposure Point Total					8.32E-03	
				Exposure Medium Total						8.32E-03	
			Sediment Total							8.32E-03	

**Table C-1.16**  
**Summary of Receptor Risks and Hazards for COPCs - Adult Angler (Mixed Fish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Angler  
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Surface Water	Surface Water	Surface Water	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	1.25E-11	2.45E-08	2.45E-08	Reproductive, Developmental	9.61E-07	1.88E-03	1.88E-03	
			<b>Metals</b>								
			Arsenic	2.82E-10	1.34E-10	4.16E-10	Skin, Vascular	4.39E-06	2.08E-06	6.47E-06	
			Chromium	3.69E-10	1.40E-08	1.44E-08	None reported	1.72E-06	6.54E-05	6.71E-05	
			Cobalt	NA	NA	NA	Thyroid	5.81E-06	1.10E-06	6.92E-06	
			Manganese	NA	NA	NA	Neurological	1.04E-05	1.23E-04	1.34E-04	
			<b>Pesticides</b>								
			4,4'-DDT	1.12E-13	1.27E-10	1.27E-10	Liver	4.63E-09	5.23E-06	5.23E-06	
			<b>PCBs</b>								
			Total PCBs	7.17E-13	6.81E-10	6.82E-10	Eye, Nails, Immune	8.36E-07	7.95E-04	7.95E-04	
			Chemical Total	6.64E-10	3.94E-08	4.01E-08		2.41E-05	2.87E-03	2.90E-03	
					Exposure Point Total						2.90E-03
					Exposure Medium Total						2.90E-03
Surface Water Total					4.01E-08				2.90E-03		
Fish Tissue	Fish Fillet Tissue - Mixed Diet (1)	Fish Tissue Upper Anacostia Upper Anacostia Lower Anacostia Lower Anacostia Upstream Upstream	<b>PCBs</b>								
			Total PCBs	3.60E-07	NA	3.60E-07	Eye, Nails, Immune	1.26E-01	NA	1.26E-01	
			PCB-TEQ	1.86E-06	NA	1.86E-06	Reproductive, Developmental	1.43E-01	NA	1.43E-01	
			Total PCBs	1.02E-06	NA	1.02E-06	Eye, Nails, Immune	3.56E-01	NA	3.56E-01	
			PCB-TEQ	1.88E-06	NA	1.88E-06	Reproductive, Developmental	1.45E-01	NA	1.45E-01	
			Total PCBs	2.08E-06	NA	2.08E-06	Eye, Nails, Immune	7.28E-01	NA	7.28E-01	
			PCB-TEQ	NC	NA	NC	NA	NC	NA	NC	
Receptor Total - Upper Anacostia (Total PCBs) <sup>1</sup>					5.87E-07				1.37E-01		
Receptor Total - Upper Anacostia (PCB-TEQs) <sup>2</sup>					2.09E-06				1.54E-01		
Receptor Total - Lower Anacostia (Total PCBs) <sup>1</sup>					1.25E-06				3.67E-01		
Receptor Total - Lower Anacostia (PCB-TEQs) <sup>2</sup>					2.11E-06				1.56E-01		
Receptor Total - Upstream (Total PCBs) <sup>1</sup>					2.31E-06				7.40E-01		
Receptor Total - Upstream (PCB-TEQs) <sup>2</sup>					NC				NC		



**Table C-1.16**  
**Summary of Receptor Risks and Hazards for COPCs - Adult Angler (Mixed Fish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Angler  
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient			
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total
<b>Notes</b>				<b>Target Organ HI - Upper Anacostia</b>						
NA - Not Applicable										
(1) - Assumes equal portions of available species, including American eel, catfish, carp, largemouth bass, and sunfish.										
(2) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.										
(3) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.										
				<b>Target Organ HI - Lower Anacostia</b>						
				<b>Target Organ HI - Upstream</b>						

**Table C-1.17**  
**Summary of Receptor Risks and Hazards for COPCs - Child Angler (Catfish Fish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: Angler Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk		Non-Carcinogenic Hazard Quotient			
				Ingestion	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Exposure Routes Total	
Fish Tissue	Fish Fillet Tissue - Catfish	<b>Fish Tissue</b>							
			<b>PCBs</b>						
		Upper Anacostia	Total PCBs	7.80E-06	7.80E-06	Eye, Nails, Immune	2.27E+00	2.27E+00	
		Upper Anacostia	PCB-TEQ	1.02E-05	1.02E-05	Reproductive, Developmental	1.31E+00	1.31E+00	
		Lower Anacostia	Total PCBs	1.39E-05	1.39E-05	Eye, Nails, Immune	4.05E+00	4.05E+00	
		Lower Anacostia	PCB-TEQ	3.67E-06	3.67E-06	Reproductive, Developmental	4.70E-01	4.70E-01	
		Upstream	Total PCBs	2.18E-05	2.18E-05	Eye, Nails, Immune	6.37E+00	6.37E+00	
		Upstream	PCB-TEQ	NC	NC	NA	NC	NC	
		Receptor Total - Upper Anacostia (Total PCBs) <sup>1</sup>				7.80E-06			2.27E+00
		Receptor Total - Upper Anacostia (PCB-TEQ) <sup>2</sup>				1.02E-05			1.31E+00
Receptor Total - Lower Anacostia (Total PCBs) <sup>1</sup>				1.39E-05			4.05E+00		
Receptor Total - Lower Anacostia (PCB-TEQ) <sup>2</sup>				3.67E-06			4.70E-01		
Receptor Total - Upstream (Total PCBs) <sup>1</sup>				2.18E-05			6.37E+00		
Receptor Total - Upstream (PCB-TEQ) <sup>2</sup>				NC			NC		

**Notes**

NC - Not calculated

(1) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.

(2) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

**Table C-1.18**  
**Summary of Receptor Risks and Hazards for COPCs - Child Angler (Catfish Fish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: Angler Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk		Non-Carcinogenic Hazard Quotient		
				Ingestion	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Exposure Routes Total
Fish Tissue	Fish Fillet Tissue - Catfish	<b>Fish Tissue</b>	<b>PCBs</b>					
		Upper Anacostia	Total PCBs	1.74E-07	1.74E-07	Eye, Nails, Immune	3.05E-01	3.05E-01
		Upper Anacostia	PCB-TEQ	4.69E-07	4.69E-07	Reproductive, Developmental	1.81E-01	1.81E-01
		Lower Anacostia	Total PCBs	2.52E-07	2.52E-07	Eye, Nails, Immune	4.42E-01	4.42E-01
		Lower Anacostia	PCB-TEQ	2.06E-07	2.06E-07	Reproductive, Developmental	7.93E-02	7.93E-02
		Upstream	Total PCBs	4.47E-07	4.47E-07	Eye, Nails, Immune	7.82E-01	7.82E-01
		Upstream	PCB-TEQ	NC	NC	NA	NC	NC
Receptor Total - Upper Anacostia (Total PCBs) <sup>(1)</sup>					1.74E-07			3.05E-01
Receptor Total - Upper Anacostia (PCB-TEQ) <sup>(2)</sup>					4.69E-07			1.81E-01
Receptor Total - Lower Anacostia (Total PCBs) <sup>(1)</sup>					2.52E-07			4.42E-01
Receptor Total - Lower Anacostia (PCB-TEQ) <sup>(2)</sup>					2.06E-07			7.93E-02
Receptor Total - Upstream (Total PCBs) <sup>(1)</sup>					4.47E-07			7.82E-01
Receptor Total - Upstream (PCB-TEQ) <sup>(2)</sup>					NC			NC

**Notes**

NA - Not Applicable  
 NC - Not calculated

- (1) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.
- (2) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

**Table C-1.19  
Summary of Receptor Risks and Hazards for COPCs - Child Angler (Mixed Fish Diet)  
Reasonable Maximum Exposure  
Benning Road Facility R/FS Project  
3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: Angler Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk		Non-Carcinogenic Hazard Quotient			
				Ingestion	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Exposure Routes Total	
Fish Tissue	Fish Fillet Tissue - Mixed Diet (1)	<b>Fish Tissue</b>							
			<b>PCBs</b>						
		Upper Anacostia	Total PCBs	3.97E-06	3.97E-06	Eye, Nails, Immune	1.16E+00	1.16E+00	
		Upper Anacostia	PCB-TEQ	9.66E-06	9.66E-06	Reproductive, Developmental	1.24E+00	1.24E+00	
		Lower Anacostia	Total PCBs	1.10E-05	1.10E-05	Eye, Nails, Immune	3.21E+00	3.21E+00	
		Lower Anacostia	PCB-TEQ	9.26E-06	9.26E-06	Reproductive, Developmental	1.19E+00	1.19E+00	
		Upstream	Total PCBs	2.34E-05	2.34E-05	Eye, Nails, Immune	6.84E+00	6.84E+00	
		Upstream	PCB-TEQ	NC	NC	NA	NC	NC	
Receptor Total - Upper Anacostia (Total PCBs) <sup>2</sup>					3.97E-06			1.16E+00	
Receptor Total - Upper Anacostia (PCB-TEQs) <sup>3</sup>					9.66E-06			1.24E+00	
Receptor Total - Lower Anacostia (Total PCBs) <sup>2</sup>					1.10E-05			3.21E+00	
Receptor Total - Lower Anacostia (PCB-TEQs) <sup>3</sup>					9.26E-06			1.19E+00	
Receptor Total - Upstream (Total PCBs) <sup>2</sup>					2.34E-05			6.84E+00	
Receptor Total - Upstream (PCB-TEQs) <sup>3</sup>					NC			NC	

**Notes**

NA - Not Applicable  
NC - Not calculated

(1) - Assumes equal portions of available species, including American eel, catfish, carp, largemouth bass, and sunfish.

(2) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.

(3) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

**Table C-1.20  
Summary of Receptor Risks and Hazards for COPCs - Child Angler (Mixed Fish Diet)  
Central Tendency Exposure  
Benning Road Facility R/FS Project  
3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: Angler Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk		Non-Carcinogenic Hazard Quotient		
				Ingestion	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Exposure Routes Total
Fish Tissue	Fish Fillet Tissue - Mixed Diet (1)	<b>Fish Tissue</b>	<b>PCBs</b>					
		Upper Anacostia	Total PCBs	1.02E-07	1.02E-07	Eye, Nails, Immune	1.78E-01	1.78E-01
		Upper Anacostia	PCB-TEQ	5.25E-07	5.25E-07	Reproductive, Developmental	2.02E-01	2.02E-01
		Lower Anacostia	Total PCBs	2.87E-07	2.87E-07	Eye, Nails, Immune	5.03E-01	5.03E-01
		Lower Anacostia	PCB-TEQ	5.31E-07	5.31E-07	Reproductive, Developmental	2.04E-01	2.04E-01
		Upstream	Total PCBs	5.88E-07	5.88E-07	Eye, Nails, Immune	1.03E+00	1.03E+00
		Upstream	PCB-TEQ	NC	NC	NA	NC	NC
Receptor Total - Upper Anacostia (Total PCBs) <sup>2</sup>					1.02E-07			1.78E-01
Receptor Total - Upper Anacostia (PCB-TEQs) <sup>3</sup>					5.25E-07			2.02E-01
Receptor Total - Lower Anacostia (Total PCBs) <sup>2</sup>					2.87E-07			5.03E-01
Receptor Total - Lower Anacostia (PCB-TEQs) <sup>3</sup>					5.31E-07			2.04E-01
Receptor Total - Upstream (Total PCBs) <sup>2</sup>					5.88E-07			1.03E+00
Receptor Total - Upstream (PCB-TEQs) <sup>3</sup>					NC			NC

**Notes**

NA - Not Applicable  
NC - Not calculated

- (1) - Assumes equal portions of available species, including American eel, catfish, carp, largemouth bass, and sunfish.
- (2) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.
- (3) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

**Table C-1.21**  
**Summary of Receptor Risks and Hazards for COPCs - Teen Angler (Catfish Fish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Angler  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Sediment	Surface Sediment	Nearshore Surface Sediment	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	6.73E-07	2.73E-07	9.46E-07	Reproductive, Developmental	4.31E-02	1.75E-02	6.06E-02	
			<b>Metals</b>								
			Aluminum	NA	NA	NA	Neurological	6.08E-04	NA	6.08E-04	
			Arsenic	7.81E-08	5.29E-08	1.31E-07	Skin, Vascular	1.01E-03	6.86E-04	1.70E-03	
			Chromium	6.71E-07	NA	6.71E-07	None reported	1.04E-03	NA	1.04E-03	
			Cobalt	NA	NA	NA	Thyroid	4.01E-03	NA	4.01E-03	
			Manganese	NA	NA	NA	Neurological	7.19E-04	NA	7.19E-04	
			Nickel	NA	NA	NA	Decreased body and organ weights	2.65E-04	NA	2.65E-04	
			Thallium	NA	NA	NA	Hair	2.03E-03	NA	2.03E-03	
			Vanadium	NA	NA	NA	Hair	3.05E-03	NA	3.05E-03	
			<b>PCBs</b>								
			Total PCBs	1.77E-08	3.35E-08	5.12E-08	Eye, Nails, Immune	2.58E-03	4.89E-03	7.47E-03	
			<b>SVOCs</b>								
			Benzo(a)anthracene	1.19E-08	2.09E-08	3.28E-08	NA	NA	NA	NA	
			Benzo(a)pyrene	1.32E-07	2.32E-07	3.64E-07	NA	NA	NA	NA	
			Benzo(b)fluoranthene	2.00E-08	3.52E-08	5.52E-08	NA	NA	NA	NA	
			Benzo(k)fluoranthene	7.71E-10	1.36E-09	2.13E-09	NA	NA	NA	NA	
			Chrysene	1.84E-10	3.25E-10	5.09E-10	NA	NA	NA	NA	
			Dibenzo(a,h)anthracene	2.98E-08	5.25E-08	8.24E-08	NA	NA	NA	NA	
			Indeno(1,2,3-cd)pyrene	1.01E-08	1.77E-08	2.78E-08	NA	NA	NA	NA	
			Chemical Total	1.64E-06	7.20E-07	2.36E-06		5.84E-02	2.31E-02	8.15E-02	
					Exposure Point Total					8.15E-02	
				Exposure Medium Total						8.15E-02	
			Sediment Total				2.36E-06			8.15E-02	

**Table C-1.21**  
**Summary of Receptor Risks and Hazards for COPCs - Teen Angler (Catfish Fish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Angler  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Surface Water	Surface Water	Surface Water	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	2.38E-10	1.45E-07	1.45E-07	Reproductive, Developmental	1.53E-05	9.27E-03	9.29E-03	
			<b>Metals</b>								
			Arsenic	3.85E-09	8.03E-10	4.65E-09	Skin, Vascular	4.99E-05	1.04E-05	6.03E-05	
			Chromium	1.18E-08	1.97E-07	2.09E-07	None reported	1.84E-05	3.07E-04	3.25E-04	
			Cobalt	NA	NA	NA	Thyroid	6.05E-05	5.05E-06	6.56E-05	
			Manganese	NA	NA	NA	Neurological	1.07E-04	5.60E-04	6.67E-04	
			<b>Pesticides</b>								
			4,4'-DDT	1.63E-12	5.71E-10	5.72E-10	Liver	5.59E-08	1.96E-05	1.96E-05	
			<b>PCBs</b>								
			Total PCBs	1.13E-11	2.35E-09	2.36E-09	Eye, Nails, Immune	8.21E-06	1.71E-03	1.72E-03	
			Chemical Total	1.59E-08	3.46E-07	3.61E-07		2.60E-04	1.19E-02	1.21E-02	
					Exposure Point Total						1.21E-02
		Exposure Medium Total						1.21E-02			
Surface Water Total					3.61E-07			1.21E-02			
Fish Tissue	Fish Fillet Tissue - Catfish	Fish Tissue	<b>PCBs</b>								
			Total PCBs	9.29E-06	NA	9.29E-06	Eye, Nails, Immune	1.36E+00	NA	1.36E+00	
			PCB-TEQ	1.22E-05	NA	1.22E-05	Reproductive, Developmental	7.83E-01	NA	7.83E-01	
			Total PCBs	1.65E-05	NA	1.65E-05	Eye, Nails, Immune	2.41E+00	NA	2.41E+00	
			PCB-TEQ	4.37E-06	NA	4.37E-06	Reproductive, Developmental	2.80E-01	NA	2.80E-01	
			Total PCBs	2.60E-05	NA	2.60E-05	Eye, Nails, Immune	3.79E+00	NA	3.79E+00	
			PCB-TEQ	NC	NA	NC	Reproductive, Developmental	NC	NA	NC	
Receptor Total - Upper Anacostia (Total PCBs) <sup>1</sup>					1.20E-05			1.45E+00			
Receptor Total - Upper Anacostia (PCB-TEQ) <sup>2</sup>					1.49E-05			8.76E-01			
Receptor Total - Lower Anacostia (Total PCBs)					1.93E-05			2.51E+00			
Receptor Total - Lower Anacostia (PCB-TEQ) <sup>2</sup>					7.10E-06			3.74E-01			
Receptor Total - Upstream (Total PCBs) <sup>1</sup>					2.87E-05			3.89E+00			
Receptor Total - Upstream (PCB-TEQ) <sup>2</sup>					NC			NC			

**Table C-1.21**  
**Summary of Receptor Risks and Hazards for COPCs - Teen Angler (Catfish Fish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Angler  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient			
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total

**Notes**

- NA - Not Applicable
- NC - Not calculated
- (1) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.
- (2) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

Target Organ HI - Upper Anacostia				
Organ	Sediment	Surface Water	Fish Tissue	Total
Decreased body and organ weights	2.65E-04	--	--	2.65E-04
Developmental	6.06E-02	9.29E-03	7.83E-01	8.53E-01
Eye	7.47E-03	1.72E-03	1.36E+00	1.36E+00
Hair	5.07E-03	--	--	5.07E-03
Immune	7.47E-03	1.72E-03	1.36E+00	1.36E+00
Liver	--	1.96E-05	--	1.96E-05
Nails	7.47E-03	1.72E-03	1.36E+00	1.36E+00
Neurological	1.33E-03	6.67E-04	--	1.99E-03
None Reported	1.04E-03	3.25E-04	--	1.37E-03
Reproductive	6.06E-02	9.29E-03	7.83E-01	8.53E-01
Skin	1.70E-03	6.03E-05	--	1.76E-03
Thyroid	4.01E-03	6.56E-05	--	4.07E-03
Vascular	1.70E-03	6.03E-05	--	1.76E-03

Target Organ HI - Lower Anacostia				
Organ	Sediment	Surface Water	Fish Tissue	Total
Decreased body and organ weights	2.65E-04	--	--	2.65E-04
Developmental	6.06E-02	9.29E-03	2.80E-01	3.50E-01
Eye	7.47E-03	1.72E-03	2.41E+00	2.42E+00
Hair	5.07E-03	--	--	5.07E-03
Immune	7.47E-03	1.72E-03	2.41E+00	2.42E+00
Liver	--	1.96E-05	--	1.96E-05
Nails	7.47E-03	1.72E-03	2.41E+00	2.42E+00
Neurological	1.33E-03	6.67E-04	--	1.99E-03
None Reported	1.04E-03	3.25E-04	--	1.37E-03
Reproductive	6.06E-02	9.29E-03	2.80E-01	3.50E-01
Skin	1.70E-03	6.03E-05	--	1.76E-03
Thyroid	4.01E-03	6.56E-05	--	4.07E-03
Vascular	1.70E-03	6.03E-05	--	1.76E-03

Target Organ HI - Upstream				
Organ	Sediment	Surface Water	Fish Tissue	Total
Decreased body and organ weights	2.65E-04	--	--	2.65E-04
Developmental	6.06E-02	9.29E-03	NC	6.99E-02
Eye	7.47E-03	1.72E-03	3.79E+00	3.80E+00
Hair	5.07E-03	--	--	5.07E-03
Immune	7.47E-03	1.72E-03	3.79E+00	3.80E+00
Liver	--	1.96E-05	--	1.96E-05
Nails	7.47E-03	1.72E-03	3.79E+00	3.80E+00
Neurological	1.33E-03	6.67E-04	--	1.99E-03
None Reported	1.04E-03	3.25E-04	--	1.37E-03
Reproductive	6.06E-02	9.29E-03	NC	6.99E-02
Skin	1.70E-03	6.03E-05	--	1.76E-03
Thyroid	4.01E-03	6.56E-05	--	4.07E-03
Vascular	1.70E-03	6.03E-05	--	1.76E-03



**Table C-1.22**  
**Summary of Receptor Risks and Hazards for COPCs - Teen Angler (Catfish Fish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Angler  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Sediment	Surface Sediment	Nearshore Surface Sediment	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	2.08E-08	1.69E-08	3.76E-08	Reproductive, Developmental	2.66E-03	2.16E-03	4.83E-03	
			<b>Metals</b>								
			Aluminum	NA	NA	NA	Neurological	1.31E-04	NA	1.31E-04	
			Arsenic	7.11E-09	9.63E-09	1.67E-08	Skin, Vascular	1.84E-04	2.50E-04	4.34E-04	
			Chromium	7.22E-08	NA	7.22E-08	None reported	2.25E-04	NA	2.25E-04	
			Cobalt	NA	NA	NA	Thyroid	8.87E-04	NA	8.87E-04	
			Manganese	NA	NA	NA	Neurological	1.57E-04	NA	1.57E-04	
			Nickel	NA	NA	NA	Decreased body and organ weights	4.79E-05	NA	4.79E-05	
			Thallium	NA	NA	NA	Hair	3.93E-04	NA	3.93E-04	
			Vanadium	NA	NA	NA	Hair	3.57E-04	NA	3.57E-04	
			<b>PCBs</b>								
			Total PCBs	8.03E-10	3.05E-09	3.85E-09	Eye, Nails, Immune	4.68E-04	1.78E-03	2.25E-03	
			<b>SVOCs</b>								
			Benzo(a)anthracene	1.30E-09	4.58E-09	5.88E-09	NA	NA	NA	NA	
			Benzo(a)pyrene	1.45E-08	5.13E-08	6.58E-08	NA	NA	NA	NA	
			Benzo(b)fluoranthene	2.19E-09	7.72E-09	9.92E-09	NA	NA	NA	NA	
			Benzo(k)fluoranthene	8.27E-11	2.91E-10	3.74E-10	NA	NA	NA	NA	
			Chrysene	2.04E-11	7.19E-11	9.23E-11	NA	NA	NA	NA	
			Dibenzo(a,h)anthracene	3.28E-09	1.16E-08	1.48E-08	NA	NA	NA	NA	
			Indeno(1,2,3-cd)pyrene	1.10E-09	3.87E-09	4.96E-09	NA	NA	NA	NA	
			Chemical Total	1.23E-07	1.09E-07	2.32E-07		5.51E-03	4.19E-03	9.70E-03	
					Exposure Point Total					9.70E-03	
				Exposure Medium Total						9.70E-03	
			Sediment Total							9.70E-03	

**Table C-1.22**  
**Summary of Receptor Risks and Hazards for COPCs - Teen Angler (Catfish Fish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Angler  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Surface Water	Surface Water	Surface Water	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	1.13E-11	1.58E-08	1.58E-08	Reproductive, Developmental	1.45E-06	2.03E-03	2.03E-03	
			<b>Metals</b>								
			Arsenic	2.56E-10	8.66E-11	3.42E-10	Skin, Vascular	6.63E-06	2.24E-06	8.87E-06	
			Chromium	8.35E-10	2.26E-08	2.35E-08	None reported	2.60E-06	7.04E-05	7.30E-05	
			Cobalt	NA	NA	NA	Thyroid	8.77E-06	1.19E-06	9.96E-06	
			Manganese	NA	NA	NA	Neurological	1.57E-05	1.33E-04	1.48E-04	
			<b>Pesticides</b>								
			4,4'-DDT	1.02E-13	8.20E-11	8.21E-11	Liver	6.98E-09	5.63E-06	5.63E-06	
			<b>PCBs</b>								
			Total PCBs	6.49E-13	4.40E-10	4.41E-10	Eye, Nails, Immune	1.26E-06	8.55E-04	8.57E-04	
			Chemical Total	1.10E-09	3.90E-08	4.01E-08		3.64E-05	3.09E-03	3.13E-03	
					Exposure Point Total						3.13E-03
					Exposure Medium Total						3.13E-03
Surface Water Total					4.01E-08				3.13E-03		
Fish Tissue	Fish Fillet Tissue - Catfish	Fish Tissue	<b>PCBs</b>								
			Total PCBs	3.91E-07	NA	3.91E-07	Eye, Nails, Immune	2.28E-01	NA	2.28E-01	
			PCB-TEQ	1.05E-06	NA	1.05E-06	Reproductive, Developmental	1.35E-01	NA	1.35E-01	
			Total PCBs	5.67E-07	NA	5.67E-07	Eye, Nails, Immune	3.31E-01	NA	3.31E-01	
			PCB-TEQ	4.63E-07	NA	4.63E-07	Reproductive, Developmental	5.93E-02	NA	5.93E-02	
			Total PCBs	1.00E-06	NA	1.00E-06	Eye, Nails, Immune	5.85E-01	NA	5.85E-01	
			PCB-TEQ	NC	NA	NC	Reproductive, Developmental	NC	NA	NC	
Receptor Total - Upper Anacostia (Total PCBs) <sup>1</sup>					6.64E-07				2.41E-01		
Receptor Total - Upper Anacostia (PCB-TEQ) <sup>2</sup>					1.33E-06				1.48E-01		
Receptor Total - Lower Anacostia (Total PCBs)					8.39E-07				3.43E-01		
Receptor Total - Lower Anacostia (PCB-TEQ) <sup>2</sup>					7.35E-07				7.22E-02		
Receptor Total - Upstream (Total PCBs) <sup>1</sup>					1.28E-06				5.98E-01		
Receptor Total - Upstream (PCB-TEQ) <sup>2</sup>					NC				NC		

**Table C-1.22**  
**Summary of Receptor Risks and Hazards for COPCs - Teen Angler (Catfish Fish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Angler  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient			
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total
				<b>Target Organ HI - Upper Anacostia</b>						
				<b>Organ</b>	<b>Sediment</b>	<b>Surface Water</b>	<b>Fish Tissue</b>	<b>Total</b>		
				Decreased body and organ weights	4.79E-05	--	--	4.79E-05		
				Developmental	4.83E-03	2.03E-03	1.35E-01	1.42E-01		
				Eye	2.25E-03	8.57E-04	2.28E-01	2.31E-01		
				Hair	7.50E-04	--	--	7.50E-04		
				Immune	2.25E-03	8.57E-04	2.28E-01	2.31E-01		
				Liver	--	5.63E-06	--	5.63E-06		
				Nails	2.25E-03	8.57E-04	2.28E-01	2.31E-01		
				Neurological	2.87E-04	1.48E-04	--	4.36E-04		
				None Reported	2.25E-04	7.30E-05	--	2.98E-04		
				Reproductive	4.83E-03	2.03E-03	1.35E-01	1.42E-01		
				Skin	4.34E-04	8.87E-06	--	4.43E-04		
				Thyroid	8.87E-04	9.96E-06	--	8.97E-04		
				Vascular	4.34E-04	8.87E-06	--	4.43E-04		
				<b>Target Organ HI - Lower Anacostia</b>						
				<b>Organ</b>	<b>Sediment</b>	<b>Surface Water</b>	<b>Fish Tissue</b>	<b>Total</b>		
				Decreased body and organ weights	4.79E-05	--	--	4.79E-05		
				Developmental	4.83E-03	2.03E-03	5.93E-02	6.62E-02		
				Eye	2.25E-03	8.57E-04	3.31E-01	3.34E-01		
				Hair	7.50E-04	--	--	7.50E-04		
				Immune	2.25E-03	8.57E-04	3.31E-01	3.34E-01		
				Liver	--	5.63E-06	--	5.63E-06		
				Nails	2.25E-03	8.57E-04	3.31E-01	3.34E-01		
				Neurological	2.87E-04	1.48E-04	--	4.36E-04		
				None Reported	2.25E-04	7.30E-05	--	2.98E-04		
				Reproductive	4.83E-03	2.03E-03	5.93E-02	6.62E-02		
				Skin	4.34E-04	8.87E-06	--	4.43E-04		
				Thyroid	8.87E-04	9.96E-06	--	8.97E-04		
				Vascular	4.34E-04	8.87E-06	--	4.43E-04		
				<b>Target Organ HI - Upstream</b>						
				<b>Organ</b>	<b>Sediment</b>	<b>Surface Water</b>	<b>Fish Tissue</b>	<b>Total</b>		
				Decreased body and organ weights	4.79E-05	--	--	4.79E-05		
				Developmental	4.83E-03	2.03E-03	NC	6.85E-03		
				Eye	2.25E-03	8.57E-04	5.85E-01	5.88E-01		
				Hair	7.50E-04	--	--	7.50E-04		
				Immune	2.25E-03	8.57E-04	5.85E-01	5.88E-01		
				Liver	--	5.63E-06	--	5.63E-06		
				Nails	2.25E-03	8.57E-04	5.85E-01	5.88E-01		
				Neurological	2.87E-04	1.48E-04	--	4.36E-04		
				None Reported	2.25E-04	7.30E-05	--	2.98E-04		
				Reproductive	4.83E-03	2.03E-03	NC	6.85E-03		
				Skin	4.34E-04	8.87E-06	--	4.43E-04		
				Thyroid	8.87E-04	9.96E-06	--	8.97E-04		
				Vascular	4.34E-04	8.87E-06	--	4.43E-04		

**Notes**  
 NA - Not Applicable  
 NC - Not calculated  
 (1) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.  
 (2) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

**Table C-1.23**  
**Summary of Receptor Risks and Hazards for COPCs - Teen Angler (Mixed Fish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Angler  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Sediment	Surface Sediment	Nearshore Surface Sediment	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	6.73E-07	2.73E-07	9.46E-07	Reproductive, Developmental	4.31E-02	1.75E-02	6.06E-02	
			<b>Metals</b>								
			Aluminum	NA	NA	NA	Neurological	6.08E-04	NA	6.08E-04	
			Arsenic	7.81E-08	5.29E-08	1.31E-07	Skin, Vascular	1.01E-03	6.86E-04	1.70E-03	
			Chromium	6.71E-07	NA	6.71E-07	None reported	1.04E-03	NA	1.04E-03	
			Cobalt	NA	NA	NA	Thyroid	4.01E-03	NA	4.01E-03	
			Manganese	NA	NA	NA	Neurological	7.19E-04	NA	7.19E-04	
			Nickel	NA	NA	NA	Decreased body and organ weights	2.65E-04	NA	2.65E-04	
			Thallium	NA	NA	NA	Hair	2.03E-03	NA	2.03E-03	
			Vanadium	NA	NA	NA	Hair	3.05E-03	NA	3.05E-03	
			<b>PCBs</b>								
			Total PCBs	1.77E-08	3.35E-08	5.12E-08	Eye, Nails, Immune	2.58E-03	4.89E-03	7.47E-03	
			<b>SVOCs</b>								
			Benzo(a)anthracene	1.19E-08	2.09E-08	3.28E-08	NA	NA	NA	NA	
			Benzo(a)pyrene	1.32E-07	2.32E-07	3.64E-07	NA	NA	NA	NA	
			Benzo(b)fluoranthene	2.00E-08	3.52E-08	5.52E-08	NA	NA	NA	NA	
			Benzo(k)fluoranthene	7.71E-10	1.36E-09	2.13E-09	NA	NA	NA	NA	
			Chrysene	1.84E-10	3.25E-10	5.09E-10	NA	NA	NA	NA	
			Dibenzo(a,h)anthracene	2.98E-08	5.25E-08	8.24E-08	NA	NA	NA	NA	
			Indeno(1,2,3-cd)pyrene	1.01E-08	1.77E-08	2.78E-08	NA	NA	NA	NA	
			Chemical Total	1.64E-06	7.20E-07	2.36E-06		5.84E-02	2.31E-02	8.15E-02	
					Exposure Point Total					2.36E-06	8.15E-02
					Exposure Medium Total					2.36E-06	8.15E-02
			Sediment Total							2.36E-06	8.15E-02

**Table C-1.23**  
**Summary of Receptor Risks and Hazards for COPCs - Teen Angler (Mixed Fish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Angler  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Surface Water	Surface Water	Surface Water	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	2.38E-10	1.45E-07	1.45E-07	Reproductive, Developmental	1.53E-05	9.27E-03	9.29E-03	
			<b>Metals</b>								
			Arsenic	3.85E-09	8.03E-10	4.65E-09	Skin, Vascular	4.99E-05	1.04E-05	6.03E-05	
			Chromium	1.18E-08	1.97E-07	2.09E-07	None reported	1.84E-05	3.07E-04	3.25E-04	
			Cobalt	NA	NA	NA	Thyroid	6.05E-05	5.05E-06	6.56E-05	
			Manganese	NA	NA	NA	Neurological	1.07E-04	5.60E-04	6.67E-04	
			<b>Pesticides</b>								
			4,4'-DDT	1.63E-12	5.71E-10	5.72E-10	Liver	5.59E-08	1.96E-05	1.96E-05	
			<b>PCBs</b>								
			Total PCBs	1.13E-11	2.35E-09	2.36E-09	Eye, Nails, Immune	8.21E-06	1.71E-03	1.72E-03	
			Chemical Total	1.59E-08	3.46E-07	3.61E-07		2.60E-04	1.19E-02	1.21E-02	
					Exposure Point Total						1.21E-02
		Exposure Medium Total						1.21E-02			
Surface Water Total					3.61E-07			1.21E-02			
Fish Tissue	Fish Fillet Tissue - Mixed Diet (1)	Fish Tissue	<b>PCBs</b>								
			Total PCBs	4.73E-06	NA	4.73E-06	Eye, Nails, Immune	6.89E-01	NA	6.89E-01	
			PCB-TEQ	1.15E-05	NA	1.15E-05	Reproductive, Developmental	7.38E-01	NA	7.38E-01	
			Total PCBs	1.31E-05	NA	1.31E-05	Eye, Nails, Immune	1.91E+00	NA	1.91E+00	
			PCB-TEQ	1.10E-05	NA	1.10E-05	Reproductive, Developmental	7.07E-01	NA	7.07E-01	
			Total PCBs	2.79E-05	NA	2.79E-05	Eye, Nails, Immune	4.07E+00	NA	4.07E+00	
			PCB-TEQ	NC	NA	NC	Reproductive, Developmental	NC	NA	NC	
Receptor Total - Upper Anacostia (Total PCBs) <sup>2</sup>					7.45E-06			7.83E-01			
Receptor Total - Upper Anacostia (PCB-TEQs) <sup>3</sup>					1.42E-05			8.31E-01			
Receptor Total - Lower Anacostia (Total PCBs) <sup>2</sup>					1.59E-05			2.01E+00			
Receptor Total - Lower Anacostia (PCB-TEQs) <sup>3</sup>					1.38E-05			8.01E-01			
Receptor Total - Upstream (Total PCBs) <sup>2</sup>					3.07E-05			4.17E+00			
Receptor Total - Upstream (PCB-TEQs) <sup>3</sup>					NC			NC			

**Table C-1.23**  
**Summary of Receptor Risks and Hazards for COPCs - Teen Angler (Mixed Fish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Angler  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient			
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total

**Notes**

NA - Not Applicable

NC - Not calculated

(1) - Assumes equal portions of available species, including American eel, catfish, carp, largemouth bass, and sunfish.

(2) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.

(3) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

Target Organ HI - Upper Anacostia				
Organ	Sediment	Surface Water	Fish Tissue	Total
Decreased body and organ weights	2.65E-04	--	--	2.65E-04
Developmental	6.06E-02	9.29E-03	7.38E-01	8.08E-01
Eye	7.47E-03	1.72E-03	6.89E-01	6.99E-01
Hair	5.07E-03	--	--	5.07E-03
Immune	7.47E-03	1.72E-03	6.89E-01	6.99E-01
Liver	--	1.96E-05	--	1.96E-05
Nails	7.47E-03	1.72E-03	6.89E-01	6.99E-01
Neurological	1.33E-03	6.67E-04	--	1.99E-03
None Reported	1.04E-03	3.25E-04	--	1.37E-03
Reproductive	6.06E-02	9.29E-03	7.38E-01	8.08E-01
Skin	1.70E-03	6.03E-05	--	1.76E-03
Thyroid	4.01E-03	6.56E-05	--	4.07E-03
Vascular	1.70E-03	6.03E-05	--	1.76E-03

Target Organ HI - Lower Anacostia				
Organ	Sediment	Surface Water	Fish Tissue	Total
Decreased body and organ weights	2.65E-04	--	--	2.65E-04
Developmental	6.06E-02	9.29E-03	7.07E-01	7.77E-01
Eye	7.47E-03	1.72E-03	1.91E+00	1.92E+00
Hair	5.07E-03	--	--	5.07E-03
Immune	7.47E-03	1.72E-03	1.91E+00	1.92E+00
Liver	--	1.96E-05	--	1.96E-05
Nails	7.47E-03	1.72E-03	1.91E+00	1.92E+00
Neurological	1.33E-03	6.67E-04	--	1.99E-03
None Reported	1.04E-03	3.25E-04	--	1.37E-03
Reproductive	6.06E-02	9.29E-03	7.07E-01	7.77E-01
Skin	1.70E-03	6.03E-05	--	1.76E-03
Thyroid	4.01E-03	6.56E-05	--	4.07E-03
Vascular	1.70E-03	6.03E-05	--	1.76E-03

Target Organ HI - Upstream				
Organ	Sediment	Surface Water	Fish Tissue	Total
Decreased body and organ weights	2.65E-04	--	--	2.65E-04
Developmental	6.06E-02	9.29E-03	NC	6.99E-02
Eye	7.47E-03	1.72E-03	4.07E+00	4.08E+00
Hair	5.07E-03	--	--	5.07E-03
Immune	7.47E-03	1.72E-03	4.07E+00	4.08E+00
Liver	--	1.96E-05	--	1.96E-05
Nails	7.47E-03	1.72E-03	4.07E+00	4.08E+00
Neurological	1.33E-03	6.67E-04	--	1.99E-03
None Reported	1.04E-03	3.25E-04	--	1.37E-03
Reproductive	6.06E-02	9.29E-03	NC	6.99E-02
Skin	1.70E-03	6.03E-05	--	1.76E-03
Thyroid	4.01E-03	6.56E-05	--	4.07E-03
Vascular	1.70E-03	6.03E-05	--	1.76E-03

**Table C-1.24**  
**Summary of Receptor Risks and Hazards for COPCs - Teen Angler (Mixed Fish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Angler  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Sediment	Surface Sediment	Nearshore Surface Sediment	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	2.08E-08	1.69E-08	3.76E-08	Reproductive, Developmental	2.66E-03	2.16E-03	4.83E-03	
			<b>Metals</b>								
			Aluminum	NA	NA	NA	Neurological	1.31E-04	NA	1.31E-04	
			Arsenic	7.11E-09	9.63E-09	1.67E-08	Skin, Vascular	1.84E-04	2.50E-04	4.34E-04	
			Chromium	7.22E-08	NA	7.22E-08	None reported	2.25E-04	NA	2.25E-04	
			Cobalt	NA	NA	NA	Thyroid	8.87E-04	NA	8.87E-04	
			Manganese	NA	NA	NA	Neurological	1.57E-04	NA	1.57E-04	
			Nickel	NA	NA	NA	Decreased body and organ weights	4.79E-05	NA	4.79E-05	
			Thallium	NA	NA	NA	Hair	3.93E-04	NA	3.93E-04	
			Vanadium	NA	NA	NA	Hair	3.57E-04	NA	3.57E-04	
			<b>PCBs</b>								
			Total PCBs	8.03E-10	3.05E-09	3.85E-09	Eye, Nails, Immune	4.68E-04	1.78E-03	2.25E-03	
			<b>SVOCs</b>								
			Benzo(a)anthracene	1.30E-09	4.58E-09	5.88E-09	NA	NA	NA	NA	
			Benzo(a)pyrene	1.45E-08	5.13E-08	6.58E-08	NA	NA	NA	NA	
			Benzo(b)fluoranthene	2.19E-09	7.72E-09	9.92E-09	NA	NA	NA	NA	
			Benzo(k)fluoranthene	8.27E-11	2.91E-10	3.74E-10	NA	NA	NA	NA	
			Chrysene	2.04E-11	7.19E-11	9.23E-11	NA	NA	NA	NA	
			Dibenzo(a,h)anthracene	3.28E-09	1.16E-08	1.48E-08	NA	NA	NA	NA	
			Indeno(1,2,3-cd)pyrene	1.10E-09	3.87E-09	4.96E-09	NA	NA	NA	NA	
			Chemical Total	1.23E-07	1.09E-07	2.32E-07		5.51E-03	4.19E-03	9.70E-03	
					Exposure Point Total					9.70E-03	
					Exposure Medium Total					9.70E-03	
			Sediment Total							9.70E-03	

**Table C-1.24**  
**Summary of Receptor Risks and Hazards for COPCs - Teen Angler (Mixed Fish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Angler  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Surface Water	Surface Water	Surface Water	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	1.13E-11	1.58E-08	1.58E-08	Reproductive, Developmental	1.45E-06	2.03E-03	2.03E-03	
			<b>Metals</b>								
			Arsenic	2.56E-10	8.66E-11	3.42E-10	Skin, Vascular	6.63E-06	2.24E-06	8.87E-06	
			Chromium	8.35E-10	2.26E-08	2.35E-08	None reported	2.60E-06	7.04E-05	7.30E-05	
			Cobalt	NA	NA	NA	Thyroid	8.77E-06	1.19E-06	9.96E-06	
			Manganese	NA	NA	NA	Neurological	1.57E-05	1.33E-04	1.48E-04	
			<b>Pesticides</b>								
			4,4'-DDT	1.02E-13	8.20E-11	8.21E-11	Liver	6.98E-09	5.63E-06	5.63E-06	
			<b>PCBs</b>								
			Total PCBs	6.49E-13	4.40E-10	4.41E-10	Eye, Nails, Immune	1.26E-06	8.55E-04	8.57E-04	
			Chemical Total	1.10E-09	3.90E-08	4.01E-08		3.64E-05	3.09E-03	3.13E-03	
					Exposure Point Total						3.13E-03
		Exposure Medium Total						3.13E-03			
Surface Water Total					4.01E-08				3.13E-03		
Fish Tissue	Fish Fillet Tissue - Mixed Diet (1)	Fish Tissue	<b>PCBs</b>								
			Total PCBs	2.28E-07	NA	2.28E-07	Eye, Nails, Immune	1.33E-01	NA	1.33E-01	
			PCB-TEQ	1.18E-06	NA	1.18E-06	Reproductive, Developmental	1.51E-01	NA	1.51E-01	
			Total PCBs	6.45E-07	NA	6.45E-07	Eye, Nails, Immune	3.76E-01	NA	3.76E-01	
			PCB-TEQ	1.19E-06	NA	1.19E-06	Reproductive, Developmental	1.53E-01	NA	1.53E-01	
			Total PCBs	1.32E-06	NA	1.32E-06	Eye, Nails, Immune	7.70E-01	NA	7.70E-01	
			PCB-TEQ	NC	NA	NC	Reproductive, Developmental	NC	NA	NC	
Receptor Total - Upper Anacostia (Total PCBs) <sup>2</sup>					5.00E-07				1.46E-01		
Receptor Total - Upper Anacostia (PCB-TEQs) <sup>3</sup>					1.45E-06				1.64E-01		
Receptor Total - Lower Anacostia (Total PCBs) <sup>2</sup>					9.18E-07				3.89E-01		
Receptor Total - Lower Anacostia (PCB-TEQs) <sup>3</sup>					1.46E-06				1.66E-01		
Receptor Total - Upstream (Total PCBs) <sup>2</sup>					1.59E-06				7.82E-01		
Receptor Total - Upstream (PCB-TEQs) <sup>3</sup>					NC				NC		



**Table C-1.24**  
**Summary of Receptor Risks and Hazards for COPCs - Teen Angler (Mixed Fish Diet)**  
**Central Tendency Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
Receptor Population: Angler  
Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient			
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total
<b>Notes</b>				<b>Target Organ HI - Upper Anacostia</b>						
NA - Not Applicable				<b>Organ</b>						
NC - Not calculated				<b>Sediment</b>						
(1) - Assumes equal portions of available species, including American eel, catfish, carp, largemouth bass, and sunfish.				<b>Surface Water</b>						
(2) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.				<b>Fish Tissue</b>						
(3) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.				<b>Total</b>						
Decreased body and organ weights				4.79E-05						
Developmental				4.83E-03						
Eye				2.25E-03						
Hair				7.50E-04						
Immune				2.25E-03						
Liver				--						
Nails				2.25E-03						
Neurological				2.87E-04						
None Reported				2.25E-04						
Reproductive				4.83E-03						
Skin				4.34E-04						
Thyroid				8.87E-04						
Vascular				4.34E-04						
<b>Target Organ HI - Lower Anacostia</b>				<b>Organ</b>						
Decreased body and organ weights				4.79E-05						
Developmental				4.83E-03						
Eye				2.25E-03						
Hair				7.50E-04						
Immune				2.25E-03						
Liver				--						
Nails				2.25E-03						
Neurological				2.87E-04						
None Reported				2.25E-04						
Reproductive				4.83E-03						
Skin				4.34E-04						
Thyroid				8.87E-04						
Vascular				4.34E-04						
<b>Target Organ HI - Upstream</b>				<b>Organ</b>						
Decreased body and organ weights				4.79E-05						
Developmental				4.83E-03						
Eye				2.25E-03						
Hair				7.50E-04						
Immune				2.25E-03						
Liver				--						
Nails				2.25E-03						
Neurological				2.87E-04						
None Reported				2.25E-04						
Reproductive				4.83E-03						
Skin				4.34E-04						
Thyroid				8.87E-04						
Vascular				4.34E-04						

## **Risk Calculation Spreadsheets – Swimmer Receptor**

**Table C-2.1**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Swimmer**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Swimmer
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations									
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient				
							Value	Units	Value	Units			Value	Units	Value	Units					
Sediment	Surface Sediment	Nearshore Surface Sediment	Ingestion	<b>Dioxin</b>																	
				2,3,7,8-TCDD-TEQ	4.49E-04	mg/kg	2.86E-12	mg/kg-day	1.30E+05	kg-day/mg		3.71E-07	1.00E-11	mg/kg-day	7.00E-10	mg/kg-day	1.43E-02				
				<b>Metals</b>																	
				Aluminum	9.05E+03	mg/kg	5.75E-05	mg/kg-day	NA	kg-day/mg		NA	2.01E-04	mg/kg-day	1.00E+00	mg/kg-day	2.01E-04				
				Arsenic	7.54E+00	mg/kg	2.88E-08	mg/kg-day	1.50E+00	kg-day/mg		4.31E-08	1.01E-07	mg/kg-day	3.00E-04	mg/kg-day	3.36E-04				
				Chromium	4.67E+01	mg/kg	2.96E-07	mg/kg-day	5.00E-01	kg-day/mg	1	1.48E-07	1.04E-06	mg/kg-day	3.00E-03	mg/kg-day	3.46E-04				
				Cobalt	1.79E+01	mg/kg	1.14E-07	mg/kg-day	NA	kg-day/mg		NA	3.98E-07	mg/kg-day	3.00E-04	mg/kg-day	1.33E-03				
				Manganese	2.57E+02	mg/kg	1.63E-06	mg/kg-day	NA	kg-day/mg		NA	5.72E-06	mg/kg-day	2.40E-02	mg/kg-day	2.38E-04				
				Nickel	7.90E+01	mg/kg	5.02E-07	mg/kg-day	NA	kg-day/mg		NA	1.76E-06	mg/kg-day	2.00E-02	mg/kg-day	8.79E-05				
				Thallium	3.02E-01	mg/kg	1.92E-09	mg/kg-day	NA	kg-day/mg		NA	6.72E-09	mg/kg-day	1.00E-05	mg/kg-day	6.72E-04				
				Vanadium	2.29E+02	mg/kg	1.45E-06	mg/kg-day	NA	kg-day/mg		NA	5.08E-06	mg/kg-day	5.04E-03	mg/kg-day	1.01E-03				
				<b>PCBs</b>																	
				Total PCBs	7.68E-01	mg/kg	4.88E-09	mg/kg-day	2.00E+00	kg-day/mg		9.76E-09	1.71E-08	mg/kg-day	2.00E-05	mg/kg-day	8.54E-04				
				<b>SVOCs</b>																	
				Benzo(a)anthracene	5.65E-01	mg/kg	3.59E-09	mg/kg-day	7.30E-01	kg-day/mg	1	2.62E-09	1.26E-08	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(a)pyrene	6.28E-01	mg/kg	3.99E-09	mg/kg-day	7.30E+00	kg-day/mg	1	2.91E-08	1.40E-08	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(b)fluoranthene	9.51E-01	mg/kg	6.04E-09	mg/kg-day	7.30E-01	kg-day/mg	1	4.41E-09	2.12E-08	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(k)fluoranthene	3.67E-01	mg/kg	2.33E-09	mg/kg-day	7.30E-02	kg-day/mg	1	1.70E-10	8.16E-09	mg/kg-day	NA	mg/kg-day	NA				
				Chrysene	8.77E-01	mg/kg	5.57E-09	mg/kg-day	7.30E-03	kg-day/mg	1	4.07E-11	1.95E-08	mg/kg-day	NA	mg/kg-day	NA				
				Dibenzo(a,h)anthracene	1.42E-01	mg/kg	9.02E-10	mg/kg-day	7.30E+00	kg-day/mg	1	6.59E-09	3.16E-09	mg/kg-day	NA	mg/kg-day	NA				
Indeno(1,2,3-cd)pyrene	4.79E-01	mg/kg	3.04E-09	mg/kg-day	7.30E-01	kg-day/mg	1	2.22E-09	1.07E-08	mg/kg-day	NA	mg/kg-day	NA								
<b>Exp. Route Total</b>																		1.94E-02			

**Table C-2.1**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Swimmer**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Swimmer  
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations									
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient				
							Value	Units	Value	Units			Value	Units	Value	Units					
Sediment	Surface Sediment	Nearshore Surface Sediment	Dermal	<b>Dioxin</b>																	
				2,3,7,8-TCDD-TEQ	4.49E-04	mg/kg	1.95E-12	mg/kg-day	1.30E+05	kg-day/mg		2.54E-07	6.84E-12	mg/kg-day	7.00E-10	mg/kg-day	9.77E-03				
				<b>Metals</b>																	
				Aluminum	9.05E+03	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E+00	mg/kg-day	NA				
				Arsenic	7.54E+00	mg/kg	3.28E-08	mg/kg-day	1.50E+00	kg-day/mg		4.92E-08	1.15E-07	mg/kg-day	3.00E-04	mg/kg-day	3.83E-04				
				Chromium	4.67E+01	mg/kg	NA	mg/kg-day	2.00E+01	kg-day/mg	1	NA	NA	mg/kg-day	7.50E-05	mg/kg-day	NA				
				Cobalt	1.79E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	3.00E-04	mg/kg-day	NA				
				Manganese	2.57E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	9.60E-04	mg/kg-day	NA				
				Nickel	7.90E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	8.00E-04	mg/kg-day	NA				
				Thallium	3.02E-01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E-05	mg/kg-day	NA				
				Vanadium	2.29E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.31E-04	mg/kg-day	NA				
				<b>PCBs</b>																	
				Total PCBs	7.68E-01	mg/kg	1.56E-08	mg/kg-day	2.00E+00	kg-day/mg		3.12E-08	5.45E-08	mg/kg-day	2.00E-05	mg/kg-day	2.73E-03				
				<b>SVOCs</b>																	
				Benzo(a)anthracene	5.65E-01	mg/kg	1.06E-08	mg/kg-day	7.30E-01	kg-day/mg	1	7.77E-09	3.72E-08	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(a)pyrene	6.28E-01	mg/kg	1.18E-08	mg/kg-day	7.30E+00	kg-day/mg	1	8.64E-08	4.14E-08	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(b)fluoranthene	9.51E-01	mg/kg	1.79E-08	mg/kg-day	7.30E-01	kg-day/mg	1	1.31E-08	6.27E-08	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(k)fluoranthene	3.67E-01	mg/kg	6.91E-09	mg/kg-day	7.30E-02	kg-day/mg	1	5.05E-10	2.42E-08	mg/kg-day	NA	mg/kg-day	NA				
				Chrysene	8.77E-01	mg/kg	1.65E-08	mg/kg-day	7.30E-03	kg-day/mg	1	1.21E-10	5.78E-08	mg/kg-day	NA	mg/kg-day	NA				
				Dibenzo(a,h)anthracene	1.42E-01	mg/kg	2.67E-09	mg/kg-day	7.30E+00	kg-day/mg	1	1.95E-08	9.36E-09	mg/kg-day	NA	mg/kg-day	NA				
				Indeno(1,2,3-cd)pyrene	4.79E-01	mg/kg	9.02E-09	mg/kg-day	7.30E-01	kg-day/mg	1	6.59E-09	3.16E-08	mg/kg-day	NA	mg/kg-day	NA				
							<b>Exp. Route Total</b>							4.68E-07				1.29E-02			
							<b>Exposure Point Total</b>							1.09E-06				3.22E-02			
			<b>Exposure Medium Total</b>							1.09E-06				3.22E-02							
<b>Sediment Total</b>										1.09E-06				3.22E-02							

**Table C-2.1**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Swimmer**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Swimmer  
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations							
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient		
							Value	Units	Value	Units			Value	Units	Value	Units			
Surface Water	Surface Water	Surface Water	Ingestion	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	6.12E-07	ug/L	8.17E-16	mg/kg-day	1.30E+05	kg-day/mg	1	1.06E-10	2.86E-15	mg/kg-day	7.00E-10	mg/kg-day	4.08E-06		
				<b>Metals</b> Arsenic	8.58E-01	ug/L	1.15E-09	mg/kg-day	1.50E+00	kg-day/mg		1.72E-09	4.01E-09	mg/kg-day	3.00E-04	mg/kg-day	1.34E-05		
				Chromium	3.16E+00	ug/L	4.22E-09	mg/kg-day	5.00E-01	kg-day/mg		2.11E-09	1.48E-08	mg/kg-day	3.00E-03	mg/kg-day	4.92E-06		
				Cobalt	1.04E+00	ug/L	1.39E-09	mg/kg-day	NA	kg-day/mg		NA	4.86E-09	mg/kg-day	3.00E-04	mg/kg-day	1.62E-05		
				Manganese	1.48E+02	ug/L	1.97E-07	mg/kg-day	NA	kg-day/mg		NA	6.90E-07	mg/kg-day	2.40E-02	mg/kg-day	2.87E-05		
				<b>Pesticides</b> 4,4'-DDT	1.60E-03	ug/L	2.14E-12	mg/kg-day	3.40E-01	kg-day/mg		7.26E-13	7.47E-12	mg/kg-day	5.00E-04	mg/kg-day	1.49E-08		
				<b>PCBs</b> Total PCBs	9.40E-03	ug/L	1.25E-11	mg/kg-day	4.00E-01	kg-day/mg		5.02E-12	4.39E-11	mg/kg-day	2.00E-05	mg/kg-day	2.20E-06		
				<b>Exp. Route Total</b>									3.94E-09					6.95E-05	
				Dermal	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	6.12E-07	ug/L	3.35E-12	mg/kg-day	1.30E+05		kg-day/mg	1	4.36E-07	1.17E-11	mg/kg-day	7.00E-10	mg/kg-day	1.68E-02
					<b>Metals</b> Arsenic	8.58E-01	ug/L	1.14E-09	mg/kg-day	1.50E+00		kg-day/mg		1.71E-09	3.99E-09	mg/kg-day	3.00E-04	mg/kg-day	1.33E-05
			Chromium		3.16E+00	ug/L	8.39E-09	mg/kg-day	2.00E+01	kg-day/mg	1.68E-07	2.94E-08		mg/kg-day	7.50E-05	mg/kg-day	3.92E-04		
			Cobalt		1.04E+00	ug/L	5.53E-10	mg/kg-day	NA	kg-day/mg	NA	1.93E-09		mg/kg-day	3.00E-04	mg/kg-day	6.45E-06		
			Manganese		1.48E+02	ug/L	1.96E-07	mg/kg-day	NA	kg-day/mg	NA	6.87E-07		mg/kg-day	9.60E-04	mg/kg-day	7.15E-04		
			<b>Pesticides</b> 4,4'-DDT		1.60E-03	ug/L	5.05E-09	mg/kg-day	3.40E-01	kg-day/mg	1.72E-09	1.77E-08		mg/kg-day	5.00E-04	mg/kg-day	3.54E-05		
			<b>PCBs</b> Total PCBs		9.40E-03	ug/L	3.54E-08	mg/kg-day	4.00E-01	kg-day/mg	1.42E-08	1.24E-07		mg/kg-day	2.00E-05	mg/kg-day	6.19E-03		
			<b>Exp. Route Total</b>									6.21E-07						2.41E-02	
			<b>Exposure Point Total</b>									6.25E-07						2.42E-02	
			<b>Exposure Medium Total</b>									6.25E-07						2.42E-02	
			<b>Surface Water Total</b>								6.25E-07					2.42E-02			
			<b>Total Receptor Risk/Hazard</b>								1.71E-06					5.64E-02			

**Notes:**

- ADAF - Age-Dependent Adjustment Factor.
  - CSF - Cancer Slope Factor.
  - EPC - Exposure Point Concentration.
  - NA - Not applicable.
  - PCB - Polychlorinated Biphenyl.
  - RfD - Oral Reference Dose.
  - SVOC - Semivolatile Organic Compound.
  - TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.
- (1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.

**Table C-2.2**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Swimmer**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Swimmer
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations								
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient			
							Value	Units	Value	Units			Value	Units	Value	Units				
Sediment	Surface Sediment	Nearshore Surface Sediment	Ingestion	<b>Dioxin</b>																
				2,3,7,8-TCDD-TEQ	1.11E-04	mg/kg	8.82E-14	mg/kg-day	1.30E+05	kg-day/mg		1.15E-08	6.17E-13	mg/kg-day	7.00E-10	mg/kg-day	8.82E-04			
				<b>Metals</b>																
				Aluminum	7.78E+03	mg/kg	6.18E-06	mg/kg-day	NA	kg-day/mg		NA	4.33E-05	mg/kg-day	1.00E+00	mg/kg-day	4.33E-05			
				Arsenic	5.49E+00	mg/kg	2.62E-09	mg/kg-day	1.50E+00	kg-day/mg		3.92E-09	1.83E-08	mg/kg-day	3.00E-04	mg/kg-day	6.10E-05			
				Chromium	4.02E+01	mg/kg	3.19E-08	mg/kg-day	5.00E-01	kg-day/mg	1	1.60E-08	2.23E-07	mg/kg-day	3.00E-03	mg/kg-day	7.44E-05			
				Cobalt	1.59E+01	mg/kg	1.26E-08	mg/kg-day	NA	kg-day/mg		NA	8.81E-08	mg/kg-day	3.00E-04	mg/kg-day	2.94E-04			
				Manganese	2.24E+02	mg/kg	1.78E-07	mg/kg-day	NA	kg-day/mg		NA	1.25E-06	mg/kg-day	2.40E-02	mg/kg-day	5.19E-05			
				Nickel	5.71E+01	mg/kg	4.54E-08	mg/kg-day	NA	kg-day/mg		NA	3.18E-07	mg/kg-day	2.00E-02	mg/kg-day	1.59E-05			
				Thallium	2.34E-01	mg/kg	1.86E-10	mg/kg-day	NA	kg-day/mg		NA	1.30E-09	mg/kg-day	1.00E-05	mg/kg-day	1.30E-04			
				Vanadium	1.07E+02	mg/kg	8.51E-08	mg/kg-day	NA	kg-day/mg		NA	5.96E-07	mg/kg-day	5.04E-03	mg/kg-day	1.18E-04			
				<b>PCBs</b>																
				Total PCBs	5.58E-01	mg/kg	4.43E-10	mg/kg-day	1.00E+00	kg-day/mg		4.43E-10	3.10E-09	mg/kg-day	2.00E-05	mg/kg-day	1.55E-04			
				<b>SVOCs</b>																
				Benzo(a)anthracene	4.95E-01	mg/kg	3.93E-10	mg/kg-day	7.30E-01	kg-day/mg	1	2.87E-10	2.75E-09	mg/kg-day	NA	mg/kg-day	NA			
				Benzo(a)pyrene	5.54E-01	mg/kg	4.40E-10	mg/kg-day	7.30E+00	kg-day/mg	1	3.21E-09	3.08E-09	mg/kg-day	NA	mg/kg-day	NA			
				Benzo(b)fluoranthene	8.35E-01	mg/kg	6.63E-10	mg/kg-day	7.30E-01	kg-day/mg	1	4.84E-10	4.64E-09	mg/kg-day	NA	mg/kg-day	NA			
				Benzo(k)fluoranthene	3.15E-01	mg/kg	2.50E-10	mg/kg-day	7.30E-02	kg-day/mg	1	1.83E-11	1.75E-09	mg/kg-day	NA	mg/kg-day	NA			
				chrysene	7.77E-01	mg/kg	6.17E-10	mg/kg-day	7.30E-03	kg-day/mg	1	4.50E-12	4.32E-09	mg/kg-day	NA	mg/kg-day	NA			
				Dibenzo(a,h)anthracene	1.25E-01	mg/kg	9.93E-11	mg/kg-day	7.30E+00	kg-day/mg	1	7.25E-10	6.95E-10	mg/kg-day	NA	mg/kg-day	NA			
Indeno(1,2,3-cd)pyrene	4.18E-01	mg/kg	3.32E-10	mg/kg-day	7.30E-01	kg-day/mg	1	2.42E-10	2.32E-09	mg/kg-day	NA	mg/kg-day	NA							
<b>Exp. Route Total</b>																		1.83E-03		

**Table C-2.2**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Swimmer**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Swimmer  
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations									
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient				
							Value	Units	Value	Units			Value	Units	Value	Units					
Sediment	Surface Sediment	Nearshore Surface Sediment	Dermal	<b>Dioxin</b>																	
				2,3,7,8-TCDD-TEQ	1.11E-04	mg/kg	1.21E-13	mg/kg-day	1.30E+05	kg-day/mg		1.57E-08	8.44E-13	mg/kg-day	7.00E-10	mg/kg-day	1.21E-03				
				<b>Metals</b>																	
				Aluminum	7.78E+03	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E+00	mg/kg-day	NA				
				Arsenic	5.49E+00	mg/kg	5.97E-09	mg/kg-day	1.50E+00	kg-day/mg		8.95E-09	4.18E-08	mg/kg-day	3.00E-04	mg/kg-day	1.39E-04				
				Chromium	4.02E+01	mg/kg	NA	mg/kg-day	2.00E+01	kg-day/mg	1	NA	NA	mg/kg-day	7.50E-05	mg/kg-day	NA				
				Cobalt	1.59E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	3.00E-04	mg/kg-day	NA				
				Manganese	2.24E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	9.60E-04	mg/kg-day	NA				
				Nickel	5.71E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	8.00E-04	mg/kg-day	NA				
				Thallium	2.34E-01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E-05	mg/kg-day	NA				
				Vanadium	1.07E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.31E-04	mg/kg-day	NA				
				<b>PCBs</b>																	
				Total PCBs	5.58E-01	mg/kg	2.83E-09	mg/kg-day	1.00E+00	kg-day/mg		2.83E-09	1.98E-08	mg/kg-day	2.00E-05	mg/kg-day	9.90E-04				
				<b>SVOCs</b>																	
				Benzo(a)anthracene	4.95E-01	mg/kg	2.33E-09	mg/kg-day	7.30E-01	kg-day/mg	1	1.70E-09	1.63E-08	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(a)pyrene	5.54E-01	mg/kg	2.61E-09	mg/kg-day	7.30E+00	kg-day/mg	1	1.90E-08	1.83E-08	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(b)fluoranthene	8.35E-01	mg/kg	3.93E-09	mg/kg-day	7.30E-01	kg-day/mg	1	2.87E-09	2.75E-08	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(k)fluoranthene	3.15E-01	mg/kg	1.48E-09	mg/kg-day	7.30E-02	kg-day/mg	1	1.08E-10	1.04E-08	mg/kg-day	NA	mg/kg-day	NA				
				chrysene	7.77E-01	mg/kg	3.66E-09	mg/kg-day	7.30E-03	kg-day/mg	1	2.67E-11	2.56E-08	mg/kg-day	NA	mg/kg-day	NA				
				Dibenzo(a,h)anthracene	1.25E-01	mg/kg	5.89E-10	mg/kg-day	7.30E+00	kg-day/mg	1	4.30E-09	4.12E-09	mg/kg-day	NA	mg/kg-day	NA				
Indeno(1,2,3-cd)pyrene	4.18E-01	mg/kg	1.97E-09	mg/kg-day	7.30E-01	kg-day/mg	1	1.44E-09	1.38E-08	mg/kg-day	NA	mg/kg-day	NA								
			<b>Exp. Route Total</b>							5.69E-08				2.34E-03							
			<b>Exposure Point Total</b>							9.37E-08				4.16E-03							
			<b>Exposure Medium Total</b>							9.37E-08				4.16E-03							
<b>Sediment Total</b>										9.37E-08				4.16E-03							

**Table C-2.2**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Swimmer**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Swimmer  
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations							
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient		
							Value	Units	Value	Units			Value	Units	Value	Units			
Surface Water	Surface Water	Surface Water	Ingestion	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	3.78E-07	ug/L	6.31E-17	mg/kg-day	1.30E+05	kg-day/mg	1	8.20E-12	4.41E-16	mg/kg-day	7.00E-10	mg/kg-day	6.31E-07		
				<b>Metals</b> Arsenic	7.40E-01	ug/L	1.23E-10	mg/kg-day	1.50E+00	kg-day/mg		1.85E-10	8.64E-10	mg/kg-day	3.00E-04	mg/kg-day	2.88E-06		
				Chromium	2.90E+00	ug/L	4.84E-10	mg/kg-day	5.00E-01	kg-day/mg		2.42E-10	3.39E-09	mg/kg-day	3.00E-03	mg/kg-day	1.13E-06		
				Cobalt	9.80E-01	ug/L	1.63E-10	mg/kg-day	NA	kg-day/mg		NA	1.14E-09	mg/kg-day	3.00E-04	mg/kg-day	3.81E-06		
				Manganese	1.40E+02	ug/L	2.34E-08	mg/kg-day	NA	kg-day/mg		NA	1.63E-07	mg/kg-day	2.40E-02	mg/kg-day	6.81E-06		
				<b>Pesticides</b> 4,4'-DDT	1.30E-03	ug/L	2.17E-13	mg/kg-day	3.40E-01	kg-day/mg		7.37E-14	1.52E-12	mg/kg-day	5.00E-04	mg/kg-day	3.04E-09		
				<b>PCBs</b> Total PCBs	9.40E-03	ug/L	1.57E-12	mg/kg-day	3.00E-01	kg-day/mg		4.70E-13	1.10E-11	mg/kg-day	2.00E-05	mg/kg-day	5.49E-07		
				<b>Exp. Route Total</b>									4.36E-10					1.58E-05	
				Dermal	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	3.78E-07	ug/L	3.66E-13	mg/kg-day	1.30E+05		kg-day/mg	1	4.76E-08	2.56E-12	mg/kg-day	7.00E-10	mg/kg-day	3.66E-03
					<b>Metals</b> Arsenic	7.40E-01	ug/L	1.23E-10	mg/kg-day	1.50E+00		kg-day/mg		1.84E-10	8.60E-10	mg/kg-day	3.00E-04	mg/kg-day	2.87E-06
					Chromium	2.90E+00	ug/L	9.63E-10	mg/kg-day	2.00E+01		kg-day/mg		1.93E-08	6.74E-09	mg/kg-day	7.50E-05	mg/kg-day	8.99E-05
			Cobalt		9.80E-01	ug/L	6.51E-11	mg/kg-day	NA	kg-day/mg	NA	4.56E-10		mg/kg-day	3.00E-04	mg/kg-day	1.52E-06		
			Manganese		1.40E+02	ug/L	2.32E-08	mg/kg-day	NA	kg-day/mg	NA	1.63E-07		mg/kg-day	9.60E-04	mg/kg-day	1.69E-04		
			<b>Pesticides</b> 4,4'-DDT		1.30E-03	ug/L	7.26E-10	mg/kg-day	3.40E-01	kg-day/mg	2.47E-10	5.08E-09		mg/kg-day	5.00E-04	mg/kg-day	1.02E-05		
			<b>PCBs</b> Total PCBs		9.40E-03	ug/L	6.26E-09	mg/kg-day	3.00E-01	kg-day/mg	1.88E-09	4.38E-08		mg/kg-day	2.00E-05	mg/kg-day	2.19E-03		
			<b>Exp. Route Total</b>									6.91E-08						6.12E-03	
			<b>Exposure Point Total</b>									6.96E-08							6.14E-03
			<b>Exposure Medium Total</b>									6.96E-08							6.14E-03
			<b>Surface Water Total</b>									6.96E-08							6.14E-03
			<b>Total Receptor Risk/Hazard</b>									1.63E-07							1.03E-02

**Notes:**  
 ADAF - Age-Dependent Adjustment Factor.  
 CSF - Cancer Slope Factor.  
 EPC - Exposure Point Concentration.  
 NA - Not applicable.  
 PCB - Polychlorinated Biphenyl.  
 RfD - Oral Reference Dose.  
 SVOC - Semivolatile Organic Compound.  
 TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.  
 (1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.



**Table C-2.3**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Child Swimmer**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Swimmer
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations										
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient					
							Value	Units	Value	Units			Value	Units	Value	Units						
Sediment	Surface Sediment	Nearshore Surface Sediment	Ingestion	<b>Dioxin</b>																		
				2,3,7,8-TCDD-TEQ	4.49E-04	mg/kg	8.06E-12	mg/kg-day	1.30E+05	kg-day/mg		1.05E-06	9.41E-11	mg/kg-day	7.00E-10	mg/kg-day	1.34E-01					
				<b>Metals</b>																		
				Aluminum	9.05E+03	mg/kg	1.62E-04	mg/kg-day	NA	kg-day/mg		NA	1.89E-03	mg/kg-day	1.00E+00	mg/kg-day	1.89E-03					
				Arsenic	7.54E+00	mg/kg	8.12E-08	mg/kg-day	1.50E+00	kg-day/mg		1.22E-07	9.47E-07	mg/kg-day	3.00E-04	mg/kg-day	3.16E-03					
				Chromium	4.67E+01	mg/kg	8.37E-07	mg/kg-day	5.00E-01	kg-day/mg	4.2	1.76E-06	9.77E-06	mg/kg-day	3.00E-03	mg/kg-day	3.26E-03					
				Cobalt	1.79E+01	mg/kg	3.21E-07	mg/kg-day	NA	kg-day/mg		NA	3.75E-06	mg/kg-day	3.00E-04	mg/kg-day	1.25E-02					
				Manganese	2.57E+02	mg/kg	4.61E-06	mg/kg-day	NA	kg-day/mg		NA	5.38E-05	mg/kg-day	2.40E-02	mg/kg-day	2.24E-03					
				Nickel	7.90E+01	mg/kg	1.42E-06	mg/kg-day	NA	kg-day/mg		NA	1.65E-05	mg/kg-day	2.00E-02	mg/kg-day	8.27E-04					
				Thallium	3.02E-01	mg/kg	5.42E-09	mg/kg-day	NA	kg-day/mg		NA	6.32E-08	mg/kg-day	1.00E-05	mg/kg-day	6.32E-03					
				Vanadium	2.29E+02	mg/kg	4.10E-06	mg/kg-day	NA	kg-day/mg		NA	4.79E-05	mg/kg-day	5.04E-03	mg/kg-day	9.50E-03					
				<b>PCBs</b>																		
				Total PCBs	7.68E-01	mg/kg	1.38E-08	mg/kg-day	2.00E+00	kg-day/mg		2.76E-08	1.61E-07	mg/kg-day	2.00E-05	mg/kg-day	8.04E-03					
				<b>SVOCs</b>																		
				Benzo(a)anthracene	5.65E-01	mg/kg	1.01E-08	mg/kg-day	7.30E-01	kg-day/mg	4.2	3.11E-08	1.18E-07	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(a)pyrene	6.28E-01	mg/kg	1.13E-08	mg/kg-day	7.30E+00	kg-day/mg	4.2	3.46E-07	1.31E-07	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(b)fluoranthene	9.51E-01	mg/kg	1.71E-08	mg/kg-day	7.30E-01	kg-day/mg	4.2	5.23E-08	1.99E-07	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(k)fluoranthene	3.67E-01	mg/kg	6.59E-09	mg/kg-day	7.30E-02	kg-day/mg	4.2	2.02E-09	7.68E-08	mg/kg-day	NA	mg/kg-day	NA					
				Chrysene	8.77E-01	mg/kg	1.57E-08	mg/kg-day	7.30E-03	kg-day/mg	4.2	4.82E-10	1.84E-07	mg/kg-day	NA	mg/kg-day	NA					
				Dibenzo(a,h)anthracene	1.42E-01	mg/kg	2.55E-09	mg/kg-day	7.30E+00	kg-day/mg	4.2	7.81E-08	2.97E-08	mg/kg-day	NA	mg/kg-day	NA					
Indeno(1,2,3-cd)pyrene	4.79E-01	mg/kg	8.60E-09	mg/kg-day	7.30E-01	kg-day/mg	4.2	2.64E-08	1.00E-07	mg/kg-day	NA	mg/kg-day	NA									
<b>Exp. Route Total</b>										3.49E-06				1.82E-01								

**Table C-2.3**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Child Swimmer**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Swimmer  
 Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations											
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient						
							Value	Units	Value	Units			Value	Units	Value	Units							
Sediment	Surface Sediment	Nearshore Surface Sediment	Dermal	<b>Dioxin</b>																			
				2,3,7,8-TCDD-TEQ	4.49E-04	mg/kg	1.39E-12	mg/kg-day	1.30E+05	kg-day/mg		1.81E-07	1.63E-11	mg/kg-day	7.00E-10	mg/kg-day	2.32E-02						
				<b>Metals</b>																			
				Aluminum	9.05E+03	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E+00	mg/kg-day	NA						
				Arsenic	7.54E+00	mg/kg	2.34E-08	mg/kg-day	1.50E+00	kg-day/mg		3.51E-08	2.73E-07	mg/kg-day	3.00E-04	mg/kg-day	9.10E-04						
				Chromium	4.67E+01	mg/kg	NA	mg/kg-day	2.00E+01	kg-day/mg	4.2	NA	NA	mg/kg-day	7.50E-05	mg/kg-day	NA						
				Cobalt	1.79E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	3.00E-04	mg/kg-day	NA						
				Manganese	2.57E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	9.60E-04	mg/kg-day	NA						
				Nickel	7.90E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	8.00E-04	mg/kg-day	NA						
				Thallium	3.02E-01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E-05	mg/kg-day	NA						
				Vanadium	2.29E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.31E-04	mg/kg-day	NA						
				<b>PCBs</b>																			
				Total PCBs	7.68E-01	mg/kg	1.11E-08	mg/kg-day	2.00E+00	kg-day/mg		2.22E-08	1.30E-07	mg/kg-day	2.00E-05	mg/kg-day	6.48E-03						
				<b>SVOCs</b>																			
				Benzo(a)anthracene	5.65E-01	mg/kg	7.59E-09	mg/kg-day	7.30E-01	kg-day/mg	4.2	2.33E-08	8.86E-08	mg/kg-day	NA	mg/kg-day	NA						
				Benzo(a)pyrene	6.28E-01	mg/kg	8.44E-09	mg/kg-day	7.30E+00	kg-day/mg	4.2	2.59E-07	9.84E-08	mg/kg-day	NA	mg/kg-day	NA						
				Benzo(b)fluoranthene	9.51E-01	mg/kg	1.28E-08	mg/kg-day	7.30E-01	kg-day/mg	4.2	3.92E-08	1.49E-07	mg/kg-day	NA	mg/kg-day	NA						
				Benzo(k)fluoranthene	3.67E-01	mg/kg	4.93E-09	mg/kg-day	7.30E-02	kg-day/mg	4.2	1.51E-09	5.75E-08	mg/kg-day	NA	mg/kg-day	NA						
				Chrysene	8.77E-01	mg/kg	1.18E-08	mg/kg-day	7.30E-03	kg-day/mg	4.2	3.61E-10	1.37E-07	mg/kg-day	NA	mg/kg-day	NA						
				Dibenzo(a,h)anthracene	1.42E-01	mg/kg	1.91E-09	mg/kg-day	7.30E+00	kg-day/mg	4.2	5.85E-08	2.23E-08	mg/kg-day	NA	mg/kg-day	NA						
				Indeno(1,2,3-cd)pyrene	4.79E-01	mg/kg	6.44E-09	mg/kg-day	7.30E-01	kg-day/mg	4.2	1.97E-08	7.51E-08	mg/kg-day	NA	mg/kg-day	NA						
							<b>Exp. Route Total</b>																
							<b>Exposure Point Total</b>																
			<b>Exposure Medium Total</b>																				
<b>Sediment Total</b>																							

**Table C-2.3**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Child Swimmer**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Swimmer  
 Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations						Noncancer Hazard Calculations						
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient		
							Value	Units	Value	Units			Value	Units	Value	Units			
Surface Water	Surface Water	Surface Water	Ingestion	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	6.12E-07	ug/L	2.69E-15	mg/kg-day	1.30E+05	kg-day/mg	4.2	3.50E-10	3.14E-14	mg/kg-day	7.00E-10	mg/kg-day	4.48E-05		
				<b>Metals</b> Arsenic	8.58E-01	ug/L	3.77E-09	mg/kg-day	1.50E+00	kg-day/mg		5.66E-09	4.40E-08	mg/kg-day	3.00E-04	mg/kg-day	1.47E-04		
				Chromium	3.16E+00	ug/L	1.39E-08	mg/kg-day	5.00E-01	kg-day/mg		2.92E-08	1.62E-07	mg/kg-day	3.00E-03	mg/kg-day	5.40E-05		
				Cobalt	1.04E+00	ug/L	4.57E-09	mg/kg-day	NA	kg-day/mg		NA	5.33E-08	mg/kg-day	3.00E-04	mg/kg-day	1.78E-04		
				Manganese	1.48E+02	ug/L	6.49E-07	mg/kg-day	NA	kg-day/mg		NA	7.58E-06	mg/kg-day	2.40E-02	mg/kg-day	3.16E-04		
				<b>Pesticides</b> 4,4'-DDT	1.60E-03	ug/L	7.03E-12	mg/kg-day	3.40E-01	kg-day/mg		2.39E-12	8.21E-11	mg/kg-day	5.00E-04	mg/kg-day	1.64E-07		
				<b>PCBs</b> Total PCBs	9.40E-03	ug/L	4.13E-11	mg/kg-day	4.00E-01	kg-day/mg		1.65E-11	4.82E-10	mg/kg-day	2.00E-05	mg/kg-day	2.41E-05		
				<b>Exp. Route Total</b>								3.52E-08					7.63E-04		
				Dermal	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	6.12E-07	ug/L	1.70E-12	mg/kg-day	1.30E+05		kg-day/mg	4.2	2.21E-07	1.98E-11	mg/kg-day	7.00E-10	mg/kg-day	2.83E-02
					<b>Metals</b> Arsenic	8.58E-01	ug/L	5.77E-10	mg/kg-day	1.50E+00		kg-day/mg		8.66E-10	6.74E-09	mg/kg-day	3.00E-04	mg/kg-day	2.25E-05
			Chromium		3.16E+00	ug/L	4.25E-09	mg/kg-day	2.00E+01	kg-day/mg	3.57E-07	4.96E-08		mg/kg-day	7.50E-05	mg/kg-day	6.62E-04		
			Cobalt		1.04E+00	ug/L	2.80E-10	mg/kg-day	NA	kg-day/mg	NA	3.27E-09		mg/kg-day	3.00E-04	mg/kg-day	1.09E-05		
			Manganese		1.48E+02	ug/L	9.94E-08	mg/kg-day	NA	kg-day/mg	NA	1.16E-06		mg/kg-day	9.60E-04	mg/kg-day	1.21E-03		
			<b>Pesticides</b> 4,4'-DDT		1.60E-03	ug/L	2.56E-09	mg/kg-day	3.40E-01	kg-day/mg	8.70E-10	2.99E-08		mg/kg-day	5.00E-04	mg/kg-day	5.97E-05		
			<b>PCBs</b> Total PCBs		9.40E-03	ug/L	1.79E-08	mg/kg-day	4.00E-01	kg-day/mg	7.17E-09	2.09E-07		mg/kg-day	2.00E-05	mg/kg-day	1.05E-02		
			<b>Exp. Route Total</b>								5.87E-07						4.07E-02		
			<b>Exposure Point Total</b>								6.22E-07						4.15E-02		
			<b>Exposure Medium Total</b>								6.22E-07						4.15E-02		
			<b>Surface Water Total</b>							6.22E-07					4.15E-02				
			<b>Total Receptor Risk/Hazard</b>							4.75E-06					2.54E-01				

**Notes:**

- ADAF - Age-Dependent Adjustment Factor.
- CSF - Cancer Slope Factor.
- EPC - Exposure Point Concentration.
- NA - Not applicable.
- PCB - Polychlorinated Biphenyl.
- RfD - Oral Reference Dose.
- SVOC - Semivolatile Organic Compound.
- TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.

(1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.

**Table C-2.4**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Child Swimmer**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Swimmer
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations						Noncancer Hazard Calculations									
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient					
							Value	Units	Value	Units			Value	Units	Value	Units						
Sediment	Surface Sediment	Nearshore Surface Sediment	Ingestion	<b>Dioxin</b>																		
				2,3,7,8-TCDD-TEQ	1.11E-04	mg/kg	1.66E-13	mg/kg-day	1.30E+05	kg-day/mg		2.16E-08	5.81E-12	mg/kg-day	7.00E-10	mg/kg-day	8.30E-03					
				<b>Metals</b>																		
				Aluminum	7.78E+03	mg/kg	1.16E-05	mg/kg-day	NA	kg-day/mg		NA	4.07E-04	mg/kg-day	1.00E+00	mg/kg-day	4.07E-04					
				Arsenic	5.49E+00	mg/kg	4.92E-09	mg/kg-day	1.50E+00	kg-day/mg		7.39E-09	1.72E-07	mg/kg-day	3.00E-04	mg/kg-day	5.75E-04					
				Chromium	4.02E+01	mg/kg	6.01E-08	mg/kg-day	5.00E-01	kg-day/mg	4.2	1.26E-07	2.10E-06	mg/kg-day	3.00E-03	mg/kg-day	7.01E-04					
				Cobalt	1.59E+01	mg/kg	2.37E-08	mg/kg-day	NA	kg-day/mg		NA	8.30E-07	mg/kg-day	3.00E-04	mg/kg-day	2.77E-03					
				Manganese	2.24E+02	mg/kg	3.35E-07	mg/kg-day	NA	kg-day/mg		NA	1.17E-05	mg/kg-day	2.40E-02	mg/kg-day	4.89E-04					
				Nickel	5.71E+01	mg/kg	8.54E-08	mg/kg-day	NA	kg-day/mg		NA	2.99E-06	mg/kg-day	2.00E-02	mg/kg-day	1.49E-04					
				Thallium	2.34E-01	mg/kg	3.50E-10	mg/kg-day	NA	kg-day/mg		NA	1.22E-08	mg/kg-day	1.00E-05	mg/kg-day	1.22E-03					
				Vanadium	1.07E+02	mg/kg	1.60E-07	mg/kg-day	NA	kg-day/mg		NA	5.61E-06	mg/kg-day	5.04E-03	mg/kg-day	1.11E-03					
				<b>PCBs</b>																		
				Total PCBs	5.58E-01	mg/kg	8.34E-10	mg/kg-day	1.00E+00	kg-day/mg		8.34E-10	2.92E-08	mg/kg-day	2.00E-05	mg/kg-day	1.46E-03					
				<b>SVOCs</b>																		
				Benzo(a)anthracene	4.95E-01	mg/kg	7.40E-10	mg/kg-day	7.30E-01	kg-day/mg	4.2	2.27E-09	2.59E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(a)pyrene	5.54E-01	mg/kg	8.28E-10	mg/kg-day	7.30E+00	kg-day/mg	4.2	2.54E-08	2.90E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(b)fluoranthene	8.35E-01	mg/kg	1.25E-09	mg/kg-day	7.30E-01	kg-day/mg	4.2	3.83E-09	4.37E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(k)fluoranthene	3.15E-01	mg/kg	4.71E-10	mg/kg-day	7.30E-02	kg-day/mg	4.2	1.44E-10	1.65E-08	mg/kg-day	NA	mg/kg-day	NA					
				chrysene	7.77E-01	mg/kg	1.16E-09	mg/kg-day	7.30E-03	kg-day/mg	4.2	3.56E-11	4.07E-08	mg/kg-day	NA	mg/kg-day	NA					
				Dibenzo(a,h)anthracene	1.25E-01	mg/kg	1.87E-10	mg/kg-day	7.30E+00	kg-day/mg	4.2	5.73E-09	6.54E-09	mg/kg-day	NA	mg/kg-day	NA					
Indeno(1,2,3-cd)pyrene	4.18E-01	mg/kg	6.25E-10	mg/kg-day	7.30E-01	kg-day/mg	4.2	1.92E-09	2.19E-08	mg/kg-day	NA	mg/kg-day	NA									
<b>Exp. Route Total</b>																			1.72E-02			

**Table C-2.4**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Child Swimmer**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Swimmer  
 Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations								
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient			
							Value	Units	Value	Units			Value	Units	Value	Units				
Sediment	Surface Sediment	Nearshore Surface Sediment	Dermal	<b>Dioxin</b>																
				2,3,7,8-TCDD-TEQ	1.11E-04	mg/kg	5.73E-14	mg/kg-day	1.30E+05	kg-day/mg		7.46E-09	2.01E-12	mg/kg-day	7.00E-10	mg/kg-day	2.87E-03			
				<b>Metals</b>																
				Aluminum	7.78E+03	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E+00	mg/kg-day	NA			
				Arsenic	5.49E+00	mg/kg	2.84E-09	mg/kg-day	1.50E+00	kg-day/mg		4.25E-09	9.93E-08	mg/kg-day	3.00E-04	mg/kg-day	3.31E-04			
				Chromium	4.02E+01	mg/kg	NA	mg/kg-day	2.00E+01	kg-day/mg	4.2	NA	NA	mg/kg-day	7.50E-05	mg/kg-day	NA			
				Cobalt	1.59E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	3.00E-04	mg/kg-day	NA			
				Manganese	2.24E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	9.60E-04	mg/kg-day	NA			
				Nickel	5.71E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	8.00E-04	mg/kg-day	NA			
				Thallium	2.34E-01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E-05	mg/kg-day	NA			
				Vanadium	1.07E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.31E-04	mg/kg-day	NA			
				<b>PCBs</b>																
				Total PCBs	5.58E-01	mg/kg	1.35E-09	mg/kg-day	1.00E+00	kg-day/mg		1.35E-09	4.71E-08	mg/kg-day	2.00E-05	mg/kg-day	2.35E-03			
				<b>SVOCs</b>																
				Benzo(a)anthracene	4.95E-01	mg/kg	1.11E-09	mg/kg-day	7.30E-01	kg-day/mg	4.2	3.40E-09	3.88E-08	mg/kg-day	NA	mg/kg-day	NA			
				Benzo(a)pyrene	5.54E-01	mg/kg	1.24E-09	mg/kg-day	7.30E+00	kg-day/mg	4.2	3.80E-08	4.34E-08	mg/kg-day	NA	mg/kg-day	NA			
				Benzo(b)fluoranthene	8.35E-01	mg/kg	1.87E-09	mg/kg-day	7.30E-01	kg-day/mg	4.2	5.73E-09	6.54E-08	mg/kg-day	NA	mg/kg-day	NA			
				Benzo(k)fluoranthene	3.15E-01	mg/kg	7.05E-10	mg/kg-day	7.30E-02	kg-day/mg	4.2	2.16E-10	2.47E-08	mg/kg-day	NA	mg/kg-day	NA			
				chrysene	7.77E-01	mg/kg	1.74E-09	mg/kg-day	7.30E-03	kg-day/mg	4.2	5.33E-11	6.09E-08	mg/kg-day	NA	mg/kg-day	NA			
				Dibenzo(a,h)anthracene	1.25E-01	mg/kg	2.80E-10	mg/kg-day	7.30E+00	kg-day/mg	4.2	8.58E-09	9.80E-09	mg/kg-day	NA	mg/kg-day	NA			
Indeno(1,2,3-cd)pyrene	4.18E-01	mg/kg	9.36E-10	mg/kg-day	7.30E-01	kg-day/mg	4.2	2.87E-09	3.28E-08	mg/kg-day	NA	mg/kg-day	NA							
			<b>Exp. Route Total</b>																	
			<b>Exposure Point Total</b>																	
			<b>Exposure Medium Total</b>																	
<b>Sediment Total</b>																				

**Table C-2.4**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Child Swimmer**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Swimmer  
 Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations						Noncancer Hazard Calculations						
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient		
							Value	Units	Value	Units			Value	Units	Value	Units			
Surface Water	Surface Water	Surface Water	Ingestion	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	3.78E-07	ug/L	1.38E-16	mg/kg-day	1.30E+05	kg-day/mg	4.2	1.80E-11	4.85E-15	mg/kg-day	7.00E-10	mg/kg-day	6.92E-06		
				<b>Metals</b> Arsenic	7.40E-01	ug/L	2.71E-10	mg/kg-day	1.50E+00	kg-day/mg		4.07E-10	9.49E-09	mg/kg-day	3.00E-04	mg/kg-day	3.16E-05		
				Chromium	2.90E+00	ug/L	1.06E-09	mg/kg-day	5.00E-01	kg-day/mg		2.23E-09	3.72E-08	mg/kg-day	3.00E-03	mg/kg-day	1.24E-05		
				Cobalt	9.80E-01	ug/L	3.59E-10	mg/kg-day	NA	kg-day/mg		NA	1.26E-08	mg/kg-day	3.00E-04	mg/kg-day	4.19E-05		
				Manganese	1.40E+02	ug/L	5.13E-08	mg/kg-day	NA	kg-day/mg		NA	1.80E-06	mg/kg-day	2.40E-02	mg/kg-day	7.48E-05		
				<b>Pesticides</b> 4,4'-DDT	1.30E-03	ug/L	4.76E-13	mg/kg-day	3.40E-01	kg-day/mg		1.62E-13	1.67E-11	mg/kg-day	5.00E-04	mg/kg-day	3.33E-08		
				<b>PCBs</b> Total PCBs	9.40E-03	ug/L	3.44E-12	mg/kg-day	3.00E-01	kg-day/mg		1.03E-12	1.21E-10	mg/kg-day	2.00E-05	mg/kg-day	6.03E-06		
				<b>Exp. Route Total</b>									2.66E-09					1.74E-04	
				Dermal	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	3.78E-07	ug/L	1.24E-13	mg/kg-day	1.30E+05		kg-day/mg	4.2	1.61E-08	4.32E-12	mg/kg-day	7.00E-10	mg/kg-day	6.18E-03
					<b>Metals</b> Arsenic	7.40E-01	ug/L	4.15E-11	mg/kg-day	1.50E+00		kg-day/mg		6.22E-11	1.45E-09	mg/kg-day	3.00E-04	mg/kg-day	4.84E-06
					Chromium	2.90E+00	ug/L	3.25E-10	mg/kg-day	2.00E+01		kg-day/mg		2.73E-08	1.14E-08	mg/kg-day	7.50E-05	mg/kg-day	1.52E-04
					Cobalt	9.80E-01	ug/L	2.20E-11	mg/kg-day	NA		kg-day/mg		NA	7.69E-10	mg/kg-day	3.00E-04	mg/kg-day	2.56E-06
					Manganese	1.40E+02	ug/L	7.85E-09	mg/kg-day	NA		kg-day/mg		NA	2.75E-07	mg/kg-day	9.60E-04	mg/kg-day	2.86E-04
			<b>Pesticides</b> 4,4'-DDT		1.30E-03	ug/L	2.45E-10	mg/kg-day	3.40E-01	kg-day/mg	8.34E-11	8.58E-09		mg/kg-day	5.00E-04	mg/kg-day	1.72E-05		
			<b>PCBs</b> Total PCBs		9.40E-03	ug/L	2.11E-09	mg/kg-day	3.00E-01	kg-day/mg	6.34E-10	7.40E-08		mg/kg-day	2.00E-05	mg/kg-day	3.70E-03		
			<b>Exp. Route Total</b>								4.42E-08					1.03E-02			
			<b>Exposure Point Total</b>								4.68E-08						1.05E-02		
			<b>Exposure Medium Total</b>								4.68E-08						1.05E-02		
			<b>Surface Water Total</b>								4.68E-08						1.05E-02		
			<b>Total Receptor Risk/Hazard</b>								3.14E-07						3.32E-02		

**Notes:**

- ADAF - Age-Dependent Adjustment Factor.
- CSF - Cancer Slope Factor.
- EPC - Exposure Point Concentration.
- NA - Not applicable.
- PCB - Polychlorinated Biphenyl.
- RfD - Oral Reference Dose.
- SVOC - Semivolatile Organic Compound.
- TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.

(1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.

**Table C-2.5**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Swimmer**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Swimmer
Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations						Noncancer Hazard Calculations								
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient				
							Value	Units	Value	Units			Value	Units	Value	Units					
Sediment	Surface Sediment	Nearshore Surface Sediment	Ingestion	<b>Dioxin</b>																	
				2,3,7,8-TCDD-TEQ	4.49E-04	mg/kg	5.17E-12	mg/kg-day	1.30E+05	kg-day/mg		6.73E-07	3.02E-11	mg/kg-day	7.00E-10	mg/kg-day	4.31E-02				
				<b>Metals</b>																	
				Aluminum	9.05E+03	mg/kg	1.04E-04	mg/kg-day	NA	kg-day/mg		NA	6.08E-04	mg/kg-day	1.00E+00	mg/kg-day	6.08E-04				
				Arsenic	7.54E+00	mg/kg	5.21E-08	mg/kg-day	1.50E+00	kg-day/mg		7.81E-08	3.04E-07	mg/kg-day	3.00E-04	mg/kg-day	1.01E-03				
				Chromium	4.67E+01	mg/kg	5.37E-07	mg/kg-day	5.00E-01	kg-day/mg	2.5	6.71E-07	3.13E-06	mg/kg-day	3.00E-03	mg/kg-day	1.04E-03				
				Cobalt	1.79E+01	mg/kg	2.06E-07	mg/kg-day	NA	kg-day/mg		NA	1.20E-06	mg/kg-day	3.00E-04	mg/kg-day	4.01E-03				
				Manganese	2.57E+02	mg/kg	2.96E-06	mg/kg-day	NA	kg-day/mg		NA	1.73E-05	mg/kg-day	2.40E-02	mg/kg-day	7.19E-04				
				Nickel	7.90E+01	mg/kg	9.09E-07	mg/kg-day	NA	kg-day/mg		NA	5.30E-06	mg/kg-day	2.00E-02	mg/kg-day	2.65E-04				
				Thallium	3.02E-01	mg/kg	3.48E-09	mg/kg-day	NA	kg-day/mg		NA	2.03E-08	mg/kg-day	1.00E-05	mg/kg-day	2.03E-03				
				Vanadium	2.29E+02	mg/kg	2.63E-06	mg/kg-day	NA	kg-day/mg		NA	1.54E-05	mg/kg-day	5.04E-03	mg/kg-day	3.05E-03				
				<b>PCBs</b>																	
				Total PCBs	7.68E-01	mg/kg	8.84E-09	mg/kg-day	2.00E+00	kg-day/mg		1.77E-08	5.16E-08	mg/kg-day	2.00E-05	mg/kg-day	2.58E-03				
				<b>SVOCs</b>																	
				Benzo(a)anthracene	5.65E-01	mg/kg	6.50E-09	mg/kg-day	7.30E-01	kg-day/mg	2.5	1.19E-08	3.79E-08	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(a)pyrene	6.28E-01	mg/kg	7.23E-09	mg/kg-day	7.30E+00	kg-day/mg	2.5	1.32E-07	4.22E-08	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(b)fluoranthene	9.51E-01	mg/kg	1.09E-08	mg/kg-day	7.30E-01	kg-day/mg	2.5	2.00E-08	6.39E-08	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(k)fluoranthene	3.67E-01	mg/kg	4.22E-09	mg/kg-day	7.30E-02	kg-day/mg	2.5	7.71E-10	2.46E-08	mg/kg-day	NA	mg/kg-day	NA				
				Chrysene	8.77E-01	mg/kg	1.01E-08	mg/kg-day	7.30E-03	kg-day/mg	2.5	1.84E-10	5.89E-08	mg/kg-day	NA	mg/kg-day	NA				
				Dibenzo(a,h)anthracene	1.42E-01	mg/kg	1.63E-09	mg/kg-day	7.30E+00	kg-day/mg	2.5	2.98E-08	9.54E-09	mg/kg-day	NA	mg/kg-day	NA				
Indeno(1,2,3-cd)pyrene	4.79E-01	mg/kg	5.51E-09	mg/kg-day	7.30E-01	kg-day/mg	2.5	1.01E-08	3.22E-08	mg/kg-day	NA	mg/kg-day	NA								
<b>Exp. Route Total</b>																		5.84E-02			

**Table C-2.5**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Swimmer**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Swimmer  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations									
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient				
							Value	Units	Value	Units			Value	Units	Value	Units					
Sediment	Surface Sediment	Nearshore Surface Sediment	Dermal	<b>Dioxin</b>																	
				2,3,7,8-TCDD-TEQ	4.49E-04	mg/kg	2.10E-12	mg/kg-day	1.30E+05	kg-day/mg		2.73E-07	1.23E-11	mg/kg-day	7.00E-10	mg/kg-day	1.75E-02				
				<b>Metals</b>																	
				Aluminum	9.05E+03	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E+00	mg/kg-day	NA				
				Arsenic	7.54E+00	mg/kg	3.53E-08	mg/kg-day	1.50E+00	kg-day/mg		5.29E-08	2.06E-07	mg/kg-day	3.00E-04	mg/kg-day	6.86E-04				
				Chromium	4.67E+01	mg/kg	NA	mg/kg-day	2.00E+01	kg-day/mg	2.5	NA	NA	mg/kg-day	7.50E-05	mg/kg-day	NA				
				Cobalt	1.79E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	3.00E-04	mg/kg-day	NA				
				Manganese	2.57E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	9.60E-04	mg/kg-day	NA				
				Nickel	7.90E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	8.00E-04	mg/kg-day	NA				
				Thallium	3.02E-01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E-05	mg/kg-day	NA				
				Vanadium	2.29E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.31E-04	mg/kg-day	NA				
				<b>PCBs</b>																	
				Total PCBs	7.68E-01	mg/kg	1.68E-08	mg/kg-day	2.00E+00	kg-day/mg		3.35E-08	9.78E-08	mg/kg-day	2.00E-05	mg/kg-day	4.89E-03				
				<b>SVOCs</b>																	
				Benzo(a)anthracene	5.65E-01	mg/kg	1.15E-08	mg/kg-day	7.30E-01	kg-day/mg	2.5	2.09E-08	6.68E-08	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(a)pyrene	6.28E-01	mg/kg	1.27E-08	mg/kg-day	7.30E+00	kg-day/mg	2.5	2.32E-07	7.43E-08	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(b)fluoranthene	9.51E-01	mg/kg	1.93E-08	mg/kg-day	7.30E-01	kg-day/mg	2.5	3.52E-08	1.12E-07	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(k)fluoranthene	3.67E-01	mg/kg	7.44E-09	mg/kg-day	7.30E-02	kg-day/mg	2.5	1.36E-09	4.34E-08	mg/kg-day	NA	mg/kg-day	NA				
				Chrysene	8.77E-01	mg/kg	1.78E-08	mg/kg-day	7.30E-03	kg-day/mg	2.5	3.25E-10	1.04E-07	mg/kg-day	NA	mg/kg-day	NA				
				Dibenzo(a,h)anthracene	1.42E-01	mg/kg	2.88E-09	mg/kg-day	7.30E+00	kg-day/mg	2.5	5.25E-08	1.68E-08	mg/kg-day	NA	mg/kg-day	NA				
				Indeno(1,2,3-cd)pyrene	4.79E-01	mg/kg	9.71E-09	mg/kg-day	7.30E-01	kg-day/mg	2.5	1.77E-08	5.67E-08	mg/kg-day	NA	mg/kg-day	NA				
			<b>Exp. Route Total</b>																		
			<b>Exposure Point Total</b>																		
			<b>Exposure Medium Total</b>																		
<b>Sediment Total</b>																					



**Table C-2.5**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Swimmer**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Swimmer  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations						Noncancer Hazard Calculations						
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient		
							Value	Units	Value	Units			Value	Units	Value	Units			
Surface Water	Surface Water	Surface Water	Ingestion	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	6.12E-07	ug/L	3.45E-15	mg/kg-day	1.30E+05	kg-day/mg	2.5	4.49E-10	2.01E-14	mg/kg-day	7.00E-10	mg/kg-day	2.88E-05		
				<b>Metals</b> Arsenic	8.58E-01	ug/L	4.84E-09	mg/kg-day	1.50E+00	kg-day/mg		7.26E-09	2.82E-08	mg/kg-day	3.00E-04	mg/kg-day	9.41E-05		
				Chromium	3.16E+00	ug/L	1.78E-08	mg/kg-day	5.00E-01	kg-day/mg		2.23E-08	1.04E-07	mg/kg-day	3.00E-03	mg/kg-day	3.47E-05		
				Cobalt	1.04E+00	ug/L	5.87E-09	mg/kg-day	NA	kg-day/mg		NA	3.42E-08	mg/kg-day	3.00E-04	mg/kg-day	1.14E-04		
				Manganese	1.48E+02	ug/L	8.33E-07	mg/kg-day	NA	kg-day/mg		NA	4.86E-06	mg/kg-day	2.40E-02	mg/kg-day	2.02E-04		
				<b>Pesticides</b> 4,4'-DDT	1.60E-03	ug/L	9.02E-12	mg/kg-day	3.40E-01	kg-day/mg		3.07E-12	5.26E-11	mg/kg-day	5.00E-04	mg/kg-day	1.05E-07		
				<b>PCBs</b> Total PCBs	9.40E-03	ug/L	5.30E-11	mg/kg-day	4.00E-01	kg-day/mg		2.12E-11	3.09E-10	mg/kg-day	2.00E-05	mg/kg-day	1.55E-05		
				<b>Exp. Route Total</b>									3.00E-08				4.90E-04		
				Dermal	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	6.12E-07	ug/L	4.30E-12	mg/kg-day	1.30E+05		kg-day/mg	2.5	5.60E-07	2.51E-11	mg/kg-day	7.00E-10	mg/kg-day	3.59E-02
					<b>Metals</b> Arsenic	8.58E-01	ug/L	1.46E-09	mg/kg-day	1.50E+00		kg-day/mg		2.20E-09	8.54E-09	mg/kg-day	3.00E-04	mg/kg-day	2.85E-05
					Chromium	3.16E+00	ug/L	1.08E-08	mg/kg-day	2.00E+01		kg-day/mg		5.39E-07	6.29E-08	mg/kg-day	7.50E-05	mg/kg-day	8.39E-04
					Cobalt	1.04E+00	ug/L	7.10E-10	mg/kg-day	NA		kg-day/mg		NA	4.14E-09	mg/kg-day	3.00E-04	mg/kg-day	1.38E-05
					Manganese	1.48E+02	ug/L	2.52E-07	mg/kg-day	NA		kg-day/mg		NA	1.47E-06	mg/kg-day	9.60E-04	mg/kg-day	1.53E-03
			<b>Pesticides</b> 4,4'-DDT		1.60E-03	ug/L	6.49E-09	mg/kg-day	3.40E-01	kg-day/mg	2.21E-09	3.79E-08		mg/kg-day	5.00E-04	mg/kg-day	7.58E-05		
			<b>PCBs</b> Total PCBs		9.40E-03	ug/L	4.55E-08	mg/kg-day	4.00E-01	kg-day/mg	1.82E-08	2.65E-07		mg/kg-day	2.00E-05	mg/kg-day	1.33E-02		
			<b>Exp. Route Total</b>									1.12E-06					5.16E-02		
			<b>Exposure Point Total</b>									1.15E-06					5.21E-02		
			<b>Exposure Medium Total</b>									1.15E-06					5.21E-02		
			<b>Surface Water Total</b>								1.15E-06				5.21E-02				
			<b>Total Receptor Risk/Hazard</b>								3.52E-06				1.34E-01				

**Notes:**

ADAF - Age-Dependent Adjustment Factor.

CSF - Cancer Slope Factor.

NA - Not applicable.

PCB - Polychlorinated Biphenyl.

RfD - Oral Reference Dose.

SVOC - Semivolatile Organic Compound.

TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.

(1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.

**Table C-2.6**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Swimmer**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Swimmer
Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations										
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient					
							Value	Units	Value	Units			Value	Units	Value	Units						
Sediment	Surface Sediment	Nearshore Surface Sediment	Ingestion	<b>Dioxin</b>																		
				2,3,7,8-TCDD-TEQ	1.11E-04	mg/kg	1.60E-13	mg/kg-day	1.30E+05	kg-day/mg		2.08E-08	1.86E-12	mg/kg-day	7.00E-10	mg/kg-day	2.66E-03					
				<b>Metals</b>																		
				Aluminum	7.78E+03	mg/kg	1.12E-05	mg/kg-day	NA	kg-day/mg		NA	1.31E-04	mg/kg-day	1.00E+00	mg/kg-day	1.31E-04					
				Arsenic	5.49E+00	mg/kg	4.74E-09	mg/kg-day	1.50E+00	kg-day/mg		7.11E-09	5.53E-08	mg/kg-day	3.00E-04	mg/kg-day	1.84E-04					
				Chromium	4.02E+01	mg/kg	5.78E-08	mg/kg-day	5.00E-01	kg-day/mg	2.5	7.22E-08	6.74E-07	mg/kg-day	3.00E-03	mg/kg-day	2.25E-04					
				Cobalt	1.59E+01	mg/kg	2.28E-08	mg/kg-day	NA	kg-day/mg		NA	2.66E-07	mg/kg-day	3.00E-04	mg/kg-day	8.87E-04					
				Manganese	2.24E+02	mg/kg	3.23E-07	mg/kg-day	NA	kg-day/mg		NA	3.76E-06	mg/kg-day	2.40E-02	mg/kg-day	1.57E-04					
				Nickel	5.71E+01	mg/kg	8.22E-08	mg/kg-day	NA	kg-day/mg		NA	9.59E-07	mg/kg-day	2.00E-02	mg/kg-day	4.79E-05					
				Thallium	2.34E-01	mg/kg	3.37E-10	mg/kg-day	NA	kg-day/mg		NA	3.93E-09	mg/kg-day	1.00E-05	mg/kg-day	3.93E-04					
				Vanadium	1.07E+02	mg/kg	1.54E-07	mg/kg-day	NA	kg-day/mg		NA	1.80E-06	mg/kg-day	5.04E-03	mg/kg-day	3.57E-04					
				<b>PCBs</b>																		
				Total PCBs	5.58E-01	mg/kg	8.03E-10	mg/kg-day	1.00E+00	kg-day/mg		8.03E-10	9.37E-09	mg/kg-day	2.00E-05	mg/kg-day	4.68E-04					
				<b>SVOCs</b>																		
				Benzo(a)anthracene	4.95E-01	mg/kg	7.12E-10	mg/kg-day	7.30E-01	kg-day/mg	2.5	1.30E-09	8.31E-09	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(a)pyrene	5.54E-01	mg/kg	7.97E-10	mg/kg-day	7.30E+00	kg-day/mg	2.5	1.45E-08	9.30E-09	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(b)fluoranthene	8.35E-01	mg/kg	1.20E-09	mg/kg-day	7.30E-01	kg-day/mg	2.5	2.19E-09	1.40E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(k)fluoranthene	3.15E-01	mg/kg	4.53E-10	mg/kg-day	7.30E-02	kg-day/mg	2.5	8.27E-11	5.29E-09	mg/kg-day	NA	mg/kg-day	NA					
				chrysene	7.77E-01	mg/kg	1.12E-09	mg/kg-day	7.30E-03	kg-day/mg	2.5	2.04E-11	1.30E-08	mg/kg-day	NA	mg/kg-day	NA					
				Dibenzo(a,h)anthracene	1.25E-01	mg/kg	1.80E-10	mg/kg-day	7.30E+00	kg-day/mg	2.5	3.28E-09	2.10E-09	mg/kg-day	NA	mg/kg-day	NA					
Indeno(1,2,3-cd)pyrene	4.18E-01	mg/kg	6.01E-10	mg/kg-day	7.30E-01	kg-day/mg	2.5	1.10E-09	7.02E-09	mg/kg-day	NA	mg/kg-day	NA									
<b>Exp. Route Total</b>										1.23E-07								5.51E-03				

**Table C-2.6**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Swimmer**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Swimmer  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations											
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient						
							Value	Units	Value	Units			Value	Units	Value	Units							
Sediment	Surface Sediment	Nearshore Surface Sediment	Dermal	<b>Dioxin</b>																			
				2,3,7,8-TCDD-TEQ	1.11E-04	mg/kg	1.30E-13	mg/kg-day	1.30E+05	kg-day/mg		1.69E-08	1.51E-12	mg/kg-day	7.00E-10	mg/kg-day	2.16E-03						
				<b>Metals</b>																			
				Aluminum	7.78E+03	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E+00	mg/kg-day	NA						
				Arsenic	5.49E+00	mg/kg	6.42E-09	mg/kg-day	1.50E+00	kg-day/mg	2.5	9.63E-09	7.49E-08	mg/kg-day	3.00E-04	mg/kg-day	2.50E-04						
				Chromium	4.02E+01	mg/kg	NA	mg/kg-day	2.00E+01	kg-day/mg		NA	NA	mg/kg-day	7.50E-05	mg/kg-day	NA						
				Cobalt	1.59E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	3.00E-04	mg/kg-day	NA						
				Manganese	2.24E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	9.60E-04	mg/kg-day	NA						
				Nickel	5.71E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	8.00E-04	mg/kg-day	NA						
				Thallium	2.34E-01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E-05	mg/kg-day	NA						
				Vanadium	1.07E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.31E-04	mg/kg-day	NA						
				<b>PCBs</b>																			
				Total PCBs	5.58E-01	mg/kg	3.05E-09	mg/kg-day	1.00E+00	kg-day/mg		3.05E-09	3.55E-08	mg/kg-day	2.00E-05	mg/kg-day	1.78E-03						
				<b>SVOCs</b>																			
				Benzo(a)anthracene	4.95E-01	mg/kg	2.51E-09	mg/kg-day	7.30E-01	kg-day/mg	2.5	4.58E-09	2.93E-08	mg/kg-day	NA	mg/kg-day	NA						
				Benzo(a)pyrene	5.54E-01	mg/kg	2.81E-09	mg/kg-day	7.30E+00	kg-day/mg	2.5	5.13E-08	3.28E-08	mg/kg-day	NA	mg/kg-day	NA						
				Benzo(b)fluoranthene	8.35E-01	mg/kg	4.23E-09	mg/kg-day	7.30E-01	kg-day/mg	2.5	7.72E-09	4.94E-08	mg/kg-day	NA	mg/kg-day	NA						
				Benzo(k)fluoranthene	3.15E-01	mg/kg	1.60E-09	mg/kg-day	7.30E-02	kg-day/mg	2.5	2.91E-10	1.86E-08	mg/kg-day	NA	mg/kg-day	NA						
				chrysene	7.77E-01	mg/kg	3.94E-09	mg/kg-day	7.30E-03	kg-day/mg	2.5	7.19E-11	4.59E-08	mg/kg-day	NA	mg/kg-day	NA						
				Dibenzo(a,h)anthracene	1.25E-01	mg/kg	6.34E-10	mg/kg-day	7.30E+00	kg-day/mg	2.5	1.16E-08	7.39E-09	mg/kg-day	NA	mg/kg-day	NA						
				Indeno(1,2,3-cd)pyrene	4.18E-01	mg/kg	2.12E-09	mg/kg-day	7.30E-01	kg-day/mg	2.5	3.87E-09	2.47E-08	mg/kg-day	NA	mg/kg-day	NA						
							<b>Exp. Route Total</b>																
							<b>Exposure Point Total</b>																
			<b>Exposure Medium Total</b>																				
<b>Sediment Total</b>																							

**Table C-2.6**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Swimmer**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Swimmer  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations						Noncancer Hazard Calculations						
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient		
							Value	Units	Value	Units			Value	Units	Value	Units			
Surface Water	Surface Water	Surface Water	Ingestion	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	3.78E-07	ug/L	2.67E-16	mg/kg-day	1.30E+05	kg-day/mg	2.5	3.46E-11	3.11E-15	mg/kg-day	7.00E-10	mg/kg-day	4.44E-06		
				<b>Metals</b> Arsenic	7.40E-01	ug/L	5.22E-10	mg/kg-day	1.50E+00	kg-day/mg		7.83E-10	6.09E-09	mg/kg-day	3.00E-04	mg/kg-day	2.03E-05		
				Chromium	2.90E+00	ug/L	2.04E-09	mg/kg-day	5.00E-01	kg-day/mg		2.56E-09	2.39E-08	mg/kg-day	3.00E-03	mg/kg-day	7.95E-06		
				Cobalt	9.80E-01	ug/L	6.91E-10	mg/kg-day	NA	kg-day/mg		NA	8.06E-09	mg/kg-day	3.00E-04	mg/kg-day	2.69E-05		
				Manganese	1.40E+02	ug/L	9.87E-08	mg/kg-day	NA	kg-day/mg		NA	1.15E-06	mg/kg-day	2.40E-02	mg/kg-day	4.80E-05		
				<b>Pesticides</b> 4,4'-DDT	1.30E-03	ug/L	9.17E-13	mg/kg-day	3.40E-01	kg-day/mg		3.12E-13	1.07E-11	mg/kg-day	5.00E-04	mg/kg-day	2.14E-08		
				<b>PCBs</b> Total PCBs	9.40E-03	ug/L	6.63E-12	mg/kg-day	3.00E-01	kg-day/mg		1.99E-12	7.73E-11	mg/kg-day	2.00E-05	mg/kg-day	3.87E-06		
				<b>Exp. Route Total</b>									3.38E-09					1.11E-04	
				Dermal	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	3.78E-07	ug/L	4.70E-13	mg/kg-day	1.30E+05		kg-day/mg	2.5	6.11E-08	5.48E-12	mg/kg-day	7.00E-10	mg/kg-day	7.83E-03
					<b>Metals</b> Arsenic	7.40E-01	ug/L	1.58E-10	mg/kg-day	1.50E+00		kg-day/mg		2.37E-10	1.84E-09	mg/kg-day	3.00E-04	mg/kg-day	6.14E-06
					Chromium	2.90E+00	ug/L	1.24E-09	mg/kg-day	2.00E+01		kg-day/mg		6.19E-08	1.44E-08	mg/kg-day	7.50E-05	mg/kg-day	1.92E-04
					Cobalt	9.80E-01	ug/L	8.36E-11	mg/kg-day	NA		kg-day/mg		NA	9.76E-10	mg/kg-day	3.00E-04	mg/kg-day	3.25E-06
			Manganese		1.40E+02	ug/L	2.99E-08	mg/kg-day	NA	kg-day/mg	NA	3.48E-07		mg/kg-day	9.60E-04	mg/kg-day	3.63E-04		
			<b>Pesticides</b> 4,4'-DDT		1.30E-03	ug/L	9.33E-10	mg/kg-day	3.40E-01	kg-day/mg	3.17E-10	1.09E-08		mg/kg-day	5.00E-04	mg/kg-day	2.18E-05		
			<b>PCBs</b> Total PCBs		9.40E-03	ug/L	8.04E-09	mg/kg-day	3.00E-01	kg-day/mg	2.41E-09	9.38E-08		mg/kg-day	2.00E-05	mg/kg-day	4.69E-03		
			<b>Exp. Route Total</b>									1.26E-07						1.31E-02	
			<b>Exposure Point Total</b>									1.29E-07						1.32E-02	
			<b>Exposure Medium Total</b>									1.29E-07						1.32E-02	
			<b>Surface Water Total</b>									1.29E-07						1.32E-02	
			<b>Total Receptor Risk/Hazard</b>									3.62E-07						2.29E-02	

**Notes:**

- ADAF - Age-Dependent Adjustment Factor.
  - CSF - Cancer Slope Factor.
  - EPC - Exposure Point Concentration.
  - NA - Not applicable.
  - PCB - Polychlorinated Biphenyl.
  - RfD - Oral Reference Dose.
  - SVOC - Semivolatile Organic Compound.
  - TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.
- (1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.

**Table C-2.7**  
**Summary of Receptor Risks and Hazards for COPCs - Adult Swimmer**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Swimmer
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Sediment	Sediment	Sediment	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	3.71E-07	2.54E-07	6.25E-07	Reproductive, Developmental	1.43E-02	9.77E-03	2.40E-02	
			<b>Metals</b>								
			Aluminum	NA	NA	NA	Neurological	2.01E-04	NA	2.01E-04	
			Arsenic	4.31E-08	4.92E-08	9.23E-08	Skin, Vascular	3.36E-04	3.83E-04	7.18E-04	
			Chromium	1.48E-07	NA	1.48E-07	None reported	3.46E-04	NA	3.46E-04	
			Cobalt	NA	NA	NA	Thyroid	1.33E-03	NA	1.33E-03	
			Manganese	NA	NA	NA	Neurological	2.38E-04	NA	2.38E-04	
			Nickel	NA	NA	NA	Decreased body and organ weights	8.79E-05	NA	8.79E-05	
			Thallium	NA	NA	NA	Hair	6.72E-04	NA	6.72E-04	
			Vanadium	NA	NA	NA	Hair	1.01E-03	NA	1.01E-03	
			<b>PCBs</b>								
			Total PCBs	9.76E-09	3.12E-08	4.09E-08	Eye, Nails, Immune	8.54E-04	2.73E-03	3.58E-03	
			<b>SVOCs</b>								
			Benzo(a)anthracene	2.62E-09	7.77E-09	1.04E-08	NA	NA	NA	NA	
			Benzo(a)pyrene	2.91E-08	8.64E-08	1.15E-07	NA	NA	NA	NA	
			Benzo(b)fluoranthene	4.41E-09	1.31E-08	1.75E-08	NA	NA	NA	NA	
			Benzo(k)fluoranthene	1.70E-10	5.05E-10	6.75E-10	NA	NA	NA	NA	
			Chrysene	4.07E-11	1.21E-10	1.61E-10	NA	NA	NA	NA	
			Dibenzo(a,h)anthracene	6.59E-09	1.95E-08	2.61E-08	NA	NA	NA	NA	
			Indeno(1,2,3-cd)pyrene	2.22E-09	6.59E-09	8.81E-09	NA	NA	NA	NA	
			Chemical Total	6.18E-07	4.68E-07	1.09E-06		1.94E-02	1.29E-02	3.22E-02	
					Exposure Point Total						3.22E-02
				Exposure Medium Total							3.22E-02
			Sediment Total								3.22E-02

**Table C-2.7**  
**Summary of Receptor Risks and Hazards for COPCs - Adult Swimmer**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Swimmer  
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Surface Water	Surface Water	Surface Water	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	1.06E-10	4.36E-07	4.36E-07	Reproductive, Developmental	4.08E-06	1.68E-02	1.68E-02	
			<b>Metals</b>								
			Arsenic	1.72E-09	1.71E-09	3.43E-09	Skin, Vascular	1.34E-05	1.33E-05	2.67E-05	
			Chromium	2.11E-09	1.68E-07	1.70E-07	None reported	4.92E-06	3.92E-04	3.97E-04	
			Cobalt	NA	NA	NA	Thyroid	1.62E-05	6.45E-06	2.26E-05	
			Manganese	NA	NA	NA	Neurological	2.87E-05	7.15E-04	7.44E-04	
			<b>Pesticides</b>								
			4,4'-DDT	7.26E-13	1.72E-09	1.72E-09	Liver	1.49E-08	3.54E-05	3.54E-05	
			<b>PCBs</b>								
			Total PCBs	5.02E-12	1.42E-08	1.42E-08	Eye, Nails, Immune	2.20E-06	6.19E-03	6.20E-03	
			Chemical Total	3.94E-09	6.21E-07	6.25E-07		6.95E-05	2.41E-02	2.42E-02	
					Exposure Point Total						2.42E-02
		Exposure Medium Total						2.42E-02			
Surface Water Total					6.25E-07			2.42E-02			
Receptor Total					1.71E-06			5.64E-02			

**Notes**  
 NA - Not Applicable

Target Organ Hazard Index			
Organ	Sediment	Surface Water	Total
Decreased body and organ weights	8.79E-05	--	8.79E-05
Developmental	2.40E-02	1.68E-02	4.08E-02
Eye	3.58E-03	6.20E-03	9.78E-03
Hair	1.68E-03	--	1.68E-03
Immune	3.58E-03	6.20E-03	9.78E-03
Liver	--	3.54E-05	3.54E-05
Nails	3.58E-03	6.20E-03	9.78E-03
Neurological	4.39E-04	7.44E-04	1.18E-03
None Reported	3.46E-04	3.97E-04	7.43E-04
Reproductive	2.40E-02	1.68E-02	4.08E-02
Skin	7.18E-04	2.67E-05	7.45E-04
Thyroid	1.33E-03	2.26E-05	1.35E-03
Vascular	7.18E-04	2.67E-05	7.45E-04

**Table C-2.8**  
**Summary of Receptor Risks and Hazards for COPCs - Adult Swimmer**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Swimmer
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Sediment	Sediment	Sediment	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	1.15E-08	1.57E-08	2.71E-08	Reproductive, Developmental	8.82E-04	1.21E-03	2.09E-03	
			<b>Metals</b>								
			Aluminum	NA	NA	NA	Neurological	4.33E-05	NA	4.33E-05	
			Arsenic	3.92E-09	8.95E-09	1.29E-08	Skin, Vascular	6.10E-05	1.39E-04	2.00E-04	
			Chromium	1.60E-08	NA	1.60E-08	None reported	7.44E-05	NA	7.44E-05	
			Cobalt	NA	NA	NA	Thyroid	2.94E-04	NA	2.94E-04	
			Manganese	NA	NA	NA	Neurological	5.19E-05	NA	5.19E-05	
			Nickel	NA	NA	NA	Decreased body and organ weights	1.59E-05	NA	1.59E-05	
			Thallium	NA	NA	NA	Hair	1.30E-04	NA	1.30E-04	
			Vanadium	NA	NA	NA	Hair	1.18E-04	NA	1.18E-04	
			<b>PCBs</b>								
			Total PCBs	4.43E-10	2.83E-09	3.27E-09	Eye, Nails, Immune	1.55E-04	9.90E-04	1.15E-03	
			<b>SVOCs</b>								
			Benzo(a)anthracene	2.87E-10	1.70E-09	1.99E-09	NA	NA	NA	NA	
			Benzo(a)pyrene	3.21E-09	1.90E-08	2.23E-08	NA	NA	NA	NA	
			Benzo(b)fluoranthene	4.84E-10	2.87E-09	3.35E-09	NA	NA	NA	NA	
			Benzo(k)fluoranthene	1.83E-11	1.08E-10	1.27E-10	NA	NA	NA	NA	
			Chrysene	4.50E-12	2.67E-11	3.12E-11	NA	NA	NA	NA	
			Dibenzo(a,h)anthracene	7.25E-10	4.30E-09	5.02E-09	NA	NA	NA	NA	
			Indeno(1,2,3-cd)pyrene	2.42E-10	1.44E-09	1.68E-09	NA	NA	NA	NA	
			Chemical Total	3.68E-08	5.69E-08	9.37E-08		1.83E-03	2.34E-03	4.16E-03	
					Exposure Point Total					4.16E-03	
				Exposure Medium Total						4.16E-03	
			Sediment Total							4.16E-03	

**Table C-2.8**  
**Summary of Receptor Risks and Hazards for COPCs - Adult Swimmer**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Swimmer  
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Surface Water	Surface Water	Surface Water	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	8.20E-12	4.76E-08	4.76E-08	Reproductive, Developmental	6.31E-07	3.66E-03	3.66E-03	
			<b>Metals</b>								
			Arsenic	1.85E-10	1.84E-10	3.69E-10	Skin, Vascular	2.88E-06	2.87E-06	5.75E-06	
			Chromium	2.42E-10	1.93E-08	1.95E-08	None reported	1.13E-06	8.99E-05	9.10E-05	
			Cobalt	NA	NA	NA	Thyroid	3.81E-06	1.52E-06	5.33E-06	
			Manganese	NA	NA	NA	Neurological	6.81E-06	1.69E-04	1.76E-04	
			<b>Pesticides</b>								
			4,4'-DDT	7.37E-14	2.47E-10	2.47E-10	Liver	3.04E-09	1.02E-05	1.02E-05	
			<b>PCBs</b>								
			Total PCBs	4.70E-13	1.88E-09	1.88E-09	Eye, Nails, Immune	5.49E-07	2.19E-03	2.19E-03	
			Chemical Total	4.36E-10	6.91E-08	6.96E-08		1.58E-05	6.12E-03	6.14E-03	
					Exposure Point Total					6.14E-03	
		Exposure Medium Total					6.14E-03				
Surface Water Total					6.96E-08			6.14E-03			
Receptor Total					1.63E-07			1.03E-02			

**Notes**

NA - Not Applicable

Target Organ Hazard Index			
Organ	Sediment	Surface Water	Total
Decreased body and organ weights	1.59E-05	--	1.59E-05
Developmental	2.09E-03	3.66E-03	5.75E-03
Eye	1.15E-03	2.19E-03	3.34E-03
Hair	2.48E-04	--	2.48E-04
Immune	1.15E-03	2.19E-03	3.34E-03
Liver	--	1.02E-05	1.02E-05
Nails	1.15E-03	2.19E-03	3.34E-03
Neurological	9.52E-05	1.76E-04	2.72E-04
None Reported	7.44E-05	9.10E-05	1.65E-04
Reproductive	2.09E-03	3.66E-03	5.75E-03
Skin	2.00E-04	5.75E-06	2.06E-04
Thyroid	2.94E-04	5.33E-06	2.99E-04
Vascular	2.00E-04	5.75E-06	2.06E-04



**Table 2.9**  
**Summary of Receptor Risks and Hazards for COPCs - Child Swimmer**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: Swimmer Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Sediment	Sediment	Sediment	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	1.05E-06	1.81E-07	1.23E-06	Reproductive, Developmental	1.34E-01	2.32E-02	1.58E-01	
			<b>Metals</b>								
			Aluminum	NA	NA	NA	Neurological	1.89E-03	NA	1.89E-03	
			Arsenic	1.22E-07	3.51E-08	1.57E-07	Skin, Vascular	3.16E-03	9.10E-04	4.07E-03	
			Chromium	1.76E-06	NA	1.76E-06	None reported	3.26E-03	NA	3.26E-03	
			Cobalt	NA	NA	NA	Thyroid	1.25E-02	NA	1.25E-02	
			Manganese	NA	NA	NA	Neurological	2.24E-03	NA	2.24E-03	
			Nickel	NA	NA	NA	Decreased body and organ weights	8.27E-04	NA	8.27E-04	
			Thallium	NA	NA	NA	Hair	6.32E-03	NA	6.32E-03	
			Vanadium	NA	NA	NA	Hair	9.50E-03	NA	9.50E-03	
			<b>PCBs</b>								
			Total PCBs	2.76E-08	2.06E-08	4.82E-08	Eye, Nails, Immune	8.04E-03	6.02E-03	1.41E-02	
			<b>SVOCs</b>								
			Benzo(a)anthracene	3.11E-08	2.33E-08	5.44E-08	NA	NA	NA	NA	
			Benzo(a)pyrene	3.46E-07	2.59E-07	6.04E-07	NA	NA	NA	NA	
			Benzo(b)fluoranthene	5.23E-08	3.92E-08	9.15E-08	NA	NA	NA	NA	
			Benzo(k)fluoranthene	2.02E-09	1.51E-09	3.53E-09	NA	NA	NA	NA	
			Chrysene	4.82E-10	3.61E-10	8.44E-10	NA	NA	NA	NA	
			Dibenzo(a,h)anthracene	7.81E-08	5.85E-08	1.37E-07	NA	NA	NA	NA	
			Indeno(1,2,3-cd)pyrene	2.64E-08	1.97E-08	4.61E-08	NA	NA	NA	NA	
			Chemical Total	3.49E-06	6.38E-07	4.13E-06		1.82E-01	3.02E-02	2.12E-01	
					Exposure Point Total					2.12E-01	
				Exposure Medium Total						2.12E-01	
			Sediment Total							2.12E-01	

**Table 2.9**  
**Summary of Receptor Risks and Hazards for COPCs - Child Swimmer**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Swimmer  
 Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Surface Water	Surface Water	Surface Water	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	3.50E-10	2.21E-07	2.21E-07	Reproductive, Developmental	4.48E-05	2.83E-02	2.83E-02	
			<b>Metals</b>								
			Arsenic	5.66E-09	8.66E-10	6.52E-09	Skin, Vascular	1.47E-04	2.25E-05	1.69E-04	
			Chromium	2.92E-08	3.57E-07	3.86E-07	None reported	5.40E-05	6.62E-04	7.16E-04	
			Cobalt	NA	NA	NA	Thyroid	1.78E-04	1.09E-05	1.89E-04	
			Manganese	NA	NA	NA	Neurological	3.16E-04	1.21E-03	1.52E-03	
			<b>Pesticides</b>								
			4,4'-DDT	2.39E-12	8.70E-10	8.73E-10	Liver	1.64E-07	5.97E-05	5.99E-05	
			<b>PCBs</b>								
			Total PCBs	1.65E-11	7.17E-09	7.19E-09	Eye, Nails, Immune	2.41E-05	1.05E-02	1.05E-02	
			Chemical Total	3.52E-08	5.87E-07	6.22E-07		7.63E-04	4.07E-02	4.15E-02	
		Exposure Point Total						4.15E-02			
	Exposure Medium Total							4.15E-02			
Surface Water Total								4.15E-02			
Receptor Total								2.54E-01			

**Notes**  
 NA - Not Applicable

Target Organ Hazard Index			
Organ	Sediment	Surface Water	Total
Decreased body and organ weights	8.27E-04	--	8.27E-04
Developmental	1.58E-01	2.83E-02	1.86E-01
Eye	1.41E-02	1.05E-02	2.45E-02
Hair	1.58E-02	--	1.58E-02
Immune	1.41E-02	1.05E-02	2.45E-02
Liver	--	5.99E-05	5.99E-05
Nails	1.41E-02	1.05E-02	2.45E-02
Neurological	4.14E-03	1.52E-03	5.66E-03
None Reported	3.26E-03	7.16E-04	3.97E-03
Reproductive	1.58E-01	2.83E-02	1.86E-01
Skin	4.07E-03	1.69E-04	4.24E-03
Thyroid	1.25E-02	1.89E-04	1.27E-02
Vascular	4.07E-03	1.69E-04	4.24E-03

**Table C-2.10**  
**Summary of Receptor Risks and Hazards for COPCs - Child Swimmer**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: Swimmer Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Sediment	Sediment	Sediment	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	2.16E-08	7.46E-09	2.90E-08	Reproductive, Developmental	8.30E-03	2.87E-03	1.12E-02	
			<b>Metals</b>								
			Aluminum	NA	NA	NA	Neurological	4.07E-04	NA	4.07E-04	
			Arsenic	7.39E-09	4.25E-09	1.16E-08	Skin, Vascular	5.75E-04	3.31E-04	9.05E-04	
			Chromium	1.26E-07	NA	1.26E-07	None reported	7.01E-04	NA	7.01E-04	
			Cobalt	NA	NA	NA	Thyroid	2.77E-03	NA	2.77E-03	
			Manganese	NA	NA	NA	Neurological	4.89E-04	NA	4.89E-04	
			Nickel	NA	NA	NA	Decreased body and organ weights	1.49E-04	NA	1.49E-04	
			Thallium	NA	NA	NA	Hair	1.22E-03	NA	1.22E-03	
			Vanadium	NA	NA	NA	Hair	1.11E-03	NA	1.11E-03	
			<b>PCBs</b>								
			Total PCBs	8.34E-10	1.25E-09	2.08E-09	Eye, Nails, Immune	1.46E-03	2.19E-03	3.65E-03	
			<b>SVOCs</b>								
			Benzo(a)anthracene	2.27E-09	3.40E-09	5.67E-09	NA	NA	NA	NA	
			Benzo(a)pyrene	2.54E-08	3.80E-08	6.34E-08	NA	NA	NA	NA	
			Benzo(b)fluoranthene	3.83E-09	5.73E-09	9.56E-09	NA	NA	NA	NA	
			Benzo(k)fluoranthene	1.44E-10	2.16E-10	3.61E-10	NA	NA	NA	NA	
			Chrysene	3.56E-11	5.33E-11	8.90E-11	NA	NA	NA	NA	
			Dibenzo(a,h)anthracene	5.73E-09	8.58E-09	1.43E-08	NA	NA	NA	NA	
			Indeno(1,2,3-cd)pyrene	1.92E-09	2.87E-09	4.79E-09	NA	NA	NA	NA	
			Chemical Total	1.95E-07	7.18E-08	2.67E-07		1.72E-02	5.39E-03	2.26E-02	
					Exposure Point Total					2.26E-02	
				Exposure Medium Total						2.26E-02	
			Sediment Total							2.26E-02	

**Table C-2.10**  
**Summary of Receptor Risks and Hazards for COPCs - Child Swimmer**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Swimmer  
 Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Surface Water	Surface Water	Surface Water	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	1.80E-11	1.61E-08	1.61E-08	Reproductive, Developmental	6.92E-06	6.18E-03	6.18E-03	
			<b>Metals</b>								
			Arsenic	4.07E-10	6.22E-11	4.69E-10	Skin, Vascular	3.16E-05	4.84E-06	3.65E-05	
			Chromium	2.23E-09	2.73E-08	2.96E-08	None reported	1.24E-05	1.52E-04	1.64E-04	
			Cobalt	NA	NA	NA	Thyroid	4.19E-05	2.56E-06	4.45E-05	
			Manganese	NA		0.00E+00	Neurological	7.48E-05	2.86E-04	3.61E-04	
			<b>Pesticides</b>								
			4,4'-DDT	1.62E-13	8.34E-11	8.35E-11	Liver	3.33E-08	1.72E-05	1.72E-05	
			<b>PCBs</b>								
			Total PCBs	1.03E-12	6.34E-10	6.35E-10	Eye, Nails, Immune	6.03E-06	3.70E-03	3.70E-03	
			Chemical Total	2.66E-09	4.42E-08	4.68E-08		1.74E-04	1.03E-02	1.05E-02	
					Exposure Point Total						1.05E-02
		Exposure Medium Total						1.05E-02			
Surface Water Total					4.68E-08				1.05E-02		
Receptor Total					3.14E-07				3.31E-02		

**Notes**  
 NA - Not Applicable

Target Organ Hazard Index			
Organ	Sediment	Surface Water	Total
Decreased body and organ weights	1.49E-04	--	1.49E-04
Developmental	1.12E-02	6.18E-03	1.73E-02
Eye	3.65E-03	3.70E-03	7.35E-03
Hair	2.34E-03	--	2.34E-03
Immune	3.65E-03	3.70E-03	7.35E-03
Liver	--	1.72E-05	1.72E-05
Nails	3.65E-03	3.70E-03	7.35E-03
Neurological	8.96E-04	3.61E-04	1.26E-03
None Reported	7.01E-04	1.64E-04	8.65E-04
Reproductive	1.12E-02	6.18E-03	1.73E-02
Skin	9.05E-04	3.65E-05	9.42E-04
Thyroid	2.77E-03	4.45E-05	2.81E-03
Vascular	9.05E-04	3.65E-05	9.42E-04

**Table C-2.11**  
**Summary of Receptor Risks and Hazards for COPCs - Teen Swimmer**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Swimmer  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Sediment	Sediment	Sediment	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	6.73E-07	2.73E-07	9.46E-07	Reproductive, Developmental	4.31E-02	1.75E-02	6.06E-02	
			<b>Metals</b>								
			Aluminum	NA	NA	NA	Neurological	6.08E-04	NA	6.08E-04	
			Arsenic	7.81E-08	5.29E-08	1.31E-07	Skin, Vascular	1.01E-03	6.86E-04	1.70E-03	
			Chromium	6.71E-07	NA	6.71E-07	None reported	1.04E-03	NA	1.04E-03	
			Cobalt	NA	NA	NA	Thyroid	4.01E-03	NA	4.01E-03	
			Manganese	NA	NA	NA	Neurological	7.19E-04	NA	7.19E-04	
			Nickel	NA	NA	NA	Decreased body and organ weights	2.65E-04	NA	2.65E-04	
			Thallium	NA	NA	NA	Hair	2.03E-03	NA	2.03E-03	
			Vanadium	NA	NA	NA	Hair	3.05E-03	NA	3.05E-03	
			<b>PCBs</b>								
			Total PCBs	1.77E-08	3.35E-08	5.12E-08	Eye, Nails, Immune	2.58E-03	4.89E-03	7.47E-03	
			<b>SVOCs</b>								
			Benzo(a)anthracene	1.19E-08	2.09E-08	3.28E-08	NA	NA	NA	NA	
			Benzo(a)pyrene	1.32E-07	2.32E-07	3.64E-07	NA	NA	NA	NA	
			Benzo(b)fluoranthene	2.00E-08	3.52E-08	5.52E-08	NA	NA	NA	NA	
			Benzo(k)fluoranthene	7.71E-10	1.36E-09	2.13E-09	NA	NA	NA	NA	
			Chrysene	1.84E-10	3.25E-10	5.09E-10	NA	NA	NA	NA	
			Dibenzo(a,h)anthracene	2.98E-08	5.25E-08	8.24E-08	NA	NA	NA	NA	
			Indeno(1,2,3-cd)pyrene	1.01E-08	1.77E-08	2.78E-08	NA	NA	NA	NA	
			Chemical Total	1.64E-06	7.20E-07	2.36E-06		5.84E-02	2.31E-02	8.15E-02	
					Exposure Point Total					8.15E-02	
					Exposure Medium Total					8.15E-02	
					Sediment Total					8.15E-02	

**Table C-2.11**  
**Summary of Receptor Risks and Hazards for COPCs - Teen Swimmer**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Swimmer  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Surface Water	Surface Water	Surface Water	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	4.49E-10	5.60E-07	5.60E-07	Reproductive, Developmental	2.88E-05	3.59E-02	3.59E-02	
			<b>Metals</b>								
			Arsenic	7.26E-09	2.20E-09	9.46E-09	Skin, Vascular	9.41E-05	2.85E-05	1.23E-04	
			Chromium	2.23E-08	5.39E-07	5.62E-07	None reported	3.47E-05	8.39E-04	8.74E-04	
			Cobalt	NA	NA	NA	Thyroid	1.14E-04	1.38E-05	1.28E-04	
			Manganese	NA	NA	NA	Neurological	2.02E-04	1.53E-03	1.73E-03	
			<b>Pesticides</b>								
			4,4'-DDT	3.07E-12	2.21E-09	2.21E-09	Liver	1.05E-07	7.58E-05	7.59E-05	
			<b>PCBs</b>								
			Total PCBs	2.12E-11	1.82E-08	1.82E-08	Eye, Nails, Immune	1.55E-05	1.33E-02	1.33E-02	
			Chemical Total	3.00E-08	1.12E-06	1.15E-06		4.90E-04	5.16E-02	5.21E-02	
					Exposure Point Total						5.21E-02
		Exposure Medium Total						5.21E-02			
Surface Water Total					1.15E-06			5.21E-02			
Receptor Total					3.52E-06			1.34E-01			

**Notes**

NA - Not Applicable

Target Organ Hazard Index			
Organ	Sediment	Surface Water	Total
Decreased body and organ weights	2.65E-04	--	2.65E-04
Developmental	6.06E-02	3.59E-02	9.65E-02
Eye	7.47E-03	1.33E-02	2.07E-02
Hair	5.07E-03	--	5.07E-03
Immune	7.47E-03	1.33E-02	2.07E-02
Liver	--	7.59E-05	7.59E-05
Nails	7.47E-03	1.33E-02	2.07E-02
Neurological	1.33E-03	1.73E-03	3.06E-03
None Reported	1.04E-03	8.74E-04	1.92E-03
Reproductive	6.06E-02	3.59E-02	9.65E-02
Skin	1.70E-03	1.23E-04	1.82E-03
Thyroid	4.01E-03	1.28E-04	4.13E-03
Vascular	1.70E-03	1.23E-04	1.82E-03

**Table C-2.12**  
**Summary of Receptor Risks and Hazards for COPCs - Teen Swimmer**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Swimmer  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Sediment	Sediment	Sediment	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	2.08E-08	1.69E-08	3.76E-08	Reproductive, Developmental	2.66E-03	2.16E-03	4.83E-03	
			<b>Metals</b>								
			Aluminum	NA	NA	NA	Neurological	1.31E-04	NA	1.31E-04	
			Arsenic	7.11E-09	9.63E-09	1.67E-08	Skin, Vascular	1.84E-04	2.50E-04	4.34E-04	
			Chromium	7.22E-08	NA	7.22E-08	None reported	2.25E-04	NA	2.25E-04	
			Cobalt	NA	NA	NA	Thyroid	8.87E-04	NA	8.87E-04	
			Manganese	NA	NA	NA	Neurological	1.57E-04	NA	1.57E-04	
			Nickel	NA	NA	NA	Decreased body and organ weights	4.79E-05	NA	4.79E-05	
			Thallium	NA	NA	NA	Hair	3.93E-04	NA	3.93E-04	
			Vanadium	NA	NA	NA	Hair	3.57E-04	NA	3.57E-04	
			<b>PCBs</b>								
			Total PCBs	8.03E-10	3.05E-09	3.85E-09	Eye, Nails, Immune	4.68E-04	1.78E-03	2.25E-03	
			<b>SVOCs</b>								
			Benzo(a)anthracene	1.30E-09	4.58E-09	5.88E-09	NA	NA	NA	NA	
			Benzo(a)pyrene	1.45E-08	5.13E-08	6.58E-08	NA	NA	NA	NA	
			Benzo(b)fluoranthene	2.19E-09	7.72E-09	9.92E-09	NA	NA	NA	NA	
			Benzo(k)fluoranthene	8.27E-11	2.91E-10	3.74E-10	NA	NA	NA	NA	
			Chrysene	2.04E-11	7.19E-11	9.23E-11	NA	NA	NA	NA	
			Dibenzo(a,h)anthracene	3.28E-09	1.16E-08	1.48E-08	NA	NA	NA	NA	
			Indeno(1,2,3-cd)pyrene	1.10E-09	3.87E-09	4.96E-09	NA	NA	NA	NA	
			Chemical Total	1.23E-07	1.09E-07	2.32E-07		5.51E-03	4.19E-03	9.70E-03	
					Exposure Point Total					9.70E-03	
				Exposure Medium Total						9.70E-03	
			Sediment Total							9.70E-03	

**Table C-2.12**  
**Summary of Receptor Risks and Hazards for COPCs - Teen Swimmer**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Swimmer  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Surface Water	Surface Water	Surface Water	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	3.46E-11	6.11E-08	6.11E-08	Reproductive, Developmental	4.44E-06	7.83E-03	7.84E-03	
			<b>Metals</b>								
			Arsenic	7.83E-10	2.37E-10	1.02E-09	Skin, Vascular	2.03E-05	6.14E-06	2.64E-05	
			Chromium	2.56E-09	6.19E-08	6.44E-08	None reported	7.95E-06	1.92E-04	2.00E-04	
			Cobalt	NA	NA	NA	Thyroid	2.69E-05	3.25E-06	3.01E-05	
			Manganese	NA	NA	NA	Neurological	4.80E-05	3.63E-04	4.11E-04	
			<b>Pesticides</b>								
			4,4'-DDT	3.12E-13	3.17E-10	3.17E-10	Liver	2.14E-08	2.18E-05	2.18E-05	
			<b>PCBs</b>								
			Total PCBs	1.99E-12	2.41E-09	2.41E-09	Eye, Nails, Immune	3.87E-06	4.69E-03	4.69E-03	
			Chemical Total	3.38E-09	1.26E-07	1.29E-07		1.11E-04	1.31E-02	1.32E-02	
		Exposure Point Total						1.32E-02			
		Exposure Medium Total						1.32E-02			
Surface Water Total					1.29E-07			1.32E-02			
Receptor Total					3.62E-07			2.29E-02			

**Notes**  
 NA - Not Applicable

Target Organ Hazard Index			
Organ	Sediment	Surface Water	Total
Decreased body and organ weights	4.79E-05	--	4.79E-05
Developmental	4.83E-03	7.84E-03	1.27E-02
Eye	2.25E-03	4.69E-03	6.94E-03
Hair	7.50E-04	--	7.50E-04
Immune	2.25E-03	4.69E-03	6.94E-03
Liver	--	2.18E-05	2.18E-05
Nails	2.25E-03	4.69E-03	6.94E-03
Neurological	2.87E-04	4.11E-04	6.98E-04
None Reported	2.25E-04	2.00E-04	4.25E-04
Reproductive	4.83E-03	7.84E-03	1.27E-02
Skin	4.34E-04	2.64E-05	4.60E-04
Thyroid	8.87E-04	3.01E-05	9.17E-04
Vascular	4.34E-04	2.64E-05	4.60E-04



## **Risk Calculation Spreadsheets – Wader Receptor**

**Table C-3.1**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Wader**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Wader
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations									
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient				
							Value	Units	Value	Units			Value	Units	Value	Units					
Sediment	Surface Sediment	Nearshore Surface Sediment	Ingestion	<b>Dioxin</b>																	
				2,3,7,8-TCDD-TEQ	4.49E-04	mg/kg	7.60E-12	mg/kg-day	1.30E+05	kg-day/mg		9.88E-07	2.66E-11	mg/kg-day	7.00E-10	mg/kg-day	3.80E-02				
				<b>Metals</b>																	
				Aluminum	9.05E+03	mg/kg	1.53E-04	mg/kg-day	NA	kg-day/mg		NA	5.36E-04	mg/kg-day	1.00E+00	mg/kg-day	5.36E-04				
				Arsenic	7.54E+00	mg/kg	7.66E-08	mg/kg-day	1.50E+00	kg-day/mg		1.15E-07	2.68E-07	mg/kg-day	3.00E-04	mg/kg-day	8.93E-04				
				Chromium	4.67E+01	mg/kg	7.89E-07	mg/kg-day	5.00E-01	kg-day/mg	1	3.95E-07	2.76E-06	mg/kg-day	3.00E-03	mg/kg-day	9.21E-04				
				Cobalt	1.79E+01	mg/kg	3.03E-07	mg/kg-day	NA	kg-day/mg		NA	1.06E-06	mg/kg-day	3.00E-04	mg/kg-day	3.53E-03				
				Manganese	2.57E+02	mg/kg	4.35E-06	mg/kg-day	NA	kg-day/mg		NA	1.52E-05	mg/kg-day	2.40E-02	mg/kg-day	6.34E-04				
				Nickel	7.90E+01	mg/kg	1.34E-06	mg/kg-day	NA	kg-day/mg		NA	4.68E-06	mg/kg-day	2.00E-02	mg/kg-day	2.34E-04				
				Thallium	3.02E-01	mg/kg	5.11E-09	mg/kg-day	NA	kg-day/mg		NA	1.79E-08	mg/kg-day	1.00E-05	mg/kg-day	1.79E-03				
				Vanadium	2.29E+02	mg/kg	3.87E-06	mg/kg-day	NA	kg-day/mg		NA	1.35E-05	mg/kg-day	5.04E-03	mg/kg-day	2.69E-03				
				<b>PCBs</b>																	
				Total PCBs	7.68E-01	mg/kg	1.30E-08	mg/kg-day	2.00E+00	kg-day/mg		2.60E-08	4.55E-08	mg/kg-day	2.00E-05	mg/kg-day	2.27E-03				
				<b>SVOCs</b>																	
				Benzo(a)anthracene	5.65E-01	mg/kg	9.56E-09	mg/kg-day	7.30E-01	kg-day/mg	1	6.98E-09	3.35E-08	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(a)pyrene	6.28E-01	mg/kg	1.06E-08	mg/kg-day	7.30E+00	kg-day/mg	1	7.76E-08	3.72E-08	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(b)fluoranthene	9.51E-01	mg/kg	1.61E-08	mg/kg-day	7.30E-01	kg-day/mg	1	1.17E-08	5.63E-08	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(k)fluoranthene	3.67E-01	mg/kg	6.21E-09	mg/kg-day	7.30E-02	kg-day/mg	1	4.53E-10	2.17E-08	mg/kg-day	NA	mg/kg-day	NA				
				Chrysene	8.77E-01	mg/kg	1.48E-08	mg/kg-day	7.30E-03	kg-day/mg	1	1.08E-10	5.19E-08	mg/kg-day	NA	mg/kg-day	NA				
				Dibenzo(a,h)anthracene	1.42E-01	mg/kg	2.40E-09	mg/kg-day	7.30E+00	kg-day/mg	1	1.75E-08	8.41E-09	mg/kg-day	NA	mg/kg-day	NA				
Indeno(1,2,3-cd)pyrene	4.79E-01	mg/kg	8.10E-09	mg/kg-day	7.30E-01	kg-day/mg	1	5.92E-09	2.84E-08	mg/kg-day	NA	mg/kg-day	NA								
<b>Exp. Route Total</b>																		5.15E-02			

**Table C-3.1**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Wader**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Wader  
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations										
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient					
							Value	Units	Value	Units			Value	Units	Value	Units						
Sediment	Surface Sediment	Nearshore Surface Sediment	Dermal	<b>Dioxin</b>																		
				2,3,7,8-TCDD-TEQ	4.49E-04	mg/kg	5.20E-12	mg/kg-day	1.30E+05	kg-day/mg		6.76E-07	1.82E-11	mg/kg-day	7.00E-10	mg/kg-day	2.60E-02					
				<b>Metals</b>																		
				Aluminum	9.05E+03	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E+00	mg/kg-day	NA					
				Arsenic	7.54E+00	mg/kg	8.73E-08	mg/kg-day	1.50E+00	kg-day/mg		1.31E-07	3.06E-07	mg/kg-day	3.00E-04	mg/kg-day	1.02E-03					
				Chromium	4.67E+01	mg/kg	NA	mg/kg-day	2.00E+01	kg-day/mg	1	NA	NA	mg/kg-day	7.50E-05	mg/kg-day	NA					
				Cobalt	1.79E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	3.00E-04	mg/kg-day	NA					
				Manganese	2.57E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	9.60E-04	mg/kg-day	NA					
				Nickel	7.90E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	8.00E-04	mg/kg-day	NA					
				Thallium	3.02E-01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E-05	mg/kg-day	NA					
				Vanadium	2.29E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.31E-04	mg/kg-day	NA					
				<b>PCBs</b>																		
				Total PCBs	7.68E-01	mg/kg	4.15E-08	mg/kg-day	2.00E+00	kg-day/mg		8.29E-08	1.45E-07	mg/kg-day	2.00E-05	mg/kg-day	7.26E-03					
				<b>SVOCs</b>																		
				Benzo(a)anthracene	5.65E-01	mg/kg	2.83E-08	mg/kg-day	7.30E-01	kg-day/mg	1	2.07E-08	9.92E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(a)pyrene	6.28E-01	mg/kg	3.15E-08	mg/kg-day	7.30E+00	kg-day/mg	1	2.30E-07	1.10E-07	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(b)fluoranthene	9.51E-01	mg/kg	4.77E-08	mg/kg-day	7.30E-01	kg-day/mg	1	3.48E-08	1.67E-07	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(k)fluoranthene	3.67E-01	mg/kg	1.84E-08	mg/kg-day	7.30E-02	kg-day/mg	1	1.34E-09	6.44E-08	mg/kg-day	NA	mg/kg-day	NA					
				Chrysene	8.77E-01	mg/kg	4.40E-08	mg/kg-day	7.30E-03	kg-day/mg	1	3.21E-10	1.54E-07	mg/kg-day	NA	mg/kg-day	NA					
				Dibenzo(a,h)anthracene	1.42E-01	mg/kg	7.12E-09	mg/kg-day	7.30E+00	kg-day/mg	1	5.20E-08	2.49E-08	mg/kg-day	NA	mg/kg-day	NA					
Indeno(1,2,3-cd)pyrene	4.79E-01	mg/kg	2.40E-08	mg/kg-day	7.30E-01	kg-day/mg	1	1.75E-08	8.41E-08	mg/kg-day	NA	mg/kg-day	NA									
			<b>Exp. Route Total</b>																			
			<b>Exposure Point Total</b>																			
			<b>Exposure Medium Total</b>																			
<b>Sediment Total</b>																						

**Table C-3.1**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Wader**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Wader  
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations						Noncancer Hazard Calculations						
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient		
							Value	Units	Value	Units			Value	Units	Value	Units			
Surface Water	Surface Water	Surface Water	Ingestion	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	6.12E-07	ug/L	2.69E-15	mg/kg-day	1.30E+05	kg-day/mg	1	3.50E-10	9.42E-15	mg/kg-day	7.00E-10	mg/kg-day	1.35E-05		
				<b>Metals</b> Arsenic	8.58E-01	ug/L	3.77E-09	mg/kg-day	1.50E+00	kg-day/mg		5.66E-09	1.32E-08	mg/kg-day	3.00E-04	mg/kg-day	4.40E-05		
				Chromium	3.16E+00	ug/L	1.39E-08	mg/kg-day	5.00E-01	kg-day/mg		6.95E-09	4.86E-08	mg/kg-day	3.00E-03	mg/kg-day	1.62E-05		
				Cobalt	1.04E+00	ug/L	4.57E-09	mg/kg-day	NA	kg-day/mg		NA	1.60E-08	mg/kg-day	3.00E-04	mg/kg-day	5.34E-05		
				Manganese	1.48E+02	ug/L	6.50E-07	mg/kg-day	NA	kg-day/mg		NA	2.27E-06	mg/kg-day	2.40E-02	mg/kg-day	9.47E-05		
				<b>Pesticides</b> 4,4'-DDT	1.60E-03	ug/L	7.04E-12	mg/kg-day	3.40E-01	kg-day/mg		2.39E-12	2.46E-11	mg/kg-day	5.00E-04	mg/kg-day	4.93E-08		
				<b>PCBs</b> Total PCBs	9.40E-03	ug/L	4.13E-11	mg/kg-day	4.00E-01	kg-day/mg		1.65E-11	1.45E-10	mg/kg-day	2.00E-05	mg/kg-day	7.24E-06		
				<b>Exp. Route Total</b>								1.30E-08					2.29E-04		
				Dermal	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	6.12E-07	ug/L	2.29E-12	mg/kg-day	1.30E+05		kg-day/mg	1	2.98E-07	8.03E-12	mg/kg-day	7.00E-10	mg/kg-day	1.15E-02
					<b>Metals</b> Arsenic	8.58E-01	ug/L	1.10E-09	mg/kg-day	1.50E+00		kg-day/mg		1.65E-09	3.86E-09	mg/kg-day	3.00E-04	mg/kg-day	1.29E-05
			Chromium		3.16E+00	ug/L	8.13E-09	mg/kg-day	2.00E+01	kg-day/mg	1.63E-07	2.84E-08		mg/kg-day	7.50E-05	mg/kg-day	3.79E-04		
			Cobalt		1.04E+00	ug/L	5.35E-10	mg/kg-day	NA	kg-day/mg	NA	1.87E-09		mg/kg-day	3.00E-04	mg/kg-day	6.24E-06		
			Manganese		1.48E+02	ug/L	1.90E-07	mg/kg-day	NA	kg-day/mg	NA	6.65E-07		mg/kg-day	9.60E-04	mg/kg-day	6.92E-04		
			<b>Pesticides</b> 4,4'-DDT		1.60E-03	ug/L	3.46E-09	mg/kg-day	3.40E-01	kg-day/mg	1.18E-09	1.21E-08		mg/kg-day	5.00E-04	mg/kg-day	2.42E-05		
			<b>PCBs</b> Total PCBs		9.40E-03	ug/L	2.42E-08	mg/kg-day	4.00E-01	kg-day/mg	9.69E-09	8.48E-08		mg/kg-day	2.00E-05	mg/kg-day	4.24E-03		
			<b>Exp. Route Total</b>								4.73E-07						1.68E-02		
			<b>Exposure Point Total</b>								4.86E-07						1.71E-02		
			<b>Exposure Medium Total</b>								4.86E-07						1.71E-02		
			<b>Surface Water Total</b>							4.86E-07					1.71E-02				
			<b>Total Receptor Risk/Hazard</b>							3.38E-06					1.03E-01				

**Notes:**

- ADAF - Age-Dependent Adjustment Factor.
- CSF - Cancer Slope Factor.
- EPC - Exposure Point Concentration.
- NA - Not applicable.
- PCB - Polychlorinated Biphenyl.
- RfD - Oral Reference Dose.
- SVOC - Semivolatile Organic Compound.
- TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.

(1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.

**Table C-3.2**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Wader**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Wader
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations										
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient					
							Value	Units	Value	Units			Value	Units	Value	Units						
Sediment	Surface Sediment	Nearshore Surface Sediment	Ingestion	<b>Dioxin</b>																		
				2,3,7,8-TCDD-TEQ	1.11E-04	mg/kg	2.35E-13	mg/kg-day	1.30E+05	kg-day/mg		3.05E-08	1.64E-12	mg/kg-day	7.00E-10	mg/kg-day	2.35E-03					
				<b>Metals</b>																		
				Aluminum	7.78E+03	mg/kg	1.65E-05	mg/kg-day	NA	kg-day/mg		NA	1.15E-04	mg/kg-day	1.00E+00	mg/kg-day	1.15E-04					
				Arsenic	5.49E+00	mg/kg	6.96E-09	mg/kg-day	1.50E+00	kg-day/mg		1.04E-08	4.88E-08	mg/kg-day	3.00E-04	mg/kg-day	1.63E-04					
				Chromium	4.02E+01	mg/kg	8.49E-08	mg/kg-day	5.00E-01	kg-day/mg	1	4.25E-08	5.94E-07	mg/kg-day	3.00E-03	mg/kg-day	1.98E-04					
				Cobalt	1.59E+01	mg/kg	3.35E-08	mg/kg-day	NA	kg-day/mg		NA	2.35E-07	mg/kg-day	3.00E-04	mg/kg-day	7.82E-04					
				Manganese	2.24E+02	mg/kg	4.74E-07	mg/kg-day	NA	kg-day/mg		NA	3.32E-06	mg/kg-day	2.40E-02	mg/kg-day	1.38E-04					
				Nickel	5.71E+01	mg/kg	1.21E-07	mg/kg-day	NA	kg-day/mg		NA	8.45E-07	mg/kg-day	2.00E-02	mg/kg-day	4.23E-05					
				Thallium	2.34E-01	mg/kg	4.95E-10	mg/kg-day	NA	kg-day/mg		NA	3.46E-09	mg/kg-day	1.00E-05	mg/kg-day	3.46E-04					
				Vanadium	1.07E+02	mg/kg	2.26E-07	mg/kg-day	NA	kg-day/mg		NA	1.59E-06	mg/kg-day	5.04E-03	mg/kg-day	3.15E-04					
				<b>PCBs</b>																		
				Total PCBs	5.58E-01	mg/kg	1.18E-09	mg/kg-day	1.00E+00	kg-day/mg		1.18E-09	8.26E-09	mg/kg-day	2.00E-05	mg/kg-day	4.13E-04					
				<b>SVOCs</b>																		
				Benzo(a)anthracene	4.95E-01	mg/kg	1.05E-09	mg/kg-day	7.30E-01	kg-day/mg	1	7.64E-10	7.33E-09	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(a)pyrene	5.54E-01	mg/kg	1.17E-09	mg/kg-day	7.30E+00	kg-day/mg	1	8.55E-09	8.20E-09	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(b)fluoranthene	8.35E-01	mg/kg	1.77E-09	mg/kg-day	7.30E-01	kg-day/mg	1	1.29E-09	1.24E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(k)fluoranthene	3.15E-01	mg/kg	6.66E-10	mg/kg-day	7.30E-02	kg-day/mg	1	4.86E-11	4.66E-09	mg/kg-day	NA	mg/kg-day	NA					
				Chrysene	7.77E-01	mg/kg	1.64E-09	mg/kg-day	7.30E-03	kg-day/mg	1	1.20E-11	1.15E-08	mg/kg-day	NA	mg/kg-day	NA					
				Dibenzo(a,h)anthracene	1.25E-01	mg/kg	2.64E-10	mg/kg-day	7.30E+00	kg-day/mg	1	1.93E-09	1.85E-09	mg/kg-day	NA	mg/kg-day	NA					
Indeno(1,2,3-cd)pyrene	4.18E-01	mg/kg	8.84E-10	mg/kg-day	7.30E-01	kg-day/mg	1	6.45E-10	6.19E-09	mg/kg-day	NA	mg/kg-day	NA									
<b>Exp. Route Total</b>																						
										9.78E-08					4.86E-03							

**Table C-3.2**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Wader**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Wader  
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations								
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient			
							Value	Units	Value	Units			Value	Units	Value	Units				
Sediment	Surface Sediment	Nearshore Surface Sediment	Dermal	<b>Dioxin</b>																
				2,3,7,8-TCDD-TEQ	1.11E-04	mg/kg	3.21E-13	mg/kg-day	1.30E+05	kg-day/mg		4.17E-08	2.25E-12	mg/kg-day	7.00E-10	mg/kg-day	3.21E-03			
				<b>Metals</b>																
				Aluminum	7.78E+03	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E+00	mg/kg-day	NA			
				Arsenic	5.49E+00	mg/kg	1.59E-08	mg/kg-day	1.50E+00	kg-day/mg		2.38E-08	1.11E-07	mg/kg-day	3.00E-04	mg/kg-day	3.71E-04			
				Chromium	4.02E+01	mg/kg	NA	mg/kg-day	2.00E+01	kg-day/mg	1	NA	NA	mg/kg-day	7.50E-05	mg/kg-day	NA			
				Cobalt	1.59E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	3.00E-04	mg/kg-day	NA			
				Manganese	2.24E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	9.60E-04	mg/kg-day	NA			
				Nickel	5.71E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	8.00E-04	mg/kg-day	NA			
				Thallium	2.34E-01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E-05	mg/kg-day	NA			
				Vanadium	1.07E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.31E-04	mg/kg-day	NA			
				<b>PCBs</b>																
				Total PCBs	5.58E-01	mg/kg	7.53E-09	mg/kg-day	1.00E+00	kg-day/mg		7.53E-09	5.27E-08	mg/kg-day	2.00E-05	mg/kg-day	2.64E-03			
				<b>SVOCs</b>																
				Benzo(a)anthracene	4.95E-01	mg/kg	6.21E-09	mg/kg-day	7.30E-01	kg-day/mg	1	4.53E-09	4.34E-08	mg/kg-day	NA	mg/kg-day	NA			
				Benzo(a)pyrene	5.54E-01	mg/kg	6.94E-09	mg/kg-day	7.30E+00	kg-day/mg	1	5.07E-08	4.86E-08	mg/kg-day	NA	mg/kg-day	NA			
				Benzo(b)fluoranthene	8.35E-01	mg/kg	1.05E-08	mg/kg-day	7.30E-01	kg-day/mg	1	7.64E-09	7.33E-08	mg/kg-day	NA	mg/kg-day	NA			
				Benzo(k)fluoranthene	3.15E-01	mg/kg	3.95E-09	mg/kg-day	7.30E-02	kg-day/mg	1	2.88E-10	2.76E-08	mg/kg-day	NA	mg/kg-day	NA			
				Chrysene	7.77E-01	mg/kg	9.74E-09	mg/kg-day	7.30E-03	kg-day/mg	1	7.11E-11	6.82E-08	mg/kg-day	NA	mg/kg-day	NA			
				Dibenzo(a,h)anthracene	1.25E-01	mg/kg	1.57E-09	mg/kg-day	7.30E+00	kg-day/mg	1	1.14E-08	1.10E-08	mg/kg-day	NA	mg/kg-day	NA			
				Indeno(1,2,3-cd)pyrene	4.18E-01	mg/kg	5.24E-09	mg/kg-day	7.30E-01	kg-day/mg	1	3.83E-09	3.67E-08	mg/kg-day	NA	mg/kg-day	NA			
							<b>Exp. Route Total</b>							1.52E-07				6.22E-03		
							<b>Exposure Point Total</b>							2.49E-07				1.11E-02		
			<b>Exposure Medium Total</b>							2.49E-07				1.11E-02						
<b>Sediment Total</b>										2.49E-07				1.11E-02						

**Table C-3.2**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Wader**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
Receptor Population: Wader  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations						Noncancer Hazard Calculations						
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient		
							Value	Units	Value	Units			Value	Units	Value	Units			
Surface Water	Surface Water	Surface Water	Ingestion	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	3.78E-07	ug/L	1.28E-16	mg/kg-day	1.30E+05	kg-day/mg	1	1.66E-11	8.95E-16	mg/kg-day	7.00E-10	mg/kg-day	1.28E-06		
				<b>Metals</b> Arsenic	7.40E-01	ug/L	2.50E-10	mg/kg-day	1.50E+00	kg-day/mg		3.76E-10	1.75E-09	mg/kg-day	3.00E-04	mg/kg-day	5.84E-06		
				Chromium	2.90E+00	ug/L	9.81E-10	mg/kg-day	5.00E-01	kg-day/mg		4.91E-10	6.87E-09	mg/kg-day	3.00E-03	mg/kg-day	2.29E-06		
				Cobalt	9.80E-01	ug/L	3.32E-10	mg/kg-day	NA	kg-day/mg		NA	2.32E-09	mg/kg-day	3.00E-04	mg/kg-day	7.74E-06		
				Manganese	1.40E+02	ug/L	4.74E-08	mg/kg-day	NA	kg-day/mg		NA	3.32E-07	mg/kg-day	2.40E-02	mg/kg-day	1.38E-05		
				<b>Pesticides</b> 4,4'-DDT	1.30E-03	ug/L	4.40E-13	mg/kg-day	3.40E-01	kg-day/mg		1.50E-13	3.08E-12	mg/kg-day	5.00E-04	mg/kg-day	6.16E-09		
				<b>PCBs</b> Total PCBs	9.40E-03	ug/L	3.18E-12	mg/kg-day	3.00E-01	kg-day/mg		9.54E-13	2.23E-11	mg/kg-day	2.00E-05	mg/kg-day	1.11E-06		
				<b>Exp. Route Total</b>									8.84E-10					3.21E-05	
				Dermal	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	3.78E-07	ug/L	2.50E-13	mg/kg-day	1.30E+05		kg-day/mg	1	3.26E-08	1.75E-12	mg/kg-day	7.00E-10	mg/kg-day	2.50E-03
					<b>Metals</b> Arsenic	7.40E-01	ug/L	1.19E-10	mg/kg-day	1.50E+00		kg-day/mg		1.78E-10	8.33E-10	mg/kg-day	3.00E-04	mg/kg-day	2.78E-06
					Chromium	2.90E+00	ug/L	9.32E-10	mg/kg-day	2.00E+01		kg-day/mg		1.86E-08	6.53E-09	mg/kg-day	7.50E-05	mg/kg-day	8.70E-05
					Cobalt	9.80E-01	ug/L	6.30E-11	mg/kg-day	NA		kg-day/mg		NA	4.41E-10	mg/kg-day	3.00E-04	mg/kg-day	1.47E-06
			Manganese		1.40E+02	ug/L	2.25E-08	mg/kg-day	NA	kg-day/mg	NA	1.58E-07		mg/kg-day	9.60E-04	mg/kg-day	1.64E-04		
			<b>Pesticides</b> 4,4'-DDT		1.30E-03	ug/L	4.97E-10	mg/kg-day	3.40E-01	kg-day/mg	1.69E-10	3.48E-09		mg/kg-day	5.00E-04	mg/kg-day	6.96E-06		
			<b>PCBs</b> Total PCBs		9.40E-03	ug/L	4.28E-09	mg/kg-day	3.00E-01	kg-day/mg	1.28E-09	3.00E-08		mg/kg-day	2.00E-05	mg/kg-day	1.50E-03		
			<b>Exp. Route Total</b>									5.28E-08						4.27E-03	
			<b>Exposure Point Total</b>											5.37E-08					4.30E-03
			<b>Exposure Medium Total</b>											5.37E-08					4.30E-03
			<b>Surface Water Total</b>											5.37E-08					4.30E-03
			<b>Total Receptor Risk/Hazard</b>											3.03E-07					1.54E-02

**Notes:**

- ADAF - Age-Dependent Adjustment Factor.
- CSF - Cancer Slope Factor.
- EPC - Exposure Point Concentration.
- NA - Not applicable.
- PCB - Polychlorinated Biphenyl.
- RfD - Oral Reference Dose.
- SVOC - Semivolatile Organic Compound.
- TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.

(1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.

**Table C-3.3**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Child Wader**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Wader
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations									
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient				
							Value	Units	Value	Units			Value	Units	Value	Units					
Sediment	Surface Sediment	Nearshore Surface Sediment	Ingestion	<b>Dioxin</b>																	
				2,3,7,8-TCDD-TEQ	4.49E-04	mg/kg	2.15E-11	mg/kg-day	1.30E+05	kg-day/mg		2.79E-06	2.50E-10	mg/kg-day	7.00E-10	mg/kg-day	3.58E-01				
				<b>Metals</b>																	
				Aluminum	9.05E+03	mg/kg	4.32E-04	mg/kg-day	NA	kg-day/mg		NA	5.04E-03	mg/kg-day	1.00E+00	mg/kg-day	5.04E-03				
				Arsenic	7.54E+00	mg/kg	2.16E-07	mg/kg-day	1.50E+00	kg-day/mg		3.24E-07	2.52E-06	mg/kg-day	3.00E-04	mg/kg-day	8.41E-03				
				Chromium	4.67E+01	mg/kg	2.23E-06	mg/kg-day	5.00E-01	kg-day/mg	4.2	4.68E-06	2.60E-05	mg/kg-day	3.00E-03	mg/kg-day	8.67E-03				
				Cobalt	1.79E+01	mg/kg	8.55E-07	mg/kg-day	NA	kg-day/mg		NA	9.98E-06	mg/kg-day	3.00E-04	mg/kg-day	3.33E-02				
				Manganese	2.57E+02	mg/kg	1.23E-05	mg/kg-day	NA	kg-day/mg		NA	1.43E-04	mg/kg-day	2.40E-02	mg/kg-day	5.97E-03				
				Nickel	7.90E+01	mg/kg	3.77E-06	mg/kg-day	NA	kg-day/mg		NA	4.40E-05	mg/kg-day	2.00E-02	mg/kg-day	2.20E-03				
				Thallium	3.02E-01	mg/kg	1.44E-08	mg/kg-day	NA	kg-day/mg		NA	1.68E-07	mg/kg-day	1.00E-05	mg/kg-day	1.68E-02				
				Vanadium	2.29E+02	mg/kg	1.09E-05	mg/kg-day	NA	kg-day/mg		NA	1.27E-04	mg/kg-day	5.04E-03	mg/kg-day	2.53E-02				
				<b>PCBs</b>																	
				Total PCBs	7.68E-01	mg/kg	3.67E-08	mg/kg-day	2.00E+00	kg-day/mg		7.34E-08	4.28E-07	mg/kg-day	2.00E-05	mg/kg-day	2.14E-02				
				<b>SVOCs</b>																	
				Benzo(a)anthracene	5.65E-01	mg/kg	2.70E-08	mg/kg-day	7.30E-01	kg-day/mg	4.2	8.27E-08	3.15E-07	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(a)pyrene	6.28E-01	mg/kg	3.00E-08	mg/kg-day	7.30E+00	kg-day/mg	4.2	9.20E-07	3.50E-07	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(b)fluoranthene	9.51E-01	mg/kg	4.54E-08	mg/kg-day	7.30E-01	kg-day/mg	4.2	1.39E-07	5.30E-07	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(k)fluoranthene	3.67E-01	mg/kg	1.75E-08	mg/kg-day	7.30E-02	kg-day/mg	4.2	5.37E-09	2.05E-07	mg/kg-day	NA	mg/kg-day	NA				
				Chrysene	8.77E-01	mg/kg	4.19E-08	mg/kg-day	7.30E-03	kg-day/mg	4.2	1.28E-09	4.89E-07	mg/kg-day	NA	mg/kg-day	NA				
				Dibenzo(a,h)anthracene	1.42E-01	mg/kg	6.78E-09	mg/kg-day	7.30E+00	kg-day/mg	4.2	2.08E-07	7.91E-08	mg/kg-day	NA	mg/kg-day	NA				
Indeno(1,2,3-cd)pyrene	4.79E-01	mg/kg	2.29E-08	mg/kg-day	7.30E-01	kg-day/mg	4.2	7.02E-08	2.67E-07	mg/kg-day	NA	mg/kg-day	NA								
<b>Exp. Route Total</b>																			4.85E-01		



**Table C-3.3**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Child Wader**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Wader  
 Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations								
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient			
							Value	Units	Value	Units			Value	Units	Value	Units				
Sediment	Surface Sediment	Nearshore Surface Sediment	Dermal	<b>Dioxin</b>																
				2,3,7,8-TCDD-TEQ	4.49E-04	mg/kg	3.71E-12	mg/kg-day	1.30E+05	kg-day/mg		4.82E-07	4.33E-11	mg/kg-day	7.00E-10	mg/kg-day	6.18E-02			
				<b>Metals</b>																
				Aluminum	9.05E+03	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E+00	mg/kg-day	NA			
				Arsenic	7.54E+00	mg/kg	6.23E-08	mg/kg-day	1.50E+00	kg-day/mg		9.34E-08	7.26E-07	mg/kg-day	3.00E-04	mg/kg-day	2.42E-03			
				Chromium	4.67E+01	mg/kg	NA	mg/kg-day	2.00E+01	kg-day/mg	4.2	NA	NA	mg/kg-day	7.50E-05	mg/kg-day	NA			
				Cobalt	1.79E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	3.00E-04	mg/kg-day	NA			
				Manganese	2.57E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	9.60E-04	mg/kg-day	NA			
				Nickel	7.90E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	8.00E-04	mg/kg-day	NA			
				Thallium	3.02E-01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E-05	mg/kg-day	NA			
				Vanadium	2.29E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.31E-04	mg/kg-day	NA			
				<b>PCBs</b>																
				Total PCBs	7.68E-01	mg/kg	2.96E-08	mg/kg-day	2.00E+00	kg-day/mg		5.92E-08	3.45E-07	mg/kg-day	2.00E-05	mg/kg-day	1.73E-02			
				<b>SVOCs</b>																
				Benzo(a)anthracene	5.65E-01	mg/kg	2.02E-08	mg/kg-day	7.30E-01	kg-day/mg	4.2	6.20E-08	2.36E-07	mg/kg-day	NA	mg/kg-day	NA			
				Benzo(a)pyrene	6.28E-01	mg/kg	2.25E-08	mg/kg-day	7.30E+00	kg-day/mg	4.2	6.89E-07	2.62E-07	mg/kg-day	NA	mg/kg-day	NA			
				Benzo(b)fluoranthene	9.51E-01	mg/kg	3.40E-08	mg/kg-day	7.30E-01	kg-day/mg	4.2	1.04E-07	3.97E-07	mg/kg-day	NA	mg/kg-day	NA			
				Benzo(k)fluoranthene	3.67E-01	mg/kg	1.31E-08	mg/kg-day	7.30E-02	kg-day/mg	4.2	4.02E-09	1.53E-07	mg/kg-day	NA	mg/kg-day	NA			
				Chrysene	8.77E-01	mg/kg	3.14E-08	mg/kg-day	7.30E-03	kg-day/mg	4.2	9.62E-10	3.66E-07	mg/kg-day	NA	mg/kg-day	NA			
				Dibenzo(a,h)anthracene	1.42E-01	mg/kg	5.08E-09	mg/kg-day	7.30E+00	kg-day/mg	4.2	1.56E-07	5.93E-08	mg/kg-day	NA	mg/kg-day	NA			
Indeno(1,2,3-cd)pyrene	4.79E-01	mg/kg	1.71E-08	mg/kg-day	7.30E-01	kg-day/mg	4.2	5.25E-08	2.00E-07	mg/kg-day	NA	mg/kg-day	NA							
			<b>Exp. Route Total</b>																	
			<b>Exposure Point Total</b>																	
			<b>Exposure Medium Total</b>																	
<b>Sediment Total</b>																				

**Table C-3.3**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Child Wader**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
Receptor Population: Wader  
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations						Noncancer Hazard Calculations						
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient		
							Value	Units	Value	Units			Value	Units	Value	Units			
Surface Water	Surface Water	Surface Water	Ingestion	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	6.12E-07	ug/L	3.80E-15	mg/kg-day	1.30E+05	kg-day/mg	4.2	4.94E-10	4.43E-14	mg/kg-day	7.00E-10	mg/kg-day	6.33E-05		
				<b>Metals</b> Arsenic	8.58E-01	ug/L	5.33E-09	mg/kg-day	1.50E+00	kg-day/mg		7.99E-09	6.22E-08	mg/kg-day	3.00E-04	mg/kg-day	2.07E-04		
				Chromium	3.16E+00	ug/L	1.96E-08	mg/kg-day	5.00E-01	kg-day/mg		4.12E-08	2.29E-07	mg/kg-day	3.00E-03	mg/kg-day	7.63E-05		
				Cobalt	1.04E+00	ug/L	6.46E-09	mg/kg-day	NA	kg-day/mg		NA	7.53E-08	mg/kg-day	3.00E-04	mg/kg-day	2.51E-04		
				Manganese	1.48E+02	ug/L	9.17E-07	mg/kg-day	NA	kg-day/mg		NA	1.07E-05	mg/kg-day	2.40E-02	mg/kg-day	4.46E-04		
				<b>Pesticides</b> 4,4'-DDT	1.60E-03	ug/L	9.94E-12	mg/kg-day	3.40E-01	kg-day/mg		3.38E-12	1.16E-10	mg/kg-day	5.00E-04	mg/kg-day	2.32E-07		
				<b>PCBs</b> Total PCBs	9.40E-03	ug/L	5.84E-11	mg/kg-day	4.00E-01	kg-day/mg		2.33E-11	6.81E-10	mg/kg-day	2.00E-05	mg/kg-day	3.41E-05		
				<b>Exp. Route Total</b>									4.97E-08					1.08E-03	
				Dermal	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	6.12E-07	ug/L	1.75E-12	mg/kg-day	1.30E+05		kg-day/mg	4.2	2.28E-07	2.04E-11	mg/kg-day	7.00E-10	mg/kg-day	2.92E-02
					<b>Metals</b> Arsenic	8.58E-01	ug/L	8.43E-10	mg/kg-day	1.50E+00		kg-day/mg		1.26E-09	9.84E-09	mg/kg-day	3.00E-04	mg/kg-day	3.28E-05
					Chromium	3.16E+00	ug/L	6.21E-09	mg/kg-day	2.00E+01		kg-day/mg		5.22E-07	7.24E-08	mg/kg-day	7.50E-05	mg/kg-day	9.66E-04
					Cobalt	1.04E+00	ug/L	4.09E-10	mg/kg-day	NA		kg-day/mg		NA	4.77E-09	mg/kg-day	3.00E-04	mg/kg-day	1.59E-05
					Manganese	1.48E+02	ug/L	1.45E-07	mg/kg-day	NA		kg-day/mg		NA	1.69E-06	mg/kg-day	9.60E-04	mg/kg-day	1.76E-03
			<b>Pesticides</b> 4,4'-DDT		1.60E-03	ug/L	2.64E-09	mg/kg-day	3.40E-01	kg-day/mg	8.99E-10	3.08E-08		mg/kg-day	5.00E-04	mg/kg-day	6.17E-05		
			<b>PCBs</b> Total PCBs		9.40E-03	ug/L	1.85E-08	mg/kg-day	4.00E-01	kg-day/mg	7.41E-09	2.16E-07		mg/kg-day	2.00E-05	mg/kg-day	1.08E-02		
			<b>Exp. Route Total</b>									7.59E-07						4.29E-02	
			<b>Exposure Point Total</b>									8.09E-07							4.39E-02
			<b>Exposure Medium Total</b>									8.09E-07							4.39E-02
			<b>Surface Water Total</b>								8.09E-07						4.39E-02		
			<b>Total Receptor Risk/Hazard</b>								1.18E-05						6.10E-01		

**Notes:**

ADAF - Age-Dependent Adjustment Factor.

CSF - Cancer Slope Factor.

EPC - Exposure Point Concentration.

NA - Not applicable.

PCB - Polychlorinated Biphenyl.

RfD - Oral Reference Dose.

SVOC - Semivolatile Organic Compound.

TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.

(1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.

**Table C-3.4**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Child Wader**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Wader
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations								
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient			
							Value	Units	Value	Units			Value	Units	Value	Units				
Sediment	Surface Sediment	Nearshore Surface Sediment	Ingestion	<b>Dioxin</b>																
				2,3,7,8-TCDD-TEQ	1.11E-04	mg/kg	4.42E-13	mg/kg-day	1.30E+05	kg-day/mg		5.74E-08	1.55E-11	mg/kg-day	7.00E-10	mg/kg-day	2.21E-02			
				<b>Metals</b>																
				Aluminum	7.78E+03	mg/kg	3.10E-05	mg/kg-day	NA	kg-day/mg		NA	1.08E-03	mg/kg-day	1.00E+00	mg/kg-day	1.08E-03			
				Arsenic	5.49E+00	mg/kg	1.31E-08	mg/kg-day	1.50E+00	kg-day/mg		1.97E-08	4.59E-07	mg/kg-day	3.00E-04	mg/kg-day	1.53E-03			
				Chromium	4.02E+01	mg/kg	1.60E-07	mg/kg-day	5.00E-01	kg-day/mg	4.2	3.36E-07	5.60E-06	mg/kg-day	3.00E-03	mg/kg-day	1.87E-03			
				Cobalt	1.59E+01	mg/kg	6.31E-08	mg/kg-day	NA	kg-day/mg		NA	2.21E-06	mg/kg-day	3.00E-04	mg/kg-day	7.36E-03			
				Manganese	2.24E+02	mg/kg	8.92E-07	mg/kg-day	NA	kg-day/mg		NA	3.12E-05	mg/kg-day	2.40E-02	mg/kg-day	1.30E-03			
				Nickel	5.71E+01	mg/kg	2.27E-07	mg/kg-day	NA	kg-day/mg		NA	7.96E-06	mg/kg-day	2.00E-02	mg/kg-day	3.98E-04			
				Thallium	2.34E-01	mg/kg	9.31E-10	mg/kg-day	NA	kg-day/mg		NA	3.26E-08	mg/kg-day	1.00E-05	mg/kg-day	3.26E-03			
				Vanadium	1.07E+02	mg/kg	4.26E-07	mg/kg-day	NA	kg-day/mg		NA	1.49E-05	mg/kg-day	5.04E-03	mg/kg-day	2.96E-03			
				<b>PCBs</b>																
				Total PCBs	5.58E-01	mg/kg	2.22E-09	mg/kg-day	1.00E+00	kg-day/mg		2.22E-09	7.77E-08	mg/kg-day	2.00E-05	mg/kg-day	3.89E-03			
				<b>SVOCs</b>																
				Benzo(a)anthracene	4.95E-01	mg/kg	1.97E-09	mg/kg-day	7.30E-01	kg-day/mg	4.2	6.04E-09	6.90E-08	mg/kg-day	NA	mg/kg-day	NA			
				Benzo(a)pyrene	5.54E-01	mg/kg	2.21E-09	mg/kg-day	7.30E+00	kg-day/mg	4.2	6.76E-08	7.72E-08	mg/kg-day	NA	mg/kg-day	NA			
				Benzo(b)fluoranthene	8.35E-01	mg/kg	3.32E-09	mg/kg-day	7.30E-01	kg-day/mg	4.2	1.02E-08	1.16E-07	mg/kg-day	NA	mg/kg-day	NA			
				Benzo(k)fluoranthene	3.15E-01	mg/kg	1.25E-09	mg/kg-day	7.30E-02	kg-day/mg	4.2	3.85E-10	4.39E-08	mg/kg-day	NA	mg/kg-day	NA			
				Chrysene	7.77E-01	mg/kg	3.09E-09	mg/kg-day	7.30E-03	kg-day/mg	4.2	9.48E-11	1.08E-07	mg/kg-day	NA	mg/kg-day	NA			
				Dibenzo(a,h)anthracene	1.25E-01	mg/kg	4.98E-10	mg/kg-day	7.30E+00	kg-day/mg	4.2	1.53E-08	1.74E-08	mg/kg-day	NA	mg/kg-day	NA			
Indeno(1,2,3-cd)pyrene	4.18E-01	mg/kg	1.66E-09	mg/kg-day	7.30E-01	kg-day/mg	4.2	5.10E-09	5.82E-08	mg/kg-day	NA	mg/kg-day	NA							
<b>Exp. Route Total</b>										5.20E-07				4.57E-02						

**Table C-3.4**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Child Wader**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Wader  
 Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations									
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient				
							Value	Units	Value	Units			Value	Units	Value	Units					
Sediment	Surface Sediment	Nearshore Surface Sediment	Dermal	<b>Dioxin</b>																	
				2,3,7,8-TCDD-TEQ	1.11E-04	mg/kg	1.53E-13	mg/kg-day	1.30E+05	kg-day/mg		1.98E-08	5.34E-12	mg/kg-day	7.00E-10	mg/kg-day	7.63E-03				
				<b>Metals</b>																	
				Aluminum	7.78E+03	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E+00	mg/kg-day	NA				
				Arsenic	5.49E+00	mg/kg	7.55E-09	mg/kg-day	1.50E+00	kg-day/mg	4.2	1.13E-08	2.64E-07	mg/kg-day	3.00E-04	mg/kg-day	8.81E-04				
				Chromium	4.02E+01	mg/kg	NA	mg/kg-day	2.00E+01	kg-day/mg		NA	NA	mg/kg-day	7.50E-05	mg/kg-day	NA				
				Cobalt	1.59E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	3.00E-04	mg/kg-day	NA				
				Manganese	2.24E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	9.60E-04	mg/kg-day	NA				
				Nickel	5.71E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	8.00E-04	mg/kg-day	NA				
				Thallium	2.34E-01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E-05	mg/kg-day	NA				
				Vanadium	1.07E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.31E-04	mg/kg-day	NA				
				<b>PCBs</b>																	
				Total PCBs	5.58E-01	mg/kg	3.58E-09	mg/kg-day	1.00E+00	kg-day/mg		3.58E-09	1.25E-07	mg/kg-day	2.00E-05	mg/kg-day	6.27E-03				
				<b>SVOCs</b>																	
				Benzo(a)anthracene	4.95E-01	mg/kg	2.95E-09	mg/kg-day	7.30E-01	kg-day/mg	4.2	9.05E-09	1.03E-07	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(a)pyrene	5.54E-01	mg/kg	3.30E-09	mg/kg-day	7.30E+00	kg-day/mg	4.2	1.01E-07	1.16E-07	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(b)fluoranthene	8.35E-01	mg/kg	4.98E-09	mg/kg-day	7.30E-01	kg-day/mg	4.2	1.53E-08	1.74E-07	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(k)fluoranthene	3.15E-01	mg/kg	1.88E-09	mg/kg-day	7.30E-02	kg-day/mg	4.2	5.76E-10	6.57E-08	mg/kg-day	NA	mg/kg-day	NA				
				Chrysene	7.77E-01	mg/kg	4.63E-09	mg/kg-day	7.30E-03	kg-day/mg	4.2	1.42E-10	1.62E-07	mg/kg-day	NA	mg/kg-day	NA				
				Dibenzo(a,h)anthracene	1.25E-01	mg/kg	7.45E-10	mg/kg-day	7.30E+00	kg-day/mg	4.2	2.28E-08	2.61E-08	mg/kg-day	NA	mg/kg-day	NA				
				Indeno(1,2,3-cd)pyrene	4.18E-01	mg/kg	2.49E-09	mg/kg-day	7.30E-01	kg-day/mg	4.2	7.64E-09	8.72E-08	mg/kg-day	NA	mg/kg-day	NA				
			<b>Exp. Route Total</b>																		
			<b>Exposure Point Total</b>																		
			<b>Exposure Medium Total</b>																		
<b>Sediment Total</b>																					

**Table C-3.4**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Child Wader**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
Receptor Population: Wader  
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations						Noncancer Hazard Calculations						
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient		
							Value	Units	Value	Units			Value	Units	Value	Units			
Surface Water	Surface Water	Surface Water	Ingestion	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	3.78E-07	ug/L	1.20E-16	mg/kg-day	1.30E+05	kg-day/mg	4.2	1.56E-11	4.21E-15	mg/kg-day	7.00E-10	mg/kg-day	6.02E-06		
				<b>Metals</b> Arsenic	7.40E-01	ug/L	2.36E-10	mg/kg-day	1.50E+00	kg-day/mg		3.53E-10	8.25E-09	mg/kg-day	3.00E-04	mg/kg-day	2.75E-05		
				Chromium	2.90E+00	ug/L	9.24E-10	mg/kg-day	5.00E-01	kg-day/mg		1.94E-09	3.23E-08	mg/kg-day	3.00E-03	mg/kg-day	1.08E-05		
				Cobalt	9.80E-01	ug/L	3.12E-10	mg/kg-day	NA	kg-day/mg		NA	1.09E-08	mg/kg-day	3.00E-04	mg/kg-day	3.64E-05		
				Manganese	1.40E+02	ug/L	4.46E-08	mg/kg-day	NA	kg-day/mg		NA	1.56E-06	mg/kg-day	2.40E-02	mg/kg-day	6.50E-05		
				<b>Pesticides</b> 4,4'-DDT	1.30E-03	ug/L	4.14E-13	mg/kg-day	3.40E-01	kg-day/mg		1.41E-13	1.45E-11	mg/kg-day	5.00E-04	mg/kg-day	2.90E-08		
				<b>PCBs</b> Total PCBs	9.40E-03	ug/L	2.99E-12	mg/kg-day	3.00E-01	kg-day/mg		8.98E-13	1.05E-10	mg/kg-day	2.00E-05	mg/kg-day	5.24E-06		
				<b>Exp. Route Total</b>									2.31E-09					1.51E-04	
				Dermal	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	3.78E-07	ug/L	1.28E-13	mg/kg-day	1.30E+05		kg-day/mg	4.2	1.66E-08	4.47E-12	mg/kg-day	7.00E-10	mg/kg-day	6.38E-03
					<b>Metals</b> Arsenic	7.40E-01	ug/L	6.06E-11	mg/kg-day	1.50E+00		kg-day/mg		9.09E-11	2.12E-09	mg/kg-day	3.00E-04	mg/kg-day	7.07E-06
					Chromium	2.90E+00	ug/L	4.75E-10	mg/kg-day	2.00E+01		kg-day/mg		3.99E-08	1.66E-08	mg/kg-day	7.50E-05	mg/kg-day	2.22E-04
					Cobalt	9.80E-01	ug/L	3.21E-11	mg/kg-day	NA		kg-day/mg		NA	1.12E-09	mg/kg-day	3.00E-04	mg/kg-day	3.74E-06
					Manganese	1.40E+02	ug/L	1.15E-08	mg/kg-day	NA		kg-day/mg		NA	4.01E-07	mg/kg-day	9.60E-04	mg/kg-day	4.18E-04
			<b>Pesticides</b> 4,4'-DDT		1.30E-03	ug/L	2.53E-10	mg/kg-day	3.40E-01	kg-day/mg	8.61E-11	8.86E-09		mg/kg-day	5.00E-04	mg/kg-day	1.77E-05		
			<b>PCBs</b> Total PCBs		9.40E-03	ug/L	2.18E-09	mg/kg-day	3.00E-01	kg-day/mg	6.55E-10	7.64E-08		mg/kg-day	2.00E-05	mg/kg-day	3.82E-03		
			<b>Exp. Route Total</b>									5.73E-08						1.09E-02	
			<b>Exposure Point Total</b>									5.96E-08							1.10E-02
			<b>Exposure Medium Total</b>									5.96E-08							1.10E-02
			<b>Surface Water Total</b>								5.96E-08						1.10E-02		
			<b>Total Receptor Risk/Hazard</b>								7.71E-07						7.15E-02		

**Notes:**

- ADAF - Age-Dependent Adjustment Factor.
- CSF - Cancer Slope Factor.
- EPC - Exposure Point Concentration.
- NA - Not applicable.
- PCB - Polychlorinated Biphenyl.
- RfD - Oral Reference Dose.
- SVOC - Semivolatile Organic Compound.
- TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.

(1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.

**Table C-3.5**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Wader**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Wader
Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations						Noncancer Hazard Calculations									
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient					
							Value	Units	Value	Units			Value	Units	Value	Units						
Sediment	Surface Sediment	Nearshore Surface Sediment	Ingestion	<b>Dioxin</b>																		
				2,3,7,8-TCDD-TEQ	4.49E-04	mg/kg	8.60E-12	mg/kg-day	1.30E+05	kg-day/mg		1.12E-06	5.02E-11	mg/kg-day	7.00E-10	mg/kg-day	7.17E-02					
				<b>Metals</b>																		
				Aluminum	9.05E+03	mg/kg	1.73E-04	mg/kg-day	NA	kg-day/mg		NA	1.01E-03	mg/kg-day	1.00E+00	mg/kg-day	1.01E-03					
				Arsenic	7.54E+00	mg/kg	8.66E-08	mg/kg-day	1.50E+00	kg-day/mg		1.30E-07	5.05E-07	mg/kg-day	3.00E-04	mg/kg-day	1.68E-03					
				Chromium	4.67E+01	mg/kg	8.93E-07	mg/kg-day	5.00E-01	kg-day/mg	2.5	1.12E-06	5.21E-06	mg/kg-day	3.00E-03	mg/kg-day	1.74E-03					
				Cobalt	1.79E+01	mg/kg	3.42E-07	mg/kg-day	NA	kg-day/mg		NA	2.00E-06	mg/kg-day	3.00E-04	mg/kg-day	6.66E-03					
				Manganese	2.57E+02	mg/kg	4.92E-06	mg/kg-day	NA	kg-day/mg		NA	2.87E-05	mg/kg-day	2.40E-02	mg/kg-day	1.20E-03					
				Nickel	7.90E+01	mg/kg	1.51E-06	mg/kg-day	NA	kg-day/mg		NA	8.82E-06	mg/kg-day	2.00E-02	mg/kg-day	4.41E-04					
				Thallium	3.02E-01	mg/kg	5.78E-09	mg/kg-day	NA	kg-day/mg		NA	3.37E-08	mg/kg-day	1.00E-05	mg/kg-day	3.37E-03					
				Vanadium	2.29E+02	mg/kg	4.37E-06	mg/kg-day	NA	kg-day/mg		NA	2.55E-05	mg/kg-day	5.04E-03	mg/kg-day	5.06E-03					
				<b>PCBs</b>																		
				Total PCBs	7.68E-01	mg/kg	1.47E-08	mg/kg-day	2.00E+00	kg-day/mg		2.94E-08	8.57E-08	mg/kg-day	2.00E-05	mg/kg-day	4.29E-03					
				<b>SVOCs</b>																		
				Benzo(a)anthracene	5.65E-01	mg/kg	1.08E-08	mg/kg-day	7.30E-01	kg-day/mg	2.5	1.97E-08	6.31E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(a)pyrene	6.28E-01	mg/kg	1.20E-08	mg/kg-day	7.30E+00	kg-day/mg	2.5	2.19E-07	7.01E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(b)fluoranthene	9.51E-01	mg/kg	1.82E-08	mg/kg-day	7.30E-01	kg-day/mg	2.5	3.32E-08	1.06E-07	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(k)fluoranthene	3.67E-01	mg/kg	7.02E-09	mg/kg-day	7.30E-02	kg-day/mg	2.5	1.28E-09	4.10E-08	mg/kg-day	NA	mg/kg-day	NA					
				Chrysene	8.77E-01	mg/kg	1.68E-08	mg/kg-day	7.30E-03	kg-day/mg	2.5	3.06E-10	9.79E-08	mg/kg-day	NA	mg/kg-day	NA					
				Dibenzo(a,h)anthracene	1.42E-01	mg/kg	2.72E-09	mg/kg-day	7.30E+00	kg-day/mg	2.5	4.96E-08	1.58E-08	mg/kg-day	NA	mg/kg-day	NA					
Indeno(1,2,3-cd)pyrene	4.79E-01	mg/kg	9.16E-09	mg/kg-day	7.30E-01	kg-day/mg	2.5	1.67E-08	5.35E-08	mg/kg-day	NA	mg/kg-day	NA									
<b>Exp. Route Total</b>																			9.71E-02			

**Table C-3.5**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Wader**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Wader  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations										
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient					
							Value	Units	Value	Units			Value	Units	Value	Units						
Sediment	Surface Sediment	Nearshore Surface Sediment	Dermal	<b>Dioxin</b>																		
				2,3,7,8-TCDD-TEQ	4.49E-04	mg/kg	3.50E-12	mg/kg-day	1.30E+05	kg-day/mg		4.54E-07	2.04E-11	mg/kg-day	7.00E-10	mg/kg-day	2.91E-02					
				<b>Metals</b>																		
				Aluminum	9.05E+03	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E+00	mg/kg-day	NA					
				Arsenic	7.54E+00	mg/kg	5.87E-08	mg/kg-day	1.50E+00	kg-day/mg		8.80E-08	3.42E-07	mg/kg-day	3.00E-04	mg/kg-day	1.14E-03					
				Chromium	4.67E+01	mg/kg	NA	mg/kg-day	2.00E+01	kg-day/mg	2.5	NA	NA	mg/kg-day	7.50E-05	mg/kg-day	NA					
				Cobalt	1.79E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	3.00E-04	mg/kg-day	NA					
				Manganese	2.57E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	9.60E-04	mg/kg-day	NA					
				Nickel	7.90E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	8.00E-04	mg/kg-day	NA					
				Thallium	3.02E-01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E-05	mg/kg-day	NA					
				Vanadium	2.29E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.31E-04	mg/kg-day	NA					
				<b>PCBs</b>																		
				Total PCBs	7.68E-01	mg/kg	2.79E-08	mg/kg-day	2.00E+00	kg-day/mg		5.57E-08	1.63E-07	mg/kg-day	2.00E-05	mg/kg-day	8.13E-03					
				<b>SVOCs</b>																		
				Benzo(a)anthracene	5.65E-01	mg/kg	1.90E-08	mg/kg-day	7.30E-01	kg-day/mg	2.5	3.48E-08	1.11E-07	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(a)pyrene	6.28E-01	mg/kg	2.12E-08	mg/kg-day	7.30E+00	kg-day/mg	2.5	3.86E-07	1.23E-07	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(b)fluoranthene	9.51E-01	mg/kg	3.21E-08	mg/kg-day	7.30E-01	kg-day/mg	2.5	5.85E-08	1.87E-07	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(k)fluoranthene	3.67E-01	mg/kg	1.24E-08	mg/kg-day	7.30E-02	kg-day/mg	2.5	2.26E-09	7.21E-08	mg/kg-day	NA	mg/kg-day	NA					
				Chrysene	8.77E-01	mg/kg	2.96E-08	mg/kg-day	7.30E-03	kg-day/mg	2.5	5.39E-10	1.72E-07	mg/kg-day	NA	mg/kg-day	NA					
				Dibenzo(a,h)anthracene	1.42E-01	mg/kg	4.79E-09	mg/kg-day	7.30E+00	kg-day/mg	2.5	8.73E-08	2.79E-08	mg/kg-day	NA	mg/kg-day	NA					
				Indeno(1,2,3-cd)pyrene	4.79E-01	mg/kg	1.61E-08	mg/kg-day	7.30E-01	kg-day/mg	2.5	2.95E-08	9.42E-08	mg/kg-day	NA	mg/kg-day	NA					
							<b>Exp. Route Total</b>															
							<b>Exposure Point Total</b>															
			<b>Exposure Medium Total</b>																			
<b>Sediment Total</b>																						

**Table C-3.5**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Wader**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Wader  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations						Noncancer Hazard Calculations						
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient		
							Value	Units	Value	Units			Value	Units	Value	Units			
Surface Water	Surface Water	Surface Water	Ingestion	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	6.12E-07	ug/L	3.04E-15	mg/kg-day	1.30E+05	kg-day/mg	2.5	3.96E-10	1.78E-14	mg/kg-day	7.00E-10	mg/kg-day	2.54E-05		
				<b>Metals</b> Arsenic	8.58E-01	ug/L	4.27E-09	mg/kg-day	1.50E+00	kg-day/mg		6.40E-09	2.49E-08	mg/kg-day	3.00E-04	mg/kg-day	8.30E-05		
				Chromium	3.16E+00	ug/L	1.57E-08	mg/kg-day	5.00E-01	kg-day/mg		1.96E-08	9.17E-08	mg/kg-day	3.00E-03	mg/kg-day	3.06E-05		
				Cobalt	1.04E+00	ug/L	5.17E-09	mg/kg-day	NA	kg-day/mg		NA	3.02E-08	mg/kg-day	3.00E-04	mg/kg-day	1.01E-04		
				Manganese	1.48E+02	ug/L	7.35E-07	mg/kg-day	NA	kg-day/mg		NA	4.29E-06	mg/kg-day	2.40E-02	mg/kg-day	1.79E-04		
				<b>Pesticides</b> 4,4'-DDT	1.60E-03	ug/L	7.96E-12	mg/kg-day	3.40E-01	kg-day/mg		2.71E-12	4.64E-11	mg/kg-day	5.00E-04	mg/kg-day	9.29E-08		
				<b>PCBs</b> Total PCBs	9.40E-03	ug/L	4.68E-11	mg/kg-day	4.00E-01	kg-day/mg		1.87E-11	2.73E-10	mg/kg-day	2.00E-05	mg/kg-day	1.36E-05		
				<b>Exp. Route Total</b>									2.65E-08				4.32E-04		
				Dermal	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	6.12E-07	ug/L	1.85E-12	mg/kg-day	1.30E+05		kg-day/mg	2.5	2.40E-07	1.08E-11	mg/kg-day	7.00E-10	mg/kg-day	1.54E-02
					<b>Metals</b> Arsenic	8.58E-01	ug/L	8.90E-10	mg/kg-day	1.50E+00		kg-day/mg		1.33E-09	5.19E-09	mg/kg-day	3.00E-04	mg/kg-day	1.73E-05
					Chromium	3.16E+00	ug/L	6.55E-09	mg/kg-day	2.00E+01		kg-day/mg		3.28E-07	3.82E-08	mg/kg-day	7.50E-05	mg/kg-day	5.10E-04
					Cobalt	1.04E+00	ug/L	4.31E-10	mg/kg-day	NA		kg-day/mg		NA	2.52E-09	mg/kg-day	3.00E-04	mg/kg-day	8.39E-06
			Manganese		1.48E+02	ug/L	1.53E-07	mg/kg-day	NA	kg-day/mg	NA	8.93E-07		mg/kg-day	9.60E-04	mg/kg-day	9.31E-04		
			<b>Pesticides</b> 4,4'-DDT		1.60E-03	ug/L	2.79E-09	mg/kg-day	3.40E-01	kg-day/mg	9.49E-10	1.63E-08		mg/kg-day	5.00E-04	mg/kg-day	3.25E-05		
			<b>PCBs</b> Total PCBs		9.40E-03	ug/L	1.95E-08	mg/kg-day	4.00E-01	kg-day/mg	7.82E-09	1.14E-07		mg/kg-day	2.00E-05	mg/kg-day	5.70E-03		
			<b>Exp. Route Total</b>									5.78E-07					2.26E-02		
			<b>Exposure Point Total</b>									6.05E-07					2.30E-02		
			<b>Exposure Medium Total</b>									6.05E-07					2.30E-02		
			<b>Surface Water Total</b>									6.05E-07					2.30E-02		
			<b>Total Receptor Risk/Hazard</b>									4.53E-06					1.59E-01		

**Notes:**

- ADAF - Age-Dependent Adjustment Factor.
- CSF - Cancer Slope Factor.
- EPC - Exposure Point Concentration.
- NA - Not applicable.
- PCB - Polychlorinated Biphenyl.
- RfD - Oral Reference Dose.
- SVOC - Semivolatile Organic Compound.
- TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.

(1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.



**Table C-3.6**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Wader**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Wader
Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations									
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient				
							Value	Units	Value	Units			Value	Units	Value	Units					
Sediment	Surface Sediment	Nearshore Surface Sediment	Ingestion	<b>Dioxin</b>																	
				2,3,7,8-TCDD-TEQ	1.11E-04	mg/kg	1.60E-13	mg/kg-day	1.30E+05	kg-day/mg		2.08E-08	1.86E-12	mg/kg-day	7.00E-10	mg/kg-day	2.66E-03				
				<b>Metals</b>																	
				Aluminum	7.78E+03	mg/kg	1.12E-05	mg/kg-day	NA	kg-day/mg		NA	1.31E-04	mg/kg-day	1.00E+00	mg/kg-day	1.31E-04				
				Arsenic	5.49E+00	mg/kg	4.74E-09	mg/kg-day	1.50E+00	kg-day/mg		7.11E-09	5.53E-08	mg/kg-day	3.00E-04	mg/kg-day	1.84E-04				
				Chromium	4.02E+01	mg/kg	5.78E-08	mg/kg-day	5.00E-01	kg-day/mg	2.5	7.22E-08	6.74E-07	mg/kg-day	3.00E-03	mg/kg-day	2.25E-04				
				Cobalt	1.59E+01	mg/kg	2.28E-08	mg/kg-day	NA	kg-day/mg		NA	2.66E-07	mg/kg-day	3.00E-04	mg/kg-day	8.87E-04				
				Manganese	2.24E+02	mg/kg	3.23E-07	mg/kg-day	NA	kg-day/mg		NA	3.76E-06	mg/kg-day	2.40E-02	mg/kg-day	1.57E-04				
				Nickel	5.71E+01	mg/kg	8.22E-08	mg/kg-day	NA	kg-day/mg		NA	9.59E-07	mg/kg-day	2.00E-02	mg/kg-day	4.79E-05				
				Thallium	2.34E-01	mg/kg	3.37E-10	mg/kg-day	NA	kg-day/mg		NA	3.93E-09	mg/kg-day	1.00E-05	mg/kg-day	3.93E-04				
				Vanadium	1.07E+02	mg/kg	1.54E-07	mg/kg-day	NA	kg-day/mg		NA	1.80E-06	mg/kg-day	5.04E-03	mg/kg-day	3.57E-04				
				<b>PCBs</b>																	
				Total PCBs	5.58E-01	mg/kg	8.03E-10	mg/kg-day	1.00E+00	kg-day/mg		8.03E-10	9.37E-09	mg/kg-day	2.00E-05	mg/kg-day	4.68E-04				
				<b>SVOCs</b>																	
				Benzo(a)anthracene	4.95E-01	mg/kg	7.12E-10	mg/kg-day	7.30E-01	kg-day/mg	2.5	1.30E-09	8.31E-09	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(a)pyrene	5.54E-01	mg/kg	7.97E-10	mg/kg-day	7.30E+00	kg-day/mg	2.5	1.45E-08	9.30E-09	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(k)fluoranthene	3.15E-01	mg/kg	4.53E-10	mg/kg-day	7.30E-02	kg-day/mg	2.5	8.27E-11	5.29E-09	mg/kg-day	NA	mg/kg-day	NA				
				Chrysene	7.77E-01	mg/kg	1.12E-09	mg/kg-day	7.30E-03	kg-day/mg	2.5	2.04E-11	1.30E-08	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(b)fluoranthene	8.35E-01	mg/kg	1.20E-09	mg/kg-day	7.30E-01	kg-day/mg	2.5	2.19E-09	1.40E-08	mg/kg-day	NA	mg/kg-day	NA				
				Dibenzo(a,h)anthracene	1.25E-01	mg/kg	1.80E-10	mg/kg-day	7.30E+00	kg-day/mg	2.5	3.28E-09	2.10E-09	mg/kg-day	NA	mg/kg-day	NA				
Indeno(1,2,3-cd)pyrene	4.18E-01	mg/kg	6.01E-10	mg/kg-day	7.30E-01	kg-day/mg	2.5	1.10E-09	7.02E-09	mg/kg-day	NA	mg/kg-day	NA								
<b>Exp. Route Total</b>										1.23E-07				5.51E-03							

**Table C-3.6**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Wader**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Wader  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations											
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient						
							Value	Units	Value	Units			Value	Units	Value	Units							
Sediment	Surface Sediment	Nearshore Surface Sediment	Dermal	<b>Dioxin</b>																			
				2,3,7,8-TCDD-TEQ	1.11E-04	mg/kg	1.30E-13	mg/kg-day	1.30E+05	kg-day/mg		1.69E-08	1.51E-12	mg/kg-day	7.00E-10	mg/kg-day	2.16E-03						
				<b>Metals</b>																			
				Aluminum	7.78E+03	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E+00	mg/kg-day	NA						
				Arsenic	5.49E+00	mg/kg	6.42E-09	mg/kg-day	1.50E+00	kg-day/mg	2.5	9.63E-09	7.49E-08	mg/kg-day	3.00E-04	mg/kg-day	2.50E-04						
				Chromium	4.02E+01	mg/kg	NA	mg/kg-day	2.00E+01	kg-day/mg		NA	NA	mg/kg-day	7.50E-05	mg/kg-day	NA						
				Cobalt	1.59E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	3.00E-04	mg/kg-day	NA						
				Manganese	2.24E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	9.60E-04	mg/kg-day	NA						
				Nickel	5.71E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	8.00E-04	mg/kg-day	NA						
				Thallium	2.34E-01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E-05	mg/kg-day	NA						
				Vanadium	1.07E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.31E-04	mg/kg-day	NA						
				<b>PCBs</b>																			
				Total PCBs	5.58E-01	mg/kg	3.05E-09	mg/kg-day	1.00E+00	kg-day/mg		3.05E-09	3.55E-08	mg/kg-day	2.00E-05	mg/kg-day	1.78E-03						
				<b>SVOCs</b>																			
				Benzo(a)anthracene	4.95E-01	mg/kg	2.51E-09	mg/kg-day	7.30E-01	kg-day/mg	2.5	4.58E-09	2.93E-08	mg/kg-day	NA	mg/kg-day	NA						
				Benzo(a)pyrene	5.54E-01	mg/kg	2.81E-09	mg/kg-day	7.30E+00	kg-day/mg	2.5	5.13E-08	3.28E-08	mg/kg-day	NA	mg/kg-day	NA						
				Benzo(b)fluoranthene	8.35E-01	mg/kg	4.23E-09	mg/kg-day	7.30E-01	kg-day/mg	2.5	7.72E-09	4.94E-08	mg/kg-day	NA	mg/kg-day	NA						
				Benzo(k)fluoranthene	3.15E-01	mg/kg	1.60E-09	mg/kg-day	7.30E-02	kg-day/mg	2.5	2.91E-10	1.86E-08	mg/kg-day	NA	mg/kg-day	NA						
				Chrysene	7.77E-01	mg/kg	3.94E-09	mg/kg-day	7.30E-03	kg-day/mg	2.5	7.19E-11	4.59E-08	mg/kg-day	NA	mg/kg-day	NA						
				Dibenzo(a,h)anthracene	1.25E-01	mg/kg	6.34E-10	mg/kg-day	7.30E+00	kg-day/mg	2.5	1.16E-08	7.39E-09	mg/kg-day	NA	mg/kg-day	NA						
				Indeno(1,2,3-cd)pyrene	4.18E-01	mg/kg	2.12E-09	mg/kg-day	7.30E-01	kg-day/mg	2.5	3.87E-09	2.47E-08	mg/kg-day	NA	mg/kg-day	NA						
							<b>Exp. Route Total</b>																
							<b>Exposure Point Total</b>																
			<b>Exposure Medium Total</b>																				
<b>Sediment Total</b>																							

**Table C-3.6**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen Wader**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Wader  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations						Noncancer Hazard Calculations						
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient		
							Value	Units	Value	Units			Value	Units	Value	Units			
Surface Water	Surface Water	Surface Water	Ingestion	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	3.78E-07	ug/L	8.70E-17	mg/kg-day	1.30E+05	kg-day/mg	2.5	1.13E-11	1.02E-15	mg/kg-day	7.00E-10	mg/kg-day	1.45E-06		
				<b>Metals</b> Arsenic	7.40E-01	ug/L	1.70E-10	mg/kg-day	1.50E+00	kg-day/mg		2.56E-10	1.99E-09	mg/kg-day	3.00E-04	mg/kg-day	6.63E-06		
				Chromium	2.90E+00	ug/L	6.68E-10	mg/kg-day	5.00E-01	kg-day/mg		8.35E-10	7.79E-09	mg/kg-day	3.00E-03	mg/kg-day	2.60E-06		
				Cobalt	9.80E-01	ug/L	2.26E-10	mg/kg-day	NA	kg-day/mg		NA	2.63E-09	mg/kg-day	3.00E-04	mg/kg-day	8.77E-06		
				Manganese	1.40E+02	ug/L	3.22E-08	mg/kg-day	NA	kg-day/mg		NA	3.76E-07	mg/kg-day	2.40E-02	mg/kg-day	1.57E-05		
				<b>Pesticides</b> 4,4'-DDT	1.30E-03	ug/L	2.99E-13	mg/kg-day	3.40E-01	kg-day/mg		1.02E-13	3.49E-12	mg/kg-day	5.00E-04	mg/kg-day	6.98E-09		
				<b>PCBs</b> Total PCBs	9.40E-03	ug/L	2.16E-12	mg/kg-day	3.00E-01	kg-day/mg		6.49E-13	2.52E-11	mg/kg-day	2.00E-05	mg/kg-day	1.26E-06		
				<b>Exp. Route Total</b>									1.10E-09				3.64E-05		
				Dermal	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	3.78E-07	ug/L	1.22E-13	mg/kg-day	1.30E+05		kg-day/mg	2.5	1.58E-08	1.42E-12	mg/kg-day	7.00E-10	mg/kg-day	2.03E-03
					<b>Metals</b> Arsenic	7.40E-01	ug/L	5.77E-11	mg/kg-day	1.50E+00		kg-day/mg		8.66E-11	6.73E-10	mg/kg-day	3.00E-04	mg/kg-day	2.24E-06
					Chromium	2.90E+00	ug/L	4.52E-10	mg/kg-day	2.00E+01		kg-day/mg		2.26E-08	5.28E-09	mg/kg-day	7.50E-05	mg/kg-day	7.04E-05
					Cobalt	9.80E-01	ug/L	3.06E-11	mg/kg-day	NA		kg-day/mg		NA	3.57E-10	mg/kg-day	3.00E-04	mg/kg-day	1.19E-06
					Manganese	1.40E+02	ug/L	1.09E-08	mg/kg-day	NA		kg-day/mg		NA	1.27E-07	mg/kg-day	9.60E-04	mg/kg-day	1.33E-04
			<b>Pesticides</b> 4,4'-DDT		1.30E-03	ug/L	2.41E-10	mg/kg-day	3.40E-01	kg-day/mg	8.20E-11	2.81E-09		mg/kg-day	5.00E-04	mg/kg-day	5.63E-06		
			<b>PCBs</b> Total PCBs		9.40E-03	ug/L	2.08E-09	mg/kg-day	3.00E-01	kg-day/mg	6.23E-10	2.42E-08		mg/kg-day	2.00E-05	mg/kg-day	1.21E-03		
			<b>Exp. Route Total</b>									3.92E-08					3.45E-03		
			<b>Exposure Point Total</b>									4.03E-08					3.49E-03		
			<b>Exposure Medium Total</b>									4.03E-08					3.49E-03		
			<b>Surface Water Total</b>								4.03E-08				3.49E-03				
			<b>Total Receptor Risk/Hazard</b>								2.73E-07				1.32E-02				

**Notes:**

- ADAF - Age-Dependent Adjustment Factor.
- CSF - Cancer Slope Factor.
- EPC - Exposure Point Concentration.
- NA - Not applicable.
- PCB - Polychlorinated Biphenyl.
- RfD - Oral Reference Dose.
- SVOC - Semivolatile Organic Compound.
- TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.

(1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.

**Table C-3.7**  
**Summary of Receptor Risks and Hazards for COPCs - Adult Wader**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Wader  
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient						
				Ingestion	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total			
Sediment	Sediment	Sediment	<b>Dioxin</b>											
			2,3,7,8-TCDD-TEQ	9.88E-07	6.76E-07	NA	1.66E-06	Reproductive, Developmental	3.80E-02	2.60E-02	6.40E-02			
			<b>Metals</b>											
			Aluminum	NA	NA	NA	NA	Neurological	5.36E-04	NA	5.36E-04			
			Arsenic	1.15E-07	1.31E-07	NA	2.46E-07	Skin, Vascular	8.93E-04	1.02E-03	1.91E-03			
			Chromium	3.95E-07	NA	NA	3.95E-07	None reported	9.21E-04	NA	9.21E-04			
			Cobalt	NA	NA	NA	NA	Thyroid	3.53E-03	NA	3.53E-03			
			Manganese	NA	NA	NA	NA	Neurological	6.34E-04	NA	6.34E-04			
			Nickel	NA	NA	NA	NA	Decreased body and organ weights	2.34E-04	NA	2.34E-04			
			Thallium	NA	NA	NA	NA	Hair	1.79E-03	NA	1.79E-03			
			Vanadium	NA	NA	NA	NA	Hair	2.69E-03	NA	2.69E-03			
			<b>PCBs</b>											
			Total PCBs	2.60E-08	8.29E-08	NA	1.09E-07	Eye, Nails, Immune	2.27E-03	7.26E-03	9.53E-03			
			<b>SVOCs</b>											
			Benzo(a)anthracene	6.98E-09	2.07E-08	NA	2.77E-08	NA	NA	NA	NA			
			Benzo(a)pyrene	7.76E-08	2.30E-07	NA	3.07E-07	NA	NA	NA	NA			
			Benzo(b)fluoranthene	1.17E-08	3.48E-08	NA	4.66E-08	NA	NA	NA	NA			
			Benzo(k)fluoranthene	4.53E-10	1.34E-09		1.80E-09	NA	NA	NA	NA			
			Chrysene	1.08E-10	3.21E-10		4.29E-10	NA	NA	NA	NA			
			Dibenzo(a,h)anthracene	1.75E-08	5.20E-08	NA	6.95E-08	NA	NA	NA	NA			
			Indeno(1,2,3-cd)pyrene	5.92E-09	1.75E-08	NA	2.34E-08	NA	NA	NA	NA			
			Chemical Total	1.64E-06	1.25E-06	NA	2.89E-06		5.15E-02	3.43E-02	8.58E-02			
					Exposure Point Total						8.58E-02			
					Exposure Medium Total						8.58E-02			
			Sediment Total								8.58E-02			

**Table C-3.7**  
**Summary of Receptor Risks and Hazards for COPCs - Adult Wader**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
Receptor Population: Wader  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk				Non-Carcinogenic Hazard Quotient						
				Ingestion	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total			
Surface Water	Surface Water	Surface Water	<b>Dioxin</b>											
			2,3,7,8-TCDD-TEQ	3.50E-10	2.98E-07	NA	2.98E-07	Reproductive, Developmental	1.35E-05	1.15E-02	1.15E-02			
			<b>Metals</b>											
			Arsenic	5.66E-09	1.65E-09	NA	7.32E-09	Skin, Vascular	4.40E-05	1.29E-05	5.69E-05			
			Chromium	6.95E-09	1.63E-07	NA	1.69E-07	None reported	1.62E-05	3.79E-04	3.95E-04			
			Cobalt	NA	NA	NA	NA	Thyroid	5.34E-05	6.24E-06	5.96E-05			
			Manganese	NA	NA	NA	NA	Neurological	9.47E-05	6.92E-04	7.87E-04			
			<b>Pesticides</b>											
			4,4'-DDT	2.39E-12	1.18E-09	NA	1.18E-09	Liver	4.93E-08	2.42E-05	2.43E-05			
			<b>PCBs</b>											
			Total PCBs	1.65E-11	9.69E-09	NA	9.71E-09	Eye, Nails, Immune	7.24E-06	4.24E-03	4.25E-03			
			Chemical Total	1.30E-08	4.73E-07	NA	4.86E-07		2.29E-04	1.68E-02	1.71E-02			
					Exposure Point Total							1.71E-02		
		Exposure Medium Total							1.71E-02					
Surface Water Total							4.86E-07					1.71E-02		
Receptor Total							3.38E-06					1.03E-01		

**Notes**  
NA - Not Applicable

Target Organ Hazard Index			
Organ	Sediment	Surface Water	Total
Decreased body and organ weights	2.34E-04	--	2.34E-04
Developmental	6.40E-02	1.15E-02	7.55E-02
Eye	9.53E-03	4.25E-03	1.38E-02
Hair	4.47E-03	--	4.47E-03
Immune	9.53E-03	4.25E-03	1.38E-02
Liver	--	2.43E-05	2.43E-05
Nails	9.53E-03	4.25E-03	1.38E-02
Neurological	1.17E-03	7.87E-04	1.96E-03
None Reported	9.21E-04	3.95E-04	1.32E-03
Reproductive	6.40E-02	1.15E-02	7.55E-02
Skin	1.91E-03	5.69E-05	1.97E-03
Thyroid	3.53E-03	5.96E-05	3.59E-03
Vascular	1.91E-03	5.69E-05	1.97E-03

**Table C-3.8**  
**Summary of Receptor Risks and Hazards for COPCs - Adult Wader**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: Wader Receptor Age: Adult
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Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Sediment	Sediment	Sediment	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	3.05E-08	4.17E-08	7.22E-08	Reproductive, Developmental	2.35E-03	3.21E-03	5.56E-03	
			<b>Metals</b>								
			Aluminum	NA	NA	NA	Neurological	1.15E-04	NA	1.15E-04	
			Arsenic	1.04E-08	2.38E-08	3.43E-08	Skin, Vascular	1.63E-04	3.71E-04	5.33E-04	
			Chromium	4.25E-08	NA	4.25E-08	None reported	1.98E-04	NA	1.98E-04	
			Cobalt	NA	NA	NA	Thyroid	7.82E-04	NA	7.82E-04	
			Manganese	NA	NA	NA	Neurological	1.38E-04	NA	1.38E-04	
			Nickel	NA	NA	NA	Decreased body and organ weights	4.23E-05	NA	4.23E-05	
			Thallium	NA	NA	NA	Hair	3.46E-04	NA	3.46E-04	
			Vanadium	NA	NA	NA	Hair	3.15E-04	NA	3.15E-04	
			<b>PCBs</b>								
			Total PCBs	1.18E-09	7.53E-09	8.71E-09	Eye, Nails, Immune	4.13E-04	2.64E-03	3.05E-03	
			<b>SVOCs</b>								
			Benzo(a)anthracene	7.64E-10	4.53E-09	5.29E-09	NA	NA	NA	NA	
			Benzo(a)pyrene	8.55E-09	5.07E-08	5.93E-08	NA	NA	NA	NA	
			Benzo(b)fluoranthene	1.29E-09	7.64E-09	8.93E-09	NA	NA	NA	NA	
			Benzo(k)fluoranthene	4.86E-11	2.88E-10	3.37E-10	NA	NA	NA	NA	
			Chrysene	1.20E-11	7.11E-11	8.31E-11	NA	NA	NA	NA	
			Dibenzo(a,h)anthracene	1.93E-09	1.14E-08	1.34E-08	NA	NA	NA	NA	
			Indeno(1,2,3-cd)pyrene	6.45E-10	3.83E-09	4.47E-09	NA	NA	NA	NA	
			Chemical Total	9.78E-08	1.52E-07	2.49E-07		4.86E-03	6.22E-03	1.11E-02	
					Exposure Point Total					1.11E-02	
				Exposure Medium Total						1.11E-02	
			Sediment Total							1.11E-02	

**Table C-3.8**  
**Summary of Receptor Risks and Hazards for COPCs - Adult Wader**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Wader  
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Surface Water	Surface Water	Surface Water	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	1.66E-11	3.26E-08	3.26E-08	Reproductive, Developmental	1.28E-06	2.50E-03	2.51E-03	
			<b>Metals</b>								
			Arsenic	3.76E-10	1.78E-10	5.54E-10	Skin, Vascular	5.84E-06	2.78E-06	8.62E-06	
			Chromium	4.91E-10	1.86E-08	1.91E-08	None reported	2.29E-06	8.70E-05	8.93E-05	
			Cobalt	NA	NA	NA	Thyroid	7.74E-06	1.47E-06	9.21E-06	
			Manganese	NA	NA	NA	Neurological	1.38E-05	1.64E-04	1.78E-04	
			<b>Pesticides</b>								
			4,4'-DDT	1.50E-13	1.69E-10	1.69E-10	Liver	6.16E-09	6.96E-06	6.96E-06	
			<b>PCBs</b>								
			Total PCBs	9.54E-13	1.28E-09	1.29E-09	Eye, Nails, Immune	1.11E-06	1.50E-03	1.50E-03	
Chemical Total	8.84E-10	5.28E-08	5.37E-08		3.21E-05	4.27E-03	4.30E-03				
		Exposure Point Total						4.30E-03			
		Exposure Medium Total						4.30E-03			
Surface Water Total					5.37E-08			4.30E-03			
Receptor Total					3.03E-07			1.54E-02			

**Notes**  
 NA - Not Applicable

Target Organ Hazard Index			
Organ	Sediment	Surface Water	Total
Decreased body and organ weights	4.23E-05	--	4.23E-05
Developmental	5.56E-03	2.51E-03	8.06E-03
Eye	3.05E-03	1.50E-03	4.55E-03
Hair	6.61E-04	--	6.61E-04
Immune	3.05E-03	1.50E-03	4.55E-03
Liver	--	6.96E-06	6.96E-06
Nails	3.05E-03	1.50E-03	4.55E-03
Neurological	2.53E-04	1.78E-04	4.31E-04
None Reported	1.98E-04	8.93E-05	2.87E-04
Reproductive	5.56E-03	2.51E-03	8.06E-03
Skin	5.33E-04	8.62E-06	5.42E-04
Thyroid	7.82E-04	9.21E-06	7.91E-04
Vascular	5.33E-04	8.62E-06	5.42E-04

**Table C-3.9**  
**Summary of Receptor Risks and Hazards for COPCs - Child Wader**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: Wader Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Sediment	Sediment	Sediment	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	2.79E-06	4.82E-07	3.27E-06	Reproductive, Developmental	3.58E-01	6.18E-02	4.20E-01	
			<b>Metals</b>								
			Aluminum	NA	NA	NA	Neurological	5.04E-03	NA	5.04E-03	
			Arsenic	3.24E-07	9.34E-08	4.18E-07	Skin, Vascular	8.41E-03	2.42E-03	1.08E-02	
			Chromium	4.68E-06	NA	4.68E-06	None reported	8.67E-03	NA	8.67E-03	
			Cobalt	NA	NA	NA	Thyroid	3.33E-02	NA	3.33E-02	
			Manganese	NA	NA	NA	Neurological	5.97E-03	NA	5.97E-03	
			Nickel	NA	NA	NA	Decreased body and organ weights	2.20E-03	NA	2.20E-03	
			Thallium	NA	NA	NA	Hair	1.68E-02	NA	1.68E-02	
			Vanadium	NA	NA	NA	Hair	2.53E-02	NA	2.53E-02	
			<b>PCBs</b>								
			Total PCBs	7.34E-08	5.92E-08	1.33E-07	Eye, Nails, Immune	2.14E-02	1.73E-02	3.87E-02	
			<b>SVOCs</b>								
			Benzo(a)anthracene	8.27E-08	6.20E-08	1.45E-07	NA	NA	NA	NA	
			Benzo(a)pyrene	9.20E-07	6.89E-07	1.61E-06	NA	NA	NA	NA	
			Benzo(b)fluoranthene	1.39E-07	1.04E-07	2.44E-07	NA	NA	NA	NA	
			Benzo(k)fluoranthene	5.37E-09	4.02E-09	9.40E-09	NA	NA	NA	NA	
			Chrysene	1.28E-09	9.62E-10	2.25E-09	NA	NA	NA	NA	
			Dibenzo(a,h)anthracene	2.08E-07	1.56E-07	3.64E-07	NA	NA	NA	NA	
			Indeno(1,2,3-cd)pyrene	7.02E-08	5.25E-08	1.23E-07	NA	NA	NA	NA	
			<b>Chemical Total</b>	<b>9.29E-06</b>	<b>1.70E-06</b>	<b>1.10E-05</b>		<b>4.85E-01</b>	<b>8.15E-02</b>	<b>5.66E-01</b>	
					<b>Exposure Point Total</b>					<b>5.66E-01</b>	
				<b>Exposure Medium Total</b>						<b>5.66E-01</b>	
			<b>Sediment Total</b>							<b>5.66E-01</b>	



**Table C-3.9**  
**Summary of Receptor Risks and Hazards for COPCs - Child Wader**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Wader  
 Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Surface Water	Surface Water	Surface Water	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	4.94E-10	2.28E-07	2.28E-07	Reproductive, Developmental	6.33E-05	2.92E-02	2.93E-02	
			<b>Metals</b>								
			Arsenic	7.99E-09	1.26E-09	9.26E-09	Skin, Vascular	2.07E-04	3.28E-05	2.40E-04	
			Chromium	4.12E-08	5.22E-07	5.63E-07	None reported	7.63E-05	9.66E-04	1.04E-03	
			Cobalt	NA	NA	NA	Thyroid	2.51E-04	1.59E-05	2.67E-04	
			Manganese	NA	NA	NA	Neurological	4.46E-04	1.76E-03	2.21E-03	
			<b>Pesticides</b>								
			4,4'-DDT	3.38E-12	8.99E-10	9.02E-10	Liver	2.32E-07	6.17E-05	6.19E-05	
			<b>PCBs</b>								
			Total PCBs	2.33E-11	7.41E-09	7.43E-09	Eye, Nails, Immune	3.41E-05	1.08E-02	1.08E-02	
			Chemical Total	4.97E-08	7.59E-07	8.09E-07		1.08E-03	4.29E-02	4.39E-02	
		Exposure Point Total						4.39E-02			
		Exposure Medium Total						4.39E-02			
Surface Water Total					8.09E-07			4.39E-02			
Receptor Total					1.18E-05			6.10E-01			

**Notes**

NA - Not Applicable

Target Organ Hazard Index			
Organ	Sediment	Surface Water	Total
Decreased body and organ weights	2.20E-03	--	2.20E-03
Developmental	4.20E-01	2.93E-02	4.49E-01
Eye	3.87E-02	1.08E-02	4.95E-02
Hair	4.21E-02	--	4.21E-02
Immune	3.87E-02	1.08E-02	4.95E-02
Liver	--	6.19E-05	6.19E-05
Nails	3.87E-02	1.08E-02	4.95E-02
Neurological	1.10E-02	2.21E-03	1.32E-02
None Reported	8.67E-03	1.04E-03	9.71E-03
Reproductive	4.20E-01	2.93E-02	4.49E-01
Skin	1.08E-02	2.40E-04	1.11E-02
Thyroid	3.33E-02	2.67E-04	3.35E-02
Vascular	1.08E-02	2.40E-04	1.11E-02

**Table C-3.10**  
**Summary of Receptor Risks and Hazards for COPCs - Child Wader**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Wader  
 Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Sediment	Sediment	Sediment	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	5.74E-08	1.98E-08	7.73E-08	Reproductive, Developmental	2.21E-02	7.63E-03	2.97E-02	
			<b>Metals</b>								
			Aluminum	NA	NA	NA	Neurological	1.08E-03	NA	1.08E-03	
			Arsenic	1.97E-08	1.13E-08	3.10E-08	Skin, Vascular	1.53E-03	8.81E-04	2.41E-03	
			Chromium	3.36E-07	NA	3.36E-07	None reported	1.87E-03	NA	1.87E-03	
			Cobalt	NA	NA	NA	Thyroid	7.36E-03	NA	7.36E-03	
			Manganese	NA	NA	NA	Neurological	1.30E-03	NA	1.30E-03	
			Nickel	NA	NA	NA	Decreased body and organ weights	3.98E-04	NA	3.98E-04	
			Thallium	NA	NA	NA	Hair	3.26E-03	NA	3.26E-03	
			Vanadium	NA	NA	NA	Hair	2.96E-03	NA	2.96E-03	
			<b>PCBs</b>								
			Total PCBs	2.22E-09	3.58E-09	5.80E-09	Eye, Nails, Immune	3.89E-03	6.27E-03	1.02E-02	
			<b>SVOCs</b>	0.00E+00							
			Benzo(a)anthracene	6.04E-09	9.05E-09	1.51E-08	NA	NA	NA	NA	
			Benzo(a)pyrene	6.76E-08	1.01E-07	1.69E-07	NA	NA	NA	NA	
			Benzo(b)fluoranthene	1.02E-08	1.53E-08	2.55E-08	NA	NA	NA	NA	
			Benzo(k)fluoranthene	3.85E-10	5.76E-10	9.60E-10	NA	NA	NA	NA	
			Chrysene	9.48E-11	1.42E-10	2.37E-10	NA	NA	NA	NA	
			Dibenzo(a,h)anthracene	1.53E-08	2.28E-08	3.81E-08	NA	NA	NA	NA	
			Indeno(1,2,3-cd)pyrene	5.10E-09	7.64E-09	1.27E-08	NA	NA	NA	NA	
			<b>Chemical Total</b>	<b>5.20E-07</b>	<b>1.92E-07</b>	<b>7.11E-07</b>		<b>4.57E-02</b>	<b>1.48E-02</b>	<b>6.05E-02</b>	
					<b>Exposure Point Total</b>					<b>6.05E-02</b>	
				<b>Exposure Medium Total</b>						<b>6.05E-02</b>	
			<b>Sediment Total</b>							<b>6.05E-02</b>	

**Table C-3.10**  
**Summary of Receptor Risks and Hazards for COPCs - Child Wader**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Wader  
 Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Surface Water	Surface Water	Surface Water	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	1.56E-11	1.66E-08	1.66E-08	Reproductive, Developmental	6.02E-06	6.38E-03	6.38E-03	
			<b>Metals</b>								
			Arsenic	3.53E-10	9.09E-11	4.44E-10	Skin, Vascular	2.75E-05	7.07E-06	3.46E-05	
			Chromium	1.94E-09	3.99E-08	4.18E-08	None reported	1.08E-05	2.22E-04	2.32E-04	
			Cobalt	NA	NA	NA	Thyroid	3.64E-05	3.74E-06	4.02E-05	
			Manganese	NA	NA	NA	Neurological	6.50E-05	4.18E-04	4.83E-04	
			<b>Pesticides</b>								
			4,4'-DDT	1.41E-13	8.61E-11	8.62E-11	Liver	2.90E-08	1.77E-05	1.77E-05	
			<b>PCBs</b>								
			Total PCBs	8.98E-13	6.55E-10	6.55E-10	Eye, Nails, Immune	5.24E-06	3.82E-03	3.82E-03	
			Chemical Total	2.31E-09	5.73E-08	5.96E-08		1.51E-04	1.09E-02	1.10E-02	
		Exposure Point Total						1.10E-02			
		Exposure Medium Total						1.10E-02			
Surface Water Total					5.96E-08			1.10E-02			
Receptor Total					7.71E-07			7.15E-02			

**Notes**  
 NA - Not Applicable

Target Organ Hazard Index			
Organ	Sediment	Surface Water	Total
Decreased body and organ weights	3.98E-04	--	3.98E-04
Developmental	2.97E-02	6.38E-03	3.61E-02
Eye	1.02E-02	3.82E-03	1.40E-02
Hair	6.22E-03	--	6.22E-03
Immune	1.02E-02	3.82E-03	1.40E-02
Liver	--	1.77E-05	1.77E-05
Nails	1.02E-02	3.82E-03	1.40E-02
Neurological	2.39E-03	4.83E-04	2.87E-03
None Reported	1.87E-03	2.32E-04	2.10E-03
Reproductive	2.97E-02	6.38E-03	3.61E-02
Skin	2.41E-03	3.46E-05	2.44E-03
Thyroid	7.36E-03	4.02E-05	7.40E-03
Vascular	2.41E-03	3.46E-05	2.44E-03

**Table C-3.11**  
**Summary of Receptor Risks and Hazards for COPCs - Teen Wader**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: Wader Receptor Age: Teen
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Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Sediment	Sediment	Sediment	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	1.12E-06	4.54E-07	1.57E-06	Reproductive, Developmental	7.17E-02	2.91E-02	1.01E-01	
			<b>Metals</b>								
			Aluminum	NA	NA	NA	Neurological	1.01E-03	NA	1.01E-03	
			Arsenic	1.30E-07	8.80E-08	2.18E-07	Skin, Vascular	1.68E-03	1.14E-03	2.82E-03	
			Chromium	1.12E-06	NA	1.12E-06	None reported	1.74E-03	NA	1.74E-03	
			Cobalt	NA	NA	NA	Thyroid	6.66E-03	NA	6.66E-03	
			Manganese	NA	NA	NA	Neurological	1.20E-03	NA	1.20E-03	
			Nickel	NA	NA	NA	Decreased body and organ weights	4.41E-04	NA	4.41E-04	
			Thallium	NA	NA	NA	Hair	3.37E-03	NA	3.37E-03	
			Vanadium	NA	NA	NA	Hair	5.06E-03	NA	5.06E-03	
			<b>PCBs</b>								
			Total PCBs	2.94E-08	5.57E-08	8.51E-08	Eye, Nails, Immune	4.29E-03	8.13E-03	1.24E-02	
			<b>SVOCs</b>								
			Benzo(a)anthracene	1.97E-08	3.48E-08	5.45E-08	NA	NA	NA	NA	
			Benzo(a)pyrene	2.19E-07	3.86E-07	6.06E-07	NA	NA	NA	NA	
			Benzo(b)fluoranthene	3.32E-08	5.85E-08	9.17E-08	NA	NA	NA	NA	
			Benzo(k)fluoranthene	1.28E-09	2.26E-09	3.54E-09	NA	NA	NA	NA	
			Chrysene	3.06E-10	5.39E-10	8.46E-10	NA	NA	NA	NA	
			Dibenzo(a,h)anthracene	4.96E-08	8.73E-08	1.37E-07	NA	NA	NA	NA	
			Indeno(1,2,3-cd)pyrene	1.67E-08	2.95E-08	4.62E-08	NA	NA	NA	NA	
			Chemical Total	2.73E-06	1.20E-06	3.93E-06		9.71E-02	3.84E-02	1.35E-01	
					Exposure Point Total						1.35E-01
				Exposure Medium Total							1.35E-01
			Sediment Total								1.35E-01

**Table C-3.11**  
**Summary of Receptor Risks and Hazards for COPCs - Teen Wader**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Wader  
 Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Surface Water	Surface Water	Surface Water	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	3.96E-10	2.40E-07	2.41E-07	Reproductive, Developmental	2.54E-05	1.54E-02	1.54E-02	
			<b>Metals</b>								
			Arsenic	6.40E-09	1.33E-09	7.74E-09	Skin, Vascular	8.30E-05	1.73E-05	1.00E-04	
			Chromium	1.96E-08	3.28E-07	3.47E-07	None reported	3.06E-05	5.10E-04	5.40E-04	
			Cobalt	NA	NA	NA	Thyroid	1.01E-04	8.39E-06	1.09E-04	
			Manganese	NA	NA	NA	Neurological	1.79E-04	9.31E-04	1.11E-03	
			<b>Pesticides</b>								
			4,4'-DDT	2.71E-12	9.49E-10	9.51E-10	Liver	9.29E-08	3.25E-05	3.26E-05	
			<b>PCBs</b>								
			Total PCBs	1.87E-11	7.82E-09	7.83E-09	Eye, Nails, Immune	1.36E-05	5.70E-03	5.71E-03	
			Chemical Total	2.65E-08	5.78E-07	6.05E-07		4.32E-04	2.26E-02	2.30E-02	
		Exposure Point Total						2.30E-02			
		Exposure Medium Total						2.30E-02			
Surface Water Total					6.05E-07			2.30E-02			
Receptor Total					4.53E-06			1.59E-01			

**Notes**  
 NA - Not Applicable

Target Organ Hazard Index			
Organ	Sediment	Surface Water	Total
Decreased body and organ weights	4.41E-04	--	4.41E-04
Developmental	1.01E-01	1.54E-02	1.16E-01
Eye	1.24E-02	5.71E-03	1.81E-02
Hair	8.43E-03	--	8.43E-03
Immune	1.24E-02	5.71E-03	1.81E-02
Liver	--	3.26E-05	3.26E-05
Nails	1.24E-02	5.71E-03	1.81E-02
Neurological	2.20E-03	1.11E-03	3.31E-03
None Reported	1.74E-03	5.40E-04	2.28E-03
Reproductive	1.01E-01	1.54E-02	1.16E-01
Skin	2.82E-03	1.00E-04	2.92E-03
Thyroid	6.66E-03	1.09E-04	6.77E-03
Vascular	2.82E-03	1.00E-04	2.92E-03

**Table C-3.12**  
**Summary of Receptor Risks and Hazards for COPCs - Teen Wader**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: Wader Receptor Age: Teen
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Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Sediment	Sediment	Sediment	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	2.08E-08	1.69E-08	3.76E-08	Reproductive, Developmental	2.66E-03	2.16E-03	4.83E-03	
			<b>Metals</b>								
			Aluminum	NA	NA	NA	Neurological	1.31E-04	NA	1.31E-04	
			Arsenic	7.11E-09	9.63E-09	1.67E-08	Skin, Vascular	1.84E-04	2.50E-04	4.34E-04	
			Chromium	7.22E-08	NA	7.22E-08	None reported	2.25E-04	NA	2.25E-04	
			Cobalt	NA	NA	NA	Thyroid	8.87E-04	NA	8.87E-04	
			Manganese	NA	NA	NA	Neurological	1.57E-04	NA	1.57E-04	
			Nickel	NA	NA	NA	Decreased body and organ weights	4.79E-05	NA	4.79E-05	
			Thallium	NA	NA	NA	Hair	3.93E-04	NA	3.93E-04	
			Vanadium	NA	NA	NA	Hair	3.57E-04	NA	3.57E-04	
			<b>PCBs</b>								
			Total PCBs	8.03E-10	3.05E-09	3.85E-09	Eye, Nails, Immune	4.68E-04	1.78E-03	2.25E-03	
			<b>SVOCs</b>								
			Benzo(a)anthracene	1.30E-09	4.58E-09	5.88E-09	NA	NA	NA	NA	
			Benzo(a)pyrene	1.45E-08	5.13E-08	6.58E-08	NA	NA	NA	NA	
			Benzo(b)fluoranthene	2.19E-09	7.72E-09	9.92E-09	NA	NA	NA	NA	
			Benzo(k)fluoranthene	8.27E-11	2.91E-10	3.74E-10	NA	NA	NA	NA	
			Chrysene	2.04E-11	7.19E-11	9.23E-11	NA	NA	NA	NA	
			Dibenzo(a,h)anthracene	3.28E-09	1.16E-08	1.48E-08	NA	NA	NA	NA	
			Indeno(1,2,3-cd)pyrene	1.10E-09	3.87E-09	4.96E-09	NA	NA	NA	NA	
			Chemical Total	1.23E-07	1.09E-07	2.32E-07		5.51E-03	4.19E-03	9.70E-03	
					Exposure Point Total					9.70E-03	
				Exposure Medium Total						9.70E-03	
			Sediment Total							9.70E-03	

**Table C-3.12**  
**Summary of Receptor Risks and Hazards for COPCs - Teen Wader**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
Receptor Population: Wader  
Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Surface Water	Surface Water	Surface Water	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	1.13E-11	1.58E-08	1.58E-08	Reproductive, Developmental	1.45E-06	2.03E-03	2.03E-03	
			<b>Metals</b>								
			Arsenic	2.56E-10	8.66E-11	3.42E-10	Skin, Vascular	6.63E-06	2.24E-06	8.87E-06	
			Chromium	8.35E-10	2.26E-08	2.35E-08	None reported	2.60E-06	7.04E-05	7.30E-05	
			Cobalt	NA	NA	NA	Thyroid	8.77E-06	1.19E-06	9.96E-06	
			Manganese	NA	NA	NA	Neurological	1.57E-05	1.33E-04	1.48E-04	
			<b>Pesticides</b>								
			4,4'-DDT	1.02E-13	8.20E-11	8.21E-11	Liver	6.98E-09	5.63E-06	5.63E-06	
			<b>PCBs</b>								
			Total PCBs	6.49E-13	6.23E-10	6.24E-10	Eye, Nails, Immune	1.26E-06	1.21E-03	1.21E-03	
			Chemical Total	1.10E-09	3.92E-08	4.03E-08		3.64E-05	3.45E-03	3.49E-03	
		Exposure Point Total						3.49E-03			
		Exposure Medium Total						3.49E-03			
Surface Water Total					4.03E-08				3.49E-03		
Receptor Total					2.73E-07				1.32E-02		

**Notes**  
NA - Not Applicable

Target Organ Hazard Index			
Organ	Sediment	Surface Water	Total
Decreased body and organ weights	4.79E-05	--	4.79E-05
Developmental	4.83E-03	2.03E-03	6.85E-03
Eye	2.25E-03	1.21E-03	3.46E-03
Hair	7.50E-04	--	7.50E-04
Immune	2.25E-03	1.21E-03	3.46E-03
Liver	--	5.63E-06	5.63E-06
Nails	2.25E-03	1.21E-03	3.46E-03
Neurological	2.87E-04	1.48E-04	4.36E-04
None Reported	2.25E-04	7.30E-05	2.98E-04
Reproductive	4.83E-03	2.03E-03	6.85E-03
Skin	4.34E-04	8.87E-06	4.43E-04
Thyroid	8.87E-04	9.96E-06	8.97E-04
Vascular	4.34E-04	8.87E-06	4.43E-04

## **Risk Calculation Spreadsheets – Worker Receptor**



**Table C-4.1**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Worker**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations								
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient			
							Value	Units	Value	Units			Value	Units	Value	Units				
Sediment	Surface Sediment	Nearshore Surface Sediment	Ingestion	<b>Dioxin</b>																
				2,3,7,8-TCDD-TEQ	4.49E-04	mg/kg	2.75E-11	mg/kg-day	1.30E+05	kg-day/mg		3.57E-06	7.70E-11	mg/kg-day	7.00E-10	mg/kg-day	1.10E-01			
				<b>Metals</b>																
				Aluminum	9.05E+03	mg/kg	5.53E-04	mg/kg-day	NA	kg-day/mg		NA	1.55E-03	mg/kg-day	1.00E+00	mg/kg-day	1.55E-03			
				Arsenic	7.54E+00	mg/kg	2.77E-07	mg/kg-day	1.50E+00	kg-day/mg		4.15E-07	7.75E-07	mg/kg-day	3.00E-04	mg/kg-day	2.58E-03			
				Chromium	4.67E+01	mg/kg	2.85E-06	mg/kg-day	5.00E-01	kg-day/mg	1	1.43E-06	7.99E-06	mg/kg-day	3.00E-03	mg/kg-day	2.66E-03			
				Cobalt	1.79E+01	mg/kg	1.09E-06	mg/kg-day	NA	kg-day/mg		NA	3.07E-06	mg/kg-day	3.00E-04	mg/kg-day	1.02E-02			
				Manganese	2.57E+02	mg/kg	1.57E-05	mg/kg-day	NA	kg-day/mg		NA	4.40E-05	mg/kg-day	2.40E-02	mg/kg-day	1.83E-03			
				Nickel	7.90E+01	mg/kg	4.83E-06	mg/kg-day	NA	kg-day/mg		NA	1.35E-05	mg/kg-day	2.00E-02	mg/kg-day	6.76E-04			
				Thallium	3.02E-01	mg/kg	1.85E-08	mg/kg-day	NA	kg-day/mg		NA	5.17E-08	mg/kg-day	1.00E-05	mg/kg-day	5.17E-03			
				Vanadium	2.29E+02	mg/kg	1.40E-05	mg/kg-day	NA	kg-day/mg		NA	3.91E-05	mg/kg-day	5.04E-03	mg/kg-day	7.77E-03			
				<b>PCBs</b>																
				Total PCBs	7.68E-01	mg/kg	4.70E-08	mg/kg-day	2.00E+00	kg-day/mg		9.39E-08	1.32E-07	mg/kg-day	2.00E-05	mg/kg-day	6.58E-03			
				<b>SVOCs</b>																
				Benzo(a)anthracene	5.65E-01	mg/kg	3.46E-08	mg/kg-day	7.30E-01	kg-day/mg	1	2.52E-08	9.67E-08	mg/kg-day	NA	mg/kg-day	NA			
				Benzo(a)pyrene	6.28E-01	mg/kg	3.84E-08	mg/kg-day	7.30E+00	kg-day/mg	1	2.80E-07	1.08E-07	mg/kg-day	NA	mg/kg-day	NA			
				Benzo(b)fluoranthene	9.51E-01	mg/kg	5.82E-08	mg/kg-day	7.30E-01	kg-day/mg	1	4.25E-08	1.63E-07	mg/kg-day	NA	mg/kg-day	NA			
				Benzo(k)fluoranthene	3.67E-01	mg/kg	2.24E-08	mg/kg-day	7.30E-02	kg-day/mg	1	1.64E-09	6.28E-08	mg/kg-day	NA	mg/kg-day	NA			
				Chrysene	8.77E-01	mg/kg	5.36E-08	mg/kg-day	7.30E-03	kg-day/mg	1	3.92E-10	1.50E-07	mg/kg-day	NA	mg/kg-day	NA			
				Dibenzo(a,h)anthracene	1.42E-01	mg/kg	8.68E-09	mg/kg-day	7.30E+00	kg-day/mg	1	6.34E-08	2.43E-08	mg/kg-day	NA	mg/kg-day	NA			
Indeno(1,2,3-cd)pyrene	4.79E-01	mg/kg	2.93E-08	mg/kg-day	7.30E-01	kg-day/mg	1	2.14E-08	8.20E-08	mg/kg-day	NA	mg/kg-day	NA							
<b>Exp. Route Total</b>																		5.94E-06	1.49E-01	

**Table C-4.1**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Worker**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Worker  
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations								
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient			
							Value	Units	Value	Units			Value	Units	Value	Units				
Sediment	Surface Sediment	Nearshore Surface Sediment	Dermal	<b>Dioxin</b>																
				2,3,7,8-TCDD-TEQ	4.49E-04	mg/kg	8.72E-12	mg/kg-day	1.30E+05	kg-day/mg		1.13E-06	2.44E-11	mg/kg-day	7.00E-10	mg/kg-day	3.49E-02			
				<b>Metals</b>																
				Aluminum	9.05E+03	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E+00	mg/kg-day	NA			
				Arsenic	7.54E+00	mg/kg	1.46E-07	mg/kg-day	1.50E+00	kg-day/mg		2.20E-07	4.10E-07	mg/kg-day	3.00E-04	mg/kg-day	1.37E-03			
				Chromium	4.67E+01	mg/kg	NA	mg/kg-day	2.00E+01	kg-day/mg	1	NA	NA	mg/kg-day	7.50E-05	mg/kg-day	NA			
				Cobalt	1.79E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	3.00E-04	mg/kg-day	NA			
				Manganese	2.57E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	9.60E-04	mg/kg-day	NA			
				Nickel	7.90E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	8.00E-04	mg/kg-day	NA			
				Thallium	3.02E-01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E-05	mg/kg-day	NA			
				Vanadium	2.29E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.31E-04	mg/kg-day	NA			
				<b>PCBs</b>																
				Total PCBs	7.68E-01	mg/kg	6.96E-08	mg/kg-day	2.00E+00	kg-day/mg		1.39E-07	1.95E-07	mg/kg-day	2.00E-05	mg/kg-day	9.74E-03			
				<b>SVOCs</b>																
				Benzo(a)anthracene	5.65E-01	mg/kg	4.75E-08	mg/kg-day	7.30E-01	kg-day/mg	1	3.47E-08	1.33E-07	mg/kg-day	NA	mg/kg-day	NA			
				Benzo(a)pyrene	6.28E-01	mg/kg	5.28E-08	mg/kg-day	7.30E+00	kg-day/mg	1	3.86E-07	1.48E-07	mg/kg-day	NA	mg/kg-day	NA			
				Benzo(b)fluoranthene	9.51E-01	mg/kg	8.00E-08	mg/kg-day	7.30E-01	kg-day/mg	1	5.84E-08	2.24E-07	mg/kg-day	NA	mg/kg-day	NA			
				Benzo(k)fluoranthene	3.67E-01	mg/kg	3.09E-08	mg/kg-day	7.30E-02	kg-day/mg	1	2.25E-09	8.64E-08	mg/kg-day	NA	mg/kg-day	NA			
				Chrysene	8.77E-01	mg/kg	7.38E-08	mg/kg-day	7.30E-03	kg-day/mg	1	5.39E-10	2.07E-07	mg/kg-day	NA	mg/kg-day	NA			
				Dibenzo(a,h)anthracene	1.42E-01	mg/kg	1.19E-08	mg/kg-day	7.30E+00	kg-day/mg	1	8.72E-08	3.34E-08	mg/kg-day	NA	mg/kg-day	NA			
Indeno(1,2,3-cd)pyrene	4.79E-01	mg/kg	4.03E-08	mg/kg-day	7.30E-01	kg-day/mg	1	2.94E-08	1.13E-07	mg/kg-day	NA	mg/kg-day	NA							
			<b>Exp. Route Total</b>							2.09E-06				4.60E-02						
			<b>Exposure Point Total</b>							8.03E-06				1.95E-01						
			<b>Exposure Medium Total</b>							8.03E-06				1.95E-01						
<b>Sediment Total</b>										8.03E-06				1.95E-01						

**Table C-4.1**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Worker**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
Receptor Population: Worker  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations						Noncancer Hazard Calculations						
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient		
							Value	Units	Value	Units			Value	Units	Value	Units			
Surface Water	Surface Water	Surface Water	Ingestion	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	6.12E-07	ug/L	4.87E-15	mg/kg-day	1.30E+05	kg-day/mg	1	6.33E-10	1.36E-14	mg/kg-day	7.00E-10	mg/kg-day	1.95E-05		
				<b>Metals</b> Arsenic	8.58E-01	ug/L	6.82E-09	mg/kg-day	1.50E+00	kg-day/mg		1.02E-08	1.91E-08	mg/kg-day	3.00E-04	mg/kg-day	6.37E-05		
				Chromium	3.16E+00	ug/L	2.51E-08	mg/kg-day	5.00E-01	kg-day/mg		1.26E-08	7.03E-08	mg/kg-day	3.00E-03	mg/kg-day	2.34E-05		
				Cobalt	1.04E+00	ug/L	8.27E-09	mg/kg-day	NA	kg-day/mg		NA	2.32E-08	mg/kg-day	3.00E-04	mg/kg-day	7.72E-05		
				Manganese	1.48E+02	ug/L	1.17E-06	mg/kg-day	NA	kg-day/mg		NA	3.29E-06	mg/kg-day	2.40E-02	mg/kg-day	1.37E-04		
				<b>Pesticides</b> 4,4'-DDT	1.60E-03	ug/L	1.27E-11	mg/kg-day	3.40E-01	kg-day/mg		4.32E-12	3.56E-11	mg/kg-day	5.00E-04	mg/kg-day	7.12E-08		
				<b>PCBs</b> Total PCBs	9.40E-03	ug/L	7.47E-11	mg/kg-day	4.00E-01	kg-day/mg		2.99E-11	2.09E-10	mg/kg-day	2.00E-05	mg/kg-day	1.05E-05		
				<b>Exp. Route Total</b>									2.35E-08				3.31E-04		
				Dermal	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	6.12E-07	ug/L	5.44E-12	mg/kg-day	1.30E+05		kg-day/mg	1	7.07E-07	1.52E-11	mg/kg-day	7.00E-10	mg/kg-day	2.18E-02
					<b>Metals</b> Arsenic	8.58E-01	ug/L	3.70E-09	mg/kg-day	1.50E+00		kg-day/mg		5.55E-09	1.04E-08	mg/kg-day	3.00E-04	mg/kg-day	3.45E-05
					Chromium	3.16E+00	ug/L	2.73E-08	mg/kg-day	2.00E+01		kg-day/mg		5.45E-07	7.63E-08	mg/kg-day	7.50E-05	mg/kg-day	1.02E-03
					Cobalt	1.04E+00	ug/L	1.79E-09	mg/kg-day	NA		kg-day/mg		NA	5.02E-09	mg/kg-day	3.00E-04	mg/kg-day	1.67E-05
			Manganese		1.48E+02	ug/L	6.37E-07	mg/kg-day	NA	kg-day/mg	NA	1.78E-06		mg/kg-day	9.60E-04	mg/kg-day	1.86E-03		
			<b>Pesticides</b> 4,4'-DDT		1.60E-03	ug/L	8.21E-09	mg/kg-day	3.40E-01	kg-day/mg	2.79E-09	2.30E-08		mg/kg-day	5.00E-04	mg/kg-day	4.60E-05		
			<b>PCBs</b> Total PCBs		9.40E-03	ug/L	5.75E-08	mg/kg-day	4.00E-01	kg-day/mg	2.30E-08	1.61E-07		mg/kg-day	2.00E-05	mg/kg-day	8.05E-03		
			<b>Exp. Route Total</b>									1.28E-06					3.28E-02		
			<b>Exposure Point Total</b>									1.31E-06					3.31E-02		
			<b>Exposure Medium Total</b>									1.31E-06					3.31E-02		
			<b>Surface Water Total</b>									1.31E-06					3.31E-02		
			<b>Total Receptor Risk/Hazard</b>									9.34E-06					2.28E-01		

**Notes:**

- ADAF - Age-Dependent Adjustment Factor.
- CSF - Cancer Slope Factor.
- EPC - Exposure Point Concentration.
- NA - Not applicable.
- PCB - Polychlorinated Biphenyl.
- RfD - Oral Reference Dose.
- SVOC - Semivolatile Organic Compound.
- TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.

(1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.

**Table C-4.2**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Worker**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations								
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient			
							Value	Units	Value	Units			Value	Units	Value	Units				
Sediment	Surface Sediment	Nearshore Surface Sediment	Ingestion	<b>Dioxin</b>																
				2,3,7,8-TCDD-TEQ	1.11E-04	mg/kg	4.48E-13	mg/kg-day	1.30E+05	kg-day/mg		5.82E-08	4.75E-12	mg/kg-day	7.00E-10	mg/kg-day	6.79E-03			
				<b>Metals</b>																
				Aluminum	7.78E+03	mg/kg	3.14E-05	mg/kg-day	NA	kg-day/mg		NA	3.33E-04	mg/kg-day	1.00E+00	mg/kg-day	3.33E-04			
				Arsenic	5.49E+00	mg/kg	1.33E-08	mg/kg-day	1.50E+00	kg-day/mg		1.99E-08	1.41E-07	mg/kg-day	3.00E-04	mg/kg-day	4.70E-04			
				Chromium	4.02E+01	mg/kg	1.62E-07	mg/kg-day	5.00E-01	kg-day/mg	1	8.10E-08	1.72E-06	mg/kg-day	3.00E-03	mg/kg-day	5.73E-04			
				Cobalt	1.59E+01	mg/kg	6.40E-08	mg/kg-day	NA	kg-day/mg		NA	6.79E-07	mg/kg-day	3.00E-04	mg/kg-day	2.26E-03			
				Manganese	2.24E+02	mg/kg	9.05E-07	mg/kg-day	NA	kg-day/mg		NA	9.60E-06	mg/kg-day	2.40E-02	mg/kg-day	4.00E-04			
				Nickel	5.71E+01	mg/kg	2.31E-07	mg/kg-day	NA	kg-day/mg		NA	2.44E-06	mg/kg-day	2.00E-02	mg/kg-day	1.22E-04			
				Thallium	2.34E-01	mg/kg	9.44E-10	mg/kg-day	NA	kg-day/mg		NA	1.00E-08	mg/kg-day	1.00E-05	mg/kg-day	1.00E-03			
				Vanadium	1.07E+02	mg/kg	4.32E-07	mg/kg-day	NA	kg-day/mg		NA	4.58E-06	mg/kg-day	5.04E-03	mg/kg-day	9.10E-04			
				<b>PCBs</b>																
				Total PCBs	5.58E-01	mg/kg	2.25E-09	mg/kg-day	1.00E+00	kg-day/mg		2.25E-09	2.39E-08	mg/kg-day	2.00E-05	mg/kg-day	1.19E-03			
				<b>SVOCs</b>																
				Benzo(a)anthracene	4.95E-01	mg/kg	2.00E-09	mg/kg-day	7.30E-01	kg-day/mg	1	1.46E-09	2.12E-08	mg/kg-day	NA	mg/kg-day	NA			
				Benzo(a)pyrene	5.54E-01	mg/kg	2.24E-09	mg/kg-day	7.30E+00	kg-day/mg	1	1.63E-08	2.37E-08	mg/kg-day	NA	mg/kg-day	NA			
				Benzo(b)fluoranthene	8.35E-01	mg/kg	3.37E-09	mg/kg-day	7.30E-01	kg-day/mg	1	2.46E-09	3.57E-08	mg/kg-day	NA	mg/kg-day	NA			
				Benzo(k)fluoranthene	3.15E-01	mg/kg	1.27E-09	mg/kg-day	7.30E-02	kg-day/mg	1	9.28E-11	1.35E-08	mg/kg-day	NA	mg/kg-day	NA			
				Chrysene	7.77E-01	mg/kg	3.14E-09	mg/kg-day	7.30E-03	kg-day/mg	1	2.29E-11	3.33E-08	mg/kg-day	NA	mg/kg-day	NA			
				Dibenzo(a,h)anthracene	1.25E-01	mg/kg	5.05E-10	mg/kg-day	7.30E+00	kg-day/mg	1	3.68E-09	5.35E-09	mg/kg-day	NA	mg/kg-day	NA			
Indeno(1,2,3-cd)pyrene	4.18E-01	mg/kg	1.69E-09	mg/kg-day	7.30E-01	kg-day/mg	1	1.23E-09	1.79E-08	mg/kg-day	NA	mg/kg-day	NA							
<b>Exp. Route Total</b>										1.87E-07				1.41E-02						

**Table C-4.2**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Worker**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Worker  
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations									
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient				
							Value	Units	Value	Units			Value	Units	Value	Units					
Sediment	Surface Sediment	Nearshore Surface Sediment	Dermal	<b>Dioxin</b>																	
				2,3,7,8-TCDD-TEQ	1.11E-04	mg/kg	2.84E-13	mg/kg-day	1.30E+05	kg-day/mg		3.70E-08	3.02E-12	mg/kg-day	7.00E-10	mg/kg-day	4.31E-03				
				<b>Metals</b>																	
				Aluminum	7.78E+03	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E+00	mg/kg-day	NA				
				Arsenic	5.49E+00	mg/kg	1.41E-08	mg/kg-day	1.50E+00	kg-day/mg		2.11E-08	1.49E-07	mg/kg-day	3.00E-04	mg/kg-day	4.97E-04				
				Chromium	4.02E+01	mg/kg	NA	mg/kg-day	2.00E+01	kg-day/mg	1	NA	NA	mg/kg-day	7.50E-05	mg/kg-day	NA				
				Cobalt	1.59E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	3.00E-04	mg/kg-day	NA				
				Manganese	2.24E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	9.60E-04	mg/kg-day	NA				
				Nickel	5.71E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	8.00E-04	mg/kg-day	NA				
				Thallium	2.34E-01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E-05	mg/kg-day	NA				
				Vanadium	1.07E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.31E-04	mg/kg-day	NA				
				<b>PCBs</b>																	
				Total PCBs	5.58E-01	mg/kg	6.67E-09	mg/kg-day	1.00E+00	kg-day/mg		6.67E-09	7.08E-08	mg/kg-day	2.00E-05	mg/kg-day	3.54E-03				
				<b>SVOCs</b>																	
				Benzo(a)anthracene	4.95E-01	mg/kg	5.50E-09	mg/kg-day	7.30E-01	kg-day/mg		4.01E-09	5.83E-08	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(a)pyrene	5.54E-01	mg/kg	6.15E-09	mg/kg-day	7.30E+00	kg-day/mg	1	4.49E-08	6.52E-08	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(b)fluoranthene	8.35E-01	mg/kg	9.27E-09	mg/kg-day	7.30E-01	kg-day/mg	1	6.77E-09	9.83E-08	mg/kg-day	NA	mg/kg-day	NA				
				Benzo(k)fluoranthene	3.15E-01	mg/kg	3.50E-09	mg/kg-day	7.30E-02	kg-day/mg	1	2.55E-10	3.71E-08	mg/kg-day	NA	mg/kg-day	NA				
				Chrysene	7.77E-01	mg/kg	8.63E-09	mg/kg-day	7.30E-03	kg-day/mg	1	6.30E-11	9.15E-08	mg/kg-day	NA	mg/kg-day	NA				
				Dibenzo(a,h)anthracene	1.25E-01	mg/kg	1.39E-09	mg/kg-day	7.30E+00	kg-day/mg	1	1.01E-08	1.47E-08	mg/kg-day	NA	mg/kg-day	NA				
				Indeno(1,2,3-cd)pyrene	4.18E-01	mg/kg	4.64E-09	mg/kg-day	7.30E-01	kg-day/mg	1	3.39E-09	4.92E-08	mg/kg-day	NA	mg/kg-day	NA				
			<b>Exp. Route Total</b>							1.34E-07				8.34E-03							
			<b>Exposure Point Total</b>							3.21E-07				2.24E-02							
			<b>Exposure Medium Total</b>							3.21E-07				2.24E-02							
<b>Sediment Total</b>										3.21E-07				2.24E-02							

**Table C-4.2**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Worker**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
Receptor Population: Worker  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations							
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient		
							Value	Units	Value	Units			Value	Units	Value	Units			
Surface Water	Surface Water	Surface Water	Ingestion	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	3.78E-07	ug/L	1.22E-16	mg/kg-day	1.30E+05	kg-day/mg	1	1.59E-11	1.29E-15	mg/kg-day	7.00E-10	mg/kg-day	1.85E-06		
				<b>Metals</b> Arsenic	7.40E-01	ug/L	2.39E-10	mg/kg-day	1.50E+00	kg-day/mg		3.58E-10	2.53E-09	mg/kg-day	3.00E-04	mg/kg-day	8.45E-06		
				Chromium	2.90E+00	ug/L	9.36E-10	mg/kg-day	5.00E-01	kg-day/mg		4.68E-10	9.93E-09	mg/kg-day	3.00E-03	mg/kg-day	3.31E-06		
				Cobalt	9.80E-01	ug/L	3.16E-10	mg/kg-day	NA	kg-day/mg		NA	3.36E-09	mg/kg-day	3.00E-04	mg/kg-day	1.12E-05		
				Manganese	1.40E+02	ug/L	4.52E-08	mg/kg-day	NA	kg-day/mg		NA	4.79E-07	mg/kg-day	2.40E-02	mg/kg-day	2.00E-05		
				<b>Pesticides</b> 4,4'-DDT	1.30E-03	ug/L	4.20E-13	mg/kg-day	3.40E-01	kg-day/mg		1.43E-13	4.45E-12	mg/kg-day	5.00E-04	mg/kg-day	8.90E-09		
				<b>PCBs</b> Total PCBs	9.40E-03	ug/L	3.04E-12	mg/kg-day	3.00E-01	kg-day/mg		9.11E-13	3.22E-11	mg/kg-day	2.00E-05	mg/kg-day	1.61E-06		
				<b>Exp. Route Total</b>									8.44E-10				4.64E-05		
				Dermal	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	3.78E-07	ug/L	3.14E-13	mg/kg-day	1.30E+05		kg-day/mg	1	4.08E-08	3.33E-12	mg/kg-day	7.00E-10	mg/kg-day	4.75E-03
					<b>Metals</b> Arsenic	7.40E-01	ug/L	2.11E-10	mg/kg-day	1.50E+00		kg-day/mg		3.16E-10	2.23E-09	mg/kg-day	3.00E-04	mg/kg-day	7.45E-06
					Chromium	2.90E+00	ug/L	1.65E-09	mg/kg-day	2.00E+01		kg-day/mg		3.30E-08	1.75E-08	mg/kg-day	7.50E-05	mg/kg-day	2.34E-04
					Cobalt	9.80E-01	ug/L	1.12E-10	mg/kg-day	NA		kg-day/mg		NA	1.18E-09	mg/kg-day	3.00E-04	mg/kg-day	3.95E-06
			Manganese		1.40E+02	ug/L	3.99E-08	mg/kg-day	NA	kg-day/mg	NA	4.23E-07		mg/kg-day	9.60E-04	mg/kg-day	4.40E-04		
			<b>Pesticides</b> 4,4'-DDT		1.30E-03	ug/L	6.22E-10	mg/kg-day	3.40E-01	kg-day/mg	2.12E-10	6.60E-09		mg/kg-day	5.00E-04	mg/kg-day	1.32E-05		
			<b>PCBs</b> Total PCBs		9.40E-03	ug/L	5.36E-09	mg/kg-day	3.00E-01	kg-day/mg	1.61E-09	5.69E-08		mg/kg-day	2.00E-05	mg/kg-day	2.84E-03		
			<b>Exp. Route Total</b>									7.59E-08					8.30E-03		
			<b>Exposure Point Total</b>									7.68E-08					8.34E-03		
			<b>Exposure Medium Total</b>									7.68E-08					8.34E-03		
			<b>Surface Water Total</b>									7.68E-08					8.34E-03		
			<b>Total Receptor Risk/Hazard</b>									3.98E-07					3.07E-02		

**Notes:**

ADAF - Age-Dependent Adjustment Factor.  
CSF - Cancer Slope Factor.  
EPC - Exposure Point Concentration.  
NA - Not applicable.  
PCB - Polychlorinated Biphenyl.  
RfD - Oral Reference Dose.  
SVOC - Semivolatile Organic Compound.  
TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.

(1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.

**Table C-4.3**  
**Summary of Receptor Risks and Hazards for COPCs - Adult Worker**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Sediment	Sediment	Sediment	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	3.57E-06	1.13E-06	4.71E-06	Reproductive, Developmental	1.10E-01	3.49E-02	1.45E-01	
			<b>Metals</b>								
			Aluminum	NA	NA	NA	Neurological	1.55E-03	NA	1.55E-03	
			Arsenic	4.15E-07	2.20E-07	6.35E-07	Skin, Vascular	2.58E-03	1.37E-03	3.95E-03	
			Chromium	1.43E-06	NA	1.43E-06	None reported	2.66E-03	NA	2.66E-03	
			Cobalt	NA	NA	NA	Thyroid	1.02E-02	NA	1.02E-02	
			Manganese	NA	NA	NA	Neurological	1.83E-03	NA	1.83E-03	
			Nickel	NA	NA	NA	Decreased body and organ weights	6.76E-04	NA	6.76E-04	
			Thallium	NA	NA	NA	Hair	5.17E-03	NA	5.17E-03	
			Vanadium	NA	NA	NA	Hair	7.77E-03	NA	7.77E-03	
			<b>PCBs</b>								
			Total PCBs	9.39E-08	1.39E-07	2.33E-07	Eye, Nails, Immune	6.58E-03	9.74E-03	1.63E-02	
			<b>SVOCs</b>								
			Benzo(a)anthracene	2.52E-08	3.47E-08	5.99E-08	NA	NA	NA	NA	
			Benzo(a)pyrene	2.80E-07	3.86E-07	6.66E-07	NA	NA	NA	NA	
			Benzo(b)fluoranthene	4.25E-08	5.84E-08	1.01E-07	NA	NA	NA	NA	
			Benzo(k)fluoranthene	1.64E-09	2.25E-09	3.89E-09	NA	NA	NA	NA	
			Chrysene	3.92E-10	5.39E-10	9.30E-10	NA	NA	NA	NA	
			Dibenzo(a,h)anthracene	6.34E-08	8.72E-08	1.51E-07	NA	NA	NA	NA	
			Indeno(1,2,3-cd)pyrene	2.14E-08	2.94E-08	5.08E-08	NA	NA	NA	NA	
			Chemical Total	5.94E-06	2.09E-06	8.03E-06		1.49E-01	4.60E-02	1.95E-01	
					Exposure Point Total					8.03E-06	1.95E-01
					Exposure Medium Total					8.03E-06	1.95E-01
			Sediment Total							8.03E-06	1.95E-01

**Table C-4.3**  
**Summary of Receptor Risks and Hazards for COPCs - Adult Worker**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Worker  
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Surface Water	Surface Water	Surface Water	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	6.33E-10	7.07E-07	7.08E-07	Reproductive, Developmental	1.95E-05	2.18E-02	2.18E-02	
			<b>Metals</b>								
			Arsenic	1.02E-08	5.55E-09	1.58E-08	Skin, Vascular	6.37E-05	3.45E-05	9.82E-05	
			Chromium	1.26E-08	5.45E-07	5.58E-07	None reported	2.34E-05	1.02E-03	1.04E-03	
			Cobalt	NA	NA	NA	Thyroid	7.72E-05	1.67E-05	9.39E-05	
			Manganese	NA	NA	NA	Neurological	1.37E-04	1.86E-03	2.00E-03	
			<b>Pesticides</b>								
			4,4'-DDT	4.32E-12	2.79E-09	2.79E-09	Liver	7.12E-08	4.60E-05	4.60E-05	
			<b>PCBs</b>								
			Total PCBs	2.99E-11	2.30E-08	2.30E-08	Eye, Nails, Immune	1.05E-05	8.05E-03	8.06E-03	
			Chemical Total	2.35E-08	1.28E-06	1.31E-06		3.31E-04	3.28E-02	3.31E-02	
					Exposure Point Total						3.31E-02
		Exposure Medium Total						3.31E-02			
Surface Water Total					1.31E-06			3.31E-02			
Receptor Total					9.34E-06			2.28E-01			

**Notes**  
 NA - Not Applicable

Target Organ Hazard Index			
Organ	Sediment	Surface Water	Total
Decreased body and organ weights	6.76E-04	--	6.76E-04
Developmental	1.45E-01	2.18E-02	1.67E-01
Eye	1.63E-02	8.06E-03	2.44E-02
Hair	1.29E-02	--	1.29E-02
Immune	1.63E-02	8.06E-03	2.44E-02
Liver	--	4.60E-05	4.60E-05
Nails	1.63E-02	8.06E-03	2.44E-02
Neurological	3.38E-03	2.00E-03	5.38E-03
None Reported	2.66E-03	1.04E-03	3.70E-03
Reproductive	1.45E-01	2.18E-02	1.67E-01
Skin	3.95E-03	9.82E-05	4.05E-03
Thyroid	1.02E-02	9.39E-05	1.03E-02
Vascular	3.95E-03	9.82E-05	4.05E-03



**Table C-4.4**  
**Summary of Receptor Risks and Hazards for COPCs - Adult Worker**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Worker  
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Sediment	Sediment	Sediment	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	5.82E-08	3.70E-08	9.52E-08	Reproductive, Developmental	6.79E-03	4.31E-03	1.11E-02	
			<b>Metals</b>								
			Aluminum	NA	NA	NA	Neurological	3.33E-04	NA	3.33E-04	
			Arsenic	1.99E-08	2.11E-08	4.10E-08	Skin, Vascular	4.70E-04	4.97E-04	9.67E-04	
			Chromium	8.10E-08	NA	8.10E-08	None reported	5.73E-04	NA	5.73E-04	
			Cobalt	NA	NA	NA	Thyroid	2.26E-03	NA	2.26E-03	
			Manganese	NA	NA	NA	Neurological	4.00E-04	NA	4.00E-04	
			Nickel	NA	NA	NA	Decreased body and organ weights	1.22E-04	NA	1.22E-04	
			Thallium	NA	NA	NA	Hair	1.00E-03	NA	1.00E-03	
			Vanadium	NA	NA	NA	Hair	9.10E-04	NA	9.10E-04	
			<b>PCBs</b>								
			Total PCBs	2.25E-09	6.67E-09	8.92E-09	Eye, Nails, Immune	1.19E-03	3.54E-03	4.73E-03	
			<b>SVOCs</b>								
			Benzo(a)anthracene	1.46E-09	4.01E-09	5.47E-09	NA	NA	NA	NA	
			Benzo(a)pyrene	1.63E-08	4.49E-08	6.12E-08	NA	NA	NA	NA	
			Benzo(b)fluoranthene	2.46E-09	6.77E-09	9.23E-09	NA	NA	NA	NA	
			Benzo(k)fluoranthene	9.28E-11	2.55E-10	3.48E-10	NA	NA	NA	NA	
			Chrysene	2.29E-11	6.30E-11	8.59E-11	NA	NA	NA	NA	
			Dibenzo(a,h)anthracene	3.68E-09	1.01E-08	1.38E-08	NA	NA	NA	NA	
			Indeno(1,2,3-cd)pyrene	1.23E-09	3.39E-09	4.62E-09	NA	NA	NA	NA	
			Chemical Total	1.87E-07	1.34E-07	3.21E-07		1.41E-02	8.34E-03	2.24E-02	
					Exposure Point Total						2.24E-02
					Exposure Medium Total						2.24E-02
					Sediment Total			3.21E-07			2.24E-02

**Table C-4.4**  
**Summary of Receptor Risks and Hazards for COPCs - Adult Worker**  
**Central Tendency Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: Worker  
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk			Non-Carcinogenic Hazard Quotient				
				Ingestion	Dermal	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Dermal	Exposure Routes Total	
Surface Water	Surface Water	Surface Water	<b>Dioxin</b>								
			2,3,7,8-TCDD-TEQ	1.59E-11	4.08E-08	4.08E-08	Reproductive, Developmental	1.85E-06	4.75E-03	4.75E-03	
			<b>Metals</b>								
			Arsenic	3.58E-10	3.16E-10	6.74E-10	Skin, Vascular	8.45E-06	7.45E-06	1.59E-05	
			Chromium	4.68E-10	3.30E-08	3.35E-08	None reported	3.31E-06	2.34E-04	2.37E-04	
			Cobalt	NA	NA	NA	Thyroid	1.12E-05	3.95E-06	1.51E-05	
			Manganese	NA	NA	NA	Neurological	2.00E-05	4.40E-04	4.60E-04	
			<b>Pesticides</b>								
			4,4'-DDT	1.43E-13	2.12E-10	2.12E-10	Liver	8.90E-09	1.32E-05	1.32E-05	
			<b>PCBs</b>								
			Total PCBs	9.11E-13	1.61E-09	1.61E-09	Eye, Nails, Immune	1.61E-06	2.84E-03	2.85E-03	
			Chemical Total	8.44E-10	7.59E-08	7.68E-08		4.64E-05	8.30E-03	8.34E-03	
		Exposure Point Total						8.34E-03			
		Exposure Medium Total						8.34E-03			
Surface Water Total					7.68E-08			8.34E-03			
Receptor Total					3.98E-07			3.07E-02			

**Notes**  
 NA - Not Applicable

Target Organ Hazard Index			
Organ	Sediment	Surface Water	Total
Decreased body and organ weights	1.22E-04	--	1.22E-04
Developmental	1.11E-02	4.75E-03	1.59E-02
Eye	4.73E-03	2.85E-03	7.58E-03
Hair	1.91E-03	--	1.91E-03
Immune	4.73E-03	2.85E-03	7.58E-03
Liver	--	1.32E-05	1.32E-05
Nails	4.73E-03	2.85E-03	7.58E-03
Neurological	7.33E-04	4.60E-04	1.19E-03
None Reported	5.73E-04	2.37E-04	8.10E-04
Reproductive	1.11E-02	4.75E-03	1.59E-02
Skin	9.67E-04	1.59E-05	9.83E-04
Thyroid	2.26E-03	1.51E-05	2.28E-03
Vascular	9.67E-04	1.59E-05	9.83E-04

## **Risk Calculation Spreadsheets – High-End Consuming Angler Receptor and Alternate Diets**

**Table C-5.1**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult High-End Consuming Angler (Catfish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: High-End Consuming Angler Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations					
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient
							Value	Units	Value	Units			Value	Units	Value	Units	
Fish Tissue	Fish Fillet Tissue - Catfish <sup>(2)</sup>	Upper Anacostia Upper Anacostia Lower Anacostia Lower Anacostia Upstream Upstream <sup>(3)</sup>	Ingestion	<b>PCBs</b> Total PCBs PCB-TEQ Total PCBs PCB-TEQ Total PCBs PCB-TEQ	2.54E-01 5.14E-06 4.52E-01 1.84E-06 7.11E-01 NC	mg/kg mg/kg mg/kg mg/kg mg/kg NC	5.13E-05 1.04E-09 9.13E-05 3.71E-10 1.44E-04 NC	mg/kg-day mg/kg-day mg/kg-day mg/kg-day mg/kg-day NC	2.00E+00 1.30E+05 2.00E+00 1.30E+05 2.00E+00 NC	kg-day/mg kg-day/mg kg-day/mg kg-day/mg kg-day/mg NC		1.03E-04 1.35E-04 1.83E-04 4.83E-05 2.87E-04 NC	1.80E-04 3.63E-09 3.20E-04 1.30E-09 5.02E-04 NC	mg/kg-day mg/kg-day mg/kg-day mg/kg-day mg/kg-day NC	2.00E-05 7.00E-10 2.00E-05 7.00E-10 2.00E-05 NC	mg/kg-day mg/kg-day mg/kg-day mg/kg-day mg/kg-day NC	8.98E+00 5.19E+00 1.60E+01 1.86E+00 2.51E+01 NC
Total Receptor Risk/Hazard - Upper Anacostia (Total PCBs)											1.03E-04					8.98E+00	
Total Receptor Risk/Hazard - Upper Anacostia (PCB-TEQ)											1.35E-04					5.19E+00	
Total Receptor Risk/Hazard - Lower Anacostia (Total PCBs)											1.83E-04					1.60E+01	
Total Receptor Risk/Hazard - Lower Anacostia (PCB-TEQ)											4.83E-05					1.86E+00	
Total Receptor Risk/Hazard - Upstream (Total PCBs)											2.87E-04					2.51E+01	
Total Receptor Risk/Hazard - Upstream (PCB-TEQ)											NC					NC	

**Notes:**  
 ADAF - Age-Dependent Adjustment Factor.  
 CSF - Cancer Slope Factor.  
 EPC - Exposure Point Concentration.  
 NA - Not applicable.  
 PCB - Polychlorinated Biphenyl.  
 RfD - Oral Reference Dose.  
 SVOC - Semivolatile Organic Compound.  
 TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.  
 (1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.  
 (2) Assumes a diet of 100% catfish fillet.  
 (3) PCB-TEQ not calculated for Upstream Maryland due to incomplete dioxin-like congener data in this area.

**Table C-5.2**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult High-End Consuming Angler (Mixed Fish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: High-End Consuming Angler Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations						
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient	
							Value	Units	Value	Units			Value	Units	Value	Units		
Fish Tissue	Fish Fillet Tissue - Mixed Diet <sup>(2)</sup>	Upper Anacostia Upper Anacostia Lower Anacostia Lower Anacostia Upstream Upstream <sup>(3)</sup>	Ingestion	<b>PCBs</b>														
				Total PCBs	1.29E-01	mg/kg	2.61E-05	mg/kg-day	2.00E+00	kg-day/mg		5.22E-05	9.13E-05	mg/kg-day	2.00E-05	mg/kg-day	4.57E+00	
				PCB-TEQ	4.84E-06	mg/kg	9.77E-10	mg/kg-day	1.30E+05	kg-day/mg		1.27E-04	3.42E-09	mg/kg-day	7.00E-10	mg/kg-day	4.89E+00	
				Total PCBs	3.59E-01	mg/kg	7.25E-05	mg/kg-day	2.00E+00	kg-day/mg		1.45E-04	2.54E-04	mg/kg-day	2.00E-05	mg/kg-day	1.27E+01	
				PCB-TEQ	4.64E-06	mg/kg	9.37E-10	mg/kg-day	1.30E+05	kg-day/mg		1.22E-04	3.28E-09	mg/kg-day	7.00E-10	mg/kg-day	4.68E+00	
				Total PCBs	7.64E-01	mg/kg	1.54E-04	mg/kg-day	2.00E+00	kg-day/mg		3.08E-04	5.40E-04	mg/kg-day	2.00E-05	mg/kg-day	2.70E+01	
				PCB-TEQ	NC		NC		NC			NC	NC		NC		NC	
Total Receptor Risk/Hazard - Upper Anacostia (Total PCBs)															4.57E+00			
Total Receptor Risk/Hazard - Upper Anacostia (PCB-TEQ)															4.89E+00			
Total Receptor Risk/Hazard - Lower Anacostia (Total PCBs)															1.27E+01			
Total Receptor Risk/Hazard - Lower Anacostia (PCB-TEQ)															4.68E+00			
Total Receptor Risk/Hazard - Upstream (Total PCBs)															2.70E+01			
Total Receptor Risk/Hazard - Upstream (PCB-TEQ)															NC			

**Notes:**  
 ADAF - Age-Dependent Adjustment Factor.  
 CSF - Cancer Slope Factor.  
 EPC - Exposure Point Concentration.  
 NA - Not applicable.  
 PCB - Polychlorinated Biphenyl.  
 RfD - Oral Reference Dose.  
 SVOC - Semivolatile Organic Compound.  
 TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.

(1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.  
 (2) Assumes a mixed fish diet of equal amounts of each of the species with available fillet data (American eel, catfish, carp, largemouth bass, and sunfish).  
 (3) PCB-TEQ not calculated for Upstream Maryland due to incomplete dioxin-like congener data in this area.

**Table C-5.3**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Child High-End Consuming Angler (Catfish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: High-End Consuming Angler Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations						
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient	
							Value	Units	Value	Units			Value	Units	Value	Units		
Fish Tissue	Fish Fillet Tissue - Catfish <sup>(2)</sup>	Upper Anacostia Upper Anacostia Lower Anacostia Lower Anacostia Upstream Upstream <sup>(3)</sup>	Ingestion	<b>PCBs</b>														
				Total PCBs	2.54E-01	mg/kg	2.34E-05	mg/kg-day	2.00E+00	kg-day/mg		4.68E-05	2.73E-04	mg/kg-day	2.00E-05	mg/kg-day		1.36E+01
				PCB-TEQ	5.14E-06	mg/kg	4.73E-10	mg/kg-day	1.30E+05	kg-day/mg		6.15E-05	5.52E-09	mg/kg-day	7.00E-10	mg/kg-day		7.88E+00
				Total PCBs	4.52E-01	mg/kg	4.16E-05	mg/kg-day	2.00E+00	kg-day/mg		8.33E-05	4.86E-04	mg/kg-day	2.00E-05	mg/kg-day		2.43E+01
				PCB-TEQ	1.84E-06	mg/kg	1.69E-10	mg/kg-day	1.30E+05	kg-day/mg		2.20E-05	1.98E-09	mg/kg-day	7.00E-10	mg/kg-day		2.82E+00
				Total PCBs	7.11E-01	mg/kg	6.55E-05	mg/kg-day	2.00E+00	kg-day/mg		1.31E-04	7.64E-04	mg/kg-day	2.00E-05	mg/kg-day		3.82E+01
				PCB-TEQ	NC		NC		NC		NC		NC		NC		NC	
Total Receptor Risk/Hazard - Upper Anacostia (Total PCBs)											4.68E-05						1.36E+01	
Total Receptor Risk/Hazard - Upper Anacostia (PCB-TEQ)											6.15E-05						7.88E+00	
Total Receptor Risk/Hazard - Lower Anacostia (Total PCBs)											8.33E-05						2.43E+01	
Total Receptor Risk/Hazard - Lower Anacostia (PCB-TEQ)											2.20E-05						2.82E+00	
Total Receptor Risk/Hazard - Upstream (Total PCBs)											1.31E-04						3.82E+01	
Total Receptor Risk/Hazard - Upstream (PCB-TEQ)											NC						NC	

**Notes:**  
 ADAF - Age-Dependent Adjustment Factor.  
 CSF - Cancer Slope Factor.  
 EPC - Exposure Point Concentration.  
 NA - Not applicable.  
 PCB - Polychlorinated Biphenyl.  
 RfD - Oral Reference Dose.  
 (1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.  
 (2) Assumes a diet of 100% catfish.  
 (3) PCB-TEQ not calculated for Upstream Maryland due to incomplete dioxin-like congener data in this area.

**Table C-5.4**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Child High-End Consuming Angler (Mixed Fish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future  
 Receptor Population: High-End Consuming Angler  
 Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations						
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient	
							Value	Units	Value	Units			Value	Units	Value	Units		
Fish Tissue	Fish Fillet Tissue - Mixed Diet <sup>(2)</sup>	Upper Anacostia Upper Anacostia Lower Anacostia Lower Anacostia Upstream Upstream <sup>(3)</sup>	Ingestion	<b>PCBs</b>														
				Total PCBs	1.29E-01	mg/kg	1.19E-05	mg/kg-day	2.00E+00	kg-day/mg		2.38E-05	1.39E-04	mg/kg-day	2.00E-05	mg/kg-day	6.94E+00	
				PCB-TEQ	4.84E-06	mg/kg	4.46E-10	mg/kg-day	1.30E+05	kg-day/mg		5.80E-05	5.20E-09	mg/kg-day	7.00E-10	mg/kg-day	7.43E+00	
				Total PCBs	3.59E-01	mg/kg	3.31E-05	mg/kg-day	2.00E+00	kg-day/mg		6.61E-05	3.86E-04	mg/kg-day	2.00E-05	mg/kg-day	1.93E+01	
				PCB-TEQ	4.64E-06	mg/kg	4.27E-10	mg/kg-day	1.30E+05	kg-day/mg		5.55E-05	4.98E-09	mg/kg-day	7.00E-10	mg/kg-day	7.12E+00	
				Total PCBs	7.64E-01	mg/kg	7.03E-05	mg/kg-day	2.00E+00	kg-day/mg		1.41E-04	8.21E-04	mg/kg-day	2.00E-05	mg/kg-day	4.10E+01	
				PCB-TEQ	NC		NC		NC		NC		NC		NC		NC	
Total Receptor Risk/Hazard - Upper Anacostia (Total PCBs)											2.38E-05				6.94E+00			
Total Receptor Risk/Hazard - Upper Anacostia (PCB-TEQ)											5.80E-05				7.43E+00			
Total Receptor Risk/Hazard - Lower Anacostia (Total PCBs)											6.61E-05				1.93E+01			
Total Receptor Risk/Hazard - Lower Anacostia (PCB-TEQ)											5.55E-05				7.12E+00			
Total Receptor Risk/Hazard - Upstream (Total PCBs)											1.41E-04				4.10E+01			
Total Receptor Risk/Hazard - Upstream (PCB-TEQ)											NC				NC			

**Notes:**  
 ADAF - Age-Dependent Adjustment Factor.  
 CSF - Cancer Slope Factor.  
 EPC - Exposure Point Concentration.  
 NA - Not applicable.  
 PCB - Polychlorinated Biphenyl.  
 RfD - Oral Reference Dose.

(1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.  
 (2) Assumes a mixed fish diet of equal amounts of each of the species with available fillet data (American eel, catfish, carp, largemouth bass, and sunfish).  
 (3) PCB-TEQ not calculated for Upstream Maryland due to incomplete dioxin-like congener data in this area.

**Table C-5.5**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen High-End Consuming Angler (Catfish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: High-End Consuming Angler
Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations						
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient	
							Value	Units	Value	Units			Value	Units	Value	Units		
Fish Tissue	Fish Fillet Tissue - Catfish Diet <sup>(2)</sup>	Upper Anacostia Upper Anacostia Lower Anacostia Lower Anacostia Upstream Upstream <sup>(3)</sup>	Ingestion	<b>PCBs</b>														
				Total PCBs	2.54E-01	mg/kg	3.07E-05	mg/kg-day	2.00E+00	kg-day/mg		6.15E-05	1.79E-04	mg/kg-day	2.00E-05	mg/kg-day	8.96E+00	
				PCB-TEQ	5.14E-06	mg/kg	6.21E-10	mg/kg-day	1.30E+05	kg-day/mg		8.08E-05	3.62E-09	mg/kg-day	7.00E-10	mg/kg-day	5.18E+00	
				Total PCBs	4.52E-01	mg/kg	5.47E-05	mg/kg-day	2.00E+00	kg-day/mg		1.09E-04	3.19E-04	mg/kg-day	2.00E-05	mg/kg-day	1.60E+01	
				PCB-TEQ	1.84E-06	mg/kg	2.22E-10	mg/kg-day	1.30E+05	kg-day/mg		2.89E-05	1.30E-09	mg/kg-day	7.00E-10	mg/kg-day	1.85E+00	
				Total PCBs	7.11E-01	mg/kg	8.60E-05	mg/kg-day	2.00E+00	kg-day/mg		1.72E-04	5.02E-04	mg/kg-day	2.00E-05	mg/kg-day	2.51E+01	
				PCB-TEQ	NA		NC	NC	NC	NC		NC	NC	NC	NC	NC	NC	
Total Receptor Risk/Hazard - Upper Anacostia (Total PCBs)															8.96E+00			
Total Receptor Risk/Hazard - Upper Anacostia (PCB-TEQ)															5.18E+00			
Total Receptor Risk/Hazard - Lower Anacostia (Total PCBs)															1.60E+01			
Total Receptor Risk/Hazard - Lower Anacostia (PCB-TEQ)															1.85E+00			
Total Receptor Risk/Hazard - Upstream (Total PCBs)															2.51E+01			
Total Receptor Risk/Hazard - Upstream (PCB-TEQ)															NC			

**Notes:**  
ADAF - Age-Dependent Adjustment Factor.  
CSF - Cancer Slope Factor.  
EPC - Exposure Point Concentration.  
NA - Not applicable.  
PCB - Polychlorinated Biphenyl.  
RfD - Oral Reference Dose.  
SVOC - Semivolatile Organic Compound.  
TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.

(1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.  
(2) Assumes diet of 100% catfish.  
(3) PCB-TEQ not calculated for Upstream Maryland due to incomplete dioxin-like congener data in this area.



**Table C-5.6**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Teen High-End Consuming Angler (Mixed Fish Diet)**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: High-End Consuming Angler
Receptor Age: Teen

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations						
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient	
							Value	Units	Value	Units			Value	Units	Value	Units		
Fish Tissue	Fish Fillet Tissue - Mixed Diet <sup>(2)</sup>	Upper Anacostia Upper Anacostia Lower Anacostia Lower Anacostia Upstream Upstream <sup>(3)</sup>	Ingestion	<b>PCBs</b>														
				Total PCBs	1.29E-01	mg/kg	1.56E-05	mg/kg-day	2.00E+00	kg-day/mg		3.13E-05	9.12E-05	mg/kg-day	2.00E-05	mg/kg-day	4.56E+00	
				PCB-TEQ	4.84E-06	mg/kg	5.86E-10	mg/kg-day	1.30E+05	kg-day/mg		7.61E-05	3.42E-09	mg/kg-day	7.00E-10	mg/kg-day	4.88E+00	
				Total PCBs	3.59E-01	mg/kg	4.34E-05	mg/kg-day	2.00E+00	kg-day/mg		8.68E-05	2.53E-04	mg/kg-day	2.00E-05	mg/kg-day	1.27E+01	
				PCB-TEQ	4.64E-06	mg/kg	5.61E-10	mg/kg-day	1.30E+05	kg-day/mg		7.29E-05	3.27E-09	mg/kg-day	7.00E-10	mg/kg-day	4.68E+00	
				Total PCBs	7.64E-01	mg/kg	9.24E-05	mg/kg-day	2.00E+00	kg-day/mg		1.85E-04	5.39E-04	mg/kg-day	2.00E-05	mg/kg-day	2.69E+01	
				PCB-TEQ	NA		NC	NC	NC	NC		NC	NC	NC	NC	NC	NC	
Total Receptor Risk/Hazard - Upper Anacostia (Total PCBs)											3.13E-05			4.56E+00				
Total Receptor Risk/Hazard - Upper Anacostia (PCB-TEQ)											7.61E-05			4.88E+00				
Total Receptor Risk/Hazard - Lower Anacostia (Total PCBs)											8.68E-05			1.27E+01				
Total Receptor Risk/Hazard - Lower Anacostia (PCB-TEQ)											7.29E-05			4.68E+00				
Total Receptor Risk/Hazard - Upstream (Total PCBs)											1.85E-04			2.69E+01				
Total Receptor Risk/Hazard - Upstream (PCB-TEQ)											NC			NC				

**Notes:**  
ADAF - Age-Dependent Adjustment Factor.  
CSF - Cancer Slope Factor.  
EPC - Exposure Point Concentration.  
NA - Not applicable.  
PCB - Polychlorinated Biphenyl.  
RfD - Oral Reference Dose.  
SVOC - Semivolatile Organic Compound.  
TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.

(1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.  
(2) Assumes a mixed fish diet of equal amounts of each of the species with available fillet data (American eel, catfish, carp, largemouth bass, and sunfish).  
(3) PCB-TEQ not calculated for Upstream Maryland due to incomplete dioxin-like congener data in this area.

**Table C-5.7**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Angler (Alternate Diets) - Upper Anacostia**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Angler
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations										
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient					
							Value	Units	Value	Units			Value	Units	Value	Units						
Sediment	Surface Sediment	Nearshore Surface Sediment	Ingestion	<b>Dioxin</b>																		
				2,3,7,8-TCDD-TEQ	4.49E-04	mg/kg	5.71E-12	mg/kg-day	1.30E+05	kg-day/mg		7.43E-07	2.00E-11	mg/kg-day	7.00E-10	mg/kg-day	2.86E-02					
				<b>Metals</b>																		
				Aluminum	9.05E+03	mg/kg	1.15E-04	mg/kg-day	NA	kg-day/mg		NA	4.03E-04	mg/kg-day	1.00E+00	mg/kg-day	4.03E-04					
				Arsenic	7.54E+00	mg/kg	5.75E-08	mg/kg-day	1.50E+00	kg-day/mg		8.63E-08	2.01E-07	mg/kg-day	3.00E-04	mg/kg-day	6.71E-04					
				Chromium	4.67E+01	mg/kg	5.93E-07	mg/kg-day	5.00E-01	kg-day/mg	1	2.96E-07	2.08E-06	mg/kg-day	3.00E-03	mg/kg-day	6.92E-04					
				Cobalt	1.79E+01	mg/kg	2.28E-07	mg/kg-day	NA	kg-day/mg		NA	7.96E-07	mg/kg-day	3.00E-04	mg/kg-day	2.65E-03					
				Manganese	2.57E+02	mg/kg	3.27E-06	mg/kg-day	NA	kg-day/mg		NA	1.14E-05	mg/kg-day	2.40E-02	mg/kg-day	4.76E-04					
				Nickel	7.90E+01	mg/kg	1.00E-06	mg/kg-day	NA	kg-day/mg		NA	3.51E-06	mg/kg-day	2.00E-02	mg/kg-day	1.76E-04					
				Thallium	3.02E-01	mg/kg	3.84E-09	mg/kg-day	NA	kg-day/mg		NA	1.34E-08	mg/kg-day	1.00E-05	mg/kg-day	1.34E-03					
				Vanadium	2.29E+02	mg/kg	2.91E-06	mg/kg-day	NA	kg-day/mg		NA	1.02E-05	mg/kg-day	5.04E-03	mg/kg-day	2.02E-03					
				<b>PCBs</b>																		
				Total PCBs	7.68E-01	mg/kg	9.76E-09	mg/kg-day	2.00E+00	kg-day/mg		1.95E-08	3.42E-08	mg/kg-day	2.00E-05	mg/kg-day	1.71E-03					
				<b>SVOCs</b>																		
				Benzo(a)anthracene	5.65E-01	mg/kg	7.18E-09	mg/kg-day	7.30E-01	kg-day/mg	1	5.24E-09	2.51E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(a)pyrene	6.28E-01	mg/kg	7.98E-09	mg/kg-day	7.30E+00	kg-day/mg	1	5.83E-08	2.79E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(b)fluoranthene	9.51E-01	mg/kg	1.21E-08	mg/kg-day	7.30E-01	kg-day/mg	1	8.82E-09	4.23E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(k)fluoranthene	3.67E-01	mg/kg	4.66E-09	mg/kg-day	7.30E-02	kg-day/mg	1	3.41E-10	1.63E-08	mg/kg-day	NA	mg/kg-day	NA					
				Chrysene	8.77E-01	mg/kg	1.11E-08	mg/kg-day	7.30E-03	kg-day/mg	1	8.14E-11	3.90E-08	mg/kg-day	NA	mg/kg-day	NA					
				Dibenzo(a,h)anthracene	1.42E-01	mg/kg	1.80E-09	mg/kg-day	7.30E+00	kg-day/mg	1	1.32E-08	6.32E-09	mg/kg-day	NA	mg/kg-day	NA					
				Indeno(1,2,3-cd)pyrene	4.79E-01	mg/kg	6.09E-09	mg/kg-day	7.30E-01	kg-day/mg	1	4.44E-09	2.13E-08	mg/kg-day	NA	mg/kg-day	NA					
				<b>Exp. Route Total</b>																		
															1.24E-06					3.87E-02		

**Table C-5.7**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Angler (Alternate Diets) - Upper Anacostia**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Angler
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations										
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient					
							Value	Units	Value	Units			Value	Units	Value	Units						
Sediment	Surface Sediment	Nearshore Surface Sediment	Dermal	<b>Dioxin</b>																		
				2,3,7,8-TCDD-TEQ	4.49E-04	mg/kg	3.91E-12	mg/kg-day	1.30E+05	kg-day/mg		5.08E-07	1.37E-11	mg/kg-day	7.00E-10	mg/kg-day	1.95E-02					
				<b>Metals</b>																		
				Aluminum	9.05E+03	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E+00	mg/kg-day	NA					
				Arsenic	7.54E+00	mg/kg	6.56E-08	mg/kg-day	1.50E+00	kg-day/mg		9.84E-08	2.30E-07	mg/kg-day	3.00E-04	mg/kg-day	7.65E-04					
				Chromium	4.67E+01	mg/kg	NA	mg/kg-day	2.00E+01	kg-day/mg	1	NA	NA	mg/kg-day	7.50E-05	mg/kg-day	NA					
				Cobalt	1.79E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	3.00E-04	mg/kg-day	NA					
				Manganese	2.57E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	9.60E-04	mg/kg-day	NA					
				Nickel	7.90E+01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	8.00E-04	mg/kg-day	NA					
				Thallium	3.02E-01	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.00E-05	mg/kg-day	NA					
				Vanadium	2.29E+02	mg/kg	NA	mg/kg-day	NA	kg-day/mg		NA	NA	mg/kg-day	1.31E-04	mg/kg-day	NA					
				<b>PCBs</b>																		
				Total PCBs	7.68E-01	mg/kg	3.12E-08	mg/kg-day	2.00E+00	kg-day/mg		6.23E-08	1.09E-07	mg/kg-day	2.00E-05	mg/kg-day	5.45E-03					
				<b>SVOCs</b>																		
				Benzo(a)anthracene	5.65E-01	mg/kg	2.13E-08	mg/kg-day	7.30E-01	kg-day/mg	1	1.55E-08	7.45E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(a)pyrene	6.28E-01	mg/kg	2.37E-08	mg/kg-day	7.30E+00	kg-day/mg	1	1.73E-07	8.28E-08	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(b)fluoranthene	9.51E-01	mg/kg	3.58E-08	mg/kg-day	7.30E-01	kg-day/mg	1	2.62E-08	1.25E-07	mg/kg-day	NA	mg/kg-day	NA					
				Benzo(k)fluoranthene	3.67E-01	mg/kg	1.38E-08	mg/kg-day	7.30E-02	kg-day/mg	1	1.01E-09	4.84E-08	mg/kg-day	NA	mg/kg-day	NA					
				Chrysene	8.77E-01	mg/kg	3.30E-08	mg/kg-day	7.30E-03	kg-day/mg	1	2.41E-10	1.16E-07	mg/kg-day	NA	mg/kg-day	NA					
				Dibenzo(a,h)anthracene	1.42E-01	mg/kg	5.35E-09	mg/kg-day	7.30E+00	kg-day/mg	1	3.91E-08	1.87E-08	mg/kg-day	NA	mg/kg-day	NA					
				Indeno(1,2,3-cd)pyrene	4.79E-01	mg/kg	1.80E-08	mg/kg-day	7.30E-01	kg-day/mg	1	1.32E-08	6.32E-08	mg/kg-day	NA	mg/kg-day	NA					
							<b>Exp. Route Total</b>															
							<b>Exposure Point Total</b>															
			<b>Exposure Medium Total</b>																			
<b>Sediment Total</b>																						

**Table C-5.7**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Angler (Alternate Diets) - Upper Anacostia**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Angler
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations									
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient				
							Value	Units	Value	Units			Value	Units	Value	Units					
Surface Water	Surface Water	Surface Water	Ingestion	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	6.12E-07	ug/L	2.02E-15	mg/kg-day	1.30E+05	kg-day/mg		2.63E-10	7.08E-15	mg/kg-day	7.00E-10	mg/kg-day	1.01E-05				
				<b>Metals</b> Arsenic	8.58E-01	ug/L	2.84E-09	mg/kg-day	1.50E+00	kg-day/mg	1	4.25E-09	9.92E-09	mg/kg-day	3.00E-04	mg/kg-day	3.31E-05				
				Chromium	3.16E+00	ug/L	1.04E-08	mg/kg-day	5.00E-01	kg-day/mg		5.22E-09	3.65E-08	mg/kg-day	3.00E-03	mg/kg-day	1.22E-05				
				Cobalt	1.04E+00	ug/L	3.44E-09	mg/kg-day	NA	kg-day/mg		NA	1.20E-08	mg/kg-day	3.00E-04	mg/kg-day	4.01E-05				
				Manganese	1.48E+02	ug/L	4.88E-07	mg/kg-day	NA	kg-day/mg		NA	1.71E-06	mg/kg-day	2.40E-02	mg/kg-day	7.12E-05				
				<b>Pesticides</b> 4,4'-DDT	1.60E-03	ug/L	5.29E-12	mg/kg-day	3.40E-01	kg-day/mg		1.80E-12	1.85E-11	mg/kg-day	5.00E-04	mg/kg-day	3.70E-08				
				<b>PCBs</b> Total PCBs	9.40E-03	ug/L	3.11E-11	mg/kg-day	4.00E-01	kg-day/mg		1.24E-11	1.09E-10	mg/kg-day	2.00E-05	mg/kg-day	5.44E-06				
				<b>Exp. Route Total</b>								9.75E-09						1.72E-04			
				Dermal	<b>Dioxin</b> 2,3,7,8-TCDD-TEQ	6.12E-07	ug/L	1.72E-12	mg/kg-day	1.30E+05		kg-day/mg		2.24E-07	6.03E-12	mg/kg-day	7.00E-10	mg/kg-day	8.62E-03		
					<b>Metals</b> Arsenic	8.58E-01	ug/L	8.29E-10	mg/kg-day	1.50E+00		kg-day/mg	1	1.24E-09	2.90E-09	mg/kg-day	3.00E-04	mg/kg-day	9.67E-06		
					Chromium	3.16E+00	ug/L	6.11E-09	mg/kg-day	2.00E+01		kg-day/mg		1.22E-07	2.14E-08	mg/kg-day	7.50E-05	mg/kg-day	2.85E-04		
					Cobalt	1.04E+00	ug/L	4.02E-10	mg/kg-day	NA		kg-day/mg		NA	1.41E-09	mg/kg-day	3.00E-04	mg/kg-day	4.69E-06		
			Manganese		1.48E+02	ug/L	1.43E-07	mg/kg-day	NA	kg-day/mg		NA		4.99E-07	mg/kg-day	9.60E-04	mg/kg-day	5.20E-04			
			<b>Pesticides</b> 4,4'-DDT		1.60E-03	ug/L	2.60E-09	mg/kg-day	3.40E-01	kg-day/mg	8.84E-10	9.10E-09		mg/kg-day	5.00E-04	mg/kg-day	1.82E-05				
			<b>PCBs</b> Total PCBs		9.40E-03	ug/L	9.08E-09	mg/kg-day	4.00E-01	kg-day/mg	3.63E-09	3.18E-08		mg/kg-day	2.00E-05	mg/kg-day	1.59E-03				
			<b>Exp. Route Total</b>								3.52E-07							1.10E-02			
			<b>Exposure Point Total</b>								3.62E-07								1.12E-02		
			<b>Exposure Medium Total</b>								3.62E-07								1.12E-02		
			<b>Surface Water Total</b>							3.62E-07								1.12E-02			
			Fish Tissue	Fish Fillet Tissue <sup>(2)</sup>	Upper Anacostia	Ingestion	<b>PCBs</b> Total PCBs	1.01E-01	mg/kg	3.14E-06	mg/kg-day	2.00E+00	kg-day/mg		6.28E-06	1.10E-05	mg/kg-day	2.00E-05	mg/kg-day	5.49E-01	
							PCB-TEQ	1.15E-05	mg/kg	3.56E-10	mg/kg-day	1.30E+05	kg-day/mg	4.63E-05	1.25E-09	mg/kg-day	7.00E-10	mg/kg-day	1.78E+00		
							Total PCBs	1.20E-01	mg/kg	3.73E-06	mg/kg-day	2.00E+00	kg-day/mg	7.46E-06	1.31E-05	mg/kg-day	2.00E-05	mg/kg-day	6.53E-01		
							PCB-TEQ	2.00E-06	mg/kg	6.20E-11	mg/kg-day	1.30E+05	kg-day/mg	8.06E-06	2.17E-10	mg/kg-day	7.00E-10	mg/kg-day	3.10E-01		
							Total PCBs	4.19E-02	mg/kg	1.30E-06	mg/kg-day	2.00E+00	kg-day/mg	2.60E-06	4.56E-06	mg/kg-day	2.00E-05	mg/kg-day	2.28E-01		
							PCB-TEQ	7.57E-07	mg/kg	2.35E-11	mg/kg-day	1.30E+05	kg-day/mg	3.06E-06	8.23E-11	mg/kg-day	7.00E-10	mg/kg-day	1.18E-01		
Total PCBs	1.87E-01	mg/kg					5.81E-06	mg/kg-day	2.00E+00	kg-day/mg	1.16E-05	2.03E-05	mg/kg-day	2.00E-05	mg/kg-day	1.02E+00					
PCB-TEQ	3.57E-06	mg/kg					1.11E-10	mg/kg-day	1.30E+05	kg-day/mg	1.44E-05	3.88E-10	mg/kg-day	7.00E-10	mg/kg-day	5.54E-01					
<b>Total Receptor Risk/Hazard - Upper Anacostia - 100% Carp (Total PCBs)<sup>3</sup></b>																				6E-01	
<b>Total Receptor Risk/Hazard - Upper Anacostia - 100% Carp (PCB-TEQ)<sup>3</sup></b>																					2E+00
<b>Total Receptor Risk/Hazard - Upper Anacostia - 100% LMB (Total PCBs)<sup>3</sup></b>																					7E-01
<b>Total Receptor Risk/Hazard - Upper Anacostia - 100% LMB (PCB-TEQ)<sup>3</sup></b>																					4E-01
<b>Total Receptor Risk/Hazard - Upper Anacostia - 100% Sunfish (Total PCBs)<sup>3</sup></b>																					3E-01
<b>Total Receptor Risk/Hazard - Upper Anacostia - 100% Sunfish (PCB-TEQ)<sup>3</sup></b>																	1E+00				
<b>Total Receptor Risk/Hazard - Upper Anacostia - 50% Catfish, 50% LMB (Total PCBs)<sup>3</sup></b>																	1E+00				
<b>Total Receptor Risk/Hazard - Upper Anacostia - 50% Catfish, 50% LMB (PCB-TEQ)<sup>3</sup></b>																	6E-01				

**Table C-5.7**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Adult Angler (Alternate Diets) - Upper Anacostia**  
**Reasonable Maximum Exposure**  
**Benning Road Facility RI/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future
Receptor Population: Angler
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Noncancer Hazard Calculations					
					EPC		Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient
					Value	Units	Value	Units	Value	Units			Value	Units	Value	Units	

**Notes:**

ADAF - Age-Dependent Adjustment Factor.

CSF - Cancer Slope Factor.

EPC - Exposure Point Concentration.

NA - Not applicable.

NC - Not calculated.

PCB - Polychlorinated Biphenyl.

RfD - Oral Reference Dose.

SVOC - Semivolatile Organic Compound.

TCDD-TEQ - 2,3,7,8-TCDD Toxicity Equivalence.

(1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.

(2) Assumes one of four alternate diets: 100% carp, 100% largemouth bass, 1000% sunfish, or 50% catfish and 50% largemouth bass.

(3) Total Receptor Risk/Hazard based on all COPCs except PCB-TEQ.

(4) Total Receptor Risk/Hazard based on all COPCs except Total PCBs.

**Table C-5.8**  
**Calculation of Chemical Cancer Risks and Non-Cancer Hazards - Child Angler (Alternate Diets) - Upper Anacostia**  
**Reasonable Maximum Exposure**  
**Benning Road Facility R/FS Project**  
**3400 Benning Rd, N.E., Washington DC 20019**

Scenario Timeframe: Current/Future Receptor Population: Angler Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations						Noncancer Hazard Calculations					
					Value	Units	Intake/Exposure Concentration		CSF		ADAF <sup>(1)</sup>	Cancer Risk	Intake/Exposure Concentration		RfD		Hazard Quotient	
							Value	Units	Value	Units			Value	Units	Value	Units		
Fish Tissue	Fish Fillet Tissue <sup>(2)</sup>	Upper Anacostia	Ingestion	<b>PCBs</b>														
			100% Carp	Total PCBs	1.01E-01	mg/kg	1.55E-06	mg/kg-day	2.00E+00	kg-day/mg		3E-06	1.81E-05	mg/kg-day	2.00E-05	mg/kg-day	9E-01	
			100% Carp	PCB-TEQ	1.15E-05	mg/kg	1.76E-10	mg/kg-day	1.30E+05	kg-day/mg		2E-05	2.05E-09	mg/kg-day	7.00E-10	mg/kg-day	3E+00	
			100% LMB	Total PCBs	1.20E-01	mg/kg	1.84E-06	mg/kg-day	2.00E+00	kg-day/mg		4E-06	2.15E-05	mg/kg-day	2.00E-05	mg/kg-day	1E+00	
			100% LMB	PCB-TEQ	2.00E-06	mg/kg	3.06E-11	mg/kg-day	1.30E+05	kg-day/mg		4E-06	3.57E-10	mg/kg-day	7.00E-10	mg/kg-day	5E-01	
			100% Sunfish	Total PCBs	4.19E-02	mg/kg	6.43E-07	mg/kg-day	2.00E+00	kg-day/mg		1E-06	7.51E-06	mg/kg-day	2.00E-05	mg/kg-day	4E-01	
			100% Sunfish	PCB-TEQ	7.57E-07	mg/kg	1.16E-11	mg/kg-day	1.30E+05	kg-day/mg		2E-06	1.36E-10	mg/kg-day	7.00E-10	mg/kg-day	2E-01	
			50% Catfish, 50% LMB	Total PCBs	1.87E-01	mg/kg	2.87E-06	mg/kg-day	2.00E+00	kg-day/mg		6E-06	3.35E-05	mg/kg-day	2.00E-05	mg/kg-day	2E+00	
			50% Catfish, 50% LMB	PCB-TEQ	3.57E-06	mg/kg	5.47E-11	mg/kg-day	1.30E+05	kg-day/mg		7E-06	6.39E-10	mg/kg-day	7.00E-10	mg/kg-day	9E-01	

**Notes:**

ADAF - Age-Dependent Adjustment Factor.

CSF - Cancer Slope Factor.

EPC - Exposure Point Concentration.

NA - Not applicable.

PCB - Polychlorinated Biphenyl.

RfD - Oral Reference Dose.

(1) Age-Dependent Adjustment Factor (ADAF) is used for chemicals with a mutagenic mode of action for carcinogenesis. The cancer risk is adjusted by multiplying the calculated risk by the ADAF. See Text for explanation.

(2) Assumes one of four alternate diets: 100% carp, 100% largemouth bass, 100% sunfish, or 50% catfish and 50% largemouth bass.



## **Attachment D**

### **Cooking Loss Factors for PCBs**



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**Attachment D, Table D-1  
Summary of PCB Mass Loss Values from Cooking Loss Studies**

Study	Species	Percent Mass Loss						
		Deep Fry	Pan Fry	Bake/Roast	Broil/Grill	Boil/Poach	Microwave	Smoke
Bayen et al. 2005	Salmon		36% (sk-on) 44% (sk-off)	28% (sk-on) 36% (sk-off)		28% (sk-on) 38% (sk-off)	23% (sk-on) 30% (sk-off)	
Hori et al. 2005 (dioxin-like PCBs)	Mackerel				43%	28%		
Moya et al. 1998; Poston et al. 1995	Winter flounder	47%	-17%		-15%			
Puffer and Gossett 1983	White croaker		29% <sup>i</sup> 65% <sup>h</sup>					
Salama et al. 1998	Bluefish		27%	39%	37% (sk-on) 47% (sk-off)		60%	65%
Schechter et al. 1998 (dioxin-like PCBs)	Catfish				52%			
Skea et al. 1979	Smallmouth bass, Brown trout	74%		16%	0%			27%
Smith et al. 1973	Chinook, Coho salmon			24% <sup>a</sup> (Chin.) 29% (Coho)				
Trotter et al. 1989	Bluefish			24%				
Wang and Harrad 2000	Salmon (S), Trout (T)		31% (S, sk-on) 30% (S, sk-off) 25% (T, sk-on) 26% (T, sk-off)					
Zabik et al. 1979	Lake trout			34% 40% (sk-on) 50% (sk-off)	53%		26%	





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**Attachment D, Table D-1  
Summary of PCB Mass Loss Values from Cooking Loss Studies**

Study	Species	Percent Mass Loss						
		Deep Fry	Pan Fry	Bake/Roast	Broil/Grill	Boil/Poach	Microwave	Smoke
Zabik et al. 1995a	Walleye (W), White bass (B)	<u>W</u> 15% <sup>e</sup>	<u>B</u> 18% <sup>c</sup> 44% <sup>d</sup>	<u>W</u> 13% <sup>c</sup> 20% <sup>d</sup> 23% <sup>e</sup>	<u>W</u> 20% <sup>c</sup> 29% <sup>d</sup> 27% <sup>e</sup>			
Zabik et al. 1995b	Carp (C) Salmon (S)	<u>C</u> 16% (sk-on) <sup>c</sup> 32% (sk-off) <sup>c</sup> 67% (sk-on) <sup>d</sup> 32% (sk-off) <sup>d</sup>	<u>C</u> 22% (sk-on) <sup>c</sup> 19% (sk-off) <sup>c</sup> 42% (sk-on) <sup>d</sup> 37% (sk-off) <sup>d</sup>	<u>S</u> 49% (sk-on) <sup>d</sup> 45% (sk-off) <sup>d</sup> 25% (sk-on) <sup>e</sup> 29% (sk-off) <sup>e</sup>	<u>S</u> 40% (sk-on) <sup>d</sup> 62% (sk-off) <sup>d</sup> 61% (sk-on) <sup>db</sup> 52% (sk-off) <sup>db</sup> 44% (sk-on) <sup>e</sup> 33% (sk-off) <sup>e</sup> 37% (sk-on) <sup>eb</sup> 44% (sk-off) <sup>eb</sup>			
Zabik et al. 1996	Lake Trout (T) Siscowets (St)			<u>I</u> 18% <sup>d</sup> 10% <sup>e</sup> 11% <sup>g</sup> 18% <sup>f</sup>	<u>I</u> 15% <sup>d</sup> 7% <sup>e</sup> 12% <sup>g</sup> 32% <sup>f</sup>	<u>T/St</u> 10% <sup>e</sup> 19% <sup>f</sup>		<u>T/St</u> 41% <sup>e</sup> 37% <sup>f</sup>

**Notes:**

- a First value for frying in lard, second value for frying in corn oil
- b Charred and scored
- c Lake Erie
- d Lake Huron
- e Lake Michigan
- f Lake Superior
- g Lake Ontario
- h Santa Monica
- i Orange County



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## Attachment D, Table D-1 Summary of PCB Mass Loss Values from Cooking Loss Studies

### Sources:

- Bayen, Stéphane, Barlow, Philip, Lee, Hian Kee and Obbard, Jeffrey Philip. 2005. "Effect of Cooking on the Loss of Persistent Organic Pollutants from Salmon". *Journal of Toxicology and Environmental Health, Part A*, 68:253-265.
- Hori, Tsuguhide, Nakagawa, Reiko, Tobiishi, Kazuhiro, Iida, Takao, Tsutsumi, Tomoaki, Sasaki, Kumiko, and Toyoda, Masatake. 2005. "Effects of Cooking on Concentrations of Polychlorinated Dibenzo-P-Dioxins and Related Compounds in Fish and Meat". *Journal of Agricultural and Food Chemistry* 53:8820-8828.
- Moya, J., Garrahan, K.G., Poston, T.M., Durell, G.S. 1998. "Effects of Cooking on Levels of PCBs in the Fillets of Winter Flounder". *Bull. Environ. Contam. Toxicol.* 60:845-851.
- Poston, T.M., G.S. Durell, G. Koczwara, and A.M. Spellacy. 1995. "Effect of Cooking on Levels of PCBs in the Fillets of Winter Flounder (Pseudopleuronectes americanus). Prepared for the U.S. Environmental Protection Agency by Pacific Northwest Laboratory, Richland, Washington. PNL-8077, UC-602. August.
- Puffer, Harold W. and Gossett, Richard W. 1983. "PCB, DDT and Benzo(a)pyrene in Raw and Pan-fried White Croaker (*Genyonemus lineatus*)". *Bull. Environm. Contam. Toxicol.* 30:65-73.
- Salama, A.A., Mohamed, M.A.M, Duval, B., Potter, T.L. and Levin, R.E. 1998. "Polychlorinated Biphenyl Concentration in Raw and Cooked North Atlantic Bluefish (*Pomatomus saltatrix*) Fillets". *Journal of Agricultural and Food Chemistry* 46:1359-1362.
- Schechter, Arnold, Dellarco, Michael, Papke, Olaf, Olson, James. 1998. "A Comparison of Dioxins, Dibenzofurans and Coplanar PCBs in Uncooked and Broiled Ground Beef, Catfish and Bacon". *Chemosphere* 37:1723-1730.
- Skea, J.C., Simonin, H.A., Harris, E.J., Jackling, S., Spagnoli, J.J., Symula, J. and Colquhoun, J.R. 1979. "Reducing Levels of Mirex, Aroclor 1254 and DDE by Trimming and Cooking Lake Ontario Brown Trout (*Salmo Trutta Linnaeus*) and Smallmouth Bass (*Micropterus Dolomieu*)". *J. Great Lakes Res., Internat. Assoc. Great Lakes Res.*5(2):153-159.
- Smith, W.E., K. Funk, and M.E. Zabik. 1973. "Effects of Cooking on Concentrations of PCB and DDT Compounds in Chinook (*Oncorhynchus tshawytscha*) and Coho (*O. kisutch*) Salmon from Lake Michigan. *J. Fish. Res. Board Can.* 30(5):702-706.
- Trotter, William J., Corneliusson, Paul E., Laski, Ronald R. and Vannelli, Joseph J. 1989 "Pesticide and Industrial Chemical Residues – Levels of Polychlorinated Biphenyls and Pesticides in Bluefish Before and After Cooking". *J. Assoc. Off. Anal. Chem* 72:501-503.



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**Attachment D, Table D-1  
Summary of PCB Mass Loss Values from Cooking Loss Studies**

Wang, Y. and S. Harrad. 2000. "Cooking-induced Reductions in Concentrations of Polychlorinated Biphenyls (PCBs) in Fish: □PCB Versus □TE." In: *Organohalogen Compounds*, 48:44-45.

Zabik, M.E., P. Hoojjat, and C.M. Weaver. 1979. "Polychlorinated biphenyls, dieldrin and DDT in Lake Trout Cooked by Broiling, Roasting or Microwave." *Bull. Environm. Contam. Toxicol.* 21:136-143.

Zabik, Mary E., Zabik, Matthew J., Booren, Al, Daubenmire S., Pascall, M.A., Welch, R. and Humphrey, H. 1995a. "Pesticides and Total Polychlorinated Biphenyls Residue in Raw and Cooked Walleye and White Bass Harvested from the Great Lakes". *Bull. Environm. Contam. Toxicol.* 54:396-402.

Zabik, Mary E., Zabik, Matthew J., Booren, Al M., Nettles, Miriam, Song, Jeong-Hee, Welch, Robert and Humphrey, Harold. 1995b. "Pesticides and Total Polychlorinated Biphenyls in Chinook Salmon and Carp Harvested from the Great Lakes: Effects of Skin-on and Skin-off Processing and Selected Cooking Methods". *Journal of Agricultural and Food Chemistry* 43:993-1001.

Zabik, Mary E., Booren, Al, Zabik, Matthew J. Welch, Robert and Humphrey, Harold. 1996. "Pesticide Residues, PCBs and PAHs in Baked, Charbroiled, Salt Boiled and Smoked Great Lakes Lake Trout". *Food Chemistry* 55:231-239.

**Attachment D, Table D-2  
Summary Statistics for Mass Loss Values for PCBs in Fish Tissue**

Deep Fry	Pan Fry	Bake/Roast	Broil/Grill	Boil/Poach	Microwave	Smoke
0.15	0.65	0.24	0.37	0.10	0.60	0.65
0.16	0.29	0.34	0.47	0.19	0.26	0.41
0.32	0.27	0.40	0.53	0.28	0.23	0.37
0.67	0.18	0.50	0.20	0.38	0.30	0.27
0.32	0.44	0.39	0.29	<b>0.28</b>		
0.74	0.22	0.23	0.27			
0.47	0.19	0.20	0.40			
	0.42	0.13	0.62			
	0.37	0.49	0.44			
	0.36	0.45	0.33			
	0.44	0.25	0.15			
	0.31	0.29	0.07			
	0.30	0.18	0.12			
	0.25	0.10	0.32			
	0.26	0.11	0.61			
	-0.17	0.18	0.52			
		0.28	0.37			
		0.36	0.44			
		0.16	0.00			
		0.20	-0.15			
		0.16	<b>0.43</b>			
			<b>0.57</b>			
	<b>Total PCBs</b>			<b>Dioxin-Like PCBs</b>		
<b>Count</b>	79			3		
<b>Median <sup>(a)</sup></b>	<b>0.30</b>			0.43		
<b>Mean</b>	0.32			0.42		
<b>Minimum</b>	-0.17			0.28		
<b>10th Percentile <sup>(b)</sup></b>	<b>0.13</b>			0.31		
<b>25th Percentile</b>	0.20			0.36		
<b>50th Percentile</b>	0.30			0.43		
<b>75th Percentile</b>	0.42			0.50		
<b>90th Percentile</b>	0.53			0.54		
<b>Maximum</b>	0.74			0.57		

Notes:

Values shown in **red** are for PCB dioxin-like congeners only. Due to the limited data for dioxin-like PCBs, the cooking loss values based on the full PCB data set were used for dioxin-like PCBs, as well as total PCBs.

(a) For CTE scenario, median cooking loss factor used.

(b) For RME scenario, 10th percentile cooking loss factor used.



## **Attachment E**

### **Calculation of Groundwater-to-Surface Water Dilution and Attenuation Factor**

**Groundwater discharge from MW-1 upper aquifer to the Anacostia (Q) = KIA**

Calculation of A (lxh):

Elevation of top of silt-clay layer

-21.36 ft MLLW

Elevation of water table (low tide)

3.24 ft MLLW

Saturated thickness (h) of unconfined aquifer

24.6 ft

Width of boundary segment through which GW flows (l)

235 ft

(distance from property boundary to halfway between MW-1 and MW-2, from Google Earth)

**A= 5781 square ft**

Calculation of K:

Average of K from slug tests:

MW-1A

0.00002596 ft/sec

0.00002817 ft/sec

0.00002737 ft/sec

0.0000275 ft/sec

0.00002781 ft/sec

**K= 2.7362E-05 ft/sec**

Calculation of I (dh/dL):

dh/dl = slope of the plane formed by gw level at MW-1, MW-2, and MW-5

	x (easting)	y (northing)	z (water level, ft MLLW)
MW-1A	1323686.71	448230.77	3.24
MW-2A	1323684.71	448456.98	4
MW-5A	1324032.04	448172.22	6.6

**I= 0.011 ft/ft**

(calculated graphically by 3-point problem method)

**Q= 0.00173998 cu.ft./sec**

7Q10 Anacostia streamflow 13.9 cu.ft./sec

7Q10 estimated by USGS Maryland StreamStats application  
(<http://water.usgs.gov/osw/streamstats/maryland.html>)

**DAF= 0.00012518**

**Groundwater discharge from MW-1 lower aquifer to the Anacostia (Q) = KIA**

Calculation of A (Ixh):

Thickness of lower aquifer (h)

Top of LWZ (ft bgs)	Bottom of LWZ (ft bgs)	Thickness
39	52	13

Width of boundary segment through which GW flows (I)

235 ft (distance from property boundary to halfway between MW-1 and MW-2, from Google Earth)

**A= 3055 square ft**

Calculation of K:

Average of K from slug tests:

- MW-1B
- 0.00005158 ft/sec
- 0.00005409 ft/sec
- 0.00005568 ft/sec
- 0.00005965 ft/sec
- 0.00007115 ft/sec
- 0.00005471 ft/sec

**K= 0.00005781 ft/sec**

Calculation of I (dh/dL):

dh/dl = slope of the plane formed by gw level at MW-1, MW-2, and MW-5

	x (easting)	y (northing)	z (water level, ft MLLW)
MW-1B	1323686.71	448230.768	3.27
MW-2B	1323684.71	448456.975	3.54
MW-5B	1324032.04	448172.221	4.43

**I= 0.004 ft/ft** (calculated graphically by 3-point problem method)

**Q= 0.00070644 cu.ft./sec**

7Q10 Anacostia streamflow 13.9 cu.ft./sec

7Q10 estimated by USGS Maryland StreamStats application (<http://water.usgs.gov/osw/streamstats/maryland.html>)

**DAF= 5.0823E-05**

**Groundwater discharge from MW-2 upper aquifer to the Anacostia (Q) = KIA**

Calculation of A (lxh):

Elevation of top of silt-clay layer

-14.72 ft MLLW

Elevation of water table (low tide)

4 ft MLLW

Saturated thickness (h) of unconfined aquifer

18.72 ft

Width of boundary segment through which GW flows (l)

290 ft

(distance from midpoint of MW-1 and MW-2 to midpoint of MW-2 and MW-3, from Google Earth)

**A= 5428.8 square ft**

Calculation of K:

Average of K from slug tests at 3 wells in the western portion of the site:

	MW-1A	MW-3A	MW-6A
	0.00002596	8.022E-05	0.0000173 ft/sec
	0.00002817	0.0000565	2.399E-05 ft/sec
	0.00002737	5.023E-05	2.221E-05 ft/sec
	0.0000275	5.748E-05	2.251E-05 ft/sec
	0.00002781	4.915E-05	2.131E-05 ft/sec
		5.104E-05	1.976E-05 ft/sec
average	2.7362E-05	5.744E-05	2.118E-05 ft/sec

**K= 3.2168E-05 ft/sec**

Calculation of I (dh/dL):

dh/dl = slope of the plane formed by gw level at MW-2, MW-3, and MW-6

	x (easting)	y (northing)	z (water level, ft MLLW)
MW-2A	1323684.71	448456.98	4
MW-3A	1323686.31	448809.39	5.4
MW-6A	1324211.25	448553.86	5.8

**I= 0.005 ft/ft**

(calculated graphically by 3-point problem method)

**Q= 0.00087316 cu.ft./sec**

7Q10 Anacostia streamflow

13.9 cu.ft./sec

7Q10 estimated by USGS Maryland StreamStats application

(<http://water.usgs.gov/osw/streamstats/maryland.html>)

**DAF= 6.2817E-05**



**Groundwater discharge from MW-2 lower aquifer to the Anacostia (Q) = KIA**

Calculation of A (Ixh):

Thickness of lower aquifer (h)

Top of LWZ (ft bgs)	Bottom of LWZ (ft bgs)	Thickness
35	53	18

Width of boundary segment through which GW flows (I)

290 ft (distance from midpoint of MW-1 and MW-2 to midpoint of MW-2 and MW-3, from Google)

**A= 5220 square ft**

Calculation of K:

Average of K from slug tests at 3 wells in the western portion of the site:

	MW-1B	MW-3B	MW-6B
	0.00005158	0.00008006	0.0000268 ft/sec
	0.00005409	0.00007025	0.00001901 ft/sec
	0.00005568	0.00007011	0.00002869 ft/sec
	0.00005965	0.00005106	0.00002498 ft/sec
	0.00007115	0.00009747	0.00002324 ft/sec
	0.00005471	0.0000648	0.00001652 ft/sec
average	0.00005781	7.2292E-05	2.3207E-05 ft/sec

**K= 4.5945E-05 ft/sec**

Calculation of I (dh/dL):

dh/dl = slope of the plane formed by gw level at MW-1, MW-2, and MW-5

	x (easting)	y (northing)	z (water level, ft MLLW)
MW-2B	1323684.71	448456.975	3.54
MW-3B	1323686.31	448809.394	4.5
MW-6B	1324211.25	448553.855	6.0

**I= 0.005 ft/ft**

(calculated graphically by 3-point problem method)

**Q= 0.00150884 cu.ft./sec**

7Q10 Anacostia streamflow 13.9 cu.ft./sec

7Q10 estimated by USGS Maryland StreamStats application  
(<http://water.usgs.gov/osw/streamstats/maryland.html>)

**DAF= 0.00010855**

**Groundwater discharge from MW-3 upper aquifer to the Anacostia (Q) = KIA**

Calculation of A (l x h):

Elevation of top of silt-clay layer  
-8.42 ft MLLW

Elevation of water table (low tide)  
5.4 ft MLLW

Saturated thickness (h) of unconfined aquifer  
13.82 ft

Width of boundary segment through which GW flows (l)  
330 ft (distance from midpoint of MW-2 and MW-3 to midpoint of MW-3 and MW-4, from Google)

A= 4560.6 square ft

Calculation of K:

Average of K from slug tests:

- MW-3A
- 8.022E-05 ft/sec
- 0.0000565 ft/sec
- 5.023E-05 ft/sec
- 5.748E-05 ft/sec
- 4.915E-05 ft/sec
- 5.104E-05 ft/sec

K= 5.872E-05 ft/sec

Calculation of I (dh/dL):

dh/dl = slope of the plane formed by gw level at MW-3, MW-4, and MW-8

	x (easting)	y (northing)	z (water level, ft MLLW)
MW-3A	1323686.3	448809.39	5.4
MW-4A	1323752.9	449113.68	5.55
MW-8A	1324070.2	449146.9	5.7

I= 0.0006 ft/ft

(calculated graphically by 3-point problem method)

Q= 0.000160668 cu.ft./sec

7Q10 Anacostia streamflow 13.9 cu.ft./sec

7Q10 estimated by USGS Maryland StreamStats application  
(<http://water.usgs.gov/osw/streamstats/maryland.html>)

DAF= 1.15589E-05

**Groundwater discharge from MW-3 lower aquifer to the Anacostia (Q) = KIA**

Calculation of A (lxh):

Thickness of lower aquifer (h)

Top of LWZ (ft bgs)	Bottom of LWZ (ft bgs)	Thickness
40	50	10

Width of boundary segment through which GW flows (l)

330 ft (distance from property boundary to halfway between MW-1 and MW-2, from Google Earth)

A= 3300 square ft

Calculation of K:

Average of K from slug tests:

MW-3B
0.00008006 ft/sec
0.00007025 ft/sec
0.00007011 ft/sec
0.00005106 ft/sec
0.00009747 ft/sec
0.0000648 ft/sec

K= 7.2292E-05 ft/sec

Calculation of I (dh/dL):

dh/dl = slope of the plane formed by gw level at MW-3, MW-4, and MW-7

	x (easting)	y (northing)	z (water level, ft MLLW)
MW-3B	1323686.31	448809.394	4.5
MW-4B	1323752.88	449113.68	4.66
MW-7B	1324287.51	448860.381	7.2

I= 0.005 ft/ft (calculated graphically by 3-point problem method)

Q= 0.00119281 cu.ft./sec

7Q10 Anacostia streamflow 13.9 cu.ft./sec

7Q10 estimated by USGS Maryland StreamStats application (<http://water.usgs.gov/osw/streamstats/maryland.html>)

DAF= 8.5814E-05

**Groundwater discharge from MW-4 upper aquifer to the Anacostia (Q) = KIA**

Calculation of A (lxh):

Elevation of top of silt-clay layer  
-9.95 ft MLLW

Elevation of water table (low tide)  
5.55 ft MLLW

Saturated thickness (h) of unconfined aquifer  
15.5 ft

Width of boundary segment through which GW flows (l)  
250 ft (distance from midpoint of MW-3 and MW-4 to midpoint of MW-4 and MW-8, from Google Earth)

**A= 3875 square ft**

Calculation of K:

Average of K from slug tests at 3 wells in the western portion of the site:

	MW-1A	MW-3A	MW-6A
	2.596E-05	8.022E-05	0.0000173 ft/sec
	2.817E-05	0.0000565	2.399E-05 ft/sec
	2.737E-05	5.023E-05	2.221E-05 ft/sec
	0.0000275	5.748E-05	2.251E-05 ft/sec
	2.781E-05	4.915E-05	2.131E-05 ft/sec
		5.104E-05	1.976E-05 ft/sec
average	2.736E-05	5.744E-05	2.118E-05 ft/sec

**K= 3.217E-05 ft/sec**

Calculation of I (dh/dL):

dh/dl = slope of the plane formed by gw level at MW-4, MW-6, and MW-8

	x (easting)	y (northing)	z (water level, ft MLLW)
MW-4A	1323752.9	449113.68	5.55
MW-6A	1324211.3	448553.86	5.8
MW-8A	1324070.2	449146.9	5.7

**I= 0.0005 ft/ft** (calculated graphically by 3-point problem method)

**Q= 5.3014E-05 cu.ft./sec**

7Q10 Anacostia streamflow 13.9 cu.ft./sec

7Q10 estimated by USGS Maryland StreamStats application (<http://water.usgs.gov/osw/streamstats/maryland.html>)

**DAF= 3.8139E-06**

**Groundwater discharge from MW-4 lower aquifer to the Anacostia (Q) = KIA**

Calculation of A (lxh):

Thickness of lower aquifer (h)

Top of LWZ (ft bgs)	Bottom of LWZ (ft bgs)	Thickness
35	45	10

Width of boundary segment through which GW flows (l)

250 ft (distance from midpoint of MW-3 and MW-4 to midpoint of MW-4 and MW-8, from Google)

**A= 2500 square ft**

Calculation of K:

Average of K from slug tests at 3 wells in the western portion of the site:

	MW-1B	MW-3B	MW-6B
	0.00005158	0.00008006	0.0000268 ft/sec
	0.00005409	0.00007025	0.00001901 ft/sec
	0.00005568	0.00007011	0.00002869 ft/sec
	0.00005965	0.00005106	0.00002498 ft/sec
	0.00007115	0.00009747	0.00002324 ft/sec
	0.00005471	0.0000648	0.00001652 ft/sec
average	0.00005781	7.2292E-05	2.3207E-05 ft/sec

**K= 4.5945E-05 ft/sec**

Calculation of I (dh/dL):

dh/dl = slope of the plane formed by gw level at MW-4, MW-6, and MW-7

	x (easting)	y (northing)	z (water level, ft MLLW)
MW-4B	1323752.88	449113.68	4.66
MW-6B	1324211.25	448553.855	6
MW-7B	1324287.51	448860.381	7.2

**I= 0.004 ft/ft**

(calculated graphically by 3-point problem method)

**Q= 0.0005781 cu.ft./sec**

7Q10 Anacostia streamflow 13.9 cu.ft./sec

7Q10 estimated by USGS Maryland StreamStats application  
(<http://water.usgs.gov/osw/streamstats/maryland.html>)

**DAF= 4.15899E-05**

**Groundwater discharge from MW-8 upper aquifer to the Anacostia (Q) = KIA**

Calculation of A (lxh):

Elevation of top of silt-clay layer  
-6.4 ft MLLW

Elevation of water table (low tide)  
5.7 ft MLLW

Saturated thickness (h) of unconfined aquifer  
12.1 ft

Width of boundary segment through which GW flows (l)  
440 ft (distance from midpoint of MW-4 and MW-8 to midpoint of MW-8 and MW-11, from Google Earth)

**A= 5324 square ft**

Calculation of K:

Average of K from slug tests at 3 wells in the northwest portion of the site:

	MW-3A	MW-6A	MW-11A
	8.022E-05	0.0000173	1.376E-05 ft/sec
	0.0000565	2.399E-05	1.278E-05 ft/sec
	5.023E-05	2.221E-05	2.109E-05 ft/sec
	5.748E-05	2.251E-05	1.388E-05 ft/sec
	4.915E-05	2.131E-05	1.903E-05 ft/sec
	5.104E-05	1.976E-05	1.377E-05 ft/sec
average	5.872E-05	2.118E-05	1.572E-05 ft/sec

**K= 2.694E-05 ft/sec**

Calculation of I (dh/dL):

dh/dl = slope of the plane formed by gw level at MW-8, MW-7, and MW-11

	x (easting)	y (northing)	z (water level, ft MLLW)
MW-8A	1324070.2	449146.9	5.7
MW-7A	1324287.5	448860.38	7.3
MW-11A	1324624.3	449241.15	6.1

**I= 0.0047 ft/ft** (calculated graphically by 3-point problem method)

**Q= 0.00146924 cu.ft./sec**

7Q10 Anacostia streamflow 13.9 cu.ft./sec

7Q10 estimated by USGS Maryland StreamStats application (<http://water.usgs.gov/osw/streamstats/maryland.html>)

**DAF= 0.0001057**

**Groundwater discharge from MW-8 lower aquifer to the Anacostia (Q) = KIA**

Calculation of A (lxh):

Thickness of lower aquifer (h)

Top of LWZ (ft bgs)	Bottom of LWZ (ft bgs)	Thickness
50	60	10

Width of boundary segment through which GW flows (l)

440 ft (distance from midpoint of MW-4 and MW-8 to midpoint of MW-8 and MW-11, from Google Earth)

A= 4400 square ft

Calculation of K:

Average of K from slug tests at 3 wells in the northwest portion of the site:

	MW-3A	MW-6A	MW-11A
	0.00008022	0.0000173	0.00001376 ft/sec
	0.0000565	0.00002399	0.00001278 ft/sec
	0.00005023	0.00002221	0.00002109 ft/sec
	0.00005748	0.00002251	0.00001388 ft/sec
	0.00004915	0.00002131	0.00001903 ft/sec
	0.00005104	0.00001976	0.00001377 ft/sec
average	5.7437E-05	0.00002118	1.5718E-05 ft/sec

K= 2.6741E-05 ft/sec

Calculation of I (dh/dL):

dh/dl = slope of the plane formed by gw level at MW-8, MW-7, and MW-11

	x (easting)	y (northing)	z (water level, ft MLLW)
MW-8B	1324070.24	449146.902	4.2
MW-7B	1324287.51	448860.381	7.2
MW-11B	1324624.32	449241.152	4.6

I= 0.009 ft/ft (calculated graphically by 3-point problem method)

Q= 0.00227449 cu.ft./sec

7Q10 Anacostia streamflow 13.9 cu.ft./sec

7Q10 estimated by USGS Maryland StreamStats application  
(<http://water.usgs.gov/osw/streamstats/maryland.html>)

DAF= 0.00016363

**Groundwater discharge from MW-11 upper aquifer to the Anacostia (Q) = KIA**

Calculation of A (lxh):

Elevation of top of silt-clay layer  
-23.5 ft MLLW

Elevation of water table (low tide)  
6.1 ft MLLW

Saturated thickness (h) of unconfined aquifer  
29.6 ft

Width of boundary segment through which GW flows (l)  
500 ft (distance from midpoint of MW-8 and MW-1 to site boundary, from Google Earth)

**A= 14800 square ft**

Calculation of K:

Average of K from slug tests:

MW-11A  
1.376E-05 ft/sec  
1.278E-05 ft/sec  
2.109E-05 ft/sec  
1.388E-05 ft/sec  
1.903E-05 ft/sec  
1.377E-05 ft/sec

**K= 1.572E-05 ft/sec**

Calculation of I (dh/dL):

dh/dl = slope of the plane formed by gw level at MW-11, MW-7, and MW-10

	x (easting)	y (northing)	z (water level, ft MLLW)
MW-11A	1324624.3	449241.15	6.1
MW-7A	1324287.5	448860.38	7.3
MW-10A	1324574	448707.16	10.8

**I= 0.0120 ft/ft** (calculated graphically by 3-point problem method)

**Q= 0.00279158 cu.ft./sec**

7Q10 Anacostia streamflow 13.9 cu.ft./sec

7Q10 estimated by USGS Maryland StreamStats application  
(<http://water.usgs.gov/osw/streamstats/maryland.html>)

**DAF= 0.00020083**



**Groundwater discharge from MW-11 lower aquifer to the Anacostia (Q) = KIA**

Calculation of A (lxh):

Thickness of lower aquifer (h)

Top of LWZ (ft bgs)	Bottom of LWZ (ft bgs)	Thickness
50	61.8	11.8

Width of boundary segment through which GW flows (l)

500 ft (distance from property boundary to halfway between MW-1 and MW-2, from Google Earth)

**A= 5900 square ft**

Calculation of K:

Average of K from slug tests:

- MW-11B
- 3.333E-05 ft/sec
- 2.153E-05 ft/sec
- 2.161E-05 ft/sec
- 2.016E-05 ft/sec
- 0.0000233 ft/sec
- 2.235E-05 ft/sec

**K= 2.371E-05 ft/sec**

Calculation of I (dh/dL):

dh/dl = slope of the plane formed by gw level at MW-11, MW-7, and MW-10

	x (easting)	y (northing)	z (water level, ft MLLW)
MW-11B	1324624.3	449241.152	4.6
MW-7B	1324287.5	448860.381	7.2
MW-10B	1324574	448707.159	10.3

**I= 0.012 ft/ft** (calculated graphically by 3-point problem method)

**Q= 0.001678904 cu.ft./sec**

7Q10 Anacostia streamflow 13.9 cu.ft./sec

7Q10 estimated by USGS Maryland StreamStats application (<http://water.usgs.gov/osw/streamstats/maryland.html>)

**DAF= 0.000120784**



## **Attachment F**

### **Vapor Intrusion Screening Level Calculation Spreadsheet**

OSWER VAPOR INTRUSION ASSESSMENT  
Groundwater Concentration to Indoor Air Concentration (GWC-IAC) Calculator Version 3.4, June 2015 RSLs

Parameter	Symbol	Value	Instructions
Exposure Scenario	Scenario	Commercial	Select residential or commercial scenario from pull down list
Target Risk for Carcinogens	TCR	1.00E-06	Enter target risk for carcinogens (for comparison to the calculated VI carcinogenic risk in column F)
Target Hazard Quotient for Non-Carcinogens	THQ	1	Enter target hazard quotient for non-carcinogens (for comparison to the calculated VI hazard in column G)
Average Groundwater Temperature (°C)	Tgw	20	Enter average of the stabilized groundwater temperature to correct Henry's Law Constant for groundwater target concentrations

CAS	Chemical Name	Site Groundwater Concentration	Calculated Indoor Air Concentration	VI Carcinogenic Risk	VI Hazard
		Cgw (ug/L)	Cia (ug/m <sup>3</sup> )	CR	HQ
1634-04-4	Methyl tert-Butyl Ether (MTBE)	7.4E+02	1.44E+01	3.1E-07	1.1E-03
127-18-4	Tetrachloroethylene	1.6E+02	8.82E+01	1.9E-06	5.0E-01
79-01-6	Trichloroethylene	2.5E+01	7.89E+00	2.6E-06	9.0E-01

Inhalation Unit Risk	IUR Source*	Reference Concentration	RFC Source*	Mutagenic Indicator
IUR (ug/m <sup>3</sup> ) <sup>-1</sup>		RIC (mg/m <sup>3</sup> )		i
2.60E-07	CA	3.00E+00	I	
2.60E-07	I	4.00E-02	I	
see note	I	2.00E-03	I	TCE

max detect in Benning Rd GW

Notes:

(1)	Inhalation Pathway Exposure Parameters (RME):	Units	Residential		Commercial		Selected (based on scenario)	
			Symbol	Value	Symbol	Value	Symbol	Value
	Exposure Scenario		ATc_R_GW	70	ATc_C_GW	70	ATc_GW	70
	Averaging time for carcinogens	(yrs)	ATnc_R_GW	26	ATnc_C_GW	25	ATnc_GW	25
	Averaging time for non-carcinogens	(yrs)	ED_R_GW	26	ED_C_GW	25	ED_GW	25
	Exposure duration	(yrs)	EF_R_GW	350	EF_C_GW	250	EF_GW	250
	Exposure frequency	(days/yr)	ET_R_GW	24	ET_C_GW	8	ET_GW	8
	Exposure time	(hr/day)						

(2)	Generic Attenuation Factors:	Source Medium of Vapors	Units	Residential		Commercial		Selected (based on scenario)	
				Symbol	Value	Symbol	Value	Symbol	Value
	Groundwater	(-)	AFgw_R_GW	0.001	AFgw_C_GW	0.001	AFgw_GW	0.001	
	Sub-Slab and Exterior Soil Gas	(-)	AFss_R_GW	0.03	AFss_C_GW	0.03	AFss_GW	0.03	

(3)	Formulas	Residential		Commercial		Selected (based on scenario)	
		Symbol	Value	Symbol	Value	Symbol	Value
	Cia_target = MIN( Cia_c; Cia_nc)	mIURTCE_R_GW	1.00E-06	mIURTCE_C_GW	0.00E+00	mIURTCE_GW	0.00E+00
	Cia_c (ug/m3) = TCR x ATc x (365 days/yr) x (24 hrs/day) / (ED x EF x ET x IUR)	IURTCE_R_GW	3.10E-06	IURTCE_C_GW	4.10E-06	IURTCE_GW	4.10E-06
	Cia_nc (ug/m3) = THQ x ATnc x (365 days/yr) x (24 hrs/day) x RIC x (1000 ug/mg) / (ED x EF x ET)						

(4)	Special Case Chemicals	Residential		Commercial		Selected (based on scenario)	
		Symbol	Value	Symbol	Value	Symbol	Value
	Trichloroethylene	mIURTCE_R_GW	1.00E-06	mIURTCE_C_GW	0.00E+00	mIURTCE_GW	0.00E+00
		IURTCE_R_GW	3.10E-06	IURTCE_C_GW	4.10E-06	IURTCE_GW	4.10E-06

Mutagenic Chemicals

The exposure durations and age-dependent adjustment factors for mutagenic-mode-of-action are listed in the table below:

Note: This section applies to trichloroethylene and other mutagenic chemicals, but not to vinyl chloride.	Age Cohort	Exposure Duration	Age-dependent adjustment factor
	0 - 2 years	2	10
	2 - 6 years	4	3
	6 - 16 years	10	3
	16 - 26 years	10	1

Mutagenic-mode-of-action (MMOA) adjustment factor 25 This factor is used in the equations for mutagenic chemicals.

Vinyl Chloride

See the Navigation Guide equation for Cia,c for vinyl chloride.

Notation:

I = IRIS: EPA Integrated Risk Information System (IRIS). Available online at: <http://www.epa.gov/iris/subst/index.html>  
P = PPRTV: EPA Provisional Peer Reviewed Toxicity Values (PPRTVs). Available online at: <http://hhpprtv.ornl.gov/pprtv.shtml>  
A = Agency for Toxic Substances and Disease Registry (ATSDR) Minimum Risk Levels (MRLs). Available online at: <http://www.atsdr.cdc.gov/mrls/index.html>  
CA = California Environmental Protection Agency/Office of Environmental Health Hazard Assessment assessments. Available online at: <http://www.oehha.ca.gov/risk/ChemicalDB/index.asp>  
H = HEAST: EPA Superfund Health Effects Assessment Summary Tables (HEAST) database. Available online at: <http://epa-heast.ornl.gov/heast.shtml>  
S = See RSL User Guide, Section 5  
X = PPRTV Appendix  
Mut = Chemical acts according to the mutagenic-mode-of-action, special exposure parameters apply (see footnote (4) above).  
VC = Special exposure equation for vinyl chloride applies (see Navigation Guide for equation).  
TCE = Special mutagenic and non-mutagenic IURs for trichloroethylene apply (see footnote (4) above).  
Yellow highlighting indicates site-specific parameters that may be edited by the user.  
Blue highlighting indicates exposure factors that are based on Risk Assessment Guidance for Superfund (RAGS) or EPA vapor intrusion guidance, which generally should not be changed.  
Pink highlighting indicates VI carcinogenic risk greater than the target risk for carcinogens (TCR) or VI Hazard greater than or equal to the target hazard quotient for non-carcinogens (THQ).