EXPANDED SITE INSPECTION REPORT

FOR

CAPITOL LAKES SITE REASSESSMENT
CAPITOL LAKE DRIVE
BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA

Prepared for

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EXECUTIVE SUMMARY

The U.S. Environmental Protection Agency (EPA) Region 6 tasked Weston Solutions, Inc. (WESTON®), the Superfund Technical Assessment and Response Team (START) contractor, to prepare this Expanded Site Inspection (ESI) Report as part of a Site Reassessment to provide EPA with the background information collected for the Site; to discuss the ESI sampling activities; and to present the analytical data obtained as part of the investigation performed at the Capitol Lakes Site (Site) in Baton Rouge, East Baton Rouge Parish, Louisiana.

The Site was identified as a potentially hazardous waste site and was entered into the Superfund Enterprise Management System (SEMS) under identification number (ID) LAD980869440. The Site is comprised of the Capitol Lakes System, which includes three lakes identified as East Lake, South Lake, and North Lake. The Site was first identified as being contaminated with polychlorinated biphenyls (PCBs) in 1983, resulting in the Louisiana Department of Health and Human Resources (LDHHR) (now the Louisiana Department of Health [LDH]) posting a fishing advisory on the Capitol Lakes. Other contaminants have been detected in the lakes, including pesticides and metals.

Louisiana Department of Environmental Quality (LDEQ) contractors conducted a Site Inspection (SI) in 1998 that included the collection of water, sediment, and fish tissue samples from the Site. Surface water samples were collected from each lake and analyzed for semivolatile organic compounds (SVOCs), pesticides, PCBs, and total metals. Analytical results indicated that the surface waters of the Capitol Lakes System did not have detectable concentrations of SVOCs, pesticides, or PCBs. Some metals were detected, with total metals concentrations higher in East Lake than North Lake and South Lake.

Sediment samples were collected from the three lakes and were analyzed for SVOCs, pesticides, PCBs, and metals. Elevated levels of PCBs were detected in North Lake and South Lake, but not in East Lake. North Lake also had the highest concentrations and a majority of the detected SVOCs. The SVOCs were generally found at the highest concentrations in the shallowest sediments and decreased in concentration with depth. Benzo(a)pyrene, a human carcinogenic SVOC, was detected as high as 14 parts per million (ppm) in the northern section of North Lake.

Pesticides were detected in all three lakes, with the highest levels found in East Lake. Elevated levels of metals were found in all three lakes, including antimony, arsenic, cadmium, lead, and silver. Elevated levels of mercury and selenium were found in North Lake and South Lake, but not in East Lake.

PCBs were detected in 80 percent (%) of the fish specimens sampled, with the highest concentrations of PCBs in the bottom-feeding species (catfish, buffalo, and carp). Approximately 70% of the fish tissue samples contained detectable levels of pesticides, including 4,4'-dichlorodiphenyldichloroethane (DDD), 4,4'-dichlorodiphenyldichloroethylene (DDE), and 4,4'-dichlorodiphenyltrichloroethane (DDT). Six fish tissue samples were submitted for mercury analysis. All six samples had mercury detected at less than 0.2 ppm.

The state of Louisiana chose not to pursue listing on the NPL after the 1998 SI. The Fish Advisory that was issued in 1983 remains in effect as of 2022.

In 2021, the state of Louisiana requested EPA to conduct a Reassessment to determine if the Site warranted inclusion on the NPL. The START contractor conducted an ESI sampling event that included the collection of sediment and fish tissue samples from the Capitol Lakes System as well as background sediment samples from University Lake. The samples were analyzed for SVOCs, PCBs, PCB congeners, pesticides, and metals. The ESI found that levels of PCBs, pesticides, and metals in sediment samples collected from the Site were significantly elevated compared to the University Lake background samples and constituted a source of contamination and an observed release. Additionally, levels of PCBs and metals detected in fish tissue samples collected from Capitol Lakes were above the health-based benchmark levels in the EPA Superfund Chemical Data Matrix (SCDM), July 2022.

This report was prepared as part of the requirements of the Technical Direction Document (TDD) No. 0001/21-409 and serves as documentation of work completed to date.

☐ The EPA Site Assessment Manager did not provide final approval of this report prior to the completion date of the work assignment. Therefore, Weston Solutions, Inc. has submitted this report absent the Site Assessment Manager's approval.

[X] The EPA Site Assessment Manager has provided final approval of this report. Therefore, Weston Solutions, Inc. has submitted this report with the Site Assessment Manager's approval.

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LIST OF ACRONYMS

%	percent
µg/kg	micrograms per kilogram
bswi	below sediment-water interface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CLP	Contract Laboratory Program
COC	contaminant of concern
DDD	dichlorodiphenyldichloroethane
DDE	dichlorodiphenyldichloroethylene
DDT	dichlorodiphenyltrichloroethane
EJ	environmental justice
EPA	United States Environmental Protection Agency
ESAT	Environmental Services Assistance Team
ESI	Expanded Site Inspection
FIT	Field Investigation Team
GPS	Global Positioning System
HASP	Health and Safety Plan
HRS	Hazard Ranking System
IASD	Inactive and Abandoned Sites Division
ID	identification
IES	Institute for Environmental Studies
LDEQ	Louisiana Department of Environmental Quality
LDH	Louisiana Department of Health
LDHH	Louisiana Department of Health & Hospitals
LDHHR	Louisiana Department of Health and Human Resources
LDNR	Louisiana Department of Natural Resources
LSI	Listing Site Investigation
LSU	Louisiana State University
MS/MSD	matrix spike/matric spike duplicate
NELAP	National Environmental Laboratory Accreditation Program
NPL	National Priority List
PAH	Polycyclic Aromatic Hydrocarbon
PCB	polychlorinated biphenyl
PDF	portable document file
ppm	parts per million
PRP	potential responsible party
RI	Remedial Investigation

QASP	Quality Assurance Sampling Plan
SARA	Superfund Amendments and Reauthorization Act of 1986
SCDM	Superfund Chemical Data Matrix
SEMS	Superfund Enterprise Management System
SI	site investigation
START	EPA Region 6 Superfund Technical Assessment and Response Team
SVOCs	Semivolatile Organic Compounds
TDD	Technical Direction Document
TDL	target distance limit
USFWS	United State Fish and Wildlife Service
Westinghouse	Westinghouse Electric Corporation
WESTON®	Weston Solutions, Inc.

1. INTRODUCTION

Under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA), the U.S. Environmental Protection Agency (EPA) tasked Weston Solutions, Inc. (WESTON®), the Region 6 Superfund Technical Assessment and Response Team (START) contractor, to perform a Site Reassessment and Expanded Site Inspection (ESI) of the Capitol Lakes site (Site) located in Baton Rouge, East Baton Rouge Parish, Louisiana (**Figure 1-1**). EPA Region 6 directed WESTON to complete this investigation under Contract Number EP-S5-17-02 and Technical Direction Document (TDD) No. 0001/21-409.

1.1 BACKGROUND

The Site was identified as a potentially hazardous waste site and was entered into the Superfund Enterprise Management System (SEMS) under identification (ID) number LAD980869440. In 1998, contractors for the Louisiana Department of Environmental Quality (LDEQ) conducted a Phase I Remedial Investigation (RI) for the Site. The RI included the collection of water, sediment, and fish tissue samples. These samples were analyzed for polychlorinated biphenyls (PCBs), semivolatile organic compounds (SVOCs), pesticides, and metals. Laboratory analysis found elevated levels of PCBs, SVOCs, pesticides, and metals in all media sampled (Ref. 4, pages 10-13). In 2021, LDEQ requested that EPA investigate whether the Site warranted inclusion on the National Priority List (NPL) (Ref. 5).

The purpose of this report is to provide the background information collected for the Site, discuss the ESI sampling activities conducted under the Reassessment, and present the analytical data obtained as part of the investigation.

1.2 OBJECTIVES OF THE INVESTIGATION

The ESI is intended to be part of an ongoing screening process of known and potentially hazardous waste sites. Expanding on the information documented during the SI, the purpose of this ESI is to further identify immediate or potential threats that hazardous substances, attributable to the Site, may pose to human health and the environment. This is done by

documenting the existence and migration of hazardous substances related to the Site and by identifying the receptors, or targets, potentially exposed to the hazardous substances. EPA will use the information obtained during the ESI to evaluate the Site using the Hazard Ranking System (HRS) and to help determine whether the Site is a potential candidate for inclusion on the NPL. The intent of the ESI is to provide the documentation necessary to either rank the Site on the NPL or assign a "No Further Remedial Action Planned" status to the Site.

1.3 SCOPE OF WORK

The ESI Scope of Work is intended to describe the tasks requiring completion in order to evaluate the Site using the HRS (Ref. 1). As part of this Reassessment and ESI, START performed the following major tasks:

- Prepared a site-specific Quality Assurance Sampling Plan (QASP) (Appendix C), approved by EPA, and Health and Safety Plan (HASP) prior to sampling activities.
- Gathered information documenting the environmental setting of the areas of concern to characterize the surface water pathway.
- Reviewed available regulatory compliance files from federal, state, and local government agencies.
- Conducted ESI field sampling activities on April 4, 2022, through April 8, 2022. Samples were collected from sediments within the lakes and drainage paths leading into the lakes, as well as from fish collected from the lakes. The samples were collected in general accordance with the site-specific QASP and HASP to document the presence and migration of hazardous substances attributable to the Site.
- Evaluated the available information from the on-site observations, historical aerial photographs, property ownership records, interviews, area environmental information, and area demographic characteristics.
- Submitted the ESI samples to National Environmental Laboratory Accreditation Program (NELAP)-certified laboratories for analysis, and conducted data validation, and reviewed and tabulated the resulting data.
- Compared the laboratory results to Superfund Chemical Data Matrix (SCDM) benchmark concentrations and three times the background concentrations to establish an observed release as defined by the HRS (Ref. 1; Ref. 2).
- Prepared this report to present the findings of the ESI.

1.4 REPORT FORMAT

The ESI report is presented in a format that is intended to facilitate evaluation of the Site using the HRS (Ref. 1). The report contains the following sections:

- Section 1 – Introduction
- Section 2 – Site Characteristics
- Section 3 – Investigative Efforts
- Section 4 – ESI Analytical Results for Sources and Pathways
- Section 5 – Migration Pathways and Receptors
- Section 6 – Summary
- Section 7 – References

Additional information is provided in the appendices following the text of the report. The appendices are as follows:

- Appendix A Digital Photographs
- Appendix B START Site Logbooks
- Appendix C START Quality Assurance Sampling Plan
- Appendix D Laboratory Data Packages
- Appendix E Laboratory Data Validation Packages
- Appendix F START Sediment Core Logging Sheets
- Appendix G Reference Documentation

The tables referred to throughout the sections of this report are provided within the sections in which they are first cited or as separate portable document format (PDF) files. Figures cited in this report are provided as separate PDF files. Photographs taken during the ESI field sampling activities are provided as Appendix A. The START Site logbooks are provided as Appendix B.

2. SITE CHARACTERISTICS

2.1 LOCATION

The Site is located along Capitol Lake Drive in Baton Rouge, East Baton Rouge Parish, Louisiana. The Site is located between the Louisiana State Capitol Building and the Louisiana Governor's Mansion. The Site geographic coordinates are Latitude 30.461944° North and Longitude 91.183889° West (Ref 4, p. 29). Site coordinates were taken from the east bank of North Lake. The Site Area Map is provided as **Figure 2-1**.

2.2 SITE DESCRIPTION

The Site is composed of three lakes: North Lake, South Lake, and East Lake, and comprises approximately 65 acres in downtown Baton Rouge. The Site Layout Map is provided as **Figure 2-2**.

The Capitol Lakes were originally part of a natural drainage system called Grassie Bayou, which flowed into the Mississippi River. In the late 1890s, Grassie Bayou was dammed creating the Capitol Lakes System. Due to the creation of the Mississippi River levee system, the lakes have no natural drainage, and water that flows into the lakes must be pumped into the Mississippi River. South Lake flows into North Lake under a bridge along Capitol Access Road at the southeast corner of North Lake (**Figure 2-2**). East Lake drains into North Lake through a weir structure in the southwest corner of East Lake and through an underground pipe. A pumping station is located on the southwestern shore of North Lake. The lakes have been modified since the late 1890s with sections filled in to facilitate building the Governor's Mansion and the U.S. Interstate Highway System (Ref. 4, p. 29).

North Lake is the largest and deepest of the Capitol Lakes, covering approximately 53 acres and is shaped in an inverted "T" (**Figure 2-2**). North Lake is located north and adjacent to the State Capitol Building and west of the Governor's Mansion. Global Positioning System (GPS) coordinates taken from the center point of North Lake are Latitude 30.459931° North and Longitude 91.185106° West. Stormwater runoff drains into North Lake from immediately adjacent acreage and drains from the north through the channel originating near Choctaw Drive (Ref. 6, p. 3). A

pumping station located on the southwestern shore of North Lake controls the water levels in the lakes by pumping the water into the Mississippi River (Ref. 4, p. 29).

A hydrologic survey of the lakes was conducted as part of the RI in 1998. The depth of North Lake averages 6.5 feet in the southern portion and shoals to 4 feet toward the northern section of the lake tributary (Ref. 4, p. 38). The most recent sediments in North Lake, as described during the LDEQ Phase I RI conducted in 1998, are thicker along the eastern side of the lake (approximately 3 feet) and are thinner along the western side near the pumping station (less than 2 feet) (Ref. 4, p. 9). The sediments have been classified as green to black mucks and dark-colored organic-rich clays. The northern section of North Lake becomes swampy and the water depth, approximately 0.5 feet, dramatically reduces such that the lake sediments are often above the normal lake water level. Total sediment thickness in the middle and southern sections of North Lake ranges from 4 to 5.5 feet (Ref. 4, p. 9). Sediments were dredged from the northern and middle sections of North Lake in 1958. Some of the dredged sediments were deposited on land between North Lake and the Mississippi River levee (Ref. 4, p. 30).

South Lake is the second largest of the three lakes, covering approximately 9 acres. South Lake is located east of the State Capitol Building and at the bend of U.S. Interstate Highway 110. GPS coordinates taken from the center point of South Lake are Latitude 30.457156° North and Longitude 91.181953° West. South Lake is interconnected with North Lake at the Capitol Access Road bridge. Stormwater runoff drains into South Lake from the U.S. Interstate Highway system from immediately adjacent areas, and from the drainage area that extends both north and east of the U.S. Interstate Highway system and enters the southeast corner of South Lake (Ref. 6, page 3). The water depth in South Lake averaged approximately 1 to 3 feet during the 1998 RI (Ref. 4, p. 151). Water depths are shallower at present, with a mud flat that has developed into a small island in the northeastern part of the lake.

East Lake is the smallest of the three lakes, covering approximately 5 acres. East Lake is located north and east of the Governor's Mansion. GPS coordinates taken from the center point of East Lake are Latitude 30.460281° North and Longitude 91.179669°. A residential community is located on the west side of East Lake. Stormwater runoff drains into East Lake from the light industrial area to the north (Ref. 6, p. 3). Stormwater drainage emanating from East Lake is controlled by an outlet weir in the southwest corner of the lake. Stormwater drainage from East

Lake flows underground through culvert in a westerly direction until it enters the southeast section of North Lake (Ref. 6, p. 3). The water depth of East Lake was approximately 1 foot or less during the 1998 RI (Ref 4, p. 151).

The Site is bound to the west by state government buildings and light industry; to the north by light industry; to the east by light industry, state government buildings, Interstate Highway 110, and residences; and to the south by state government buildings and residences (**Figure 2-2**).

2.3 ENVIRONMENTAL JUSTICE INFORMATION AND CLIMATE CHANGE

To better meet the EPA's responsibilities related to the protection of public health and the environment, the EPA has developed an environmental justice (EJ) mapping and screening tool called EJScreen. It is based on nationally consistent data and an approach that combines environmental and demographic indicators in maps and reports.

EJScreen provides information on twelve different EJ Indices. Each EJ Index combines one environmental measure with demographic data to characterize potential areas of EJ concern. According to the EJScreen Common User Guidelines, a site may be considered a good candidate for additional review when an EJScreen analysis for that area shows one or more of the twelve EJ Indices is at or above the 80th percentile in the nation. An area may also warrant additional review if other information suggests the potential for EJ concerns.

The Site is located in downtown Baton Rouge near the State Capitol Building and the Governor's Mansion (**Figure 2-1**). The population within 1 mile of the Site is 6,402 people in 2,676 households, including 4,884 people of color (76%). The Site is in the 80th state percentile or above in 11 of the 12 EJ Indices, all except the EJ Index for Ozone (Ref. 7, p. 1).

2.4 OPERATIONAL HISTORY

The Site was never utilized as a stormwater retention pond or drainage system for a singular business. The Site received stormwater runoff from a large group of businesses, state properties, and residences and has never owned or operated as a business.

2.5 REGULATORY INVOLVEMENT

There are no operational licenses or permit numbers related to the Site: The Site SEMS ID is LAD980869440.

3. INVESTIGATIVE EFFORTS

3.1 PREVIOUS INVESTIGATIONS

3.1.1 Identification of the Site

The first available documentation of pollution in Capitol Lakes was described in a 1972 study by the Louisiana Department of Natural Resources (LDNR), when responding to citizen complaints of oily sheens on the water surface. LDNR was the state agency responsible for environmental concerns until the creation of the LDEQ in 1984. Analysis of lake sediments found high levels of oil along with the chlorinated pesticides 4,4'-DDT, Dieldrin, and Endrin. (Ref. 4, p. 30)

In May 1983, an oily discharge was reported leaking into the northern channel of North Lake originating from a Westinghouse Electric Corporation (Westinghouse) facility. The oils were found to be contaminated with PCBs. Water, lake sediments, and fish tissue were sampled over the following months. In August 1983, the Site was closed to fishing because the PCB concentrations in edible portions of the fish were above acceptable levels. In addition, the LDNR reported that the lake bottom was "heavily contaminated with oil and disturbances of the bottom produces an oil slick of varying size and thickness…and LDNR is investigating the source of the contamination… and has asked EPA for funds to clean the lake." (Ref. 4 p. 30)

3.1.2 Additional Investigations

In 1984, LDNR reported that no threat to the environment or to public health existed, as long as the public continued to cooperate by refraining from consuming fish from Capitol Lakes. LDNR also reported that information to date indicated that there was a potential for PCBs in the sediment to contaminate adjacent areas or the groundwater. (Ref. 4 p. 30).

In 1985, Louisiana State University (LSU) scientists stated to the LDEQ that their work on sediment deposition age dating in Capitol Lakes indicated that lead, selenium, antimony, and arsenic appeared to represent very high levels of contamination and that these needed to be addressed in remediation efforts. (Ref. 8 pp.14-15)

In March 1988, the Site was referred to the LDEQ Inactive and Abandoned Sites Division (IASD). The IASD undertook activities to develop remedial approaches, investigated sources of remedial

funding, determined landowner identification, and continued to pursue historical information regarding discharge activities. (Ref. 4, p. 31)

In 1988 the LDEQ IASD contracted The Institute of Environmental Studies (IES) at LSU to conduct a historical investigation of activities that may have contributed to the release of organic and inorganic toxic materials into Capitol Lakes. The identification of potentially responsible parties (PRPs) was based on LDEQ documentation, the Westinghouse facility's potential for a release(s), aerial photographs, and a windshield survey of the Capitol Lakes drainage basin. (Ref. 9)

3.1.3 Listing Site Investigation (LSI)

In 1991, the EPA Field Investigation Team (FIT) collected samples for an LSI. According to a 1994 EPA PREscore package document, the report based on the sampling data was not completed. (Ref. 10, p. 4).

3.1.4 Phase I Remedial Investigation (RI)

Based upon the presence of hazardous constituents identified in surface water, sediment, and fish tissue samples collected from the Site, in 1997 the LDEQ IASD issued Contract No. 523177 to Walk Haydel, an environmental contractor and part of Dames and Moore Group Company, to conduct a Phase I RI for the Site. The Phase I RI consisted of the following general tasks:

- A hydrographic survey of North Lake, South Lake, and East Lake
- An assessment of species composition and fish tissue
- Sampling and analyses of lake waters
- Sampling and analyses of lake sediments

The fish species composition assessment indicated that approximately 18 percent (%) of the fish in the two lakes were typically considered edible by the general population, including carp, buffalo fish, sunfish, and yellow and black bullheads (catfish). PCBs were detected in 80%of the specimens sampled, with total PCB concentrations ranging from 87-680 micrograms per kilogram (µg/kg). The highest concentrations of PCBs were present in the bottom-feeding species (catfish, buffalo, and carp). Approximately 70% of the fish tissue samples contained detectable levels of pesticides including 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT. Six fish tissue samples were submitted for mercury analysis. All six samples had mercury detected at less than 0.2 parts per million (ppm) (Ref. 4 pp. 46-48).

Surface water samples were collected from each lake and analyzed for SVOCs, pesticides, PCBs, and total metals. Analytical results indicated that the surface waters of the lake system did not have detectable concentrations of SVOCs, pesticides, or PCBs. Some metals were detected, with total metals concentrations higher in East Lake than North Lake and South Lake (Ref. 4, p. 48).

Sediment samples were collected from the three lakes and analyzed for SVOCs, pesticides, PCBs, and metals. The northern section of North Lake had the highest detected concentrations of PCBs, specifically Aroclor-1242 and Aroclor-1260. The concentrations of PCBs were generally higher in sediments deeper than 1.5 feet and lower in the shallower sediments. The highest detected concentration was for Aroclor-1260, which was detected at 5.1 ppm. The northern section of North Lake also had the highest concentrations of Aroclor-1260 and a majority of the detected SVOCs. The SVOCs were generally found at the highest concentrations in the shallowest sediments and then decreased in concentration with depth. Benzo(a)pyrene, a human carcinogenic SVOC, was detected as high as 14 ppm in the northern section of North Lake. (Ref. 4, pp. 52-53).

PCBs were not detected in the sediment samples collected from East Lake; however, East Lake sediments had the highest detected concentrations of pesticides when compared to sediment samples from the other two lakes. East Lake had elevated concentrations of 4-4'-DDD at 168 ppm, and 4-4'-DDE and 4-4'-DDT in excess of 1 ppm, whereas the other two lakes had typical concentrations of these compounds at 0.1 ppm. Elevated concentrations of Aldrin, Lindane, chlordane, and Endrin were also detected in East Lake. In general, the concentrations of the various pesticides tended to decrease with depth and were the highest, generally in the sediments below 0.5 foot. The East Lake sediment intervals from 0 to 0.5 foot were found to typically have less pesticides than the intervals deeper than 0.5 feet. (Ref. 4, p. 51).

Antimony was detected in sediment samples from all three lakes, with the northernmost portion of North Lake and East Lake having the highest concentrations, and North Lake and South Lake having comparable concentrations. The range of detectable concentrations was from below the detection limit to 350 ppm and the antimony concentrations generally increased with depth in the vertical sediment column. (Ref. 4, pp. 53-54).

Arsenic was detected in sediment samples from all three lakes, with concentrations ranging from 3.2 to 86 ppm. The highest concentrations were observed in the northern end of North Lake and in East Lake. Generally, the higher arsenic concentrations were found at depth, except for one location in the northern end of North Lake. Cadmium was also detected in sediment samples from all three lakes and follows a comparable pattern to that of arsenic, with highest concentrations found in the northern section of North Lake and in East Lake. Cadmium concentrations ranged from below detection limits to 36 ppm. (Ref. 4, p. 54).

Lead was detected in sediment samples from all three lakes, with the highest detected concentrations in the sediments of East Lake. A sample location in East Lake at 5 to 6 feet in depth had a concentration of 5,519 ppm. Lead concentrations tended to increase with depth to approximately 1.5 to 3.0 feet, decreasing in deeper sediments. (Ref. 4, p. 54).

Silver was detected in sediment samples from all three lakes but was detected with the greatest frequency in the sediments of South Lake and East Lake. The highest detected silver concentration was 293 ppm, which was detected at a depth of 5.0 to 5.7 feet at a location in East Lake. (Ref. 4, pp. 54-55).

Mercury was detected in sediment samples from the northern end of North Lake and in South Lake. Mercury was not detected in East Lake. Mercury concentrations were often highest in the intervals from 0.5 to 1.5 feet or 0.5 to 3.0 feet in South Lake. Mercury concentrations tended to be less than 0.5 ppm. The highest detected concentration of mercury, 10 ppm, was detected in sediment samples collected from the northern end of North Lake. (Ref. 4, p. 55).

Selenium was detected in sediment samples from the northern end of North Lake and in South Lake. The detected selenium concentrations ranged from less than 1.0 ppm to a high of 91 ppm. South Lake contained the highest detected concentration of selenium. The shallowest sediments of South Lake appeared to be impacted the most by selenium, while in the northern end of North Lake, the highest selenium concentrations were detected in sediments greater than 2.0 feet deep. (Ref. 4, p. 55)

A baseline health risk assessment was conducted, as part of the Phase I RI, to assess the potential for adverse health effects associated with recreational exposure to chemicals present in the sediment in the Capitol Lakes and with the ingestion of chemicals in fish obtained from the

Capitol Lakes. The health risk assessment was conducted for the LDEQ IASD and was peer-reviewed by the Louisiana Department of Health (LDH) (formerly Louisiana Department of Health & Hospitals [LDHH]), Office of Public Health Section of Environmental Epidemiology and Toxicology. The contaminants of concern (COCs) for recreational exposure to sediment included PCBs, polycyclic aromatic hydrocarbons (PAHs), pesticides, and metals. The COCs for the ingestion of fish included PCBs and pesticides. (Ref. 11, p. 7).

The results of the risk characterization indicated that:

- Recreational exposure to chemicals in sediments (dermal contact with sediments) of Capitol Lakes may be associated with potential noncarcinogenic health effects and potential cancer risks that exceed the unacceptable risk range; and
- The ingestion of chemicals in carp, buffalo fish, and yellow and black bullheads (catfish) obtained from the Capitol Lakes may be associated with potential cancer risks that exceed the acceptable risk range. (Ref. 11, p. 7)

3.1.5 2002 No Further Action

In 2002, LDEQ completed four Addenda to the Health Risk Analysis for the Phase I Remedial Investigation Report for the Capitol Lakes Site. The amended health risk analysis found that "both non-carcinogenic and carcinogenic risk to human health posed by recreational exposure to chemicals present in the Capitol Lakes sediments, and ingestion of chemicals in fish caught in the Capitol Lakes System, fall within the acceptable range of 10^{-4} to 10^{-6}" (Ref 12, p. 1).

3.1.6 Ongoing monitoring efforts

The Fish Advisory that was issued in 1983 remains in effect as of 2022 (Appendix A, Photo 26). The LDEQ and LDH (formerly Louisiana Department of Health & Hospitals [LDHH]) conduct annual fish tissue sampling in support of the Fish Advisory. Fish tissue results from samples collected in July 2017 and September 2017 indicated the presence of two PCB congeners, PCB 126, and PCB 169, in concentrations that exceeded the LDEQ/LDH screening levels for those specific PCB congeners. The reported concentration of PCB 126 was detected in sunfish and yellow bullhead catfish and the reported concentration of PCB 169 was detected in sunfish. Based on these fish tissue analytical results, the LDH recommended that the "no consumption" advisory for the Capitol Lakes System remains in place. (Ref. 13)

3.1.7 Potential contributors of hazardous materials

The primary potential contributor of the waste material in the contaminated sediments appears to have been the former Westinghouse facility. The former Westinghouse facility was located on the north side of Choctaw Drive, across the street from the swamp at the north end of North Lake. According to LDEQ documentation, PCB-containing waste material from Westinghouse was reportedly released into a drainage ditch located on the east side of the facility (Ref. 14, p. 2). The unnamed drainage ditch flowed in a southerly direction under Choctaw Drive and entered the northern section of North Lake (Ref. 6, p. 3). The actual number of years of waste deposition from Westinghouse into North Lake is unknown. Other PRPs include Industrial Tractor Equipment, Inc.; Comet Distribution Services, Inc.; Jayco Sales and Service, and Tractor Company, Inc. located on Choctaw Drive; Kansas City Southern Railroad; U.S. Government Surplus Property Yard; Louisiana National Guard Armory; the Louisiana Division of Administration Surplus Property Yard located east of the Capitol Lakes; Burger Power; K-Way Equipment Corporation; City of Baton Rouge and Parish of East Baton Rouge Maintenance Yard located along Chippewa Street/Business US Highway 190 north of Choctaw Drive; Allement Roberson Machine Works located southeast of Interstate Highway I-110 and outside the drainage basin boundary for Capitol Lakes; American Asphalt Products Corporation; and Furlow Laughlin Equipment, Inc. (Ref 9, pp. 19-20). Potential sources of PCBs, as investigated by the LDEQ, can be found in **Figure 2-2** of the QASP (Appendix C).

3.2 EXPANDED SITE INSPECTION SAMPLING

START was tasked to conduct a Reassessment and ESI sampling of the Site, including the collection of environmental samples. The specific sampling objectives were to collect data that could be used to document a release of hazardous substances to the surface water pathway. The site-specific COCs included PCBs, pesticides, total metals, and herbicides (Appendix C). For HRS purposes, a release is documented when a hazardous substance is detected at a concentration equal to or greater than three times the background concentration. If the background concentration is not detected, then a release is documented when the sample measurement equals or exceeds the sample quantitation limit (Ref. 1). The field work was conducted in accordance with the START QASP, approved by the EPA in March 2022 (Appendix C).

START implemented the QASP during Reassessment and ESI sampling activities that were conducted from April 4 through 8, 2022. START collected sediment samples from the Site and drainage paths leading into Capitol Lakes. Sediment samples were collected using 4-inch diameter aluminum tubes that were driven into the sediment to collect cores. The sediment layers were logged and sediment samples were collected and sent to laboratories for analysis. Background sediment samples were collected from University Lake, a nearby lake that also serves as a drainage basin and is similar to the Capitol Lakes in size and depth. Sediment samples were collected from 3 depths (0-12 inches, 12-24 inches, and 24-36 inches) from locations in North Lake, South Lake, and University Lake (the background location). Sediment samples were collected from 2 depths (0-12 inches and 12-24 inches) from sample locations in drainage paths leading to the Capitol Lakes. Additionally, fish tissue samples were collected from edible fish species caught in Capitol Lakes. The fish were collected by agents with the USFWS by electrofishing, which uses electricity to shock and stun the fish that can then be collected with a net (Appendix A, Photos 6 and 7). To support the ESI, 54 sediment samples (including duplicates) were collected from 19 sediment locations, and 17 fish tissue samples (including duplicates) were collected. Sediment sample locations are listed in **Table 3-1** and presented in **Figure 3-1** and **Figure 3-2**.

Sediment samples were collected and submitted to a Contract Laboratory Program (CLP) laboratory for the following analyses: total metals including mercury by SW846 Methods 6020 and 7470/7471; semivolatile organic compounds by SW846 Method 8270; PCBs by SW846 Method 8082; pesticides by SW846 Method 8081; and PCB congeners by EPA Method 1668 (Appendix D). The sediment samples were also submitted to a NELAP-certified laboratory for the analysis of herbicide compounds by SW846 Method 8151 (Appendix D). Fish tissue samples were collected and submitted to a NELAP certified laboratory for the following analyses: semivolatile organic compounds by SW846 Method 8270; PCBs by SW846 Method 8082; pesticides by SW846 Method 8081; and PCB congeners by EPA Method 1668; and herbicides by SW846 Method 8151 (Appendix D).

The EPA Region 6 Environmental Services Assistance Team (ESAT) validated the analytical data from the CLP laboratory, with the exception of one sample delivery group that was validated by START. The analytical data from the NELAP-certified laboratory were also validated by START. The laboratory data packages and data validation reports are included in Appendices D and E, respectively.

3.2.1 Deviations from the QASP

The following deviations from the QASP (Appendix C) occurred during the field work. Field activities are documented in the Site Logbook (Appendix B):

- Sediment sample 19 was not collected from the planned location in the southeast drainage path due to the inability to contact the property owner to obtain access. The sample location was moved to a spot in the north drainage path downgradient from a group of abandoned drums that had been discovered in the woods (Appendix A, Photos 19-25).
- No fish tissue samples were collected from South Lake because the water was too shallow for the shocking apparatus to work properly. All fish tissue samples were collected from North Lake.
- The QASP had planned for the collection of nine samples (plus one duplicate) of bottom-feeding fish and six samples (plus one duplicate) of top-feeding fish. Due to the lack of bottom-feeding fish of sufficient size, EPA collected eight samples (plus one duplicate) of bottom-feeding fish and seven samples (plus one duplicate) of top-feeding fish. Additionally, due to the shortage of fish large enough to provide the amount of filet meat required by the analytical laboratory, some fish tissues were "composite samples" consisting of filet tissue of two or more of the same kind of fish (i.e., yellow bullhead catfish or sunfish).
- No rinsate samples were collected during the sample mission. All samples were collected using single-use instruments and dedicated equipment.

These deviations are not expected to have any adverse impact on the data or conclusions of this report.

Table 3-1
ESI Sample Locations and Sampling Rationale

Sample Name	Sample Matrix	Sample Location (Figures 3-1 and 3-2)	Rationale
CL-L01-SED01-12-51	Sediment	Location: North Lake at 30.465936°N, 91.185094°W, Depth: 0 to 12 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in upper sediment layer in northern section of North Lake.
CL-L01-SED01-24-51	Sediment	Location: North Lake at 30.465936°N, 91.185094°W, Depth: 12 to 24 inches bswi	Collected to document observed release to the Surface Water Pathway and establish source type "contaminated sediment plume" in middle sediment layer in northern section of North Lake.
CL-L01-SED01-36-51	Sediment	Location: North Lake at 30.464558°N, 91.185364°W Depth: 0 to 12 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in bottom sediment layer in northern section of North Lake.
CL-L01-SED02-12-51	Sediment	Location: North Lake at 30.464558°N, 91.185364°W Depth: 0 to 12 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in upper sediment layer in northern section of North Lake.
CL-L01-SED02-24-51	Sediment	Location: North Lake at 30.464558°N, 91.185364°W Depth: 12 to 24 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in middle sediment layer in northern section of North Lake.
CL-L01-SED02-36-51	Sediment	Location: North Lake at 30.464558°N, 91.185364°W Depth: 24 to 36 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in bottom sediment layer in northern section of North Lake.
CL-L01-SED03-12-51	Sediment	Location: North Lake at 30.462464°N, 91.185031°W Depth: 0 to 12 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in upper sediment layer in middle section of North Lake. MS/MSD sample.
CL-L01-SED04-12-51	Sediment	Location: North Lake at 30.460533°N, 91.185072°W Depth: 0 to 12 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in upper sediment layer of the middle section of North Lake.
CL-L01-SED04-12-52	Sediment	Location: North Lake at	Collected to document observed release to Surface Water Pathway and

Table 3-1
ESI Sample Locations and Sampling Rationale

Sample Name	Sample Matrix	Sample Location (Figures 3-1 and 3-2)	Rationale
		30.460533°N, 91.185072°W Depth: 0 to 12 inches bswi	establish source type "contaminated sediment plume" in upper sediment layer of the middle section of North Lake. Duplicate sample.
CL-L01-SED04-24-51	Sediment	Location: North Lake at 30.460533°N, 91.185072°W Depth: 12 to 24 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in middle sediment layer of the middle section of North Lake.
CL-L01-SED04-36-51	Sediment	Location: North Lake at 30.460533°N, 91.185072°W Depth: 24 to 36 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in bottom sediment layer of middle section of North Lake.
CL-L01-SED05-12-51	Sediment	Location: North Lake at 30.458639°N, 91.187311°W Depth: 0 to 12 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in upper sediment layer of the southwest section of North Lake.
CL-L01-SED05-24-51	Sediment	Location: North Lake at 30.458639°N, 91.187311°W Depth: 12 to 24 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in middle sediment layer of the southwest section of North Lake.
CL-L01-SED05-36-51	Sediment	Location: North Lake at 30.458639°N, 91.187311°W Depth: 24 to 36 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in bottom sediment layer of the southwest section of North Lake.
CL-L01-SED06-12-51	Sediment	Location: North Lake at 30.459069°N, 91.184939°W Depth: 0 to 12 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in upper sediment layer of the southern section of North Lake.
CL-L01-SED06-24-51	Sediment	Location: North Lake at 30.459069°N, 91.184939°W Depth: 12 to 24 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in middle sediment layer of the southern section of North Lake.
CL-L01-SED06-36-51	Sediment	Location: North Lake at	Collected to document observed release to Surface Water Pathway and

Table 3-1
ESI Sample Locations and Sampling Rationale

Sample Name	Sample Matrix	Sample Location (Figures 3-1 and 3-2)	Rationale
		30.459069°N, 91.184939°W Depth: 24 to 36 inches bswi	establish source type "contaminated sediment plume" in bottom sediment layer of the southern section of North Lake.
CL-L01-SED07-12-51	Sediment	Location: North Lake at 30.458956°N, 91.182456°W Depth: 0 to 12 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in upper sediment layer of the southeast section of North Lake.
CL-L01-SED07-24-51	Sediment	Location: North Lake at 30.458956°N, 91.182456°W Depth: 12 to 24 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in middle sediment layer of the southeast section of North Lake.
CL-L01-SED07-36-51	Sediment	Location: North Lake at 30.458956°N, 91.182456°W Depth: 24 to 36 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in bottom sediment layer of the southeast section of North Lake.
CL-L01-SED07-36-52	Sediment	Location: North Lake at 30.458956°N, 91.182456°W Depth: 24 to 36 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in bottom sediment layer of the southeast section of North Lake. Duplicate sample.
CL-L02-SED08-12-51	Sediment	Location: South Lake at 30.45755°N, 91.182064°W Depth: 0 to 12 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in upper sediment layer of the northern section of South Lake.
CL-L02-SED08-24-51	Sediment	Location: South Lake at 30.45755°N, 91.182064°W Depth: 12 to 24 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in middle sediment layer of the northern section of South Lake.
CL-L02-SED08-36-51	Sediment	Location: South Lake at 30.45755°N, 91.182064°W Depth: 24 to 36 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in bottom sediment layer of the northern section of South Lake.
CL-L02-SED09-12-51	Sediment	Location: South Lake at	Collected to document observed release to Surface Water Pathway and

Table 3-1
ESI Sample Locations and Sampling Rationale

Sample Name	Sample Matrix	Sample Location (Figures 3-1 and 3-2)	Rationale
		30.457164°N, 91.182950°W Depth: 0 to 12 inches bswi	establish source type "contaminated sediment plume" in the upper sediment layer of the western section of South Lake.
CL-L02-SED09-24-51	Sediment	Location: South Lake at 30.457164°N, 91.182950°W Depth: 12 to 24 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in the middle sediment layer of the western section of South Lake.
CL-L02-SED09-36-51	Sediment	Location: South Lake at 30.457164°N, 91.182950°W Depth: 24 to 36 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in the bottom sediment layer of the western section of South Lake.
CL-L02-SED10-12-51	Sediment	Location: South Lake at 30.456994°N, 91.180922°W Depth: 0 to 12 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in upper sediment layer of the eastern section of South Lake.
CL-L02-SED10-24-51	Sediment	Location: South Lake at 30.456994°N, 91.180922°W Depth: 12 to 24 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in middle sediment layer of the eastern section of South Lake.
CL-L02-SED10-24-52	Sediment	Location: South Lake at 30.456994°N, 91.180922°W Depth: 12 to 24 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in middle sediment layer of the eastern section of South Lake. Duplicate sample.
CL-L02-SED10-36-51	Sediment	Location: South Lake at 30.456994°N, 91.180922°W Depth: 24 to 36 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in bottom sediment layer of the eastern section of South Lake.
CL-L03-SED11-12-51	Sediment	Location: University Lake at 30.414813°N, 91.165964°W Depth: 0 to 12 inches bswi	Collected as background sediment sample location #1 from University Lake, 0 to 12 inches bswi.
CL-L03-SED11-24-51	Sediment	Location: University Lake at 30.414813°N, 91.165964°W Depth: 12 to 24 inches bswi	Collected as background sediment sample location #1 from University Lake, 12 to 24 inches bswi. MS/MSD sample.

Table 3-1
ESI Sample Locations and Sampling Rationale

Sample Name	Sample Matrix	Sample Location (Figures 3-1 and 3-2)	Rationale
CL-L03-SED11-36-51	Sediment	Location: University Lake at 30.414183°N, 91.165964°W Depth:24 to 36 inches bswi	Collected as background sediment sample location #1 from University Lake, 24 to 36 inches bswi.
CL-L03-SED12-12-51	Sediment	Location: University Lake at 30.408367°N, 91.165681°W Depth: 0 to 12 inches bswi	Collected as background sediment sample location #2 from University Lake, 0 to 12 inches bswi.
CL-L03-SED12-24-51	Sediment	Location: University Lake at 30.408367°N, 91.165681°W Depth: 12 to 24 inches bswi	Collected as background sediment sample location #2 from University Lake, 12 to 24 inches bswi.
CL-L03-SED12-24-52	Sediment	Location: University Lake at 30.408367°N, 91.165681°W Depth: 12 to 24 inches bswi	Collected as background sediment sample location #2 from University Lake, 12 to 24 inches bswi. Duplicate sample.
CL-L03-SED12-36-51	Sediment	Location: University Lake at 30.408367°N, 91.165681°W Depth: 24 to 36 inches bswi	Collected as background sediment sample location #2 from University Lake, 24 to 36 inches bswi.
CL-L04-SED13-12-51	Sediment	Location: North Drainage Path at 30.468931°N, 91.185542°W Depth: 0 to 12 inches bswi	Collected to determine attribution of contaminated sediment from off-site sources flowing into the North Drainage Path and ultimately into North Lake, 0 to 12 inches bswi. MS/MSD sample.
CL-L04-SED13-24-51	Sediment	Location: North Drainage Path h at 30.468931°N, 91.185542°W Depth: 12 to 24 inches bswi	Collected to determine attribution of contaminated sediment from off-site source (PRP) flowing into the North Drainage Path and ultimately into North Lake, 12 to 24 inches bswi
CL-L04-SED14-12-51	Sediment	Location: North Drainage Path at 30.469036°, 91.182278°W Depth: 0 to 12 inches bswi	Collected to determine attribution of contaminated sediment from off-site source (railroad, road) flowing into the North Drainage Path and ultimately into North Lake, 0 to 12 inches bswi
CL-L04-SED14-24-51	Sediment	Location: North Drainage Path at 30.469036°, 91.182278°W Depth: 12 to 24 inches bswi	Collected to determine attribution of contaminated sediment from off-site source (railroad, road) flowing into the North Drainage Path and ultimately into North Lake, 12 to 24 inches bswi.
CL-L04-SED15-12-51	Sediment	Location: North Drainage Path at 30.469333°N, 91.174522°W Depth: 0 to 12 inches bswi	Collected to determine attribution of contaminated sediment from off-site sources flowing into the North Drainage Path and ultimately into North Lake, 0 to 12 inches bswi

Table 3-1
ESI Sample Locations and Sampling Rationale

Sample Name	Sample Matrix	Sample Location (Figures 3-1 and 3-2)	Rationale
CL-L04-SED15-24-51	Sediment	Location: North Drainage Path at 30.469333°N, 91.174522°W Depth: 12 to 24 inches bswi	Collected to determine attribution of contaminated sediment from off-site sources flowing into the North Drainage Path and ultimately into North Lake, 12 to 24 inches bswi
CL-L05-SED16-12-51	Sediment	Location: East Drainage Path at 30.459300°N, 91.181431°W Depth: 0 to 12 inches bswi	Collected to determine attribution of contaminated sediment from off-site sources and East Lake that ultimately flows into North Lake, 0 to 12 inches bswi
CL-L05-SED16-12-52	Sediment	Location: East Drainage Path at 30.459300°N, 91.181431°W Depth: 0 to 12 inches bswi	Collected to determine attribution of contaminated sediment from off-site sources and East Lake that ultimately flows into North Lake, 12 to 24 inches bswi. Duplicate sample.
CL-L05-SED16-24-51	Sediment	Location: East Drainage Path, at 30.4593°N, 1.181431°W Depth: 12 to 24 inches bswi	Collected to determine attribution of contaminated sediment from off-site sources and East Lake that ultimately flows into North Lake, 12 to 24 inches bswi..
CL-L05-SED17-12-51	Sediment	Location: East Drainage Path at 30.461381°N, 91.178981°W Depth: 0 to 12 inches bswi	Collected to determine attribution of contaminated sediment from off-site sources flowing into East Lake, and ultimately into North Lake, 0 to 12 inches bswi
CL-L05-SED17-24-51	Sediment	Location: East Drainage Path at 30.461381°N, 91.178981°W Depth: Depth: 12 to 24 inches bswi	Collected to determine attribution of contaminated sediment from off-site sources flowing into East Lake and ultimately into North Lake, 12 to 24 inches bswi.
CL-L05-SED17-24-52	Sediment	Location: East Drainage Path at 30.461381°N, 91.178981°W Depth: Depth: 12 to 24 inches bswi	Collected to determine attribution of contaminated sediment from off-site sources flowing into East Lake and ultimately into North Lake, 12 to 24 inches bswi. Duplicate sample.
CL-L06-SED18-12-51	Sediment	Location: South Drainage Path at 30.456342°N, 91.179456°W Depth: 0 to 12 inches bswi	Collected to determine attribution of contaminated sediment from off-site sources flowing into the southeast section of South Lake, via the South Drainage Path, 0 to 12 inches bswi
CL-L06-SED18-24-51	Sediment	Location: South Drainage Path at 30.456342°N, 91.179456°W Depth: 12 to 24 inches bswi	Collected to determine attribution of contaminated sediment from off-site sources flowing into the southeast section of South Lake, via the South Drainage Path, 12 to 24 inches bswi
CL-L06-SED19-12-51	Sediment	Location: North Drainage Path at 30.465436°N,	Collected to determine if there was any contamination from abandoned drums

Table 3-1
ESI Sample Locations and Sampling Rationale

Sample Name	Sample Matrix	Sample Location (Figures 3-1 and 3-2)	Rationale
		91.185606°W Depth: 0 to 12 inches bswi	found along the bank of the slough north of North Lake, 0 to 12 inches bswi. Moved from the South Drainage Path due to access issues.
CL-L06-SED19-24-51	Sediment	Location: North Drainage Path at 30.465436°N, 91.185606°W Depth: 12 to 24 inches bswi	Collected to determine if there was any contamination from abandoned drums found along the bank of the slough north of North Lake, 12 to 24 inches bswi. Moved from the South Drainage Pathdue to access issues.
CL-L01-SF01-20220405-81	Fish Tissue (fillet)	Location: North Lake, top feeder (sunfish)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L01-SF02-20220405-81	Fish Tissue (fillet)	Location: North Lake, top feeder (sunfish)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L01-YC01-20220405-81	Fish Tissue (fillet)	Location: North Lake, bottom feeder (yellow bullhead catfish)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L01-SF03-20220406-81	Fish Tissue (fillet)	Location: North Lake, top feeder (sunfish)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L01-SF04-20220406-81	Fish Tissue (fillet)	Location: North Lake, top feeder (sunfish)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L01-SF05-20220406-81	Fish Tissue (fillet)	Location: North Lake, top feeder (sunfish)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L01-SF06-20220406-81	Fish Tissue (fillet)	Location: North Lake, top feeder (sunfish)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L01-SF06-20220406-82	Fish Tissue	Location: North Lake, top feeder (sunfish)	Collected to document Level I or Level II SCDM health-based benchmark

Table 3-1
ESI Sample Locations and Sampling Rationale

Sample Name	Sample Matrix	Sample Location (Figures 3-1 and 3-2)	Rationale
	(fillet)		concentrations associated with the Surface Water Pathway, Human Food Chain Threat. Duplicate sample.
CL-L01-SF07-20220406-81	Fish Tissue (fillet)	Location: North Lake, top feeder (sunfish)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L01-BU01-20220406-81	Fish Tissue (fillet)	Location: North Lake, bottom feeder (smallmouth buffalo)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L01-BU01-20220406-82	Fish Tissue (fillet)	Location: North Lake, bottom feeder (smallmouth buffalo)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat. Duplicate sample.
CL-L01-YC02-20220406-81	Fish Tissue (fillet)	Location: North Lake, bottom feeder (yellow bullhead catfish)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L01-YC03-20220406-81	Fish Tissue (fillet)	Location: North Lake, bottom feeder (yellow bullhead catfish)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L01-YC04-20220406-81	Fish Tissue (fillet)	Location: North Lake, bottom feeder (yellow bullhead catfish)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L01-YC05-20220407-81	Fish Tissue (fillet)	Location: North Lake, bottom feeder (yellow bullhead catfish)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L01-YC06-20220407-81	Fish Tissue (fillet)	Location: North Lake, bottom feeder (yellow bullhead catfish)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L01-YC07-20220407-81	Fish Tissue (fillet)	Location: North Lake, bottom feeder (yellow bullhead catfish)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.

Notes:

bswi	below sediment water interface
PRP	potentially responsible party
MS/MSD	matrix spike/matrix spike duplicate
SCDM	Superfund Chemical Data Matrix

4. ESI ANALYTICAL RESULTS FOR SOURCES AND PATHWAYS

4.1 SOURCE SAMPLING

For HRS purposes, a source is defined as an area where a hazardous substance has been deposited, stored, disposed of, or placed, plus those soils or sediments that have become contaminated from migration of a hazardous substance (Ref. 1).

For Capitol Lakes, the source of contamination has been identified as the sediments present within the lake system. In addition to the contaminated sediments serving as a source, the sediments also constitute an observed release, as shown below.

Thirty-one sediment samples (including three duplicate samples) were collected from 10 locations (SED01-SED10) as part of the ESI to establish source contamination at the Site and document an observed release to the Surface Water Pathway (Appendix B). Seven sediment samples (including one duplicate sample) were collected from two locations (SED11 and SED12) to document Site background concentrations. In accordance with the HRS, significantly above background is defined as exceeding three times the background concentration. If the background concentration is not detected, a sample measurement is considered significantly above background when the sample measurement equals or exceeds the sample quantitation limit (Reference 1). Analytical results are presented in **Table 4-1** through **Table 4-8**.

4.1.1 North Lake

North Lake is the largest of Capitol Lakes. Water flows into North Lake from East Lake and South Lake, as well as from a slough at the north end of the lake. That slough is fed by stormwater drainage from an industrial area north of the lakes (**Figure 2-2**; Ref. 6, p. 3).

Twenty-three sediment samples including two duplicate samples were collected from locations SED01 through SED07 in North Lake and the slough that flows into North Lake from the north (Appendix B). Analytical results from North Lake indicate concentrations of the following HRS-significant contaminants (contaminants considered a hazardous substance with high toxicity/bioaccumulation factor values):

- Contaminants in North Lake sediment above background concentrations (**Table 4-1** through **Table 4-3**; Appendices D and E);
    - Metals – antimony, arsenic, cadmium. calcium, chromium, copper, lead, manganese, mercury, silver, and zinc.
    - SVOCs – acenaphthene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, bis(2-ethylhexyl)phthalate, butylbenzylphthalate, chrysene, dibenzo(a,h)anthracene, dibenzofuran, di-n-butylphthalate, di-n-octylphthalate, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene.
    - Pesticides – 4,4'-DDE, aldrin, beta-BHC, delta-BHC, dieldrin, endosulfan I, endosulfan sulfate, endrin, endrin aldehyde, heptachlor, heptachlor epoxide, and trans-chlordane.
    - Herbicides – 2,4,5-T, 2,4-DB, MCPA, pentachlorophenol, and silvex (2,4,5-TP).
    - PCBs – Aroclor 1016, Aroclor 1260, and various Aroclor congeners.

4.1.2 South Lake

South Lake is located southeast of North Lake. Water flows into South Lake through a slough that flows under Interstate Highway 110 (**Figure 2-2** and Ref. 6, p. 3). South Lake connects with North Lake under the Capitol Access Bridge.

Ten sediment samples including one duplicate sample were collected from locations SED08 through SED10 in South Lake (Appendix B). Analytical results from South Lake indicate concentrations of the following HRS-significant contaminants (contaminants considered a hazardous substance with high toxicity/bioaccumulation factor values):

- Contaminants in South Lake sediment above background concentrations (**Table 4-4** through **Table 4-6**; Appendices D and E);
    - Metals –, antimony, arsenic, cadmium, calcium, copper, lead, silver, and zinc.
    - SVOCs – acenapthene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, bis(2-ethylhexyl)phthalate, butylbenzylphthalate, chrysene, dibenzo(a,h)anthracene, di-n-butylphthalate, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene.
    - Pesticides – 4,4'-DDE, 4,4'-DDT, aldrin, beta-BHC, cis-chlordane, delta-BHC, endosulfan I, endrin aldehyde, heptachlor, heptachlor epoxide, and trans-chlordane.
    - Herbicides – MCPA, pentachlorophenol, and Silvex (2,4,5-TP).
    - PCBs – Aroclor-1016, Aroclor-1260, and various PCB congeners.

4.2 BACKGROUND SAMPLING

EPA selected University Lake as a background location for collection of samples for comparison to the sediment samples collected at Capitol Lakes. University Lake is located approximately 3 miles south-southeast of Capitol Lakes, adjacent to LSU. University Lake receives runoff from residential neighborhoods as well as from Interstate Highway 10 (Ref. 6).

Seven sediment samples including one duplicate sample, were collected from locations SED11 and SED12 to serve as a background for the sediment samples collected in Capitol Lakes (Appendix B). The background sediment sample locations are presented in **Table 3-1** and in **Figure 3-2**. Analytical results are presented in **Table 4-4** through **Table 4-6**.

4.3 SURFACE WATER PATHWAY SAMPLING

4.3.1 Overland Segments

Three overland drainage paths entering the Capitol Lakes System have been identified and are discussed below.

In addition to the sediment samples collected as described above, which served as both source samples and observed release samples, START collected 16 sediment samples (including two duplicate samples) from the overland segment drainage paths. The sediment sample locations are presented in **Table 3-1** and in **Figure 3-1**. Analytical results are presented in **Table 4-7** and **Table 4-8**.

4.3.1.1 North Drainage Path

The North Drainage Path enters the north end of North Lake. The drainage path includes a drainage ditch that flows west along Choctaw Avenue and a drainage ditch that flows from the north next to the former Westinghouse facility (**Figure 2-2** and Ref. 6, p. 3).

Six sediment samples were collected from locations SED13 through SED15 in the North Drainage Path (Appendix B). Analytical results from the North Drainage Path indicate

concentrations of the following HRS-significant contaminants (contaminants considered a hazardous substance with high toxicity/bioaccumulation factor values):

- Contaminants in the North Drainage Path sediments above background concentrations (**Table 4-7** and **Table 4-8**; Appendices D and E);
    - Metals - antimony, arsenic, barium, cadmium, calcium, copper, lead, manganese, and zinc
    - Herbicides – pentachlorophenol.
    - PCBs – aroclor-1260 and various PCB congeners

4.3.1.2 East Drainage Path

The East Drainage Path enters the southeast end of North Lake. The drainage path includes a drainage ditch that flows into East Lake and over a weir into another ditch into North Lake (**Figure 2-2** and Ref. 6, p. 3).

Six sediment samples including two duplicate samples were collected from locations SED16 and SED17 in the East Drainage Path (Appendix B). Analytical results from East Drainage Path indicate concentrations of the following HRS-significant contaminants (contaminants considered a hazardous substance with high toxicity/bioaccumulation factor values):

- Contaminants in the East Drainage Path sediments above background concentrations (Tables 4-7 and 4-8; Appendices D and E);
    - Metals – antimony, arsenic, calcium, lead, silver, and zinc
    - SVOCs –bis(2-ethylhexyl)phthalate, and phenanthrene
    - Pesticides – 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, beta-BHC, cis-chlordane, delta-BHC, endosulfan I, endrin, endrin aldehyde, heptachlor epoxide, and trans-chlordane
    - Herbicides – 2,4,5-T, 2,4-D, 2,4-DB, dichlorprop, dinoseb, MCPA, pentachlorophenol, and silvex (2,4,5-TP).
    - PCBs – aroclor-1260 and various PCB congeners

4.3.1.3 South Drainage Path

The South Drainage Path enters the southeast end of South Lake. The drainage path includes a drainage ditch that flows through an undeveloped area and under Intestate Highway 110 and into South Lake (**Figure 2-2** and Ref. 6, p. 3).

Two sediment samples were collected from location SED18 in the South Drainage Path (Appendix B). Analytical results from the East Drainage Path indicate concentrations of the

following HRS-significant contaminants (contaminants considered a hazardous substance with high toxicity/bioaccumulation factor values):

- Contaminants in the South Drainage Path sediments above background concentrations (**Table 4-7** and **Table 4-8**; Appendices D and E);
    - Metals – antimony, calcium, and lead
    - SVOCs – benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, bis(2-ethylhexyl)phthalate, fluoranthene, phenanthrene, and pyrene.
    - Pesticides – trans-chlordane
    - Herbicides – pentachlorophenol
    - PCBs – aroclor-1260 and various PCB congeners

4.3.1.4 Drum Location Sample

Sample SED19 was planned to be collected in the South Drainage Path upstream of SED18, but EPA was unable to get access to the location due to an unresponsive landowner. At the request of LDEQ, EPA collected sample SED19 near abandoned drums found along the bank of the slough at the north end of North Lake (**Figure 3-1**). Two sediment samples were collected at location SED19. Analytical results from SED19 indicate concentrations of the following HRS-significant contaminants (contaminants considered a hazardous substance with high toxicity/bioaccumulation factor values):

- Contaminants in the sediments collected near the abandoned drums above background concentrations (**Table 4-7** and **Table 4-8**; Appendices D and E);
    - Metals – antimony, arsenic, cadmium, copper, lead. mercury, and silver.
    - SVOCs – anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, bis(2-ethylhexyl)phthalate, butylbenzylphthalate, chrysene, di-n-octylphthalate, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene.
    - Herbicides – MCPA and pentachlorophenol.
    - PCBs – aroclor 1016, aroclor-1260, and various PCB congeners.

4.3.2 Human Food Chain Receptors

START collected 17 fish tissue samples (including two duplicate samples) as part of the ESI to document an actual contamination to the human food chain attributable to the Site (Appendix B). The fish were collected by agents with the USFWS by electrofishing, which uses electricity to shock and stun the fish that can then be collected with a net (Appendix A, Photos 6 and 7). The fish

tissue samples were submitted to a NELAP-certified laboratory for the following analyses: SVOCs by SW846 Method 8270; PCBs by SW846 Method 8082; pesticides by SW846 Method 8081; PCB congeners by EPA Method 1668; and herbicides by SW846 Method 8151. The samples were planned to be collected from both North Lake and South Lake, but the fish shocking apparatus did not function in South Lake because the water was too shallow, so the fish samples were all collected from North Lake. The fish were collected from a boat that was constantly moving, so the exact locations of the fish samples cannot be shown, although the lakes are a stagnant system that confines the fish to Capitol Lakes. Fish samples were collected from both top-feeding species (sunfish) and bottom-feeding species (yellow bullhead catfish and smallmouth buffalo). All three of these species are considered edible (Ref. 15, p. 1; Ref. 16, pp. 7-8; and Ref. 17, pp. 1-3). Analytical results from fish tissue samples were compared to the SCDMs (Ref. 2). Analytical results are presented in **Table 4-9** and **Table 4-10**.

The following were all present in fish tissue samples at concentrations above the SCDM values (Tables 4-9 and 4-10; Appendices D and E);

- Metals – arsenic, chromium, and mercury;
- Pesticides - 4,4'-DDT, 4,4'-DDE, 4,4'-DDD, cis-chlordane, dieldrin, heptachlor epoxide, and trans-chlordane;
- PCBs - total PCBs (aroclor 1242, 1254, and 1260).

5. MIGRATION PATHWAYS AND RECEPTORS

Many exposure pathways were considered for the Site, but only the surface water migration pathway was evaluated. Rationale for this singular selection is provided in the following subsections.

5.1 SURFACE WATER MIGRATION PATHWAY

In determining the score for the surface water pathway, the HRS evaluates: (1) the likelihood that sources at a site actually have released, or potentially could release, hazardous substances to surface water (e.g., streams, rivers, lakes, and oceans); (2) the characteristics of the hazardous substances that are available for a release (i.e., toxicity, persistence, bioaccumulation potential, and quantity); and (3) the people or sensitive environments (targets) who actually have been, or potentially could be, impacted by the release. For the targets component of the evaluation, the HRS focuses on drinking water intakes, fisheries, and sensitive environments associated with surface water bodies within 15 miles downstream of a site.

5.1.1 Overland Route

The Capitol Lakes System does not have a natural outlet, and water is pumped out of the lakes and into the Mississippi River by a pump located in the southwest corner of North Lake (Ref. 4, p. 29; Ref. 6, p. 3).

The Mississippi River in Baton Rouge has an average discharge (volumetric flow) of more than 573,000 cubic feet per second (Ref. 18). The volume of water in the Capitol Lakes System can be conservatively calculated to be approximately 15.6 million cubic feet. Therefore, the volume of water in the Capitol Lakes system flows through Baton Rouge in the Mississippi River in less than 30 seconds. Given this difference in orders of magnitude in the water bodies, it is unlikely that any contamination that is pumped from Capitol Lakes into the Mississippi River could ever be detected. Therefore, the entire 15-mile target distance limit (TDL) of the surface water pathway was not evaluated; rather, the focus of the ESI sampling effort was on the stagnant water body system of Capitol Lakes.

5.1.2 Surface Water Targets

The potential targets of the surface water pathway would include the population relying on surface water within the 15-mile TDL as a source of drinking water, as well as downstream fisheries, sensitive environments, and surface water resources. Due to the reasons presented above, the entire 15-mile TDL was not evaluated. Drinking water in the City of Baton Rouge is provided by the Southern Hills Aquifer (Ref. 19, p. 1).

The Capitol Lakes System has had a fishing advisory in place since 1983 (Ref 4, p. 25; Ref. 20, pp. 7-8; Appendix A, Photo 26). However, fishing is documented to occur in the Capitol Lakes, with witnesses testifying that fish caught there are consumed (Appendix A, Photo 1; Ref. 21; Ref. 22; Ref. 23). Fish collected and sampled during the Site Assessment include sunfish, yellow bullhead catfish, and smallmouth buffalo (Appendix A, Photos 8, 9, 11, 12, and 13). These species are commonly caught for human consumption (Ref. 15, p. 1; Ref. 16, pp. 7-8; and Ref. 17, pp. 1-3).

5.1.3 Surface Water Pathway Conclusion

Based on the ESI fish tissue sampling results, and the presence of these compounds in source sediment samples, a release of the following HRS-significant contaminants (contaminants considered a hazardous substance with high toxicity/bioaccumulation factor values) has been documented. An observed release of total PCBs; 4,4'-DDE; 4,4'-DDT; cis-chlordane; dieldrin; heptachlor epoxide; trans-chlordane; arsenic; chromium; and mercury to the surface water pathway was documented, as defined by the HRS. For HRS purposes, a release to surface water is documented when a hazardous substance attributable to the site is detected in a surface water (in this case sediment) sample at a concentration significantly above background levels (i.e., a chemical contaminant is detected at a concentration greater than or equal to three times background). ESI sampling locations for the surface water pathway are presented in **Table 3-1** and **Figure 3-1** and **Figure 3-2**. Results of the ESI sampling event relating to a release to surface water are presented in **Table 4-9** and **Table 4-10**.

The TDL for the Site is 15 miles downstream from the Site in the Mississippi River. The Mississippi River receives water pumped from Capitol Lakes. However, water from Capitol Lakes undergoes extreme dilution in the Mississippi River.

5.2 PATHWAYS NOT EVALUATED

The groundwater migration, air migration, and soil exposure pathways were not considered for the Site. Details on these pathways are provided below.

5.2.1 Groundwater Migration Pathway

In determining a score for the groundwater migration pathway, the HRS evaluates: 1) the likelihood that sources at a site actually have released, or potentially could release hazardous substances to groundwater; 2) the characteristics of the hazardous substances that are available for a release (i.e., toxicity, mobility, and quantity); and 3) the people (targets) who actually have been, or potentially could be, impacted by the release. For the targets component of the evaluation, the HRS focuses on the number of people who regularly obtain their drinking water from wells that are located within 4 miles of the site. The HRS emphasizes drinking water usage over other uses of groundwater (e.g., food crop irrigation and livestock watering) because, as a screening tool, it is designed to give the greatest weight to the most direct and extensively studied exposure routes.

The drinking water source for Baton Rouge is the Southern Hills Aquifer, which is recharged near Vicksburg, Mississippi. The wells providing the drinking water are 600 to 2800 feet deep (Ref. 19, p. 1). The combination of the distance to the recharge zone and depth of the wells make it unlikely that contamination from the Site could impact the drinking water, and thus the groundwater migration pathway was not evaluated for the Site.

5.2.2 Soil Exposure and Air Migration Pathways

In determining the score for the soil exposure pathway, the HRS evaluates: (1) the likelihood that surficial contamination is associated with the site (e.g., contaminated soil that is not covered by pavement or is at least 2 feet of clean soil); (2) the characteristics of the hazardous substances in the surficial contamination (i.e., toxicity and quantity); and (3) the people or sensitive environments (targets) who actually have been, or potentially could be, exposed to the contamination. For the targets component of the evaluation, the HRS focuses on populations that are regularly and currently present on or within 200 feet of surficial contamination. The four populations that receive the most weight are residents, students, daycare attendees, and terrestrially sensitive environments.

In determining the score for the air migration pathway, the HRS evaluates: (1) the likelihood that sources at a site actually have released, or potentially could release, hazardous substances to ambient outdoor air; (2) the characteristics of the hazardous substances that are available for a release (i.e., toxicity, mobility, and quantity); and (3) the people or sensitive environments (targets) who actually have been, or potentially could be, impacted by the release. For the targets component of the evaluation, the HRS focuses on regularly occupied residences, schools, and workplaces within 200 feet of the site. Transient populations, such as customers and travelers passing through the area are not counted.

Although people do reside near the Capitol Lakes, the location of the source in lake sediments makes it unlikely for any targets to be affected by soil exposure or air migration. The soil exposure and air migration pathways were not evaluated for the Site.

6. SUMMARY

START conducted a Site Reassessment and ESI sampling event in April 2022 that included sampling sediment and fish tissue. The specific sampling objectives for the ESI were to collect data that could be used to document a release of hazardous substances to the surface water pathway. Based on the results of the ESI sampling event, an observed release to the surface water pathway attributable to the Site was documented.

Based on the 2022 ESI, the following pertinent HRS factors are associated with the Site:

- Concentrations of PCBs, metals, and pesticides in the Capitol Lakes significantly above background levels provide a source of contaminants for the Site.
- PCBs were detected in sediments in both North Lake and in South Lake at levels significantly above background.
- Pesticides 4,4'-DDE, 4,4'-DDT, aldrin, beta-BHC, delta-BHC, dieldrin, endosulfan I, endosulfan sulfate, endrin, endrin aldehyde, heptachlor, heptachlor epoxide, and trans-chlordane were detected in sediments at levels significantly above background.
- Metals antimony, arsenic, cadmium, calcium, chromium, copper, iron, lead, manganese, silver, and zinc were detected in sediments at levels significantly above background.
- Based on the START 2022 ESI fish tissue and sediment sampling results, a release of the following HRS-significant contaminants (contaminants considered a hazardous substance with high toxicity/bioaccumulation factor values) has been documented: arsenic, chromium, mercury, 4,4'-DDD, 4,4'-DDT, cis-chlordane, dieldrin, heptachlor epoxide, and trans-chlordane, and total PCBs to the surface water pathway, as defined by the HRS. Observed releases in surface water have been documented in sediment samples.
- Metals arsenic, chromium, and mercury were detected in fish tissue samples at concentrations greater than the SCDM benchmark levels for cancer risk and non-cancer risk.
- Pesticides 4,4'-DDD, 4,4'-DDT, cis-chlordane, dieldrin, heptachlor epoxide, and trans-chlordane were found in fish tissues above the SCDM benchmark levels for cancer risk or non-cancer risk.
- Total PCBs (aroclor-1242, aroclor-1254, and aroclor-1260) were detected in fish tissue samples at concentrations greater than the SCDM levels for cancer risk (0.00208 milligrams per kilogram [mg/kg]) and for non-cancer risk (0.0309 mg/kg). The highest concentrations of total PCBs detected in fish tissue samples were 1.9 mg/kg in smallmouth buffalo, 0.28 mg/kg in Sunfish, and 0.44 mg/kg in yellow bullhead catfish.
- LDEQ has obtained testimony that local citizens catch and eat fish from Capitol Lakes in spite of posted signs warning of the health hazards of consuming the fish.

- TDL for the Site is 15 miles downstream from the Site in the Mississippi River. Although surface water is used for fishing within the TDL, the discharge (volumetric flow) of water in the Mississippi River is so great that any contamination released from Capitol Lakes would likely be diluted beyond detection; therefore, the entire 15-mile TDL was not evaluated.

7. REFERENCES

The following reference documents are found as separate files in Appendix G.

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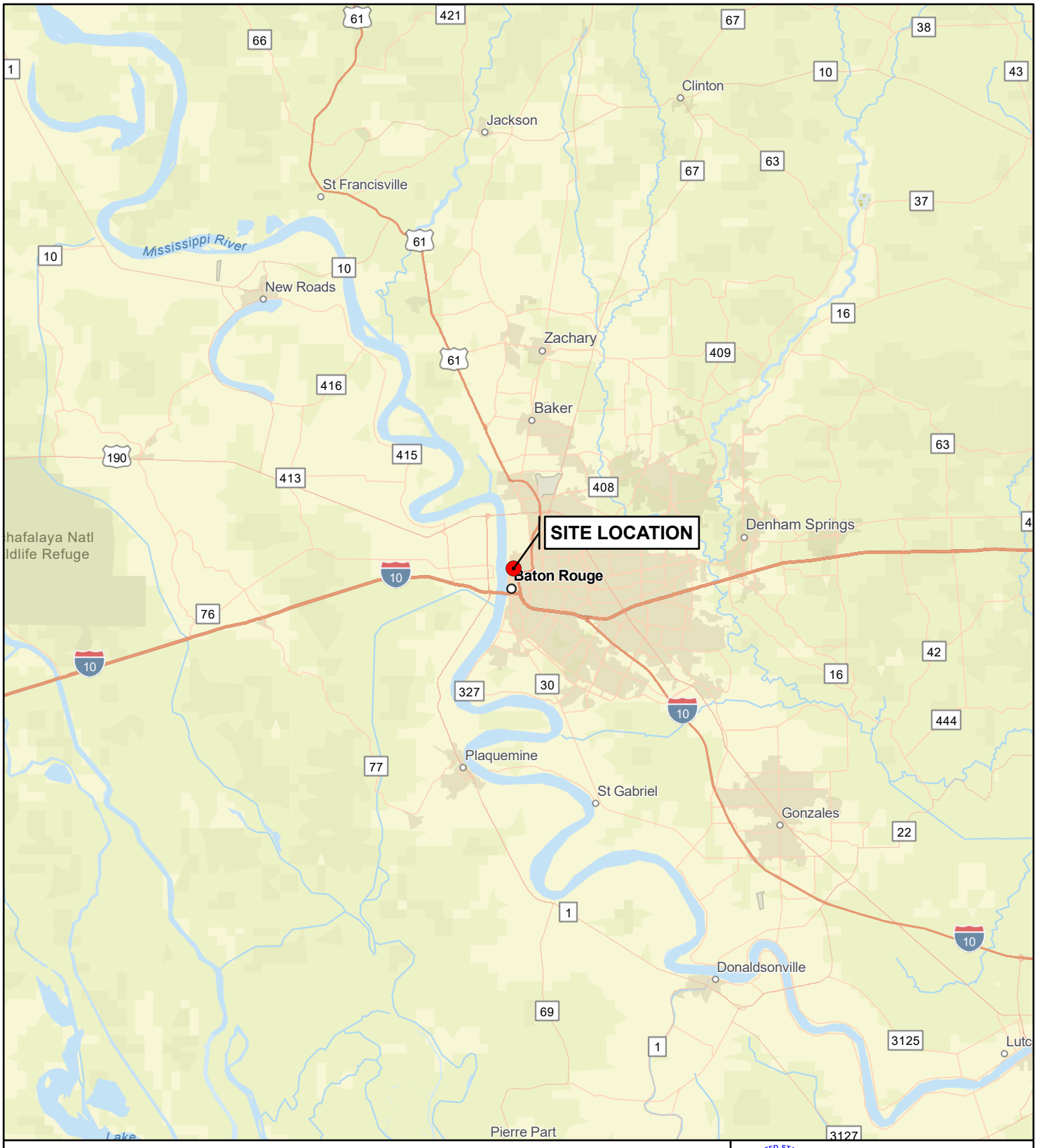
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LEGEND

- SITE LOCATION



0 8 16

SCALE IN MILES

SOURCE: WORLD STREET MAPS; ESRI
TDD: 0001/21-409
SEMS: LAD980869440
SSID: A6UD

US EPA REGION 6

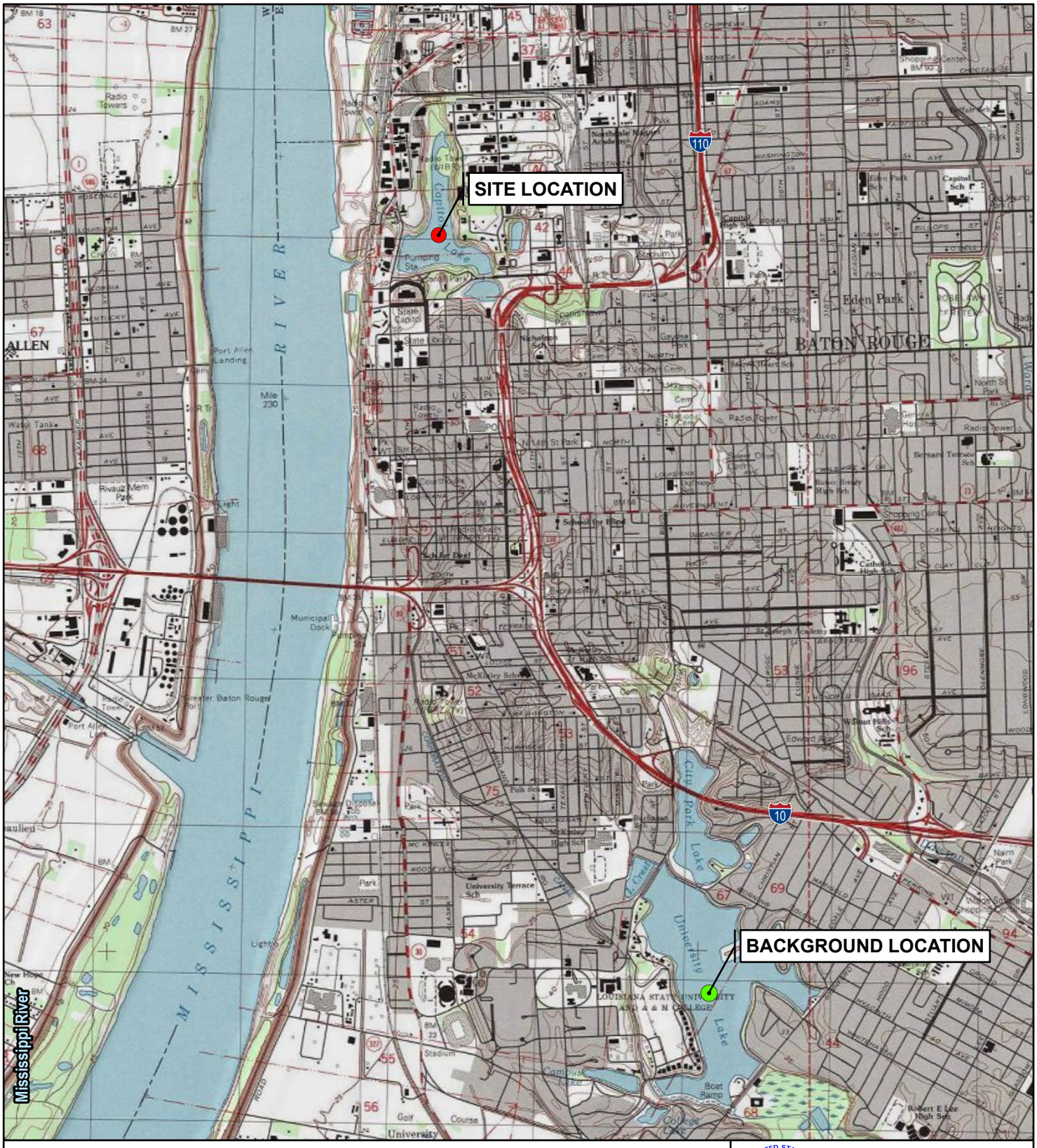
FIGURE 1-1

SITE LOCATION MAP

CAPITOL LAKES SITE REASSESSMENT
BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA

DATE	PROJECT NO	SCALE
OCTOBER 2022	20600.012.001.1409	AS SHOWN

FILE: \\nasabxgis1\ATX_GIS_Data\EPA\Region 6 START IV\Superfund\Capitol Lake Site Reassessment\pro\Capitol Lake Site Reassessment\Capitol Lake Site Reassessment\Capitol Lake Site Reassessment.aprx 2:28 PM 10/7/2022 covasj



LEGEND

- BACKGROUND LOCATION
- SITE LOCATION



0 3,000 6,000

SCALE IN FEET

SOURCE: NATIONAL GEOGRAPHIC TOPO; ESRI
TDD: 0001/21-409
SEMS: LAD980869440
SSID: A6UD

US EPA REGION 6

FIGURE 2-1

SITE AREA MAP

CAPITOL LAKES SITE REASSESSMENT
BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA

DATE	PROJECT NO	SCALE
OCTOBER 2022	20600.012.001.1409	AS SHOWN

FILE: \\nasatxgis1\ATX_GIS_Data\EPA\Region 6 START IV\Superfund\Capitol Lake Site Reassessment\pro\Capitol Lake Site Reassessment\Capitol Lake Site Reassessment\Capitol Lake Site Reassessment.aprx 2:28 PM 10/7/2022 covasj



LEGEND

- SITE LOCATION
- DRAINAGE PATH
- WATER PUMPED FROM NORTH LAKE TO MISSISSIPPI RIVER



0 1,000 2,000

SCALE IN FEET

SOURCE: ©NEARMAP IMAGERY, 2021
TDD: 0001/21-409
SEMS: LAD980869440
SSID: A6UD

US EPA REGION 6

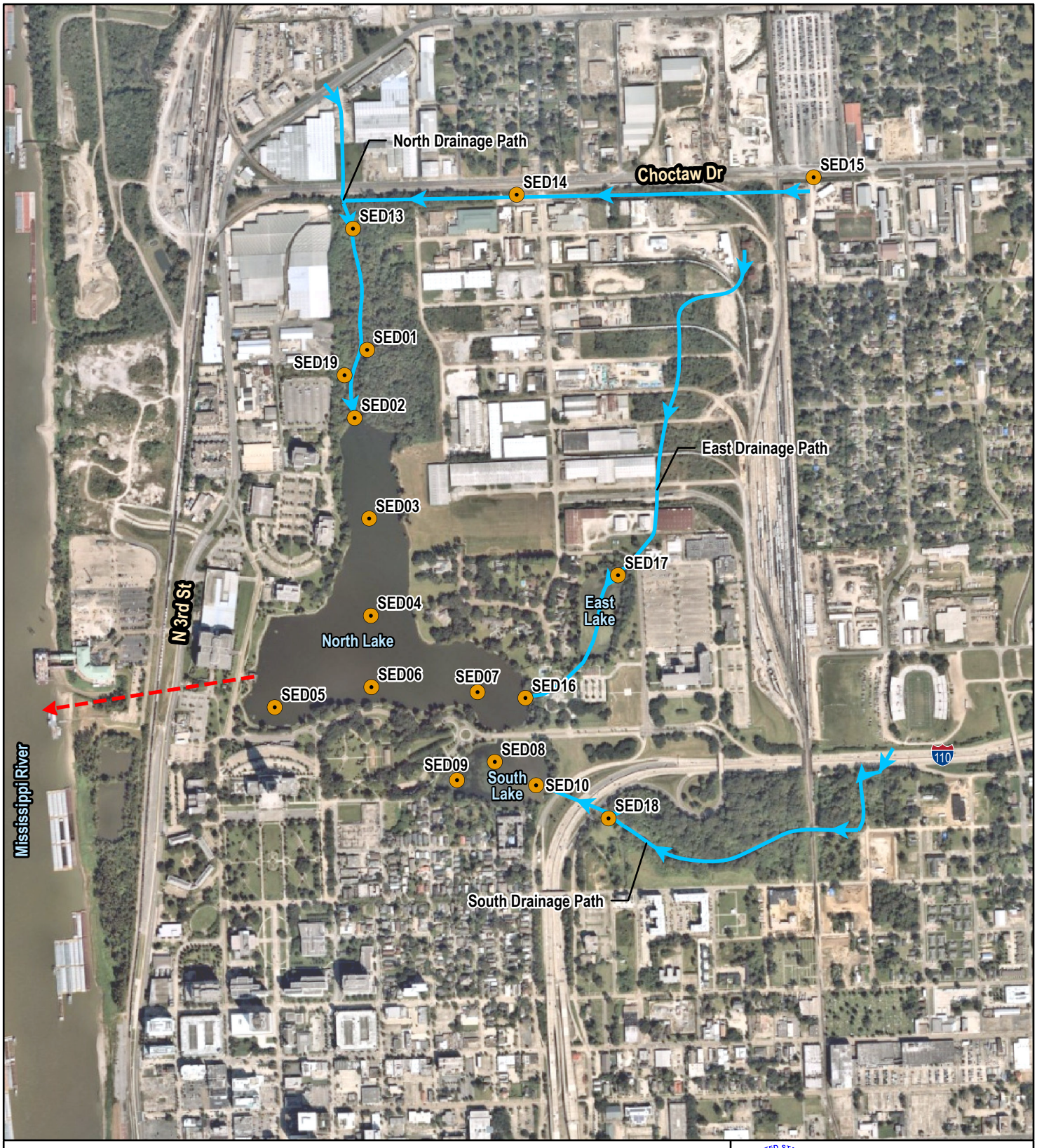
FIGURE 2-2

SITE LAYOUT MAP

CAPITOL LAKES SITE REASSESSMENT
BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA

DATE	PROJECT NO	SCALE
OCTOBER 2022	20600.012.001.1409	AS SHOWN

FILE: \\nasatxgis1\ATX_GIS_Data\EPA\Region 6 START IV\Superfund\Capitol Lake Site Reassessment\pro\Capitol Lake Site Reassessment\Capitol Lake Site Reassessment\Capitol Lake Site Reassessment.aprx 2:53 PM 10/7/2022 covasj



LEGEND

- SEDIMENT SAMPLE LOCATION
- DRAINAGE PATH
- WATER PUMPED FROM NORTH LAKE TO MISSISSIPPI RIVER



0 1,000 2,000

SCALE IN FEET

SOURCE: ©NEARMAP IMAGERY, 2021
TDD: 0001/21-409
SEMS: LAD980869440
SSID: A6UD

US EPA REGION 6

FIGURE 3-1

SEDIMENT SAMPLE LOCATION MAP
CAPITOL LAKES SITE REASSESSMENT
BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA

DATE	PROJECT NO	SCALE
OCTOBER 2022	20600.012.001.1409	AS SHOWN

FILE: \\nasatxgis1\ATX_GIS_Data\EPA\Region 6 START IV\Superfund\Capitol Lake Site Reassessment\pro\Capitol Lake Site Reassessment\Capitol Lake Site Reassessment\Capitol Lake Site Reassessment.aprx 2:55 PM 10/7/2022 covasj



LEGEND

- BACKGROUND SEDIMENT SAMPLE LOCATION



0 1,000 2,000

SCALE IN FEET

SOURCE: ©NEARMAP IMAGERY, 2021
TDD: 0001/21-409
SEMS: LAD980869440
SSID: A6UD

US EPA REGION 6

FIGURE 3-2

BACKGROUND SEDIMENT
SAMPLE LOCATION MAP
CAPITOL LAKES SITE REASSESSMENT
BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA

DATE	PROJECT NO	SCALE
OCTOBER 2022	20600.012.001.1409	AS SHOWN

FILE: \\nasatxgis1\ATX_GIS_Data\EPA\Region 6 START IV\Superfund\Capitol Lake Site Reassessment\pro\Capitol Lake Site Reassessment\Capitol Lake Site Reassessment\Capitol Lake Site Reassessment.aprx 2:32 PM 10/7/2022 covasj

Table 4-1
Summary of Sediment Sample Results, North Lake, 0-12 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 0 - 12 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L01	L01	L01	L01	L01	L01	L01	L01
					Station	SED01	SED02	SED03	SED04	SED04	SED05	SED06	SED07
					Sample ID	CL-L01-SED01-12-51	CL-L01-SED02-12-51	CL-L01-SED03-12-51	CL-L01-SED04-12-51	CL-L01-SED04-12-52	CL-L01-SED05-12-51	CL-L01-SED06-12-51	CL-L01-SED07-12-51
					Depths	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
					Date	04/04/2022	04/04/2022	04/05/2022	04/05/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022
					Type	FS	FS	FS	FS	FD	FS	FS	FS
Herbicides by SW846 Method 8151													
2,4,5-T	93-76-5	mg/kg	0.0037	63	--	0.00099 U	0.0015 U	0.0024 UJK	0.0029 U	0.0029 U	0.0027 U	0.003 U	0.0027 U
2,4-D	94-75-7	mg/kg	0.054	70	--	0.015 U	0.023 UJK	0.035 U	0.042 U	0.042 U	0.04 U	0.043 U	0.04 U
2,4-DB	94-82-6	mg/kg	0.045	NP	--	0.012 U	**0.14 JK**	0.029 UJK	0.035 U	0.035 U	0.033 U	0.036 U	0.033 U
Dalapon	75-99-0	mg/kg	0.22	190	--	0.059 U	0.092 U	0.14 U	0.17 U	0.17 U	0.16 U	0.18 U	0.16 U
Dicamba	1918-00-9	mg/kg	0.018	190	--	0.0049 U	0.0075 UJK	0.012 U	0.014 U	0.014 U	0.013 U	0.014 U	0.013 U
Dichlorprop	120-36-5	mg/kg	0.041	NP	--	0.011 U	0.017 UJK	0.026 UJK	0.032 U	0.031 U	0.03 U	0.032 U	0.03 U
Dinoseb	88-85-7	mg/kg	0.041	6.3	--	0.011 U	0.017 UJK	0.026 U	0.032 U	0.031 U	0.03 U	0.032 U	0.03 U
MCPA	94-74-6	mg/kg	3.4	3.2	--	0.92 U	1.4 UJK	2.2 U	2.7 U	2.6 U	2.5 U	2.7 U	2.5 U
MCPP	93-65-2	mg/kg	17	6.3	--	4.6 U	7.1 UJK	11 U	13 U	13 U	13 U	14 U	13 U
Pentachlorophenol	87-86-5	mg/kg	0.0015	1	--	**0.00064 JQK**	**0.0018 JQK**	**0.0015 JQK**	**0.0018 JQK**	**0.002 JQK**	**0.0018 JQK**	0.0012 U	**0.0019 JQK**
Silvex (2,4,5-TP)	93-72-1	mg/kg	0.0034	51	--	0.00091 U	**0.0021 JQK**	0.0022 UJK	0.0026 U	0.0026 U	0.0025 U	0.0027 U	0.0025 U
PCB Aroclors by CLP SOW SFAM01.1/3150.0													
Aroclor-1016	12674-11-2	mg/kg	0.0053	0.41	--	0.0026 U	0.0032 U	**0.46**	**0.16**	**0.19**	0.0041 U	0.0046 U	0.0043 UJ
Aroclor-1221	11104-28-2	mg/kg	0.0053	0.2	--	0.0026 U	0.0032 U	0.0066 U	0.0041 U	0.0042 U	0.0041 U	0.0046 U	0.0043 UJ
Aroclor-1232	11141-16-5	mg/kg	0.0053	0.17	--	0.0026 U	0.0032 U	0.0066 U	0.0041 U	0.0042 U	0.0041 U	0.0046 U	0.0043 UJ
Aroclor-1242	53469-21-9	mg/kg	0.0053	0.23	--	0.0026 U	0.0032 U	0.0066 U	0.0041 U	0.0042 U	0.0041 U	0.0046 U	0.0043 UJ
Aroclor-1248	12672-29-6	mg/kg	0.0053	0.23	--	0.0026 U	0.0032 U	0.0066 U	0.0041 U	0.0042 U	0.0041 U	0.0046 U	0.0043 UJ
Aroclor-1254	11097-69-1	mg/kg	0.0053	0.12	--	0.0026 U	0.0032 U	0.0066 U	0.0041 U	0.0042 U	0.0041 U	0.0046 U	0.0043 UJ
Aroclor-1260	11096-82-5	mg/kg	0.0053	0.24	--	**0.82**	**0.12**	**0.47**	**0.14**	**0.14**	**0.11**	**0.047**	**1.4**
Aroclor-1262	37324-23-5	mg/kg	0.0053	NP	--	0.0026 U	0.0032 U	0.0066 U	0.0041 U	0.0042 U	0.0041 U	0.0046 U	0.0043 UJ
Aroclor-1268	11100-14-4	mg/kg	0.0053	NP	--	0.0026 U	0.0032 U	0.0066 U	0.0041 U	0.0042 U	0.0041 U	0.0046 U	0.0043 UJ
PCB Aroclor Congeners Group 1 by CLP SOW HRSM02.1													
PCB-105	32598-14-4	mg/kg	0.000036	0.12	--	**0.067**	**0.0046**	**0.00091**	**0.00048**	**0.00043**	**0.0037**	**0.00026**	**0.0031**
PCB-114	74472-37-0	mg/kg	0.00000097	0.12	--	**0.0053**	**0.0003**	**0.000085**	**0.000057**	**0.000045**	**0.00033**	**0.00012**	**0.0002**
PCB-118	31508-00-6	mg/kg	0.000054	0.12	--	**0.11**	**0.0057**	**0.0018**	**0.00087**	**0.00074**	**0.0082**	**0.00032**	**0.0035**
PCB-123	65510-44-3	mg/kg	0.0000009	0.12	--	**0.0026**	**0.00025**	**0.000091**	**0.000057**	**0.000056**	**0.00036**	**0.000015 LJ**	**0.00017**
PCB-126	57465-28-8	mg/kg	0.00000066	0.000036	--	**0.0016**	**0.00019**	**0.000047**	**0.000028**	**0.000028**	**0.00023**	**0.000015 LJ**	**0.00012**
PCB-156	38380-08-4	mg/kg	0.0000186	0.12	--	**0.032**	**0.0018**	**0.00054**	**0.00026**	**0.00024**	**0.0019**	**0.00012**	**0.001**
PCB-157	69782-90-7	mg/kg	0.0000051	0.12	--	**0.0068**	**0.00047**	**0.000097**	**0.000053**	**0.000052**	**0.00042**	**0.000035**	**0.00025**
PCB-167	52663-72-6	mg/kg	0.000009	0.12	--	**0.29 F+**	**0.0011**	**0.00028**	**0.00013**	**0.00012**	**0.0011**	**0.000067**	**0.00053**
PCB-169	32774-16-6	mg/kg	0.00000093	0.00012	--	**0.000091**	**0.000016 LJ**	**0.000006**	**0.0000027**	0.0000015 U	**0.000029**	0.0000092 U	**0.000014 LJ**
PCB-189	39635-31-9	mg/kg	0.0000036	0.13	--	**0.0035**	**0.00033**	**0.00009**	**0.000048**	**0.000042**	**0.00032**	**0.000031**	**0.00018**
PCB-77	32598-13-3	mg/kg	0.0000066	0.038	--	**0.0077**	**0.0011**	**0.00029**	**0.00023**	**0.00019**	**0.0015**	**0.000061**	**0.0012**
PCB-81	70362-50-4	mg/kg	0.00000222	0.012	--	**0.0023**	**0.00017**	**0.000049**	**0.000037**	**0.000036**	**0.00017**	**0.000014 LJ**	**0.00014**
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1													
PCB-1	2051-60-7	mg/kg	0.000006	NP	--	**0.00053**	**0.00004**	**0.000018**	**0.000018**	**0.000016**	**0.000097**	**0.000029**	**0.00045**
PCB-10	33146-45-1	mg/kg	0.000002	NP	--	**0.00054**	**0.000038**	**0.000018**	**0.000014**	**0.000013**	**0.000068**	**0.0000048 LJ**	**0.00014**
PCB-100	39485-83-1	mg/kg	0.000002	NP	--	**0.0011**	**0.001**	**0.000041**	**0.000017**	**0.000016**	**0.00015**	**0.000023**	**0.00012**
PCB-103	60145-21-3	mg/kg	0.000002	NP	--	**0.0013**	**0.00045**	**0.000091**	**0.000038**	**0.000034**	**0.0003**	**0.000022**	**0.00013**
PCB-104	56558-16-8	mg/kg	0.000002	NP	--	**0.000078**	**0.0001**	0.000002 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	**0.000034**
PCB-106	70424-69-0	mg/kg	0.000048	NP	--	**0.061**	**0.0056**	**0.0011**	**0.00087**	**0.00075**	**0.0058**	**0.00038**	**0.0039**
PCB-107	70424-68-9	mg/kg	0.000006	NP	--	**0.006**	**0.00051**	**0.00014**	**0.000083**	**0.00007**	**0.00063**	**0.000037**	**0.00034**
PCB-108	70362-41-3	mg/kg	0.000006	NP	--	**0.0083**	**0.00051**	**0.00012**	**0.000089**	**0.000071**	**0.00071**	**0.000034**	**0.00037**
PCB-109	74472-35-8	mg/kg	0.000002	NP	--	0.000029 U	0.000029 U	0.000002 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.00002 U
PCB-11	2050-67-1	mg/kg	0.000006	NP	--	**0.00077**	**0.00043**	**0.0000093**	**0.000006**	**0.0000069**	**0.000061**	**0.000018 LJ**	**0.00021**
PCB-110	38380-03-9	mg/kg	0.000144	NP	--	**0.13**	**0.016**	**0.0035**	**0.0021**	**0.0019**	**0.013**	**0.00083**	**0.0082**
PCB-111/115	39635-32-0/74472-38-1	mg/kg	0.000004	NP	--	**0.0016**	**0.00026**	0.000004 U	0.000004 U	0.000004 U	**0.00013**	**0.000014 LJ**	**0.000084**
PCB-113	68194-10-5	mg/kg	0.000002	NP	--	0.000029 U	0.000029 U	0.000002 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.00002 U
PCB-119	56558-17-9	mg/kg	0.0000069	NP	--	**0.0025**	**0.00052**	**0.00016**	**0.000075**	**0.000067**	**0.00049**	**0.000034**	**0.00023**
PCB-12	2974-92-7	mg/kg	0.000002	NP	--	**0.0013**	**0.000099**	**0.000035**	**0.00003**	**0.000015**	**0.00014**	**0.000014 LJ**	**0.00021**
PCB-120	68194-12-7	mg/kg	0.000002	NP	--	**0.0003**	0.000029 U	0.000002 U	0.000002 U	0.000002 U	**0.000049**	**0.0000085 LJ**	0.00002 U

Table 4-1 (continued)
Summary of Sediment Sample Results, North Lake, 0-12 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 0 - 12 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L01	L01	L01	L01	L01	L01	L01	L01
					Station	SED01	SED02	SED03	SED04	SED04	SED05	SED06	SED07
					Sample ID	CL-L01-SED01-12-51	CL-L01-SED02-12-51	CL-L01-SED03-12-51	CL-L01-SED04-12-51	CL-L01-SED04-12-52	CL-L01-SED05-12-51	CL-L01-SED06-12-51	CL-L01-SED07-12-51
					Depths	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
					Date	04/04/2022	04/04/2022	04/05/2022	04/05/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022
					Type	FS	FS	FS	FS	FD	FS	FS	FS
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)													
PCB-121	56558-18-0	mg/kg	0.000002	NP	--	0.000029 U	0.000029 U	0.000002 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.00002 U
PCB-122	76842-07-4	mg/kg	0.000002	NP	--	**0.0019**	**0.0002**	**0.000026**	**0.000018**	**0.000019**	**0.00012**	**0.000014 LJ**	**0.00013**
PCB-124	70424-70-3	mg/kg	0.000006	NP	--	**0.0087**	**0.00062**	**0.00015**	**0.000087**	**0.000078**	**0.00062**	**0.000037**	**0.0004**
PCB-127	39635-33-1	mg/kg	0.000002	NP	--	0.000029 U	0.000029 U	0.000002 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.00002 U
PCB-128/162	38380-07-3/39635-34-2	mg/kg	0.000036	NP	--	**0.039**	**0.0035**	**0.0008**	**0.0004**	**0.00036**	**0.0033**	**0.00024**	**0.0019**
PCB-129	55215-18-4	mg/kg	0.0000081	NP	--	**0.012**	**0.00087**	**0.0002**	**0.00011**	**0.0001**	**0.00073**	**0.000048**	**0.00045**
PCB-13	2974-90-5	mg/kg	0.000002	NP	--	**0.0012**	**0.000096**	**0.00002**	**0.000018**	**0.000025**	**0.00021**	**0.000014 LJ**	**0.00023**
PCB-130	52663-66-8	mg/kg	0.0000159	NP	--	**0.011**	**0.0016**	**0.00039**	**0.00016**	**0.0002**	**0.0014**	**0.00011**	**0.00085**
PCB-131/133	61798-70-7/35694-04-3	mg/kg	0.000012	NP	--	**0.0074**	**0.00095**	**0.00022**	**0.0001**	**0.000092**	**0.00074**	**0.00005**	**0.00038**
PCB-132/161	38380-05-1/74472-43-8	mg/kg	0.000045	NP	--	**0.066**	**0.0077**	**0.0021**	**0.00087**	**0.00084**	**0.007**	**0.00037**	**0.0038**
PCB-134/143	52704-70-8/68194-15-0	mg/kg	0.000012	NP	--	**0.013**	**0.0014**	**0.00035**	**0.00017**	**0.00014**	**0.0012**	**0.000075**	**0.00068**
PCB-135	52744-13-5	mg/kg	0.0000216	NP	--	**0.041**	**0.0045**	**0.0015**	**0.00065**	**0.00048**	**0.0037**	**0.0002**	**0.0019**
PCB-136	38411-22-2	mg/kg	0.0000228	NP	--	**0.039**	**0.0043**	**0.00085**	**0.00036**	**0.00032**	**0.0027**	**0.00024**	**0.0016**
PCB-137	35694-06-5	mg/kg	0.0000096	NP	--	**0.018**	**0.001**	**0.0003**	**0.00018**	**0.0001**	**0.0012**	**0.000056**	**0.00054**
PCB-138/163/164	35065-28-2/74472-44-9/74472-45-0	mg/kg	0.000174	NP	--	**0.28**	**0.028**	**0.0073**	**0.0033**	**0.0029**	**0.024**	**0.0017**	**0.015**
PCB-139/149	56030-56-9/38380-04-0	mg/kg	0.000135	NP	--	**0.23**	**0.026**	**0.0078**	**0.0034**	**0.0028**	**0.023**	**0.0013**	**0.012**
PCB-14	34883-41-5	mg/kg	0.000002	NP	--	**0.00018**	**0.000026 LJ**	**0.0000036**	**0.000003**	**0.0000036**	0.00002 U	0.00002 U	**0.0000048 LJ**
PCB-140	59291-64-4	mg/kg	0.000002	NP	--	**0.00082**	**0.0002**	**0.000041**	**0.000026**	**0.000028**	**0.0002**	**0.000017 LJ**	**0.000087**
PCB-141	52712-04-6	mg/kg	0.0000219	NP	--	**0.06**	**0.0054**	**0.0016**	**0.00071**	**0.0006**	**0.0048**	**0.00027**	**0.0026**
PCB-142	41411-61-4	mg/kg	0.000002	NP	--	0.000029 U	0.000029 U	0.000002 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.00002 U
PCB-144	68194-14-9	mg/kg	0.000006	NP	--	**0.012**	**0.0012**	**0.00035**	**0.00017**	**0.00016**	**0.001**	**0.000081**	**0.00074**
PCB-145	74472-40-5	mg/kg	0.000002	NP	--	**0.000077**	**0.0000098 LJ**	0.000002 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.00002 U
PCB-146/165	51908-16-8/74472-46-1	mg/kg	0.000036	NP	--	**0.039**	**0.0045**	**0.0013**	**0.00055**	**0.0005**	**0.0042**	**0.00028**	**0.002**
PCB-147	68194-13-8	mg/kg	0.000006	NP	--	**0.0036**	**0.0011**	**0.000071**	**0.000042**	**0.000043**	**0.00036**	**0.000039**	**0.00024**
PCB-148	74472-41-6	mg/kg	0.000002	NP	--	0.000029 U	0.000029 U	0.000002 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.00002 U
PCB-15	2050-68-2	mg/kg	0.0000084	NP	--	**0.016**	**0.001**	**0.00041**	**0.00036**	**0.0003**	**0.0025**	**0.00015**	**0.0019**
PCB-150	68194-08-1	mg/kg	0.000002	NP	--	**0.00037**	**0.00013**	**0.000016**	**0.0000075**	**0.0000059**	**0.000065**	0.00002 U	**0.000038**
PCB-151	52663-63-5	mg/kg	0.00003	NP	--	**0.069**	**0.008**	**0.0024**	**0.001**	**0.00083**	**0.0063**	**0.0004**	**0.0035**
PCB-152	68194-09-2	mg/kg	0.000002	NP	--	**0.00022**	**0.00007**	**0.0000043**	**0.000002**	**0.0000021**	**0.000018 LJ**	0.00002 U	**0.000014 LJ**
PCB-153	35065-27-1	mg/kg	0.000186	NP	--	**0.26**	**0.025**	**0.0081**	**0.0036**	**0.003**	**0.025**	**0.0014**	**0.012**
PCB-154	60145-22-4	mg/kg	0.0000087	NP	--	**0.0025**	**0.00051**	**0.000089**	**0.000041**	**0.000039**	**0.0004**	**0.000049**	**0.00018**
PCB-155	33979-03-2	mg/kg	0.000002	NP	--	0.000029 U	**0.00002 LJ**	0.000002 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.00002 U
PCB-158/160	74472-42-7/41411-62-5	mg/kg	0.0000171	NP	--	**0.031**	**0.0026**	**0.00058**	**0.00031**	**0.00031**	**0.0024**	**0.00016**	**0.0014**
PCB-159	39635-35-3	mg/kg	0.000002	NP	--	**0.0025**	**0.00028**	**0.0001**	**0.000041**	**0.00004**	**0.00027**	**0.000019 LJ**	**0.00012**
PCB-16	38444-78-9	mg/kg	0.000002	NP	--	**0.015**	**0.0012**	**0.00055**	**0.00044**	**0.00046**	**0.0024**	**0.00015**	**0.0023**
PCB-166	41411-63-6	mg/kg	0.000002	NP	--	**0.00087**	**0.000058**	**0.0000081**	**0.0000075**	**0.0000078**	**0.000049**	0.00002 U	**0.000035**
PCB-168	59291-65-5	mg/kg	0.000002	NP	--	0.000029 U	0.000029 U	0.000002 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.00002 U
PCB-17	37680-66-3	mg/kg	0.0000078	NP	--	**0.022**	**0.0013**	**0.00072**	**0.0007**	**0.00067**	**0.0031**	**0.00021**	**0.0039**
PCB-170	35065-30-6	mg/kg	0.000045	NP	--	**0.084**	**0.0073**	**0.002**	**0.00086**	**0.00068**	**0.0075**	**0.00046**	**0.0036**
PCB-171	52663-71-5	mg/kg	0.0000141	NP	--	**0.025**	**0.0023**	**0.0007**	**0.00033**	**0.00027**	**0.0023**	**0.00016**	**0.0012**
PCB-172	52663-74-8	mg/kg	0.0000096	NP	--	**0.016**	**0.0014**	**0.00043**	**0.00021**	**0.00015**	**0.0015**	**0.00011**	**0.00074**
PCB-173	68194-16-1	mg/kg	0.000002	NP	--	**0.002**	**0.00018**	**0.000043**	**0.000025**	**0.000021**	**0.00017**	0.00002 U	**0.000095**
PCB-174	38411-25-5	mg/kg	0.000042	NP	--	**0.098**	**0.0091**	**0.0029**	**0.0013**	**0.001**	**0.0078**	**0.00054**	**0.0041**
PCB-175	40186-70-7	mg/kg	0.000002	NP	--	**0.0039**	**0.00034**	0.000002 U	0.000002 U	**0.000038**	**0.00044**	**0.000031**	**0.0002**
PCB-176	52663-65-7	mg/kg	0.000006	NP	--	**0.013**	**0.0013**	**0.00038**	**0.00017**	**0.00013**	**0.0011**	**0.000075**	**0.00059**
PCB-177	52663-70-4	mg/kg	0.0000276	NP	--	**0.057**	**0.0054**	**0.0016**	**0.00072**	**0.00058**	**0.0049**	**0.00033**	**0.0025**
PCB-178	52663-67-9	mg/kg	0.000012	NP	--	**0.02**	**0.002**	**0.0006**	**0.00027**	**0.00023**	**0.0018**	**0.00014**	**0.00096**
PCB-179	52663-64-6	mg/kg	0.0000168	NP	--	**0.039**	**0.0041**	**0.0012**	**0.00054**	**0.00043**	**0.0036**	**0.00024**	**0.0018**
PCB-18	37680-65-2	mg/kg	0.0000111	NP	--	**0.057**	**0.0026**	**0.0018**	**0.0017**	**0.0016**	**0.007**	**0.0004**	**0.0068**
PCB-180	35065-29-3	mg/kg	0.000084	NP	--	**0.24**	**0.02**	**0.0059**	**0.0027**	**0.0021**	**0.02**	**0.0013**	**0.01**
PCB-181	74472-47-2	mg/kg	0.000002	NP	--	0.000029 U	0.000029 U	0.000002 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.00002 U

Table 4-1 (continued)
Summary of Sediment Sample Results, North Lake, 0-12 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 0 - 12 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L01	L01	L01	L01	L01	L01	L01	L01
					Station	SED01	SED02	SED03	SED04	SED04	SED05	SED06	SED07
					Sample ID	CL-L01-SED01-12-51	CL-L01-SED02-12-51	CL-L01-SED03-12-51	CL-L01-SED04-12-51	CL-L01-SED04-12-52	CL-L01-SED05-12-51	CL-L01-SED06-12-51	CL-L01-SED07-12-51
					Depths	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
					Date	04/04/2022	04/04/2022	04/05/2022	04/05/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022
					Type	FS	FS	FS	FS	FD	FS	FS	FS
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)													
PCB-182/187	60145-23-5/52663-68-0	mg/kg	0.00006	NP	--	**0.12**	**0.012**	**0.0036**	**0.0016**	**0.0013**	**0.011**	**0.00078**	**0.0056**
PCB-183	52663-69-1	mg/kg	0.0000243	NP	--	**0.053**	**0.005**	**0.0016**	**0.00071**	**0.00057**	**0.0049**	**0.00031**	**0.0023**
PCB-184	74472-48-3	mg/kg	0.000002	NP	--	**0.000053**	**0.0000099 LJ**	0.000002 U	0.000002 U	0.000002 U	**0.000014 LJ**	0.00002 U	**0.0000087 LJ**
PCB-185	52712-05-7	mg/kg	0.000002	NP	--	**0.012**	**0.00099**	**0.00032**	**0.00015**	**0.00012**	**0.00095**	**0.000072**	**0.00052**
PCB-186	74472-49-4	mg/kg	0.000002	NP	--	0.000029 U	0.000029 U	0.000002 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.00002 U
PCB-188	74487-85-7	mg/kg	0.000002	NP	--	**0.0001**	**0.00003**	**0.0000051**	**0.0000028**	**0.0000027**	**0.00003**	0.00002 U	**0.000016 LJ**
PCB-19	38444-73-4	mg/kg	0.000002	NP	--	**0.0051**	**0.00052**	**0.00014**	**0.00013**	**0.00012**	**0.00058**	**0.000048**	**0.001**
PCB-190	41411-64-7	mg/kg	0.0000096	NP	--	**0.017**	**0.0016**	**0.00036**	**0.00018**	**0.00015**	**0.0015**	**0.000099**	**0.00079**
PCB-191	74472-50-7	mg/kg	0.000002	NP	--	**0.0035**	**0.00031**	**0.000099**	**0.000047**	**0.000034**	**0.00034**	**0.000025**	**0.00018**
PCB-192	74472-51-8	mg/kg	0.000002	NP	--	0.000029 U	0.000029 U	0.000002 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.00002 U
PCB-193	69782-91-8	mg/kg	0.0000063	NP	--	**0.0089**	**0.00095**	**0.00022**	**0.000097**	**0.0001**	**0.00088**	**0.000072**	**0.00046**
PCB-194	35694-08-7	mg/kg	0.0000183	NP	--	**0.033**	**0.0034**	**0.0011**	**0.00046**	**0.00052**	**0.0041**	**0.00022**	**0.0017**
PCB-195	52663-78-2	mg/kg	0.0000072	NP	--	**0.017**	**0.0016**	**0.00057**	**0.00026**	**0.00024**	**0.0018**	**0.000087**	**0.0008**
PCB-196/203	42740-50-1/52663-76-0	mg/kg	0.0000255	NP	--	**0.043**	**0.0044**	**0.0011**	**0.00045**	**0.00041**	**0.0046**	**0.00037**	**0.0022**
PCB-197	33091-17-7	mg/kg	0.000002	NP	--	**0.0017**	**0.00017**	**0.00005**	**0.000022**	**0.000022**	**0.00017**	0.00002 U	**0.000085**
PCB-198	68194-17-2	mg/kg	0.000002	NP	--	**0.00089**	**0.00017**	**0.000032**	**0.000014**	**0.00002**	**0.00018**	0.00002 U	**0.000089**
PCB-199	52663-75-9	mg/kg	0.00003	NP	--	**0.041**	**0.0042**	**0.001**	**0.0004**	**0.00036**	**0.0041**	**0.00041**	**0.0019**
PCB-2	2051-61-8	mg/kg	0.000002	NP	--	**0.000067**	**0.000017 LJ**	**0.0000087**	**0.0000056**	**0.0000047**	**0.000053**	**0.00002**	**0.0002**
PCB-20/21/33	38444-84-7/55702-46-0/38444-86-9	mg/kg	0.0000228	NP	--	**0.034**	**0.0016**	**0.0012**	**0.0011**	**0.00071**	**0.004**	**0.00017**	**0.0037**
PCB-200	52663-73-7	mg/kg	0.000002	NP	--	**0.0051**	**0.00049**	**0.00013**	**0.000059**	**0.000054**	**0.00046**	**0.000046**	**0.00023**
PCB-201	40186-71-8	mg/kg	0.000006	NP	--	**0.0052**	**0.00052**	**0.00016**	**0.000075**	**0.000064**	**0.00052**	**0.000048**	**0.00024**
PCB-202	2136-99-4	mg/kg	0.0000075	NP	--	**0.0073**	**0.00082**	**0.00025**	**0.00012**	**0.0001**	**0.00084**	**0.000079**	**0.00041**
PCB-204	74472-52-9	mg/kg	0.000002	NP	--	0.000029 U	0.000029 U	0.000002 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.00002 U
PCB-205	74472-53-0	mg/kg	0.000002	NP	--	**0.0018**	**0.0002**	**0.000067**	**0.00003**	**0.000029**	**0.00024**	**0.00002**	**0.00011**
PCB-206	40186-72-9	mg/kg	0.000024	NP	--	**0.008**	**0.0011**	**0.00038**	**0.00019**	**0.00018**	**0.0018**	**0.00012**	**0.00082**
PCB-207	52663-79-3	mg/kg	0.000006	NP	--	**0.0012**	**0.00016**	**0.000048**	**0.000025**	**0.000024**	**0.00021**	**0.000017 LJ**	**0.000098**
PCB-208	52663-77-1	mg/kg	0.0000117	NP	--	**0.0016**	**0.00027**	**0.000091**	**0.000051**	**0.000047**	**0.00043**	**0.000034**	**0.00023**
PCB-209	2051-24-3	mg/kg	0.0000267	NP	--	**0.00061**	**0.0004**	**0.00019**	**0.000092**	**0.000081**	**0.00071**	**0.000087**	**0.00068**
PCB-22	38444-85-8	mg/kg	0.000006	NP	--	**0.02**	**0.0016**	**0.00086**	**0.00077**	**0.00054**	**0.0032**	**0.00014**	**0.0029**
PCB-23	55720-44-0	mg/kg	0.000002	NP	--	**0.000044**	**0.0000081 LJ**	0.000002 U	0.000002 U	0.000002 U	**0.000024**	0.00002 U	**0.000018 LJ**
PCB-24	55702-45-9	mg/kg	0.000002	NP	--	**0.002**	**0.00018**	**0.000073**	**0.000076**	**0.000069**	**0.0003**	**0.000026**	**0.00041**
PCB-25	55712-37-3	mg/kg	0.000002	NP	--	**0.0084**	**0.00087**	**0.00033**	**0.0003**	**0.00021**	**0.0016**	**0.000082**	**0.0012**
PCB-26	38444-81-4	mg/kg	0.000002	NP	--	**0.014**	**0.0011**	**0.00055**	**0.00048**	**0.00036**	**0.0021**	**0.00008**	**0.0017**
PCB-27	38444-76-7	mg/kg	0.000002	NP	--	**0.0019**	**0.00016**	**0.000077**	**0.00007**	**0.000069**	**0.00034**	**0.00003**	**0.00035**
PCB-28	7012-37-5	mg/kg	0.0000225	NP	--	**0.053**	**0.0052**	**0.002**	**0.0027**	**0.0021**	**0.014**	**0.00037**	**0.0089**
PCB-29	15862-07-4	mg/kg	0.000002	NP	--	**0.00059**	**0.000025 LJ**	**0.000018**	**0.000022**	**0.000014**	**0.000078**	0.00002 U	**0.000076**
PCB-3	2051-62-9	mg/kg	0.000006	NP	--	**0.00028**	**0.000032**	**0.000025**	**0.000024**	**0.000022**	**0.00019**	**0.000049**	**0.00032**
PCB-30	35693-92-6	mg/kg	0.000002	NP	--	**0.000063**	0.000029 U	**0.0000026**	**0.0000024**	**0.0000025**	**0.000012 LJ**	0.00002 U	0.00002 U
PCB-31	16606-02-3	mg/kg	0.0000069	NP	--	**0.064**	**0.0037**	**0.0037**	**0.0023**	**0.0014**	**0.0074**	**0.00021**	**0.0072**
PCB-32	38444-77-8	mg/kg	0.000002	NP	--	**0.014**	**0.0013**	**0.00041**	**0.00053**	**0.00039**	**0.0019**	**0.00013**	**0.0025**
PCB-34	37680-68-5	mg/kg	0.000002	NP	--	**0.00046**	**0.000052**	**0.000034**	**0.000031**	**0.00002**	**0.00012**	0.00002 U	**0.000082**
PCB-35	37680-69-6	mg/kg	0.000002	NP	--	**0.00066**	**0.00011**	**0.000032**	**0.00003**	**0.000027**	**0.0002**	0.00002 U	**0.00012**
PCB-36	38444-87-0	mg/kg	0.000002	NP	--	0.000029 U	0.000029 U	0.000002 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.00002 U
PCB-37	38444-90-5	mg/kg	0.0000147	NP	--	**0.015**	**0.0015**	**0.00067**	**0.00062**	**0.00048**	**0.0036**	**0.00013**	**0.0023**
PCB-38	53555-66-1	mg/kg	0.000002	NP	--	**0.00096**	**0.00011**	0.000002 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.00002 U
PCB-39	38444-88-1	mg/kg	0.000002	NP	--	0.000029 U	**0.000028 LJ**	0.000002 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.00002 U
PCB-4	13029-08-8	mg/kg	0.000002	NP	--	**0.01**	**0.0004**	**0.00024**	**0.00022**	**0.00019**	**0.0011**	**0.000056**	**0.0025**
PCB-40	38444-93-8	mg/kg	0.000006	NP	--	**0.0067**	**0.00091**	**0.00024**	**0.00019**	**0.00017**	**0.0017**	**0.000073**	**0.001**
PCB-41/64/71/72	52663-59-9/52663-58-8/41464-46-4/41464-42-0	mg/kg	0.0000225	NP	--	**0.036**	**0.0056**	**0.0011**	**0.00091**	**0.00084**	**0.0087**	**0.00037**	**0.005**
PCB-42/59	36559-22-5/74472-33-6	mg/kg	0.0000117	NP	--	**0.015**	**0.0023**	**0.00054**	**0.00043**	**0.00039**	**0.0039**	**0.00015**	**0.0022**
PCB-43/49	70362-46-8/41464-40-8	mg/kg	0.000045	NP	--	**0.043**	**0.0085**	**0.0018**	**0.0011**	**0.00098**	**0.01**	**0.00043**	**0.0055**

Table 4-1 (continued)
Summary of Sediment Sample Results, North Lake, 0-12 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 0 - 12 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L01	L01	L01	L01	L01	L01	L01	L01
					Station	SED01	SED02	SED03	SED04	SED04	SED05	SED06	SED07
					Sample ID	CL-L01-SED01-12-51	CL-L01-SED02-12-51	CL-L01-SED03-12-51	CL-L01-SED04-12-51	CL-L01-SED04-12-52	CL-L01-SED05-12-51	CL-L01-SED06-12-51	CL-L01-SED07-12-51
					Depths	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
					Date	04/04/2022	04/04/2022	04/05/2022	04/05/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022
					Type	FS	FS	FS	FS	FD	FS	FS	FS
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)													
PCB-44	41464-39-5	mg/kg	0.00003	NP	--	**0.046**	**0.0058**	**0.0015**	**0.0011**	**0.00097**	**0.0099**	**0.00034**	**0.0053**
PCB-45	70362-45-7	mg/kg	0.000002	NP	--	**0.0073**	**0.001**	**0.00028**	**0.00023**	**0.00019**	**0.0016**	**0.000059**	**0.001**
PCB-46	41464-47-5	mg/kg	0.000002	NP	--	**0.0032**	**0.00066**	**0.00011**	**0.000093**	**0.000071**	**0.00066**	**0.000027**	**0.0005**
PCB-47	2437-79-8	mg/kg	0.0000207	NP	--	**0.025**	**0.0073**	**0.0007**	**0.00059**	**0.00039**	**0.0051**	**0.00021**	**0.0027**
PCB-48/75	70362-47-9/32598-12-2	mg/kg	0.000012	NP	--	**0.0053**	**0.00089**	**0.0002**	**0.00017**	**0.00022**	**0.0014**	**0.000079**	**0.001**
PCB-5	16605-91-7	mg/kg	0.000002	NP	--	**0.0022**	**0.000054**	**0.00003**	**0.000035**	**0.000025**	**0.000097**	**0.000012 LJ**	**0.00044**
PCB-50	62796-65-0	mg/kg	0.000002	NP	--	**0.00018**	**0.00003**	**0.000008**	**0.0000062**	**0.0000054**	**0.000044**	0.00002 U	**0.000028**
PCB-51	68194-04-7	mg/kg	0.000002	NP	--	**0.0051**	**0.0031**	**0.00012**	**0.000083**	**0.000076**	**0.00068**	**0.000042**	**0.00061**
PCB-52/69	35693-99-3/60233-24-1	mg/kg	0.000051	NP	--	**0.067**	**0.0087**	**0.0022**	**0.0015**	**0.0012**	**0.012**	**0.00047**	**0.0061**
PCB-53	41464-41-9	mg/kg	0.000006	NP	--	**0.01**	**0.0029**	**0.0003**	**0.00022**	**0.00019**	**0.0016**	**0.000074**	**0.0012**
PCB-54	15968-05-5	mg/kg	0.000002	NP	--	**0.00056**	**0.00041**	**0.0000072**	**0.0000052**	**0.0000043**	**0.000036**	0.00002 U	**0.000055**
PCB-55	74338-24-2	mg/kg	0.000002	NP	--	**0.001**	**0.00019**	**0.0000099**	**0.000012**	**0.000028**	**0.00017**	**0.000014 LJ**	**0.00013**
PCB-56/60	41464-43-1/33025-41-1	mg/kg	0.0000153	NP	--	**0.035**	**0.0039**	**0.0012**	**0.00091**	**0.00081**	**0.0064**	**0.00027**	**0.0047**
PCB-57	70424-67-8	mg/kg	0.000002	NP	--	**0.00032**	**0.000054**	**0.000015**	**0.0000082**	**0.0000078**	**0.000079**	**0.0000067 LJ**	**0.000051**
PCB-58	41464-49-7	mg/kg	0.000002	NP	--	**0.00013**	**0.000043**	0.000002 U	0.000002 U	0.000002 U	**0.000074**	**0.0000033 LJ**	**0.000026**
PCB-6	25569-80-6	mg/kg	0.000006	NP	--	**0.0093**	**0.00032**	**0.00011**	**0.000093**	**0.000075**	**0.00054**	**0.000073**	**0.0014**
PCB-61/70	33284-53-6/32598-11-1	mg/kg	0.0000285	NP	--	**0.059**	**0.007**	**0.0025**	**0.0017**	**0.0014**	**0.013**	**0.00036**	**0.0062**
PCB-62	54230-22-7	mg/kg	0.000002	NP	--	0.000029 U	0.000029 U	0.000002 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.00002 U
PCB-63	74472-34-7	mg/kg	0.000002	NP	--	**0.002**	**0.00032**	**0.000082**	**0.000061**	**0.000048**	**0.00048**	**0.000017 LJ**	**0.00025**
PCB-65	33284-54-7	mg/kg	0.000002	NP	--	0.000029 U	0.000029 U	0.000002 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.00002 U
PCB-66/76	32598-10-0/70362-48-0	mg/kg	0.000051	NP	--	**0.052**	**0.0064**	**0.0022**	**0.0016**	**0.0013**	**0.012**	**0.00036**	**0.0053**
PCB-67	73575-53-8	mg/kg	0.000002	NP	--	**0.0018**	**0.00025**	**0.000089**	**0.000074**	**0.00006**	**0.00051**	**0.000021**	**0.00023**
PCB-68	73575-52-7	mg/kg	0.000002	NP	--	**0.0004**	**0.00013**	**0.000016**	**0.00001**	**0.00001**	**0.00013**	**0.0000077 LJ**	**0.000057**
PCB-7	33284-50-3	mg/kg	0.000002	NP	--	**0.0017**	**0.000046**	**0.000029**	**0.00002**	**0.00002**	**0.00013**	**0.00001 LJ**	**0.00023**
PCB-73	74338-23-1	mg/kg	0.000002	NP	--	0.000029 U	0.000029 U	0.000002 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.00002 U
PCB-74	32690-93-0	mg/kg	0.000018	NP	--	**0.023**	**0.0028**	**0.001**	**0.00078**	**0.0006**	**0.0056**	**0.00018**	**0.0025**
PCB-78	70362-49-1	mg/kg	0.000002	NP	--	0.000029 U	**0.000033**	0.000002 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.00002 U
PCB-79	41464-48-6	mg/kg	0.000006	NP	--	**0.0014**	**0.00013**	**0.000053**	**0.000035**	**0.000034**	**0.00023**	**0.000011 LJ**	**0.0001**
PCB-8	34883-43-7	mg/kg	0.0000174	NP	--	**0.024**	**0.00076**	**0.00034**	**0.00028**	**0.00023**	**0.0016**	**0.00016**	**0.0035**
PCB-80	33284-52-5	mg/kg	0.000002	NP	--	0.000029 U	0.000029 U	0.000002 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.00002 U
PCB-82	52663-62-4	mg/kg	0.0000108	NP	--	**0.011**	**0.0015**	**0.00012**	**0.00011**	**0.00019**	**0.0012**	**0.000073**	**0.00069**
PCB-83/112	60145-20-2/74472-36-9	mg/kg	0.000012	NP	--	**0.0046**	**0.0006**	**0.00011**	**0.000088**	**0.000091**	**0.00052**	**0.000037 LJ**	**0.00037**
PCB-84/92	52663-60-2/52663-61-3	mg/kg	0.000057	NP	--	**0.042**	**0.0061**	**0.0016**	**0.00091**	**0.00084**	**0.005**	**0.00033**	**0.0031**
PCB-85/116	65510-45-4/18259-05-7	mg/kg	0.0000162	NP	--	**0.017**	**0.0019**	**0.00047**	**0.00032**	**0.00031**	**0.0016**	**0.00011**	**0.0014**
PCB-86	55312-69-1	mg/kg	0.000002	NP	--	0.000029 U	0.000029 U	0.000002 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.00002 U
PCB-87/117/125	38380-02-8/68194-11-6/74472-39-2	mg/kg	0.000039	NP	--	**0.044**	**0.0047**	**0.0011**	**0.00066**	**0.00064**	**0.0036**	**0.00024**	**0.0028**
PCB-88/91	55215-17-3/68194-05-8	mg/kg	0.0000231	NP	--	**0.019**	**0.0037**	**0.00059**	**0.00032**	**0.00029**	**0.0024**	**0.00015**	**0.0015**
PCB-89	73575-57-2	mg/kg	0.000002	NP	--	**0.00097**	**0.00015**	0.000002 U	**0.000019**	**0.000029**	**0.00013**	**0.000012 LJ**	**0.00013**
PCB-9	34883-39-1	mg/kg	0.000002	NP	--	**0.0015**	**0.000059**	**0.000026**	**0.00003**	**0.000019**	**0.00011**	**0.000011 LJ**	**0.00021**
PCB-90/101	68194-07-0/37680-73-2	mg/kg	0.000144	NP	--	**0.13**	**0.015**	**0.0046**	**0.0025**	**0.0023**	**0.013**	**0.00082**	**0.0074**
PCB-93	73575-56-1	mg/kg	0.000002	NP	--	0.000029 U	0.000029 U	0.000002 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.00002 U
PCB-94	73575-55-0	mg/kg	0.000002	NP	--	**0.0011**	**0.00047**	**0.000031**	**0.000017**	**0.000013**	**0.000094**	**0.000012 LJ**	**0.0001**
PCB-95	38379-99-6	mg/kg	0.000105	NP	--	**0.13**	**0.015**	**0.004**	**0.002**	**0.0016**	**0.013**	**0.00061**	**0.0072**
PCB-96	73575-54-9	mg/kg	0.000002	NP	--	**0.00099**	**0.00023**	**0.000022**	**0.000013**	**0.000013**	**0.000097**	**0.000011 LJ**	**0.000095**
PCB-97	41464-51-1	mg/kg	0.000042	NP	--	**0.037**	**0.0039**	**0.001**	**0.00066**	**0.00064**	**0.0037**	**0.00023**	**0.0024**
PCB-98/102	60233-25-2/68194-06-9	mg/kg	0.000004	NP	--	0.000059 U	0.000059 U	0.000004 U	0.000004 U	0.000004 U	0.00004 U	0.00004 U	0.00004 U
PCB-99	38380-01-7	mg/kg	0.00009	NP	--	**0.053**	**0.0062**	**0.0017**	**0.001**	**0.00095**	**0.0053**	**0.0004**	**0.0034**
TEQ (Bird)	2222-22-3	mg/kg	0.00000057	NP	--	**0.0008**	**0.000092**	**0.000025**	**0.000019**	**0.000016**	**0.00012**	**0.0000061**	**0.000087**
TEQ (Fish)	2222-22-4	mg/kg	2.4E-09	NP	--	**0.000013**	**0.0000012**	**0.00000031**	**0.00000019**	**0.00000019**	**0.0000015**	**0.000000093**	**0.00000084**
TEQ (Mammal)	2222-22-2	mg/kg	5.1E-09	NP	--	**0.00018**	**0.00002**	**0.000005**	**0.000003**	**0.0000029**	**0.000025**	**0.0000015**	**0.000013**
Total DiCB	25512-42-9	mg/kg	0.000033	NP	--	**0.069 J**	**0.0033 J**	**0.0013 J**	**0.0011 J**	**0.00092 J**	**0.0066 J**	**0.00052 J**	**0.011 J**

Table 4-1 (continued)
Summary of Sediment Sample Results, North Lake, 0-12 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 0 - 12 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L01	L01	L01	L01	L01	L01	L01	L01
					Station	SED01	SED02	SED03	SED04	SED04	SED05	SED06	SED07
					Sample ID	CL-L01-SED01-12-51	CL-L01-SED02-12-51	CL-L01-SED03-12-51	CL-L01-SED04-12-51	CL-L01-SED04-12-52	CL-L01-SED05-12-51	CL-L01-SED06-12-51	CL-L01-SED07-12-51
					Depths	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
					Date	04/04/2022	04/04/2022	04/05/2022	04/05/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022
					Type	FS	FS	FS	FS	FD	FS	FS	FS
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)													
Total HpCB	28655-71-2	mg/kg	0.00036	NP	--	**0.82 J**	**0.075 J**	**0.022 J**	**0.01 J**	**0.0079 J**	**0.071 J**	**0.0048 J**	**0.036 J**
Total HxCB	26601-64-9	mg/kg	0.00084	NP	--	**1.6 J**	**0.13 J**	**0.037 J**	**0.017 J**	**0.014 J**	**0.12 J**	**0.0073 J**	**0.064 J**
Total MoCB	27323-18-8	mg/kg	0.000006	NP	--	**0.00088 J**	**0.000089 J**	**0.000052 J**	**0.000048 J**	**0.000043 J**	**0.00034 J**	**0.000098 J**	**0.00097 J**
Total NoCB	53742-07-7	mg/kg	0.000039	NP	--	**0.011 J**	**0.0015 J**	**0.00052 J**	**0.00027 J**	**0.00025 J**	**0.0024 J**	**0.00017 J**	**0.0011 J**
Total OcCB	55722-26-4	mg/kg	0.000093	NP	--	**0.16 J**	**0.016 J**	**0.0045 J**	**0.0019 J**	**0.0018 J**	**0.017 J**	**0.0013 J**	**0.0078 J**
TOTAL PCBs	1111-11-1	mg/kg	0.00264	NP	--	**4.3 J**	**0.42 J**	**0.12 J**	**0.068 J**	**0.057 J**	**0.45 J**	**0.025 J**	**0.27 J**
Total PeCB	25429-29-2	mg/kg	0.00084	NP	--	**0.9 J**	**0.096 J**	**0.024 J**	**0.013 J**	**0.012 J**	**0.084 J**	**0.0052 J**	**0.052 J**
Total TeCB	26914-33-0	mg/kg	0.00033	NP	--	**0.46 J**	**0.071 J**	**0.017 J**	**0.012 J**	**0.01 J**	**0.098 J**	**0.0036 J**	**0.053 J**
Total TrCB	25323-68-6	mg/kg	0.000093	NP	--	**0.33 J**	**0.023 J**	**0.013 J**	**0.012 J**	**0.0092 J**	**0.052 J**	**0.0022 J**	**0.045 J**
CLP Organics by CLP SOW SFAM01.1/3151.0													
1,2,4,5-Tetrachlorobenzene	95-94-3	mg/kg	0.22	0.23	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
1,4-Dioxane	123-91-1	mg/kg	0.088	5.3	--	0.043 U	0.052 U	0.11 U	0.068 U	0.07 U	0.067 U	0.076 U	0.071 UJ
1-Methylnaphthalene	90-12-0	mg/kg	0.22	18	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
2,3,4,6-Tetrachlorophenol	58-90-2	mg/kg	0.22	190	--	0.11 U	0.13 U	0.27 U	0.17 UJ	0.18 UJ	0.17 U	0.19 U	0.18 U
Metals by CLP SOW SFAM01.1													
Aluminum	7429-90-5	mg/kg	90000	7700	--	**5800**	**5400**	**29000**	**31000**	**33000**	**28000**	**25000**	**14000**
Antimony	7440-36-0	mg/kg	0.95	3.1	--	**13**	**31**	**26**	**7.2**	**20**	**7.3**	**1.8**	**2.8**
Arsenic	7440-38-2	mg/kg	24	0.68	--	**21**	**34**	**47**	**35**	**37**	**29**	**9.4**	**6.7**
Barium	7440-39-3	mg/kg	540	1500	--	**130**	**150**	**420**	**320**	**360**	**370**	**230**	**190**
Beryllium	7440-41-7	mg/kg	2.7	16	--	**0.25 LJ**	**0.39 LJ**	**0.76 LJ**	**0.82**	**0.83 LJ**	**0.77 LJ**	**0.58**	**0.4 LJ**
Cadmium	7440-43-9	mg/kg	1.77	0.71	--	**2.4**	**0.9**	**6.1**	**3.4**	**3.4**	**2.6**	**1.7**	1.3 U
Calcium	7440-70-2	mg/kg	14400	NP	--	**67000**	**26000**	**14000**	**7900**	**6700**	**7600**	**8400**	**7400**
Chromium	7440-47-3	mg/kg	36	NP	--	**12 J**	**17 J**	**38 J**	**22 J**	**31 J**	**32 J**	**17 J**	**18 J**
Cobalt	7440-48-4	mg/kg	12.6	2.3	--	**3.2 J**	**4.7 J**	**8.8 J**	**4.9 J**	**7.6 J**	**8 J**	**4.2 J**	**5.4 J**
Copper	7440-50-8	mg/kg	45	310	--	**15 J**	**45 J**	**120**	**29 J**	**50 J**	**93**	**79**	**62**
Iron	7439-89-6	mg/kg	87000	5500	--	**9200**	**14000**	**30000**	**31000**	**35000**	**30000**	**26000**	**16000**
Lead	7439-92-1	mg/kg	228	400	--	**140**	**190**	**550**	**320**	**320**	**400**	**190**	**160**
Magnesium	7439-95-4	mg/kg	14400	NP	--	**2700**	**2600**	**4400**	**4900**	**4500**	**4200**	**4500**	**2500**
Manganese	7439-96-5	mg/kg	1500	180	--	**380**	**270**	**720**	**740**	**840**	**690**	**650**	**350**
Mercury	7439-97-6	mg/kg	0.69	1.1	--	**2.2**	**0.35**	**1.9**	**0.78**	**0.84**	**0.83**	**0.4**	**0.33**
Nickel	7440-02-0	mg/kg	57	150	--	**7**	**14**	**21 J**	**24**	**26**	**19 J**	**11 J**	**14 J**
Potassium	7440-09-7	mg/kg	11400	NP	--	**520**	**440 LJ**	**2300**	**3000**	**2700**	**2200**	**2200**	**1100**
Selenium	7782-49-2	mg/kg	2.64	39	--	**0.31 LJ**	**0.38 LJ**	6.2 U	**1.1 LJ**	**1 LJ**	**0.97 LJ**	**0.85 LJ**	6.7 U
Silver	7440-22-4	mg/kg	0.72	39	--	**0.35 LJ**	**0.27 LJ**	**7.2**	**3.8**	**4**	**6.5**	**2.5**	**2.6**
Sodium	7440-23-5	mg/kg	960	NP	--	**180 LJ**	**98 LJ**	**160 LJ**	**250 LJ**	**170 LJ**	**140 LJ**	**220 LJ**	**95 LJ**
Thallium	7440-28-0	mg/kg	0.48	0.078	--	0.44 U	0.55 U	1.2 U	0.4 U	1.3 U	1.2 U	0.43 U	1.3 U
Vanadium	7440-62-2	mg/kg	26.1	39	--	**4.5 J**	**7.8 J**	**14 J**	**7.2 J**	**16 J**	**14 J**	**6.4 J**	**12 J**
Zinc	7440-66-6	mg/kg	195	2300	--	**290 J**	**280 J**	**470 J**	**210 J**	**380 J**	**400 J**	**240 J**	**310 J**
Pesticides by CLP SOW SFAM01.1													
4,4'-DDD	72-54-8	mg/kg	0.0088	0.19	--	0.0043 U	0.0052 U	0.011 U	0.0068 U	0.007 U	0.0067 U	**0.0065 LJ**	0.0071 U
4,4'-DDE	72-55-9	mg/kg	0.0088	2	--	0.0043 U	0.0052 U	0.011 U	**0.012**	**0.03**	**0.014**	0.0076 U	0.0071 U
4,4'-DDT	50-29-3	mg/kg	0.0088	1.9	--	0.0043 U	0.0052 U	0.011 U	0.0068 U	0.007 U	**0.0057 LJ**	0.0076 U	0.0071 U
Aldrin	309-00-2	mg/kg	0.0045	0.039	--	0.0022 U	0.0027 U	0.0055 UJ	0.0035 U	0.0036 U	0.0035 U	**0.011 J**	0.0037 U
alpha-BHC	319-84-6	mg/kg	0.0045	0.086	--	0.0022 U	0.0027 U	0.0055 U	0.0035 U	0.0036 U	0.0035 U	0.0039 U	0.0037 U
beta-BHC	319-85-7	mg/kg	0.0045	0.3	--	0.0022 U	0.0027 U	0.0055 U	0.0035 U	0.0036 U	0.0035 U	**0.015**	0.0037 U
cis-Chlordane	5103-71-9	mg/kg	0.0045	3.6	--	0.0022 U	0.0027 U	0.0055 U	0.0035 U	0.0036 U	0.0035 U	0.0039 U	0.0037 U
delta-BHC	319-86-8	mg/kg	0.0045	NP	--	0.0022 U	0.0027 U	0.0055 U	0.0035 U	0.0036 U	0.0035 U	**0.024 J**	0.0037 U
Dieldrin	60-57-1	mg/kg	0.0088	0.034	--	**0.018 J**	0.0052 U	0.011 UR	0.0068 U	0.007 U	0.0067 U	**0.0065 LJ**	0.0071 U
Endosulfan I	959-98-8	mg/kg	0.0045	NP	--	0.0022 U	0.0027 U	0.0055 U	0.0035 U	0.0036 U	0.0035 U	0.0039 U	0.0037 U
Endosulfan II	33213-65-9	mg/kg	0.0088	NP	--	0.0043 U	0.0052 U	0.011 U	0.0068 U	**0.0044 LJ**	0.0067 U	0.0076 U	0.0071 U
Endosulfan sulfate	1031-07-8	mg/kg	0.0088	38	--	0.0043 U	0.0052 U	0.011 U	0.0068 U	0.007 U	0.0067 U	**0.0095 J**	0.0071 U

Table 4-1 (continued)
Summary of Sediment Sample Results, North Lake, 0-12 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 0 - 12 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L01	L01	L01	L01	L01	L01	L01	L01
					Station	SED01	SED02	SED03	SED04	SED04	SED05	SED06	SED07
					Sample ID	CL-L01-SED01-12-51	CL-L01-SED02-12-51	CL-L01-SED03-12-51	CL-L01-SED04-12-51	CL-L01-SED04-12-52	CL-L01-SED05-12-51	CL-L01-SED06-12-51	CL-L01-SED07-12-51
					Depths	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
					Date	04/04/2022	04/04/2022	04/05/2022	04/05/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022
					Type	FS	FS	FS	FS	FD	FS	FS	FS
Pesticides by CLP SOW SFAM01.1 (continued)													
Endrin	72-20-8	mg/kg	0.0088	1.9	--	**0.012 J**	0.0052 U	0.011 UR	0.0068 U	0.007 U	0.0067 U	0.0076 U	0.0071 U
Endrin aldehyde	7421-93-4	mg/kg	0.0088	NP	--	0.0043 U	0.0052 U	0.011 U	0.0068 U	0.007 U	0.0067 U	**0.0087 J**	0.0071 U
Endrin ketone	53494-70-5	mg/kg	0.0088	NP	--	0.0043 U	0.0052 U	0.011 U	0.0068 U	0.007 U	0.0067 U	0.0076 U	0.0071 U
gamma-BHC (Lindane)	58-89-9	mg/kg	0.0045	0.071	--	0.0022 U	0.0027 U	0.0055 UR	0.0035 U	0.0036 U	0.0035 U	**0.002 LJ**	0.0037 U
Heptachlor	76-44-8	mg/kg	0.0045	0.13	--	0.0022 U	0.0027 U	0.0055 UJ	0.0035 U	0.0036 U	0.0035 U	**0.012 J**	0.0037 U
Heptachlor epoxide	1024-57-3	mg/kg	0.0045	0.07	--	0.0022 U	0.0027 U	0.0055 U	0.0035 U	0.0036 U	0.0035 U	0.0039 U	0.0037 U
Methoxychlor	72-43-5	mg/kg	1.08	32	--	0.022 U	**0.096**	0.055 U	0.035 U	0.036 U	**0.04**	**0.096 J**	**0.087**
Toxaphene	8001-35-2	mg/kg	0.45	0.49	--	0.22 U	0.27 U	0.55 U	0.35 U	0.36 U	0.35 U	0.39 U	0.37 U
trans-Chlordane	5103-74-2	mg/kg	0.0045	3.6	--	0.0022 U	0.0027 U	0.0055 U	0.0035 U	0.0036 U	0.0035 U	**0.009 J**	0.0037 U
SVOCs by CLP SOW SFAM01.1/3151.0													
1,1'-Biphenyl	92-52-4	mg/kg	0.22	4.7	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
2,2'-Oxybis(1-chloropropane)	108-60-1	mg/kg	0.45	310	--	0.22 U	0.27 U	0.54 U	0.34 UJ	0.36 U	0.34 U	0.38 U	0.36 U
2,4,5-Trichlorophenol	95-95-4	mg/kg	0.22	630	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
2,4,6-Trichlorophenol	88-06-2	mg/kg	0.22	6.3	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
2,4-Dichlorophenol	120-83-2	mg/kg	0.22	19	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
2,4-Dimethylphenol	105-67-9	mg/kg	0.22	130	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
2,4-Dinitrophenol	51-28-5	mg/kg	0.45	13	--	0.22 U	0.27 U	0.54 U	0.34 U	0.36 U	0.34 U	0.38 U	0.36 U
2,4-Dinitrotoluene	121-14-2	mg/kg	0.22	1.7	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
2,6-Dinitrotoluene	606-20-2	mg/kg	0.22	0.36	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
2-Chloronaphthalene	91-58-7	mg/kg	0.22	480	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
2-Chlorophenol	95-57-8	mg/kg	0.22	39	--	0.11 U	0.13 U	0.27 U	0.17 UJ	0.18 UJ	0.17 U	0.19 U	0.18 U
2-Methylnaphthalene	91-57-6	mg/kg	0.22	24	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
2-Methylphenol	95-48-7	mg/kg	0.45	320	--	0.22 U	0.27 U	0.54 U	0.34 U	0.36 U	0.34 U	0.38 U	0.36 U
2-Nitroaniline	88-74-4	mg/kg	0.22	63	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
2-Nitrophenol	88-75-5	mg/kg	0.22	NP	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.45	1.2	--	0.22 U	0.27 U	0.54 U	0.34 U	0.36 U	0.34 U	0.38 U	0.36 U
3-Nitroaniline	99-09-2	mg/kg	0.45	NP	--	0.22 U	0.27 U	0.54 U	0.34 U	0.36 U	0.34 U	0.38 U	0.36 U
4,6-Dinitro-2-methylphenol	534-52-1	mg/kg	0.45	0.51	--	0.22 U	0.27 UJ	0.54 UJ	0.34 U	0.36 U	0.34 U	0.38 U	0.36 U
4-Bromophenyl-phenylether	101-55-3	mg/kg	0.22	NP	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 UJ
4-Chloro-3-methylphenol	59-50-7	mg/kg	0.22	630	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
4-Chloroaniline	106-47-8	mg/kg	0.45	2.7	--	0.22 U	0.27 U	0.54 U	0.34 U	0.36 U	0.34 U	0.38 U	0.36 U
4-Chlorophenyl-phenyl ether	7005-72-3	mg/kg	0.22	NP	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
4-Methylphenol	106-44-5	mg/kg	0.45	130	--	0.22 U	0.27 U	0.54 U	0.34 U	0.36 U	0.34 U	0.38 U	0.36 U
4-Nitroaniline	100-01-6	mg/kg	0.45	25	--	0.22 U	0.27 U	0.54 U	0.34 U	0.36 U	0.34 U	0.38 U	0.36 U
4-Nitrophenol	100-02-7	mg/kg	0.45	NP	--	0.22 U	0.27 U	0.54 U	0.34 U	0.36 U	0.34 U	0.38 U	0.36 U
Acenaphthene	83-32-9	mg/kg	0.22	360	--	0.11 U	**0.28**	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
Acenaphthylene	208-96-8	mg/kg	0.22	NP	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
Acetophenone	98-86-2	mg/kg	0.45	780	--	0.22 U	0.27 U	0.54 U	0.34 U	0.36 U	0.34 U	0.38 U	0.36 U
Anthracene	120-12-7	mg/kg	0.22	1800	--	0.11 U	**0.32**	0.27 U	0.17 U	0.18 U	**0.14 LJ**	0.19 U	0.18 U
Atrazine	1912-24-9	mg/kg	0.45	2.4	--	0.22 U	0.27 U	0.54 U	0.34 U	0.36 U	0.34 U	0.38 U	0.36 U
Benzaldehyde	100-52-7	mg/kg	0.45	170	--	0.22 U	0.27 U	0.54 U	0.34 U	0.36 U	0.34 U	0.38 U	0.36 U
Benzo(a)anthracene	56-55-3	mg/kg	0.66	1.1	--	**0.29**	**0.88**	**0.28**	**0.13 LJ**	**0.16 LJ**	**0.81**	**0.45**	0.18 U
Benzo(a)pyrene	50-32-8	mg/kg	0.87	0.11	--	**0.41 J+**	**0.91**	**0.38**	**0.15 LJ**	**0.19**	**0.96**	**0.6**	0.18 U
Benzo(b)fluoranthene	205-99-2	mg/kg	0.75	1.1	--	**0.53 J+**	**1.3 J**	**0.61 J**	**0.28 J**	**0.17 LJ**	**1.5 J**	**0.92 J**	0.18 U
Benzo(g,h,i)perylene	191-24-2	mg/kg	0.69	NP	--	**0.32 J+**	**0.54**	**0.29**	0.17 U	0.18 U	**0.56**	**0.48**	0.18 U
Benzo(k)fluoranthene	207-08-9	mg/kg	0.87	11	--	**0.21 J+**	**0.41 J**	**0.17 LJ**	0.17 U	0.18 U	**0.56 J**	**0.28 J**	0.18 U
Bis(2-chloroethoxy)methane	111-91-1	mg/kg	0.22	19	--	0.11 U	0.13 U	0.27 U	0.17 UJ	0.18 U	0.17 U	0.19 U	0.18 U
Bis(2-chloroethyl)ether	111-44-4	mg/kg	0.45	0.23	--	0.22 U	0.27 U	0.54 U	0.34 UJ	0.36 U	0.34 U	0.38 U	0.36 U
Bis(2-ethylhexyl)phthalate	117-81-7	mg/kg	0.22	39	--	**0.57**	**2.5**	**1.6**	**0.81**	**0.98**	**2.3**	**0.72**	**1**
Butylbenzylphthalate	85-68-7	mg/kg	0.22	290	--	**0.46**	**0.27**	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
Caprolactam	105-60-2	mg/kg	0.45	3100	--	0.22 U	0.27 U	0.54 U	0.34 U	0.36 U	0.34 U	0.38 U	0.36 U

Table 4-1 (continued)
Summary of Sediment Sample Results, North Lake, 0-12 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 0 - 12 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L01	L01	L01	L01	L01	L01	L01	L01
					Station	SED01	SED02	SED03	SED04	SED04	SED05	SED06	SED07
					Sample ID	CL-L01-SED01-12-51	CL-L01-SED02-12-51	CL-L01-SED03-12-51	CL-L01-SED04-12-51	CL-L01-SED04-12-52	CL-L01-SED05-12-51	CL-L01-SED06-12-51	CL-L01-SED07-12-51
					Depths	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
					Date	04/04/2022	04/04/2022	04/05/2022	04/05/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022
					Type	FS	FS	FS	FS	FD	FS	FS	FS
SVOCs by CLP SOW SFAM01.1/3151.0 (continued)													
Carbazole	86-74-8	mg/kg	0.45	NP	--	0.22 U	**0.18 LJ**	0.54 U	0.34 U	0.36 U	**0.098 LJ**	0.38 U	0.36 U
Chrysene	218-01-9	mg/kg	0.66	110	--	**0.33**	**1**	**0.26 LJ**	**0.14 LJ**	**0.17 LJ**	**0.97**	**0.58**	0.18 U
Dibenzo(a,h)anthracene	53-70-3	mg/kg	0.22	0.11	--	0.11 U	**0.25**	0.27 U	0.17 U	0.18 U	0.17 U	**0.17 LJ**	0.18 U
Dibenzofuran	132-64-9	mg/kg	0.22	7.8	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
Diethylphthalate	84-66-2	mg/kg	0.22	5100	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
Dimethylphthalate	131-11-3	mg/kg	0.22	NP	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
Di-n-butylphthalate	84-74-2	mg/kg	0.22	630	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
Di-n-octylphthalate	117-84-0	mg/kg	0.45	63	--	0.22 U	0.27 U	0.54 U	0.34 U	0.36 U	0.34 U	0.38 U	0.36 U
Fluoranthene	206-44-0	mg/kg	0.84	240	--	**0.64**	**2.3**	**0.31**	**0.15 LJ**	**0.21**	**1.3**	**0.85**	**0.26**
Fluorene	86-73-7	mg/kg	0.22	240	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
Hexachlorobenzene	118-74-1	mg/kg	0.22	0.078	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 UJ
Hexachlorobutadiene	87-68-3	mg/kg	0.22	1.2	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 UJ
Hexachlorocyclo-pentadiene	77-47-4	mg/kg	0.45	0.18	--	0.22 U	0.27 UJ	0.54 U	0.34 UJ	0.36 UJ	0.34 UJ	0.38 UJ	0.36 U
Hexachloroethane	67-72-1	mg/kg	0.22	1.8	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	0.72	1.1	--	**0.34 J+**	**0.48**	**0.3**	0.17 U	**0.21**	**0.67**	**0.5**	0.18 U
Isophorone	78-59-1	mg/kg	0.22	570	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
Naphthalene	91-20-3	mg/kg	0.22	2	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
Nitrobenzene	98-95-3	mg/kg	0.22	5.1	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
N-Nitroso-di-n propylamine	621-64-7	mg/kg	0.22	0.078	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
N-Nitrosodiphenylamine	86-30-6	mg/kg	0.22	110	--	0.11 U	0.13 U	0.27 U	0.17 U	0.18 U	0.17 U	0.19 U	0.18 U
Pentachlorophenol	87-86-5	mg/kg	0.0015	1	--	0.22 U	0.27 U	0.54 U	0.34 U	0.36 U	0.34 U	0.38 U	0.36 U
Phenanthrene	85-01-8	mg/kg	0.22	NP	--	**0.24**	**1.6**	0.27 U	0.17 U	0.18 U	**0.52**	**0.32**	**0.25**
Phenol	108-95-2	mg/kg	0.45	1900	--	0.22 U	**0.13 LJ**	0.54 U	0.34 U	0.36 U	0.34 U	0.38 U	0.36 U
Pyrene	129-00-0	mg/kg	0.84	180	--	**0.58**	**1.7**	**0.46**	**0.23**	**0.27**	**1.4**	**0.78**	**0.34**

Notes

mg/kg - milligrams/kilogram

U - Not detected at reported quantitation limit.

J - estimated value.

+ - High biased. Actual concentration may be lower than the concentration reported.

R - Unusable, rejected should not be used.

L - Reported concentration is below the Contract Required Quantitation Limit (CRQL).

K - Unknown bias.

NP - Not published.

FS - Field Sample.

FD - Field Duplicate.

RSL - Regional Screening level, May 2022.

TR - Targeted Risk for cancer.

THQ - Target Hazard Quotient.

Yellow Highlight - exceeds background

Orange highlight - does not exceed background, but exceeds RSL

Table 4-2
Summary of Sediment Sample Results, North Lake, 12-24 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 12 - 24 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L01	L01	L01	L01	L01	L01	L01
					Station	SED01	SED02	SED03	SED04	SED05	SED06	SED07
					Sample ID	CL-L01-SED01-24-51	CL-L01-SED02-24-51	CL-L01-SED03-24-51	CL-L01-SED04-24-51	CL-L01-SED05-24-51	CL-L01-SED06-24-51	CL-L01-SED07-24-51
					Depths	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24
					Date	04/04/2022	04/04/2022	04/05/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022
					Type	FS	FS	FS	FS	FS	FS	FS
Herbicides by SW846 Method 8151												
2,4,5-T	93-76-5	mg/kg	0.0028	63	--	**0.0064 JK**	**0.0026 JQK**	0.0024 U	0.002 U	0.0023 U	0.0022 U	0.0021 U
2,4-D	94-75-7	mg/kg	0.04	70	--	0.024 U	0.024 U	0.035 U	0.03 U	0.034 U	0.033 U	0.03 U
2,4-DB	94-82-6	mg/kg	0.034	NP	--	0.02 U	**0.47 JK**	**0.066 JK**	0.025 U	0.028 U	0.027 U	0.025 U
Dalapon	75-99-0	mg/kg	0.16	190	--	0.099 U	0.096 U	0.14 U	0.12 U	0.14 U	0.13 U	0.12 U
Dicamba	1918-00-9	mg/kg	0.013	190	--	0.0081 U	0.0078 U	0.012 U	0.0099 U	0.011 U	0.011 U	0.01 U
Dichlorprop	120-36-5	mg/kg	0.03	NP	--	0.018 U	0.018 U	0.026 U	0.022 U	0.025 U	0.024 U	0.023 U
Dinoseb	88-85-7	mg/kg	0.03	6.3	--	**0.022 JQK**	0.018 U	0.026 U	0.022 U	0.025 U	0.024 U	0.023 U
MCPA	94-74-6	mg/kg	2.6	3.2	--	1.5 U	1.5 U	2.2 U	1.9 U	2.1 U	2.1 U	**1.9 JQK**
MCPP	93-65-2	mg/kg	13	6.3	--	7.7 U	7.4 U	11 U	9.4 U	11 U	10 U	9.5 U
Pentachlorophenol	87-86-5	mg/kg	0.0011	1	--	0.00067 U	**0.0079 JK**	**0.0014 JQK**	0.00082 U	**0.00092 JQK**	**0.0015 JQK**	**0.0034 JQK**
Silvex (2,4,5-TP)	93-72-1	mg/kg	0.0025	51	--	**0.015 JK**	**0.0065 JK**	**0.0069 JK**	0.0019 U	0.0021 U	0.002 U	0.0019 U
PCB Aroclors by CLP SOW SFAM01.1/3150.0												
Aroclor-1016	12674-11-2	mg/kg	0.0062	0.41	--	0.0047 U	0.004 U	0.0053 U	0.0052 U	0.0055 U	0.0054 U	**0.18**
Aroclor-1221	11104-28-2	mg/kg	0.0062	0.2	--	0.0047 U	0.004 U	0.0053 U	0.0052 U	0.0055 U	0.0054 U	0.0031 UJ
Aroclor-1232	11141-16-5	mg/kg	0.0062	0.17	--	0.0047 U	0.004 U	0.0053 U	0.0052 U	0.0055 U	0.0054 U	0.0031 UJ
Aroclor-1242	53469-21-9	mg/kg	0.0062	0.23	--	0.0047 U	0.004 U	0.0053 U	0.0052 U	0.0055 U	0.0054 U	0.0031 UJ
Aroclor-1248	12672-29-6	mg/kg	0.0062	0.23	--	0.0047 U	0.004 U	0.0053 U	0.0052 U	0.0055 U	0.0054 U	0.0031 UJ
Aroclor-1254	11097-69-1	mg/kg	0.0062	0.12	--	0.0047 U	0.004 U	0.0053 U	0.0052 U	0.0055 U	0.0054 U	0.0031 UJ
Aroclor-1260	11096-82-5	mg/kg	0.0062	0.24	--	**1.7**	**0.77**	**0.095 J-**	**0.013**	**0.16**	**0.091**	**0.14**
Aroclor-1262	37324-23-5	mg/kg	0.0062	NP	--	0.0047 U	0.004 U	0.0053 U	0.0052 U	0.0055 U	0.0054 U	0.0031 UJ
Aroclor-1268	11100-14-4	mg/kg	0.0062	NP	--	0.0047 U	0.004 U	0.0053 U	0.0052 U	0.0055 U	0.0054 U	0.0031 UJ
PCB Aroclor Congeners Group 1 by CLP SOW HRSM02.1												
PCB-105	32598-14-4	mg/kg	0.000057	0.12	--	**0.014**	**0.024**	**0.0012**	**0.000055**	**0.0029**	**0.004**	**0.0035**
PCB-114	74472-37-0	mg/kg	0.0000039	0.12	--	**0.0011**	**0.0018**	**0.000075**	**0.0000042**	**0.00023**	**0.00037**	**0.00023**
PCB-118	31508-00-6	mg/kg	0.000105	0.12	--	**0.027**	**0.038**	**0.0021**	**0.000066**	**0.0046**	**0.0068**	**0.0051**
PCB-123	65510-44-3	mg/kg	0.0000051	0.12	--	**0.00047**	**0.0012**	**0.000059**	**0.0000089**	**0.00023**	**0.00034**	**0.00022**
PCB-126	57465-28-8	mg/kg	0.0000039	0.000036	--	**0.00062**	**0.00074**	**0.000062**	**0.0000021**	**0.00012**	**0.00022**	**0.00022**
PCB-156	38380-08-4	mg/kg	0.000033	0.12	--	**0.012**	**0.012**	**0.0011**	**0.000029**	**0.0014**	**0.0021**	**0.002**
PCB-157	69782-90-7	mg/kg	0.0000102	0.12	--	**0.0016**	**0.0017**	**0.00017**	**0.0000063**	**0.00027**	**0.00043**	**0.00041**
PCB-167	52663-72-6	mg/kg	0.0000177	0.12	--	**0.0056**	**0.0057**	**0.00055**	**0.000012**	**0.00072**	**0.0011**	**0.0011**
PCB-169	32774-16-6	mg/kg	0.00000093	0.00012	--	**0.000073**	**0.000076**	0.000014 U	0.00000093 U	0.0000093 U	0.000046 U	**0.000025**
PCB-189	39635-31-9	mg/kg	0.0000057	0.13	--	**0.0027**	**0.0026**	**0.00026**	**0.0000046**	**0.00026**	**0.00038**	**0.00045**
PCB-77	32598-13-3	mg/kg	0.00003	0.038	--	**0.0019**	**0.0061**	**0.00025**	**0.0000065**	**0.0012**	**0.0017**	**0.00092**
PCB-81	70362-50-4	mg/kg	0.000003	0.012	--	**0.0008**	**0.0011**	**0.000046**	**0.0000037**	**0.00015**	**0.0003**	**0.00017**
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1												
PCB-1	2051-60-7	mg/kg	0.0000066	NP	--	**0.00024**	**0.00053**	**0.000043**	**0.0000095**	**0.000099**	**0.00049**	**0.00035**
PCB-10	33146-45-1	mg/kg	0.000002	NP	--	**0.00019**	**0.0007**	**0.000021 LJ**	0.000002 U	**0.000085**	**0.0001**	**0.000099**
PCB-100	39485-83-1	mg/kg	0.0000078	NP	--	**0.00015**	**0.0016**	**0.000047**	0.000002 U	**0.000072**	**0.00016**	**0.000095**
PCB-103	60145-21-3	mg/kg	0.0000114	NP	--	**0.00081**	**0.0011**	**0.00016**	**0.0000029**	**0.00022**	**0.0003**	**0.00015**
PCB-104	56558-16-8	mg/kg	0.000002	NP	--	0.00003 U	**0.00015**	0.00003 U	0.000002 U	0.00002 U	0.000099 U	0.00002 U
PCB-106	70424-69-0	mg/kg	0.000102	NP	--	**0.021**	**0.036**	**0.002**	**0.000092**	**0.0055**	**0.0068**	**0.0046**
PCB-107	70424-68-9	mg/kg	0.0000105	NP	--	**0.0019**	**0.0027**	**0.00018**	**0.0000063**	**0.00046**	**0.00056**	**0.00045**
PCB-108	70362-41-3	mg/kg	0.0000111	NP	--	**0.002**	**0.0024**	**0.0002**	**0.0000058**	**0.00057**	**0.00066**	**0.00051**
PCB-109	74472-35-8	mg/kg	0.000002	NP	--	0.00003 U	0.00003 U	0.00003 U	0.000002 U	0.00002 U	0.000099 U	0.00002 U
PCB-11	2050-67-1	mg/kg	0.000006	NP	--	**0.0001**	**0.00026**	**0.000015 LJ**	0.000002 U	**0.000041**	**0.000099**	**0.00023**
PCB-110	38380-03-9	mg/kg	0.00036	NP	--	**0.049**	**0.077**	**0.0057**	**0.00021**	**0.0092**	**0.02**	**0.0095**
PCB-111/115	39635-32-0/74472-38-1	mg/kg	0.000004	NP	--	**0.00041**	**0.0013**	0.00006 U	**0.0000045**	**0.00015**	**0.00025**	**0.00014**
PCB-113	68194-10-5	mg/kg	0.000002	NP	--	0.00003 U	0.00003 U	0.00003 U	0.000002 U	0.00002 U	0.000099 U	0.00002 U
PCB-119	56558-17-9	mg/kg	0.0000219	NP	--	**0.001**	**0.0022**	**0.00019**	**0.0000048**	**0.00031**	**0.00069**	**0.00027**
PCB-12	2974-92-7	mg/kg	0.000006	NP	--	**0.0001**	**0.0012**	**0.000031**	0.000002 U	**0.0001**	**0.00024**	**0.00017**
PCB-120	68194-12-7	mg/kg	0.000006	NP	--	**0.00026**	0.00003 U	0.00003 U	0.000002 U	**0.000025**	**0.00006 LJ**	0.00002 U

Table 4-2 (continued)
Summary of Sediment Sample Results, North Lake, 12-24 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 12 - 24 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L01	L01	L01	L01	L01	L01	L01
					Station	SED01	SED02	SED03	SED04	SED05	SED06	SED07
					Sample ID	CL-L01-SED01-24-51	CL-L01-SED02-24-51	CL-L01-SED03-24-51	CL-L01-SED04-24-51	CL-L01-SED05-24-51	CL-L01-SED06-24-51	CL-L01-SED07-24-51
					Depths	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24
					Date	04/04/2022	04/04/2022	04/05/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022
					Type	FS	FS	FS	FS	FS	FS	FS
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)												
PCB-121	56558-18-0	mg/kg	0.000002	NP	--	0.00003 U	0.00003 U	0.00003 U	0.000002 U	0.00002 U	0.000099 U	0.00002 U
PCB-122	76842-07-4	mg/kg	0.000002	NP	--	**0.00049**	**0.00069**	**0.000042**	**0.0000033**	**0.000094**	**0.00017**	**0.00011**
PCB-124	70424-70-3	mg/kg	0.0000084	NP	--	**0.0031**	**0.0049**	**0.00021**	**0.0000078**	**0.00043**	**0.00076**	**0.00063**
PCB-127	39635-33-1	mg/kg	0.000002	NP	--	0.00003 U	0.00003 U	0.00003 U	0.000002 U	0.00002 U	0.000099 U	0.00002 U
PCB-128/162	38380-07-3/39635-34-2	mg/kg	0.000069	NP	--	**0.014**	**0.018**	**0.0014**	**0.000038**	**0.0022**	**0.0034**	**0.0032**
PCB-129	55215-18-4	mg/kg	0.0000141	NP	--	**0.0035**	**0.0042**	**0.00031**	**0.000012**	**0.00055**	**0.00087**	**0.00079**
PCB-13	2974-90-5	mg/kg	0.000006	NP	--	**0.0001**	**0.00066**	**0.000052**	0.000002 U	**0.00024**	**0.00018**	**0.00017**
PCB-130	52663-66-8	mg/kg	0.000036	NP	--	**0.0067**	**0.0071**	**0.00076**	**0.000018**	**0.00082**	**0.0014**	**0.0013**
PCB-131/133	61798-70-7/35694-04-3	mg/kg	0.0000138	NP	--	**0.0039**	**0.0042**	**0.00036**	**0.0000075**	**0.0005**	**0.00072**	**0.00062**
PCB-132/161	38380-05-1/74472-43-8	mg/kg	0.000078	NP	--	**0.046**	**0.067**	**0.0032**	**0.000067**	0.00004 U	**0.0063**	**0.0072**
PCB-134/143	52704-70-8/68194-15-0	mg/kg	0.0000168	NP	--	**0.0073**	**0.0078**	**0.00061**	**0.000013**	**0.00085**	**0.0012**	**0.0011**
PCB-135	52744-13-5	mg/kg	0.000054	NP	--	**0.028**	**0.027**	**0.0023**	**0.000037**	**0.0029**	**0.0036**	**0.0037**
PCB-136	38411-22-2	mg/kg	0.000051	NP	--	**0.039**	**0.025**	**0.0025**	**0.000034**	**0.0023**	**0.0048**	**0.0029**
PCB-137	35694-06-5	mg/kg	0.000018	NP	--	**0.0038**	**0.0065**	**0.00026**	**0.0000092**	**0.00091**	**0.0011**	**0.00096**
PCB-138/163/164	35065-28-2/74472-44-9/74472-45-0	mg/kg	0.00036	NP	--	**0.16**	**0.17**	**0.015**	**0.00027**	**0.019**	**0.026**	**0.027**
PCB-139/149	56030-56-9/38380-04-0	mg/kg	0.00036	NP	--	**0.17**	**0.18**	**0.015**	**0.00023**	**0.018**	**0.022**	**0.022**
PCB-14	34883-41-5	mg/kg	0.000002	NP	--	0.00003 U	**0.00017**	0.00003 U	0.000002 U	0.00002 U	0.000099 U	**0.000011 LJ**
PCB-140	59291-64-4	mg/kg	0.000006	NP	--	**0.00056**	0.00003 U	**0.000087**	**0.0000027**	**0.00011**	**0.00018**	**0.00012**
PCB-141	52712-04-6	mg/kg	0.000048	NP	--	**0.043**	**0.04**	**0.0034**	**0.000058**	**0.0038**	**0.0053**	**0.0056**
PCB-142	41411-61-4	mg/kg	0.000002	NP	--	0.00003 U	0.00003 U	0.00003 U	0.000002 U	0.00002 U	0.000099 U	0.00002 U
PCB-144	68194-14-9	mg/kg	0.0000111	NP	--	**0.01**	**0.0095**	**0.00093**	**0.000013**	**0.00073**	**0.0012**	**0.0012**
PCB-145	74472-40-5	mg/kg	0.000002	NP	--	**0.000029 LJ**	**0.000029 LJ**	0.00003 U	0.000002 U	0.00002 U	0.000099 U	0.00002 U
PCB-146/165	51908-16-8/74472-46-1	mg/kg	0.000087	NP	--	**0.026**	**0.026**	**0.0024**	**0.000038**	**0.0031**	**0.0039**	**0.0038**
PCB-147	68194-13-8	mg/kg	0.0000111	NP	--	**0.00082**	**0.0015**	**0.00011**	**0.0000046**	**0.00016**	**0.00033**	**0.00022**
PCB-148	74472-41-6	mg/kg	0.000002	NP	--	0.00003 U	0.00003 U	0.00003 U	0.000002 U	0.00002 U	0.000099 U	0.00002 U
PCB-15	2050-68-2	mg/kg	0.000018	NP	--	**0.0011**	**0.016**	**0.00039**	**0.000015**	**0.0025**	**0.0028**	**0.0023**
PCB-150	68194-08-1	mg/kg	0.000006	NP	--	**0.00022**	**0.00025**	**0.000032**	0.000002 U	**0.00004**	**0.00011**	**0.000062**
PCB-151	52663-63-5	mg/kg	0.000081	NP	--	**0.059**	**0.057**	**0.0045**	**0.000063**	**0.005**	**0.0067**	**0.0066**
PCB-152	68194-09-2	mg/kg	0.000002	NP	--	**0.000063**	**0.00011**	0.00003 U	0.000002 U	**0.00001 LJ**	0.000099 U	**0.00002**
PCB-153	35065-27-1	mg/kg	0.00048	NP	--	**0.18**	**0.16**	**0.017**	**0.00027**	**0.019**	**0.025**	**0.024**
PCB-154	60145-22-4	mg/kg	0.0000252	NP	--	**0.0019**	**0.0014**	**0.0002**	**0.0000038**	**0.00023**	**0.00055**	**0.0003**
PCB-155	33979-03-2	mg/kg	0.000002	NP	--	0.00003 U	**0.000022 LJ**	0.00003 U	0.000002 U	0.00002 U	0.000099 U	0.00002 U
PCB-158/160	74472-42-7/41411-62-5	mg/kg	0.0000249	NP	--	**0.014**	**0.014**	**0.0014**	**0.00003**	**0.0017**	**0.0025**	**0.0026**
PCB-159	39635-35-3	mg/kg	0.000006	NP	--	**0.0021**	**0.0018**	**0.00017**	**0.0000038**	**0.0002**	**0.00028**	**0.00026**
PCB-16	38444-78-9	mg/kg	0.0000081	NP	--	**0.0013**	**0.016**	**0.0004**	**0.000016**	**0.0024**	**0.0044**	**0.0022**
PCB-166	41411-63-6	mg/kg	0.000002	NP	--	**0.00014**	**0.00021**	**0.000016 LJ**	0.000002 U	**0.00003**	**0.000045 LJ**	**0.000028**
PCB-168	59291-65-5	mg/kg	0.000002	NP	--	0.00003 U	0.00003 U	0.00003 U	0.000002 U	0.00002 U	0.000099 U	0.00002 U
PCB-17	37680-66-3	mg/kg	0.0000147	NP	--	**0.0018**	**0.022**	**0.00053**	**0.000024**	**0.0035**	**0.0061**	**0.0032**
PCB-170	35065-30-6	mg/kg	0.000111	NP	--	**0.068**	**0.055**	**0.0057**	**0.000077**	**0.0061**	**0.0093**	**0.0083**
PCB-171	52663-71-5	mg/kg	0.000033	NP	--	**0.021**	**0.02**	**0.0017**	**0.000025**	**0.0018**	**0.003**	**0.0029**
PCB-172	52663-74-8	mg/kg	0.0000237	NP	--	**0.014**	**0.012**	**0.001**	**0.000016**	**0.0012**	**0.002**	**0.0018**
PCB-173	68194-16-1	mg/kg	0.000002	NP	--	**0.0014**	**0.0011**	**0.00012**	0.000002 U	**0.00013**	**0.0002**	**0.00023**
PCB-174	38411-25-5	mg/kg	0.000102	NP	--	**0.084**	**0.077**	**0.0061**	**0.000097**	**0.0063**	**0.011**	**0.0099**
PCB-175	40186-70-7	mg/kg	0.0000066	NP	--	**0.0033**	**0.0023**	**0.00024**	**0.0000051**	**0.000057**	**0.00047**	**0.00021**
PCB-176	52663-65-7	mg/kg	0.0000132	NP	--	**0.012**	**0.012**	**0.00087**	**0.000012**	**0.00091**	**0.0014**	**0.0014**
PCB-177	52663-70-4	mg/kg	0.000066	NP	--	**0.049**	**0.046**	**0.0037**	**0.00005**	**0.0039**	**0.0063**	**0.0063**
PCB-178	52663-67-9	mg/kg	0.0000264	NP	--	**0.017**	**0.017**	**0.0012**	**0.000018**	**0.0014**	**0.0022**	**0.0022**
PCB-179	52663-64-6	mg/kg	0.000045	NP	--	**0.036**	**0.037**	**0.0026**	**0.000035**	**0.003**	**0.0044**	**0.0042**
PCB-18	37680-65-2	mg/kg	0.0000225	NP	--	**0.0057**	**0.058**	**0.0014**	**0.000059**	**0.0086**	**0.015**	**0.007**
PCB-180	35065-29-3	mg/kg	0.000228	NP	--	**0.2**	**0.17**	**0.016**	**0.00021**	**0.016**	**0.027**	**0.024**
PCB-181	74472-47-2	mg/kg	0.000002	NP	--	0.00003 U	0.00003 U	0.00003 U	0.000002 U	0.00002 U	0.000099 U	0.00002 U

Table 4-2 (continued)
Summary of Sediment Sample Results, North Lake, 12-24 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 12 - 24 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L01	L01	L01	L01	L01	L01	L01
					Station	SED01	SED02	SED03	SED04	SED05	SED06	SED07
					Sample ID	CL-L01-SED01-24-51	CL-L01-SED02-24-51	CL-L01-SED03-24-51	CL-L01-SED04-24-51	CL-L01-SED05-24-51	CL-L01-SED06-24-51	CL-L01-SED07-24-51
					Depths	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24
					Date	04/04/2022	04/04/2022	04/05/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022
					Type	FS	FS	FS	FS	FS	FS	FS
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)												
PCB-182/187	60145-23-5/52663-68-0	mg/kg	0.000153	NP	--	**0.11**	**0.1**	**0.0077**	**0.00011**	**0.009**	**0.013**	**0.014**
PCB-183	52663-69-1	mg/kg	0.000063	NP	--	**0.048**	**0.046**	**0.0037**	**0.000057**	**0.0039**	**0.0063**	**0.0061**
PCB-184	74472-48-3	mg/kg	0.000002	NP	--	**0.000032**	**0.000046**	0.00003 U	0.000002 U	0.00002 U	0.000099 U	**0.000021**
PCB-185	52712-05-7	mg/kg	0.000009	NP	--	**0.011**	**0.01**	**0.00072**	**0.000011**	**0.00082**	**0.0013**	**0.0014**
PCB-186	74472-49-4	mg/kg	0.000002	NP	--	0.00003 U	0.00003 U	0.00003 U	0.000002 U	0.00002 U	0.000099 U	0.00002 U
PCB-188	74487-85-7	mg/kg	0.000002	NP	--	**0.000063**	**0.000086**	**0.0000093 LJ**	0.000002 U	**0.000014 LJ**	**0.000041 LJ**	**0.000027**
PCB-19	38444-73-4	mg/kg	0.000002	NP	--	**0.00073**	**0.0049**	**0.00011**	**0.0000063**	**0.00063**	**0.0012**	**0.00079**
PCB-190	41411-64-7	mg/kg	0.0000186	NP	--	**0.014**	**0.0093**	**0.0011**	**0.000015**	**0.0012**	**0.002**	**0.0018**
PCB-191	74472-50-7	mg/kg	0.000006	NP	--	**0.0029**	**0.0022**	**0.00025**	**0.0000054**	**0.00026**	**0.00042**	**0.0004**
PCB-192	74472-51-8	mg/kg	0.000002	NP	--	0.00003 U	0.00003 U	0.00003 U	0.000002 U	0.00002 U	0.000099 U	0.00002 U
PCB-193	69782-91-8	mg/kg	0.0000153	NP	--	**0.0081**	**0.0063**	**0.00067**	**0.000012**	**0.00064**	**0.0011**	**0.00091**
PCB-194	35694-08-7	mg/kg	0.000051	NP	--	**0.028**	**0.025**	**0.0027**	**0.000039**	**0.003**	**0.0035**	**0.0034**
PCB-195	52663-78-2	mg/kg	0.0000183	NP	--	**0.015**	**0.014**	**0.0011**	**0.000019**	**0.0014**	**0.0016**	**0.0016**
PCB-196/203	42740-50-1/52663-76-0	mg/kg	0.000066	NP	--	**0.039**	**0.024**	**0.0036**	**0.000038**	**0.0037**	**0.0049**	**0.0038**
PCB-197	33091-17-7	mg/kg	0.000002	NP	--	**0.0015**	**0.0012**	**0.00013**	**0.0000027**	**0.00014**	**0.00021**	**0.00019**
PCB-198	68194-17-2	mg/kg	0.000002	NP	--	**0.002**	**0.00032**	**0.00016**	**0.0000026**	**0.00013**	**0.00022**	**0.00013**
PCB-199	52663-75-9	mg/kg	0.000072	NP	--	**0.035**	**0.022**	**0.0031**	**0.00003**	**0.0031**	**0.0048**	**0.0032**
PCB-2	2051-61-8	mg/kg	0.000002	NP	--	**0.000028 LJ**	**0.00008**	**0.000032**	0.000002 U	**0.000031**	**0.00011**	**0.00022**
PCB-20/21/33	38444-84-7/55702-46-0/38444-86-9	mg/kg	0.000057	NP	--	**0.0031**	**0.054**	**0.00097**	**0.000037**	**0.0064**	**0.0035**	**0.0058**
PCB-200	52663-73-7	mg/kg	0.000002	NP	--	**0.0041**	**0.0028**	**0.00034**	**0.0000049**	**0.00039**	**0.00054**	**0.00041**
PCB-201	40186-71-8	mg/kg	0.0000108	NP	--	**0.0044**	**0.0038**	**0.00037**	**0.0000055**	**0.00041**	**0.00062**	**0.00053**
PCB-202	2136-99-4	mg/kg	0.0000198	NP	--	**0.0063**	**0.0059**	**0.00055**	**0.0000083**	**0.00066**	**0.001**	**0.00086**
PCB-204	74472-52-9	mg/kg	0.000002	NP	--	0.00003 U	0.00003 U	0.00003 U	0.000002 U	0.00002 U	0.000099 U	0.00002 U
PCB-205	74472-53-0	mg/kg	0.000002	NP	--	**0.0016**	**0.0014**	**0.00015**	**0.0000029**	**0.00016**	**0.00021**	**0.00022**
PCB-206	40186-72-9	mg/kg	0.000057	NP	--	**0.0067**	**0.0077**	**0.00087**	**0.000018**	**0.0012**	**0.0019**	**0.0015**
PCB-207	52663-79-3	mg/kg	0.0000087	NP	--	**0.00098**	**0.0011**	**0.00012**	**0.0000024**	**0.00014**	**0.00024**	**0.00019**
PCB-208	52663-77-1	mg/kg	0.000027	NP	--	**0.0013**	**0.0017**	**0.00022**	**0.0000055**	**0.00028**	**0.00059**	**0.00037**
PCB-209	2051-24-3	mg/kg	0.000072	NP	--	**0.00064**	**0.0017**	**0.00036**	**0.000013**	**0.00055**	**0.0015**	**0.00081**
PCB-22	38444-85-8	mg/kg	0.0000126	NP	--	**0.0019**	**0.03**	**0.00069**	**0.000022**	**0.0046**	**0.0028**	**0.0037**
PCB-23	55720-44-0	mg/kg	0.000002	NP	--	**0.000015 LJ**	**0.00012**	0.00003 U	0.000002 U	**0.000024**	0.000099 U	**0.000012 LJ**
PCB-24	55702-45-9	mg/kg	0.000002	NP	--	**0.00021**	**0.0021**	**0.000043**	**0.0000029**	**0.00035**	**0.0006**	**0.00034**
PCB-25	55712-37-3	mg/kg	0.0000063	NP	--	**0.00062**	**0.0056**	**0.0002**	**0.0000075**	**0.0017**	**0.00096**	**0.0012**
PCB-26	38444-81-4	mg/kg	0.000006	NP	--	**0.0011**	**0.019**	**0.00036**	**0.000012**	**0.0027**	**0.0016**	**0.0019**
PCB-27	38444-76-7	mg/kg	0.000002	NP	--	**0.00019**	**0.0022**	**0.000081**	**0.0000026**	**0.00034**	**0.00065**	**0.00033**
PCB-28	7012-37-5	mg/kg	0.000051	NP	--	**0.0046**	**0.051**	**0.0022**	**0.000063**	**0.018**	**0.009**	**0.0086**
PCB-29	15862-07-4	mg/kg	0.000002	NP	--	**0.000067**	**0.0007**	0.00003 U	0.000002 U	**0.00013**	**0.000085 LJ**	**0.000096**
PCB-3	2051-62-9	mg/kg	0.000006	NP	--	**0.000074**	**0.00036**	**0.000056**	**0.0000072**	**0.00015**	**0.00038**	**0.00027**
PCB-30	35693-92-6	mg/kg	0.000002	NP	--	0.00003 U	**0.000056**	0.00003 U	0.000002 U	**0.0000089 LJ**	**0.000021 LJ**	0.00002 U
PCB-31	16606-02-3	mg/kg	0.0000132	NP	--	**0.0065**	**0.12**	**0.0015**	**0.000049**	**0.012**	**0.0051**	**0.011**
PCB-32	38444-77-8	mg/kg	0.0000066	NP	--	**0.0017**	**0.016**	**0.0004**	**0.000017**	**0.0024**	**0.0041**	**0.0024**
PCB-34	37680-68-5	mg/kg	0.000002	NP	--	**0.000037**	**0.00063**	0.00003 U	0.000002 U	**0.00017**	**0.00013**	**0.000095**
PCB-35	37680-69-6	mg/kg	0.000002	NP	--	**0.00013**	**0.001**	**0.000045**	0.000002 U	**0.00022**	**0.00015**	**0.00017**
PCB-36	38444-87-0	mg/kg	0.000002	NP	--	0.00003 U	0.00003 U	0.00003 U	0.000002 U	0.00002 U	0.000099 U	0.00002 U
PCB-37	38444-90-5	mg/kg	0.000045	NP	--	**0.0015**	**0.021**	**0.00072**	**0.000019**	**0.0043**	**0.0031**	**0.0027**
PCB-38	53555-66-1	mg/kg	0.000002	NP	--	**0.000099**	**0.00044**	0.00003 U	0.000002 U	0.00002 U	0.000099 U	0.00002 U
PCB-39	38444-88-1	mg/kg	0.000002	NP	--	0.00003 U	0.00003 U	0.00003 U	0.000002 U	0.00002 U	0.000099 U	0.00002 U
PCB-4	13029-08-8	mg/kg	0.000006	NP	--	**0.0026**	**0.012**	**0.00021**	**0.000019**	**0.0012**	**0.0017**	**0.0016**
PCB-40	38444-93-8	mg/kg	0.000009	NP	--	**0.00084**	**0.007**	**0.00021**	**0.0000061**	**0.0013**	**0.0013**	**0.0009**
PCB-41/64/71/72	52663-59-9/52663-58-8/41464-46-4/41464-42-0	mg/kg	0.00006	NP	--	**0.005**	**0.037**	**0.001**	**0.000031**	**0.0058**	**0.0059**	**0.0042**
PCB-42/59	36559-22-5/74472-33-6	mg/kg	0.000033	NP	--	**0.0015**	**0.013**	**0.00048**	**0.000011**	**0.0026**	**0.003**	**0.0019**
PCB-43/49	70362-46-8/41464-40-8	mg/kg	0.000129	NP	--	**0.0069**	**0.046**	**0.0016**	**0.000049**	**0.0069**	**0.0068**	**0.0047**

Table 4-2 (continued)
Summary of Sediment Sample Results, North Lake, 12-24 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 12 - 24 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L01	L01	L01	L01	L01	L01	L01
					Station	SED01	SED02	SED03	SED04	SED05	SED06	SED07
					Sample ID	CL-L01-SED01-24-51	CL-L01-SED02-24-51	CL-L01-SED03-24-51	CL-L01-SED04-24-51	CL-L01-SED05-24-51	CL-L01-SED06-24-51	CL-L01-SED07-24-51
					Depths	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24
					Date	04/04/2022	04/04/2022	04/05/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022
					Type	FS	FS	FS	FS	FS	FS	FS
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)												
PCB-44	41464-39-5	mg/kg	0.000066	NP	--	**0.0091**	**0.046**	**0.0014**	**0.000048**	**0.0068**	**0.0071**	**0.0048**
PCB-45	70362-45-7	mg/kg	0.000006	NP	--	**0.00065**	**0.0084**	**0.0002**	**0.0000058**	**0.0013**	**0.0014**	**0.001**
PCB-46	41464-47-5	mg/kg	0.000006	NP	--	**0.00026**	**0.0034**	**0.000091**	**0.0000027**	**0.00055**	**0.0005**	**0.00044**
PCB-47	2437-79-8	mg/kg	0.000066	NP	--	**0.0022**	**0.02**	**0.00054**	**0.000015**	**0.0031**	**0.0038**	**0.0024**
PCB-48/75	70362-47-9/32598-12-2	mg/kg	0.0000126	NP	--	**0.00059**	**0.0065**	**0.00025**	**0.0000071**	**0.001**	**0.0011**	**0.00071**
PCB-5	16605-91-7	mg/kg	0.000002	NP	--	**0.00032**	**0.0036**	**0.000021 LJ**	0.000002 U	**0.000073**	**0.00015**	**0.00037**
PCB-50	62796-65-0	mg/kg	0.000002	NP	--	**0.000015 LJ**	**0.0002**	0.00003 U	0.000002 U	**0.000034**	**0.000038 LJ**	**0.000024**
PCB-51	68194-04-7	mg/kg	0.000006	NP	--	**0.00018**	**0.0049**	**0.000066**	**0.0000026**	**0.00046**	**0.00052**	**0.00045**
PCB-52/69	35693-99-3/60233-24-1	mg/kg	0.000111	NP	--	**0.02**	**0.057**	**0.0023**	**0.000088**	**0.0092**	**0.0086**	**0.006**
PCB-53	41464-41-9	mg/kg	0.0000069	NP	--	**0.00082**	**0.0092**	**0.00021**	**0.0000074**	**0.0013**	**0.0013**	**0.0011**
PCB-54	15968-05-5	mg/kg	0.000002	NP	--	**0.000016 LJ**	**0.0004**	0.00003 U	0.000002 U	**0.000023**	**0.000035 LJ**	**0.000038**
PCB-55	74338-24-2	mg/kg	0.000006	NP	--	**0.00024**	**0.0007**	**0.000036**	0.000002 U	**0.00014**	**0.00018**	**0.000073**
PCB-56/60	41464-43-1/33025-41-1	mg/kg	0.0000297	NP	--	**0.0048**	**0.041**	**0.00094**	**0.000029**	**0.0061**	**0.0071**	**0.0042**
PCB-57	70424-67-8	mg/kg	0.000002	NP	--	**0.000053**	**0.00026**	**0.000014 LJ**	0.000002 U	**0.000052**	**0.000076 LJ**	**0.000037**
PCB-58	41464-49-7	mg/kg	0.000002	NP	--	**0.000021 LJ**	0.00003 U	**0.000013 LJ**	0.000002 U	**0.000043**	**0.000048 LJ**	**0.000021**
PCB-6	25569-80-6	mg/kg	0.0000105	NP	--	**0.001**	**0.0061**	**0.000094**	**0.0000075**	**0.00052**	**0.0008**	**0.00099**
PCB-61/70	33284-53-6/32598-11-1	mg/kg	0.000066	NP	--	**0.017**	**0.058**	**0.0025**	**0.000087**	**0.011**	**0.0089**	**0.0057**
PCB-62	54230-22-7	mg/kg	0.000002	NP	--	0.00003 U	0.00003 U	0.00003 U	0.000002 U	0.00002 U	0.000099 U	0.00002 U
PCB-63	74472-34-7	mg/kg	0.000006	NP	--	**0.00026**	**0.0018**	**0.000066**	**0.0000024**	**0.00037**	**0.00034**	**0.00021**
PCB-65	33284-54-7	mg/kg	0.000002	NP	--	0.00003 U	0.00003 U	0.00003 U	0.000002 U	0.00002 U	0.000099 U	0.00002 U
PCB-66/76	32598-10-0/70362-48-0	mg/kg	0.00012	NP	--	**0.01**	**0.042**	**0.0019**	**0.000059**	**0.0088**	**0.0086**	**0.0048**
PCB-67	73575-53-8	mg/kg	0.000006	NP	--	**0.0002**	**0.0018**	**0.000096**	**0.0000022**	**0.00041**	**0.00035**	**0.0002**
PCB-68	73575-52-7	mg/kg	0.000006	NP	--	**0.000047**	**0.00027**	**0.000018 LJ**	0.000002 U	**0.000079**	**0.000075 LJ**	**0.000045**
PCB-7	33284-50-3	mg/kg	0.000006	NP	--	**0.00028**	**0.0022**	**0.000034**	**0.0000026**	**0.00015**	**0.00022**	**0.00023**
PCB-73	74338-23-1	mg/kg	0.000002	NP	--	0.00003 U	0.00003 U	0.00003 U	0.000002 U	0.00002 U	0.000099 U	0.00002 U
PCB-74	32690-93-0	mg/kg	0.000033	NP	--	**0.004**	**0.022**	**0.0009**	**0.000025**	**0.0047**	**0.0038**	**0.0023**
PCB-78	70362-49-1	mg/kg	0.000002	NP	--	0.00003 U	0.00003 U	0.00003 U	0.000002 U	0.00002 U	0.000099 U	0.00002 U
PCB-79	41464-48-6	mg/kg	0.0000069	NP	--	**0.00051**	**0.00075**	**0.000061**	**0.0000023**	**0.00019**	**0.00032**	**0.00014**
PCB-8	34883-43-7	mg/kg	0.000036	NP	--	**0.0037**	**0.025**	**0.00032**	**0.000029**	**0.0018**	**0.0026**	**0.0032**
PCB-80	33284-52-5	mg/kg	0.000002	NP	--	0.00003 U	0.00003 U	0.00003 U	0.000002 U	0.00002 U	0.000099 U	0.00002 U
PCB-82	52663-62-4	mg/kg	0.0000174	NP	--	**0.003**	**0.0016**	**0.00031**	**0.000017**	**0.00084**	**0.002**	**0.00017**
PCB-83/112	60145-20-2/74472-36-9	mg/kg	0.0000108	NP	--	**0.0013**	**0.0022**	**0.00016**	**0.0000075**	**0.00039**	**0.0009**	**0.00032**
PCB-84/92	52663-60-2/52663-61-3	mg/kg	0.000123	NP	--	**0.018**	**0.03**	**0.002**	**0.000081**	**0.0038**	**0.0082**	**0.0035**
PCB-85/116	65510-45-4/18259-05-7	mg/kg	0.0000252	NP	--	**0.0041**	**0.0085**	**0.00051**	**0.000024**	**0.0011**	**0.0028**	**0.0011**
PCB-86	55312-69-1	mg/kg	0.000002	NP	--	0.00003 U	0.00003 U	0.00003 U	0.000002 U	0.00002 U	0.000099 U	0.00002 U
PCB-87/117/125	38380-02-8/68194-11-6/74472-39-2	mg/kg	0.000048	NP	--	**0.015**	**0.025**	**0.0014**	**0.000064**	**0.0028**	**0.0064**	**0.0029**
PCB-88/91	55215-17-3/68194-05-8	mg/kg	0.000087	NP	--	**0.0052**	**0.01**	**0.00083**	**0.000027**	**0.0019**	**0.0026**	**0.0013**
PCB-89	73575-57-2	mg/kg	0.000002	NP	--	**0.00024**	0.00003 U	**0.00003**	0.000002 U	**0.000084**	**0.00025**	**0.000075**
PCB-9	34883-39-1	mg/kg	0.000006	NP	--	**0.00028**	**0.0015**	**0.000033**	**0.0000024**	**0.00013**	**0.00023**	**0.00021**
PCB-90/101	68194-07-0/37680-73-2	mg/kg	0.00033	NP	--	**0.068**	**0.092**	**0.0075**	**0.00024**	**0.011**	**0.023**	**0.01**
PCB-93	73575-56-1	mg/kg	0.000002	NP	--	0.00003 U	0.00003 U	0.00003 U	0.000002 U	0.00002 U	0.000099 U	0.00002 U
PCB-94	73575-55-0	mg/kg	0.000002	NP	--	**0.0002**	**0.00072**	**0.000026 LJ**	0.000002 U	**0.000081**	**0.00013**	**0.000085**
PCB-95	38379-99-6	mg/kg	0.000231	NP	--	**0.078**	**0.078**	**0.0076**	0.000002 U	**0.012**	**0.014**	**0.0087**
PCB-96	73575-54-9	mg/kg	0.000002	NP	--	**0.00019**	**0.0006**	**0.000019 LJ**	0.000002 U	**0.000078**	**0.00012**	**0.000082**
PCB-97	41464-51-1	mg/kg	0.00009	NP	--	**0.011**	**0.021**	**0.0012**	**0.000061**	**0.0028**	**0.0063**	**0.0024**
PCB-98/102	60233-25-2/68194-06-9	mg/kg	0.00009	NP	--	0.00006 U	0.00006 U	0.00006 U	**0.00019**	0.00004 U	0.0002 U	0.00004 U
PCB-99	38380-01-7	mg/kg	0.000234	NP	--	**0.016**	**0.029**	**0.0022**	**0.000085**	**0.0036**	**0.01**	**0.0035**
TEQ (Bird)	2222-22-3	mg/kg	0.00000219	NP	--	**0.00024**	**0.0005**	**0.000024**	**0.00000092**	**0.000088**	**0.00014**	**0.000086**
TEQ (Fish)	2222-22-4	mg/kg	2.52E-08	NP	--	**0.000004**	**0.0000053**	**0.00000039**	**0.000000014**	**0.00000085**	**0.0000015**	**0.0000013**
TEQ (Mammal)	2222-22-2	mg/kg	0.00000039	NP	--	**0.000067**	**0.00008**	**0.0000064**	**0.00000022**	**0.000012**	**0.000023**	**0.000023**
Total DiCB	25512-42-9	mg/kg	0.000084	NP	--	**0.0098 J**	**0.069 J**	**0.0012 J**	**0.000076 J**	**0.0068 J**	**0.0091 J**	**0.0096 J**

Table 4-2 (continued)
Summary of Sediment Sample Results, North Lake, 12-24 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 12 - 24 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L01	L01	L01	L01	L01	L01	L01
					Station	SED01	SED02	SED03	SED04	SED05	SED06	SED07
					Sample ID	CL-L01-SED01-24-51	CL-L01-SED02-24-51	CL-L01-SED03-24-51	CL-L01-SED04-24-51	CL-L01-SED05-24-51	CL-L01-SED06-24-51	CL-L01-SED07-24-51
					Depths	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24
					Date	04/04/2022	04/04/2022	04/05/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022
					Type	FS	FS	FS	FS	FS	FS	FS
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)												
Total HpCB	28655-71-2	mg/kg	0.00093	NP	--	**0.7 J**	**0.63 J**	**0.054 J**	**0.00076 J**	**0.057 J**	**0.092 J**	**0.087 J**
Total HxCB	26601-64-9	mg/kg	0.00192	NP	--	**0.84 J**	**0.85 J**	**0.074 J**	**0.0013 J**	**0.085 J**	**0.12 J**	**0.12 J**
Total MoCB	27323-18-8	mg/kg	0.0000126	NP	--	**0.00034 J**	**0.00097 J**	**0.00013 J**	**0.000017 J**	**0.00028 J**	**0.00098 J**	**0.00084 J**
Total NoCB	53742-07-7	mg/kg	0.000093	NP	--	**0.009 J**	**0.011 J**	**0.0012 J**	**0.000026 J**	**0.0016 J**	**0.0027 J**	**0.0021 J**
Total OcCB	55722-26-4	mg/kg	0.000237	NP	--	**0.14 J**	**0.1 J**	**0.012 J**	**0.00015 J**	**0.013 J**	**0.018 J**	**0.014 J**
TOTAL PCBs	1111-11-1	mg/kg	0.0063	NP	--	**2.2 J**	**3 J**	**0.2 J**	**0.0044 J**	**0.37 J**	**0.5 J**	**0.39 J**
Total PeCB	25429-29-2	mg/kg	0.00192	NP	--	**0.34 J**	**0.49 J**	**0.036 J**	**0.0013 J**	**0.066 J**	**0.12 J**	**0.06 J**
Total TeCB	26914-33-0	mg/kg	0.00081	NP	--	**0.088 J**	**0.43 J**	**0.015 J**	**0.00049 J**	**0.074 J**	**0.073 J**	**0.047 J**
Total TrCB	25323-68-6	mg/kg	0.000243	NP	--	**0.031 J**	**0.42 J**	**0.0096 J**	**0.00034 J**	**0.068 J**	**0.058 J**	**0.052 J**
CLP Organics by CLP SOW SFAM01.1/3151.0												
1,2,4,5-Tetrachlorobenzene	95-94-3	mg/kg	0.26	0.23	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
1,4-Dioxane	123-91-1	mg/kg	0.1	5.3	--	0.077 U	0.066 U	0.088 U	0.086 U	0.091 U	0.091 U	0.051 U
1-Methylnaphthalene	90-12-0	mg/kg	0.26	18	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 UR
2,3,4,6-Tetrachlorophenol	58-90-2	mg/kg	0.26	190	--	0.19 U	0.17 U	0.22 UJ	0.22 UJ	0.23 U	0.23 U	0.13 UJ
Metals by CLP SOW SFAM01.1												
Aluminum	7429-90-5	mg/kg	102000	7700	--	**33000**	**19000**	**34000**	**42000**	**28000**	**28000**	**18000**
Antimony	7440-36-0	mg/kg	2.6	3.1	--	**97**	**43**	**100**	**3.9**	**92**	**46**	**2.7**
Arsenic	7440-38-2	mg/kg	28.8	0.68	--	**120**	**41**	**130**	**21**	**79**	**52**	**11**
Barium	7440-39-3	mg/kg	690	1500	--	**360**	**390**	**360**	**310**	**320**	**260**	**290**
Beryllium	7440-41-7	mg/kg	3.3	16	--	**1.1**	**0.56 LJ**	**1**	**1.3**	**0.77 LJ**	**0.72 LJ**	**0.45 LJ**
Cadmium	7440-43-9	mg/kg	2.67	0.71	--	**13**	**5**	**13**	**1.1**	**5.5**	**3.9**	**2.3**
Calcium	7440-70-2	mg/kg	15600	NP	--	**9300**	**25000**	**4500**	**4400**	**4300**	**4200**	**9500**
Chromium	7440-47-3	mg/kg	48	NP	--	**22 J**	**26 J**	**25 J**	**19 J**	**30 J**	**21 J**	**23 J**
Cobalt	7440-48-4	mg/kg	22.5	2.3	--	**8.7 J**	**6.5 J**	**8 J**	**7 J**	**7.3 J**	**6.4 J**	**6.3 J**
Copper	7440-50-8	mg/kg	75	310	--	**42 J**	**50 J**	**42 J**	**17 J**	**71**	**48**	**77**
Iron	7439-89-6	mg/kg	90000	5500	--	**35000**	**22000**	**36000**	**43000**	**30000**	**29000**	**21000**
Lead	7439-92-1	mg/kg	261	400	--	**550**	**320**	**450**	**84**	**430**	**360**	**310**
Magnesium	7439-95-4	mg/kg	18300	NP	--	**3600**	**3300**	**4000**	**5200**	**4000**	**3500**	**2700**
Manganese	7439-96-5	mg/kg	1590	180	--	**920**	**540**	**1300**	**2900**	**610**	**710**	**390**
Mercury	7439-97-6	mg/kg	0.69	1.1	--	**1.4**	**2.2**	**0.36**	**0.27**	**0.9**	**0.46**	**0.47**
Nickel	7440-02-0	mg/kg	72	150	--	**31**	**17**	**27**	**28**	**17 J**	**15 J**	**18 J**
Potassium	7440-09-7	mg/kg	12600	NP	--	**2400**	**1500**	**2600**	**3700**	**2500**	**2200**	**1400**
Selenium	7782-49-2	mg/kg	3.6	39	--	**1.2 LJ**	**0.56 LJ**	**1.3 LJ**	**1.3 LJ**	**0.75 LJ**	**0.68 LJ**	6.1 U
Silver	7440-22-4	mg/kg	1.05	39	--	**4.5**	**4.6**	**6.6**	**0.85 LJ**	**28**	**9.5**	**2.6**
Sodium	7440-23-5	mg/kg	690	NP	--	**240 LJ**	**160 LJ**	**200 LJ**	**200 LJ**	**130 LJ**	**120 LJ**	**110 LJ**
Thallium	7440-28-0	mg/kg	1.3	0.078	--	0.93 U	0.84 U	0.99 U	1.8 U	1.1 U	1 U	1.2 U
Vanadium	7440-62-2	mg/kg	51	39	--	**13 J**	**9.5 J**	**14 J**	**14 J**	**13 J**	**12 J**	**12 J**
Zinc	7440-66-6	mg/kg	330	2300	--	**300 J**	**310 J**	**250 J**	**66 J**	**270 J**	**210 J**	**430 J**
Pesticides by CLP SOW SFAM01.1												
4,4'-DDD	72-54-8	mg/kg	0.03	0.19	--	0.0077 UJ	0.0065 U	0.0087 U	0.0086 U	0.0091 U	0.009 U	0.0051 U
4,4'-DDE	72-55-9	mg/kg	0.045	2	--	0.0077 UJ	0.0065 U	**0.016**	0.0086 U	**0.059**	**0.019**	0.0051 U
4,4'-DDT	50-29-3	mg/kg	0.042	1.9	--	0.0077 UJ	0.0065 U	0.0087 U	0.0086 U	**0.026 J**	**0.014**	0.0051 U
Aldrin	309-00-2	mg/kg	0.0201	0.039	--	0.004 UJ	0.0034 U	0.0045 U	0.0044 U	0.0047 U	**0.0019 LJ**	0.0026 U
alpha-BHC	319-84-6	mg/kg	0.0156	0.086	--	0.004 UJ	0.0034 U	0.0045 U	0.0044 U	0.0047 U	0.0047 U	0.0026 U
beta-BHC	319-85-7	mg/kg	0.0052	0.3	--	0.004 UJ	0.0034 U	0.0045 U	0.0044 U	0.0047 U	0.0047 U	0.0026 U
cis-Chlordane	5103-71-9	mg/kg	0.0168	3.6	--	0.004 UJ	0.0034 U	0.0045 U	0.0044 U	0.0047 U	0.0047 U	0.0026 U
delta-BHC	319-86-8	mg/kg	0.0052	NP	--	0.004 UJ	0.0034 U	0.0045 U	0.0044 U	**0.0077 J**	0.0047 U	0.0026 U
Dieldrin	60-57-1	mg/kg	0.01	0.034	--	0.0077 UJ	0.0065 U	0.0087 U	0.0086 U	**0.0061 LJ**	0.009 U	0.0051 U
Endosulfan I	959-98-8	mg/kg	0.0156	NP	--	0.004 UJ	0.0034 U	0.0045 U	0.0044 U	0.0047 U	0.0047 U	0.0026 U
Endosulfan II	33213-65-9	mg/kg	0.01	NP	--	0.0077 UJ	0.0065 U	**0.006 LJ**	0.0086 U	**0.0064 LJ**	0.009 U	0.0051 U
Endosulfan sulfate	1031-07-8	mg/kg	0.01	38	--	0.0077 UJ	0.0065 U	0.0087 U	0.0086 U	0.0091 U	0.009 U	0.0051 U

Table 4-2 (continued)
Summary of Sediment Sample Results, North Lake, 12-24 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 12 - 24 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L01	L01	L01	L01	L01	L01	L01
					Station	SED01	SED02	SED03	SED04	SED05	SED06	SED07
					Sample ID	CL-L01-SED01-24-51	CL-L01-SED02-24-51	CL-L01-SED03-24-51	CL-L01-SED04-24-51	CL-L01-SED05-24-51	CL-L01-SED06-24-51	CL-L01-SED07-24-51
					Depths	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24
					Date	04/04/2022	04/04/2022	04/05/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022
					Type	FS	FS	FS	FS	FS	FS	FS
Pesticides by CLP SOW SFAM01.1 (continued)												
Endrin	72-20-8	mg/kg	0.01	1.9	--	0.0077 UJ	0.0065 U	0.0087 U	0.0086 U	**0.0059 LJ**	0.009 U	0.0051 U
Endrin aldehyde	7421-93-4	mg/kg	0.01	NP	--	0.0077 UJ	0.0065 U	0.0087 U	0.0086 U	**0.008 LJ**	0.009 U	0.0051 U
Endrin ketone	53494-70-5	mg/kg	0.01	NP	--	0.0077 UJ	0.0065 U	0.0087 U	0.0086 U	0.0091 U	0.009 U	0.0051 U
gamma-BHC (Lindane)	58-89-9	mg/kg	0.0156	0.071	--	0.004 UJ	0.0034 U	0.0045 U	0.0044 U	0.0047 U	0.0047 U	0.0026 U
Heptachlor	76-44-8	mg/kg	0.0198	0.13	--	0.004 UJ	0.0034 U	0.0045 U	0.0044 U	0.0047 U	0.0047 U	0.0026 U
Heptachlor epoxide	1024-57-3	mg/kg	0.0156	0.07	--	0.004 UJ	0.0034 U	0.0045 U	0.0044 U	**0.0085 J**	**0.0028 LJ**	0.0026 U
Methoxychlor	72-43-5	mg/kg	1.44	32	--	**0.3 J-**	**1.1**	**0.06**	**0.031 LJ**	**0.18 J**	**0.12**	**0.06**
Toxaphene	8001-35-2	mg/kg	0.52	0.49	--	0.4 UJ	0.34 U	0.45 U	0.44 U	0.47 U	0.47 U	0.26 U
trans-Chlordane	5103-74-2	mg/kg	0.0052	3.6	--	0.004 UJ	0.0034 U	0.0045 U	0.0044 U	**0.0077 J**	0.0047 U	0.0026 U
SVOCs by CLP SOW SFAM01.1/3151.0												
1,1'-Biphenyl	92-52-4	mg/kg	0.26	4.7	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
2,2'-Oxybis(1-chloropropane)	108-60-1	mg/kg	0.52	310	--	0.39 U	0.33 U	0.44 U	0.43 U	0.46 U	0.46 U	0.26 U
2,4,5-Trichlorophenol	95-95-4	mg/kg	0.26	630	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
2,4,6-Trichlorophenol	88-06-2	mg/kg	0.26	6.3	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
2,4-Dichlorophenol	120-83-2	mg/kg	0.26	19	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
2,4-Dimethylphenol	105-67-9	mg/kg	0.26	130	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
2,4-Dinitrophenol	51-28-5	mg/kg	0.52	13	--	0.39 U	0.33 U	0.44 U	0.43 U	0.46 U	0.46 U	0.26 U
2,4-Dinitrotoluene	121-14-2	mg/kg	0.26	1.7	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
2,6-Dinitrotoluene	606-20-2	mg/kg	0.26	0.36	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
2-Chloronaphthalene	91-58-7	mg/kg	0.26	480	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 UR
2-Chlorophenol	95-57-8	mg/kg	0.26	39	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
2-Methylnaphthalene	91-57-6	mg/kg	0.26	24	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 UR
2-Methylphenol	95-48-7	mg/kg	0.52	320	--	0.39 U	0.33 U	0.44 U	0.43 U	0.46 U	0.46 U	0.26 U
2-Nitroaniline	88-74-4	mg/kg	0.26	63	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
2-Nitrophenol	88-75-5	mg/kg	0.26	NP	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.52	1.2	--	0.39 U	0.33 U	0.44 U	0.43 U	0.46 U	0.46 U	0.26 U
3-Nitroaniline	99-09-2	mg/kg	0.52	NP	--	0.39 U	0.33 U	0.44 U	0.43 U	0.46 U	0.46 U	0.26 U
4,6-Dinitro-2-methylphenol	534-52-1	mg/kg	0.52	0.51	--	0.39 UJ	0.33 UJ	0.44 U	0.43 U	0.46 U	0.46 U	0.26 U
4-Bromophenyl-phenylether	101-55-3	mg/kg	0.26	NP	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
4-Chloro-3-methylphenol	59-50-7	mg/kg	0.26	630	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
4-Chloroaniline	106-47-8	mg/kg	0.52	2.7	--	0.39 U	0.33 U	0.44 U	0.43 U	0.46 U	0.46 U	0.26 U
4-Chlorophenyl-phenyl ether	7005-72-3	mg/kg	0.26	NP	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
4-Methylphenol	106-44-5	mg/kg	0.52	130	--	0.39 U	0.33 U	0.44 U	0.43 U	0.46 U	0.46 U	0.26 U
4-Nitroaniline	100-01-6	mg/kg	0.52	25	--	0.39 U	0.33 U	0.44 U	0.43 U	0.46 U	0.46 U	0.26 U
4-Nitrophenol	100-02-7	mg/kg	0.52	NP	--	0.39 U	0.33 U	0.44 U	0.43 U	0.46 U	0.46 U	0.26 U
Acenaphthene	83-32-9	mg/kg	0.26	360	--	0.19 U	**0.13 LJ**	0.22 U	0.22 U	0.23 U	0.23 U	0.13 UR
Acenaphthylene	208-96-8	mg/kg	0.26	NP	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 UR
Acetophenone	98-86-2	mg/kg	0.52	780	--	0.39 U	0.33 U	0.44 U	0.43 U	0.46 U	0.46 U	0.26 U
Anthracene	120-12-7	mg/kg	0.26	1800	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
Atrazine	1912-24-9	mg/kg	0.52	2.4	--	0.39 U	0.33 U	0.44 U	0.43 U	0.46 U	0.46 U	0.26 U
Benzaldehyde	100-52-7	mg/kg	0.52	170	--	0.39 U	0.33 U	0.44 U	0.43 U	0.46 U	0.46 U	0.26 U
Benzo(a)anthracene	56-55-3	mg/kg	0.78	1.1	--	0.19 U	**0.47**	0.22 U	0.22 U	**0.24**	**0.29**	**0.34**
Benzo(a)pyrene	50-32-8	mg/kg	0.78	0.11	--	**0.11 LJ+**	**0.46**	0.22 U	0.22 U	**0.32**	**0.37**	**0.38**
Benzo(b)fluoranthene	205-99-2	mg/kg	0.87	1.1	--	**0.2 J+**	**0.65 J**	0.22 U	0.22 U	**0.47 J**	**0.59 J**	**0.53 J**
Benzo(g,h,i)perylene	191-24-2	mg/kg	0.78	NP	--	0.19 U	**0.33**	0.22 U	0.22 U	**0.16 LJ**	**0.34**	**0.26**
Benzo(k)fluoranthene	207-08-9	mg/kg	0.26	11	--	0.19 U	**0.24 J**	0.22 U	0.22 U	**0.19 LJ**	**0.21 LJ**	**0.2 J**
Bis(2-chloroethoxy)methane	111-91-1	mg/kg	0.26	19	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
Bis(2-chloroethyl)ether	111-44-4	mg/kg	0.52	0.23	--	0.39 U	0.33 U	0.44 U	0.43 U	0.46 U	0.46 U	0.26 U
Bis(2-ethylhexyl)phthalate	117-81-7	mg/kg	0.26	39	--	**0.77**	**1.3**	0.22 U	0.22 U	**0.81**	**1.8**	**0.92**
Butylbenzylphthalate	85-68-7	mg/kg	0.26	290	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
Caprolactam	105-60-2	mg/kg	0.52	3100	--	0.39 U	0.33 U	0.44 U	0.43 U	0.46 U	0.46 U	0.26 U

Table 4-2 (continued)
Summary of Sediment Sample Results, North Lake, 12-24 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 12 - 24 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L01	L01	L01	L01	L01	L01	L01
					Station	SED01	SED02	SED03	SED04	SED05	SED06	SED07
					Sample ID	CL-L01-SED01-24-51	CL-L01-SED02-24-51	CL-L01-SED03-24-51	CL-L01-SED04-24-51	CL-L01-SED05-24-51	CL-L01-SED06-24-51	CL-L01-SED07-24-51
					Depths	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24
					Date	04/04/2022	04/04/2022	04/05/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022
					Type	FS	FS	FS	FS	FS	FS	FS
SVOCs by CLP SOW SFAM01.1/3151.0 (continued)												
Carbazole	86-74-8	mg/kg	0.52	NP	--	0.39 U	0.33 U	0.44 U	0.43 U	0.46 U	0.46 U	0.26 U
Chrysene	218-01-9	mg/kg	0.78	110	--	0.19 U	**0.49**	0.22 U	0.22 U	**0.34**	**0.3**	**0.39**
Dibenzo(a,h)anthracene	53-70-3	mg/kg	0.26	0.11	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
Dibenzofuran	132-64-9	mg/kg	0.26	7.8	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
Diethylphthalate	84-66-2	mg/kg	0.78	5100	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
Dimethylphthalate	131-11-3	mg/kg	0.26	NP	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
Di-n-butylphthalate	84-74-2	mg/kg	0.26	630	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
Di-n-octylphthalate	117-84-0	mg/kg	0.52	63	--	0.39 U	0.33 U	0.44 U	0.43 U	0.46 U	0.46 U	0.26 U
Fluoranthene	206-44-0	mg/kg	0.78	240	--	**0.25**	**0.92**	0.22 U	0.22 U	**0.48**	**0.42**	**0.79**
Fluorene	86-73-7	mg/kg	0.26	240	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
Hexachlorobenzene	118-74-1	mg/kg	0.26	0.078	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
Hexachlorobutadiene	87-68-3	mg/kg	0.26	1.2	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
Hexachlorocyclo-pentadiene	77-47-4	mg/kg	1.56	0.18	--	0.39 UJ	0.33 UJ	0.44 UJ	0.43 UJ	0.46 UJ	0.46 UJ	0.26 UJ
Hexachloroethane	67-72-1	mg/kg	0.26	1.8	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	0.78	1.1	--	0.19 U	**0.34**	0.22 U	0.22 U	**0.36**	**0.33**	**0.33**
Isophorone	78-59-1	mg/kg	0.26	570	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
Naphthalene	91-20-3	mg/kg	0.26	2	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 UR
Nitrobenzene	98-95-3	mg/kg	0.26	5.1	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
N-Nitroso-di-n propylamine	621-64-7	mg/kg	0.26	0.078	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
N-Nitrosodiphenylamine	86-30-6	mg/kg	0.26	110	--	0.19 U	0.17 U	0.22 U	0.22 U	0.23 U	0.23 U	0.13 U
Pentachlorophenol	87-86-5	mg/kg	0.0011	1	--	0.39 U	0.33 U	0.44 U	0.43 U	0.46 U	0.46 U	0.26 U
Phenanthrene	85-01-8	mg/kg	0.26	NP	--	0.19 U	**0.53**	0.22 U	0.22 U	**0.21 LJ**	**0.17 LJ**	**0.57**
Phenol	108-95-2	mg/kg	0.52	1900	--	0.39 U	0.33 U	0.44 U	0.43 U	0.46 U	0.46 U	0.26 U
Pyrene	129-00-0	mg/kg	0.78	180	--	**0.35**	**0.88**	0.22 U	0.22 U	**0.54**	**0.59**	**1.1**

Notes
mg/kg - milligrams/kilogram
U - Not detected at reported quantitation limit.
J - estimated value.
+ - High biased. Actual concentration may be lower than the concentration reported.
R - Unusable, rejected should not be used.
L - Reported concentration is below the Contract Required Quantitation Limit (CRQL).
K - Unknown bias.
NP - Not published.
FS - Field Sample.
FD - Field Duplicate.
RSL - Regional Screening level, May 2022.
TR - Targeted Risk for cancer.
THQ - Target Hazard Quotient.
Yellow Highlight - exceeds background
Orange highlight - does not exceed background, but exceeds RSL

Table 4-3
Summary of Sediment Sample Results, North Lake, 24-36 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 24 - 36 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L01	L01	L01	L01	L01	L01	L01	L01
					Station	SED01	SED02	SED03	SED04	SED05	SED06	SED07	SED07
					Sample ID	CL-L01-SED01-36-51	CL-L01-SED02-36-51	CL-L01-SED03-36-51	CL-L01-SED04-36-51	CL-L01-SED05-36-51	CL-L01-SED06-36-51	CL-L01-SED07-36-51	CL-L01-SED07-36-52
					Depths	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36
					Date	04/04/2022	04/04/2022	04/05/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022	04/06/2022
					Type	FS	FS	FS	FS	FS	FS	FS	FD
Herbicides by SW846 Method 8151													
2,4,5-T	93-76-5	mg/kg	0.002	63	--	0.0016 U	0.0019 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0021 U	0.0019 U
2,4-D	94-75-7	mg/kg	0.03	70	--	0.024 U	0.027 U	0.018 U	0.019 U	0.021 U	0.021 U	0.03 U	0.028 U
2,4-DB	94-82-6	mg/kg	0.025	NP	--	0.02 U	0.023 U	0.015 U	0.016 U	0.018 U	0.018 U	0.025 U	0.023 U
Dalapon	75-99-0	mg/kg	0.12	190	--	0.097 U	0.11 UJK	0.074 U	0.076 U	0.088 U	0.087 U	0.12 U	0.11 U
Dicamba	1918-00-9	mg/kg	0.0099	190	--	0.008 U	0.0091 U	0.006 U	0.0062 U	0.0071 U	0.0071 U	0.01 U	0.0092 U
Dichlorprop	120-36-5	mg/kg	0.022	NP	--	0.018 U	0.02 U	0.014 U	0.014 U	0.016 U	0.016 U	0.023 U	0.021 U
Dinoseb	88-85-7	mg/kg	0.022	6.3	--	0.018 U	0.02 U	0.014 U	0.014 U	0.016 U	0.016 U	0.023 U	0.021 U
MCPA	94-74-6	mg/kg	1.9	3.2	--	1.5 U	1.7 U	1.1 U	1.2 U	1.4 U	1.3 U	**3.6 JQK**	**4 JQK**
MCPP	93-65-2	mg/kg	9.4	6.3	--	7.6 U	8.6 U	5.7 U	5.9 U	6.8 U	6.7 U	9.6 U	8.7 U
Pentachlorophenol	87-86-5	mg/kg	0.00082	1	--	0.00066 U	0.00075 U	0.0005 U	0.00051 U	0.00059 U	0.00058 U	**0.0027 JQK**	**0.0031 JQK**
Silvex (2,4,5-TP)	93-72-1	mg/kg	0.0019	51	--	0.0015 U	0.0017 U	0.0011 U	0.0012 U	0.0013 U	0.0013 U	0.0019 U	0.0017 U
PCB Aroclors by CLP SOW SFAM01.1/3150.0													
Aroclor-1016	12674-11-2	mg/kg	0.0052	0.41	--	0.0038 U	0.0046 U	0.0031 U	**0.53**	0.0038 U	0.0034 U	**0.055**	**0.086 J**
Aroclor-1221	11104-28-2	mg/kg	0.0052	0.2	--	0.0038 U	0.0046 U	0.0031 U	0.0049 U	0.0038 U	0.0034 U	0.004 UJ	0.0062 U
Aroclor-1232	11141-16-5	mg/kg	0.0052	0.17	--	0.0038 U	0.0046 U	0.0031 U	0.0049 U	0.0038 U	0.0034 U	0.004 UJ	0.0062 U
Aroclor-1242	53469-21-9	mg/kg	0.0052	0.23	--	0.0038 U	0.0046 U	0.0031 U	0.0049 U	0.0038 U	0.0034 U	0.004 UJ	0.0062 U
Aroclor-1248	12672-29-6	mg/kg	0.0052	0.23	--	0.0038 U	0.0046 U	0.0031 U	0.0049 U	0.0038 U	0.0034 U	0.004 UJ	0.0062 U
Aroclor-1254	11097-69-1	mg/kg	0.0052	0.12	--	0.0038 U	0.0046 U	0.0031 U	0.0049 U	0.0038 U	0.0034 U	0.004 UJ	0.0062 U
Aroclor-1260	11096-82-5	mg/kg	0.0052	0.24	--	0.0038 U	**0.032**	**0.0023 LJ**	**0.33**	0.0038 U	0.0034 U	**0.021 J-**	**0.13**
Aroclor-1262	37324-23-5	mg/kg	0.0052	NP	--	0.0038 U	0.0046 U	0.0031 U	0.0049 U	0.0038 U	0.0034 U	0.004 UJ	0.0062 U
Aroclor-1268	11100-14-4	mg/kg	0.0052	NP	--	0.0038 U	0.0046 U	0.0031 U	0.0049 U	0.0038 U	0.0034 U	0.004 UJ	0.0062 U
PCB Aroclor Congeners Group 1 by CLP SOW HRSM02.1													
PCB-105	32598-14-4	mg/kg	0.00006	0.12	--	**0.00001**	**0.0004**	**0.000013**	**0.0000014 LJ**	**0.000071**	**0.00032**	**0.0076**	**0.0093**
PCB-114	74472-37-0	mg/kg	0.00000097	0.12	--	0.00000095 U	**0.000035**	0.00000096 U	0.00000097 U	0.0000097 U	**0.000022**	**0.00064**	**0.00094**
PCB-118	31508-00-6	mg/kg	0.000102	0.12	--	**0.000013**	**0.00063**	**0.000023**	**0.0000045**	**0.00014**	**0.00056**	**0.0097**	**0.014**
PCB-123	65510-44-3	mg/kg	0.0000045	0.12	--	0.00000088 U	**0.000024 LJ**	**0.00000095 LJ**	0.0000009 U	0.000009 U	**0.000015 LJ**	**0.00055**	**0.0006**
PCB-126	57465-28-8	mg/kg	0.0000045	0.000036	--	0.00000065 U	**0.000025 LJ**	**0.0000011 LJ**	0.00000099 U	0.0000066 U	**0.000012 LJ**	**0.00041**	**0.00053**
PCB-156	38380-08-4	mg/kg	0.000033	0.12	--	**0.000012**	**0.00032**	**0.000012**	0.00000097 U	**0.000038**	**0.00018**	**0.0033**	**0.0043**
PCB-157	69782-90-7	mg/kg	0.0000093	0.12	--	**0.0000023**	**0.000046**	**0.0000021**	0.0000009 U	**0.0000094 LJ**	**0.000031**	**0.0007**	**0.0009**
PCB-167	52663-72-6	mg/kg	0.0000162	0.12	--	**0.0000063**	**0.00016**	**0.0000058**	0.00000083 U	**0.000021**	**0.000081**	**0.0017**	**0.0022**
PCB-169	32774-16-6	mg/kg	0.00000093	0.00012	--	0.00000091 U	0.000014 U	0.00000092 U	0.00000093 U	0.0000093 U	0.0000092 U	0.000046 U	0.000046 U
PCB-189	39635-31-9	mg/kg	0.0000051	0.13	--	**0.0000037**	**0.000087**	**0.000003**	0.00000087 U	0.0000087 U	**0.000034**	**0.00067**	**0.00093**
PCB-77	32598-13-3	mg/kg	0.000024	0.038	--	**0.0000022**	**0.0001**	**0.0000027**	0.00000083 U	**0.000023**	**0.000042**	**0.0032**	**0.0042**
PCB-81	70362-50-4	mg/kg	0.0000036	0.012	--	0.00000073 U	**0.000024 LJ**	0.00000074 U	0.00000062 U	0.000006 U	**0.000015 LJ**	**0.00057**	**0.00076**
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1													
PCB-1	2051-60-7	mg/kg	0.000006	NP	--	0.000002 U	**0.00003**	**0.000001 LJ**	0.000002 U	**0.000026**	**0.000095**	**0.0012**	**0.002**
PCB-10	33146-45-1	mg/kg	0.000002	NP	--	0.000002 U	**0.00002 LJ**	0.000002 U	0.000002 U	**0.0000068 LJ**	**0.0000063 LJ**	**0.00022**	**0.00028**
PCB-100	39485-83-1	mg/kg	0.0000063	NP	--	0.000002 U	**0.00003**	0.000002 U	0.000002 U	0.00002 U	0.00002 U	**0.00015**	**0.00019**
PCB-103	60145-21-3	mg/kg	0.0000081	NP	--	0.000002 U	**0.000078**	**0.0000022**	0.000002 U	**0.0000073 LJ**	**0.000021**	**0.00032**	**0.00041**
PCB-104	56558-16-8	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U
PCB-106	70424-69-0	mg/kg	0.000087	NP	--	**0.000026**	**0.00066**	**0.000022**	0.000002 U	**0.00011**	**0.00044**	**0.011**	**0.013**
PCB-107	70424-68-9	mg/kg	0.0000111	NP	--	**0.0000017 LJ**	**0.00006**	**0.000002**	0.000002 U	**0.000014 LJ**	**0.000049**	**0.001**	**0.0013**
PCB-108	70362-41-3	mg/kg	0.000009	NP	--	**0.000002**	**0.00008**	**0.0000024**	0.000002 U	**0.000014 LJ**	**0.00005**	**0.00088**	**0.0014**
PCB-109	74472-35-8	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U
PCB-11	2050-67-1	mg/kg	0.000002	NP	--	**0.0000011 LJ**	**0.00023**	**0.00000092 LJ**	0.000002 U	**0.0000098 LJ**	**0.0000061 LJ**	**0.00022**	**0.0003**
PCB-110	38380-03-9	mg/kg	0.000297	NP	--	**0.000059**	**0.0015**	**0.000062**	**0.0000059**	**0.00028**	**0.0011**	**0.033**	**0.047**
PCB-111/115	39635-32-0/74472-38-1	mg/kg	0.000004	NP	--	**0.0000011 LJ**	**0.000019 LJ**	0.000004 U	0.000004 U	0.00004 U	**0.000012 LJ**	**0.00035**	**0.00069**
PCB-113	68194-10-5	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U
PCB-119	56558-17-9	mg/kg	0.0000165	NP	--	**0.0000019 LJ**	**0.000066**	**0.0000026**	0.000002 U	**0.000011 LJ**	**0.00003**	**0.00087**	**0.0013**

Table 4-3 (continued)
Summary of Sediment Sample Results, North Lake, 24-36 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 24 - 36 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L01	L01	L01	L01	L01	L01	L01	L01
					Station	SED01	SED02	SED03	SED04	SED05	SED06	SED07	SED07
					Sample ID	CL-L01-SED01-36-51	CL-L01-SED02-36-51	CL-L01-SED03-36-51	CL-L01-SED04-36-51	CL-L01-SED05-36-51	CL-L01-SED06-36-51	CL-L01-SED07-36-51	CL-L01-SED07-36-52
					Depths	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36
					Date	04/04/2022	04/04/2022	04/05/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022	04/06/2022
					Type	FS	FS	FS	FS	FS	FS	FS	FD
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)													
PCB-12	2974-92-7	mg/kg	0.000002	NP	--	0.000002 U	**0.000023 LJ**	0.000002 U	0.000002 U	**0.0000063 LJ**	**0.000011 LJ**	**0.00039**	**0.00058**
PCB-120	68194-12-7	mg/kg	0.000002	NP	--	0.000002 U	**0.000018 LJ**	0.000002 U	0.000002 U	0.00002 U	0.00002 U	**0.000077 LJ**	**0.00012**
PCB-121	56558-18-0	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U
PCB-122	76842-07-4	mg/kg	0.000002	NP	--	0.000002 U	**0.000015 LJ**	0.000002 U	0.000002 U	0.00002 U	**0.00001 LJ**	**0.00028**	**0.0004**
PCB-124	70424-70-3	mg/kg	0.0000081	NP	--	**0.0000029**	**0.000087**	**0.0000017 LJ**	0.000002 U	**0.000013 LJ**	**0.000049**	**0.0014**	**0.0018**
PCB-127	39635-33-1	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U
PCB-128/162	38380-07-3/39635-34-2	mg/kg	0.00006	NP	--	**0.000013**	**0.00041**	**0.000014**	**0.0000018 LJ**	**0.000058**	**0.00026**	**0.0055**	**0.0067**
PCB-129	55215-18-4	mg/kg	0.0000135	NP	--	**0.0000047**	**0.0001**	**0.0000035**	0.000002 U	**0.000018 LJ**	**0.000072**	**0.0014**	**0.0018**
PCB-13	2974-90-5	mg/kg	0.000002	NP	--	0.000002 U	**0.000025 LJ**	0.000002 U	0.000002 U	**0.0000085 LJ**	**0.000006 LJ**	**0.00052**	**0.0008**
PCB-130	52663-66-8	mg/kg	0.00003	NP	--	**0.0000082**	**0.00026**	**0.0000078**	0.000002 U	**0.000039**	**0.00011**	**0.0018**	**0.0024**
PCB-131/133	61798-70-7/35694-04-3	mg/kg	0.0000117	NP	--	**0.0000044**	**0.00013**	**0.0000036 LJ**	0.000004 U	**0.000016 LJ**	**0.000057**	**0.0011**	**0.0015**
PCB-132/161	38380-05-1/74472-43-8	mg/kg	0.000078	NP	--	**0.000041**	**0.0012**	**0.00003**	**0.000002 LJ**	**0.00012**	**0.00052**	**0.011**	**0.013**
PCB-134/143	52704-70-8/68194-15-0	mg/kg	0.0000153	NP	--	**0.0000071**	**0.0002**	**0.0000054**	0.000004 U	**0.000026 LJ**	**0.0001**	**0.0018**	**0.0025**
PCB-135	52744-13-5	mg/kg	0.000048	NP	--	**0.000026**	**0.00076**	**0.000018**	**0.0000018 LJ**	**0.000074**	**0.00028**	**0.0056**	**0.0072**
PCB-136	38411-22-2	mg/kg	0.000042	NP	--	**0.000031**	**0.0008**	**0.00002**	**0.0000016 LJ**	**0.000074**	**0.00029**	**0.0076**	**0.0097**
PCB-137	35694-06-5	mg/kg	0.0000144	NP	--	**0.0000031**	**0.0001**	**0.0000025**	0.000002 U	**0.000017 LJ**	**0.000072**	**0.002**	**0.0024**
PCB-138/163/164	35065-28-2/74472-44-9/74472-45-0	mg/kg	0.00033	NP	--	**0.00016**	**0.0046**	**0.00013**	**0.0000088**	**0.00052**	**0.0021**	**0.038**	**0.051**
PCB-139/149	56030-56-9/38380-04-0	mg/kg	0.000288	NP	--	**0.00016**	**0.0053**	**0.00013**	**0.0000081**	**0.00048**	**0.0018**	**0.034**	**0.045**
PCB-14	34883-41-5	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U
PCB-140	59291-64-4	mg/kg	0.0000045	NP	--	0.000002 U	**0.000035**	0.000002 U	0.000002 U	0.00002 U	0.00002 U	**0.0002**	**0.00026**
PCB-141	52712-04-6	mg/kg	0.000042	NP	--	**0.000043**	**0.0011**	**0.000029**	**0.0000022**	**0.000097**	**0.00045**	**0.0084**	**0.011**
PCB-142	41411-61-4	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U
PCB-144	68194-14-9	mg/kg	0.000009	NP	--	**0.0000092**	**0.00032**	**0.0000072**	0.000002 U	**0.000024**	**0.00011**	**0.0021**	**0.0026**
PCB-145	74472-40-5	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U
PCB-146/165	51908-16-8/74472-46-1	mg/kg	0.000069	NP	--	**0.000025**	**0.00085**	**0.000022**	**0.0000019 LJ**	**0.000095**	**0.00031**	**0.0059**	**0.0079**
PCB-147	68194-13-8	mg/kg	0.0000084	NP	--	**0.0000014 LJ**	**0.000054**	**0.0000015 LJ**	0.000002 U	**0.0000081 LJ**	**0.000025**	**0.00044**	**0.00057**
PCB-148	74472-41-6	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U
PCB-15	2050-68-2	mg/kg	0.0000132	NP	--	**0.0000037**	**0.00022**	**0.0000033**	0.000002 U	**0.000051**	**0.000059**	**0.0064**	**0.0092**
PCB-150	68194-08-1	mg/kg	0.000002	NP	--	0.000002 U	**0.000022 LJ**	0.000002 U	0.000002 U	0.00002 U	0.00002 U	**0.00013**	**0.00018**
PCB-151	52663-63-5	mg/kg	0.000063	NP	--	**0.000056**	**0.0016**	**0.000036**	**0.0000029**	**0.00013**	**0.00054**	**0.0097**	**0.013**
PCB-152	68194-09-2	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	**0.000061 LJ**	**0.000061 LJ**
PCB-153	35065-27-1	mg/kg	0.00036	NP	--	**0.00017**	**0.0049**	**0.00014**	**0.0000093**	**0.00011**	**0.00047**	**0.035**	**0.049**
PCB-154	60145-22-4	mg/kg	0.0000174	NP	--	**0.0000017 LJ**	**0.00011**	**0.0000025**	0.000002 U	**0.00001 LJ**	**0.000023**	**0.00071**	**0.001**
PCB-155	33979-03-2	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U
PCB-158/160	74472-42-7/41411-62-5	mg/kg	0.0000243	NP	--	**0.000016**	**0.00039**	**0.000013**	**0.0000014 LJ**	**0.00005**	**0.0002**	**0.004**	**0.0051**
PCB-159	39635-35-3	mg/kg	0.0000042	NP	--	**0.0000023**	**0.000062**	**0.0000021**	0.000002 U	**0.0000084 LJ**	**0.000018 LJ**	**0.00055**	**0.00063**
PCB-16	38444-78-9	mg/kg	0.000006	NP	--	**0.0000047**	**0.00025**	**0.0000039**	0.000002 U	**0.000077**	**0.000061**	**0.011**	**0.018**
PCB-166	41411-63-6	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	**0.000098 LJ**	**0.00011**
PCB-168	59291-65-5	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U
PCB-17	37680-66-3	mg/kg	0.0000111	NP	--	**0.0000076**	**0.00033**	**0.0000053**	**0.0000023**	**0.0001**	**0.000085**	**0.014**	**0.022**
PCB-170	35065-30-6	mg/kg	0.00009	NP	--	**0.000067**	**0.0017**	**0.000055**	**0.0000032**	**0.00017**	**0.00064**	**0.014**	**0.018**
PCB-171	52663-71-5	mg/kg	0.0000288	NP	--	**0.000019**	**0.00056**	**0.000017**	0.000002 U	**0.000064**	**0.00022**	**0.0045**	**0.0065**
PCB-172	52663-74-8	mg/kg	0.0000189	NP	--	**0.000013**	**0.00034**	**0.000011**	0.000002 U	**0.000038**	**0.00013**	**0.003**	**0.004**
PCB-173	68194-16-1	mg/kg	0.000002	NP	--	0.000002 U	**0.000033**	0.000002 U	0.000002 U	0.00002 U	**0.000018 LJ**	**0.00031**	**0.00052**
PCB-174	38411-25-5	mg/kg	0.000087	NP	--	**0.000084**	**0.0019**	**0.00006**	**0.000004**	**0.00019**	**0.00073**	**0.016**	**0.023**
PCB-175	40186-70-7	mg/kg	0.000006	NP	--	**0.0000033**	**0.000083**	**0.0000027**	0.000002 U	0.00002 U	**0.00003**	**0.00068**	**0.00027**
PCB-176	52663-65-7	mg/kg	0.0000099	NP	--	**0.000011**	**0.0003**	**0.0000078**	0.000002 U	**0.00003**	**0.000099**	**0.0021**	**0.003**
PCB-177	52663-70-4	mg/kg	0.00006	NP	--	**0.000045**	**0.0012**	**0.000033**	**0.0000022**	**0.00013**	**0.00043**	**0.0097**	**0.014**
PCB-178	52663-67-9	mg/kg	0.0000201	NP	--	**0.000015**	**0.00042**	**0.000011**	0.000002 U	**0.000043**	**0.00014**	**0.0033**	**0.0048**

Table 4-3 (continued)
Summary of Sediment Sample Results, North Lake, 24-36 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 24 - 36 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L01	L01	L01	L01	L01	L01	L01	L01
					Station	SED01	SED02	SED03	SED04	SED05	SED06	SED07	SED07
					Sample ID	CL-L01-SED01-36-51	CL-L01-SED02-36-51	CL-L01-SED03-36-51	CL-L01-SED04-36-51	CL-L01-SED05-36-51	CL-L01-SED06-36-51	CL-L01-SED07-36-51	CL-L01-SED07-36-52
					Depths	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36
					Date	04/04/2022	04/04/2022	04/05/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022	04/06/2022
					Type	FS	FS	FS	FS	FS	FS	FS	FD
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)													
PCB-179	52663-64-6	mg/kg	0.000039	NP	--	**0.000034**	**0.00088**	**0.000023**	**0.0000019 LJ**	**0.000091**	**0.00031**	**0.0069**	**0.0095**
PCB-18	37680-65-2	mg/kg	0.0000186	NP	--	**0.00002**	**0.00091**	**0.000013**	**0.0000057**	**0.00026**	**0.00022**	**0.033**	**0.054**
PCB-180	35065-29-3	mg/kg	0.000195	NP	--	**0.00019**	**0.0048**	**0.00014**	**0.0000089**	**0.00045**	**0.0018**	**0.041**	**0.055**
PCB-181	74472-47-2	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U
PCB-182/187	60145-23-5/52663-68-0	mg/kg	0.000123	NP	--	**0.000097**	**0.0026**	**0.000069**	**0.0000049**	**0.00027**	**0.00093**	**0.02**	**0.03**
PCB-183	52663-69-1	mg/kg	0.000051	NP	--	**0.000044**	**0.0012**	**0.000035**	**0.0000029**	**0.00012**	**0.00042**	**0.0093**	**0.013**
PCB-184	74472-48-3	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U
PCB-185	52712-05-7	mg/kg	0.0000075	NP	--	**0.0000099**	**0.00026**	**0.0000056**	0.000002 U	**0.000024**	**0.000088**	**0.002**	**0.003**
PCB-186	74472-49-4	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U
PCB-188	74487-85-7	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	**0.000052 LJ**	**0.000085 LJ**
PCB-19	38444-73-4	mg/kg	0.000002	NP	--	**0.000002**	**0.000097**	**0.0000014 LJ**	0.000002 U	**0.000029**	**0.000023**	**0.0026**	**0.0041**
PCB-190	41411-64-7	mg/kg	0.0000159	NP	--	**0.000015**	**0.00036**	**0.000013**	0.000002 U	**0.000033**	**0.00013**	**0.003**	**0.004**
PCB-191	74472-50-7	mg/kg	0.000006	NP	--	**0.0000037**	**0.000072**	**0.0000028**	0.000002 U	0.00002 U	**0.00003**	**0.00067**	**0.00091**
PCB-192	74472-51-8	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U
PCB-193	69782-91-8	mg/kg	0.0000135	NP	--	**0.0000098**	**0.00021**	**0.0000077**	0.000002 U	**0.000025**	**0.000074**	**0.0017**	**0.0022**
PCB-194	35694-08-7	mg/kg	0.000039	NP	--	**0.000033**	**0.00083**	**0.000022**	0.000002 U	**0.000079**	**0.00029**	**0.0051**	**0.0058**
PCB-195	52663-78-2	mg/kg	0.0000159	NP	--	**0.000015**	**0.00039**	**0.00001**	0.000002 U	**0.000041**	**0.00011**	**0.0026**	**0.0029**
PCB-196/203	42740-50-1/52663-76-0	mg/kg	0.000054	NP	--	**0.000042**	**0.0012**	**0.000033**	**0.0000022 LJ**	**0.0001**	**0.00041**	**0.0075**	**0.0084**
PCB-197	33091-17-7	mg/kg	0.000006	NP	--	**0.000002**	**0.000044**	**0.0000014 LJ**	0.000002 U	0.00002 U	**0.000018 LJ**	**0.00034**	**0.00046**
PCB-198	68194-17-2	mg/kg	0.000002	NP	--	**0.0000025**	**0.000069**	**0.0000023**	0.000002 U	0.00002 U	**0.000023**	**0.00023**	**0.00022**
PCB-199	52663-75-9	mg/kg	0.000063	NP	--	**0.000041**	**0.0012**	**0.000027**	**0.0000023**	**0.000094**	**0.00032**	**0.008**	**0.0075**
PCB-2	2051-61-8	mg/kg	0.000002	NP	--	0.000002 U	**0.0000043 LJ**	0.000002 U	0.000002 U	**0.0000036 LJ**	**0.0000073 LJ**	**0.00035**	**0.00042**
PCB-20/21/33	38444-84-7/55702-46-0/38444-86-9	mg/kg	0.000042	NP	--	**0.00001**	**0.00057**	**0.0000083**	**0.0000025 LJ**	**0.00012**	**0.00013**	**0.0081**	**0.013**
PCB-200	52663-73-7	mg/kg	0.0000051	NP	--	**0.0000054**	**0.00013**	**0.0000033**	0.000002 U	0.00002 U	**0.00004**	**0.00096**	**0.00091**
PCB-201	40186-71-8	mg/kg	0.0000108	NP	--	**0.0000057**	**0.00014**	**0.0000039**	0.000002 U	**0.000015 LJ**	**0.000048**	**0.00098**	**0.0011**
PCB-202	2136-99-4	mg/kg	0.0000156	NP	--	**0.0000079**	**0.00019**	**0.0000055**	0.000002 U	**0.000022**	**0.000078**	**0.0014**	**0.002**
PCB-204	74472-52-9	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U
PCB-205	74472-53-0	mg/kg	0.000006	NP	--	**0.0000027**	**0.000049**	**0.0000022**	0.000002 U	0.00002 U	**0.000018 LJ**	**0.00035**	**0.00037**
PCB-206	40186-72-9	mg/kg	0.000048	NP	--	**0.000015**	**0.00047**	**0.000012**	0.000002 U	**0.000051**	**0.00018**	**0.0026**	**0.0034**
PCB-207	52663-79-3	mg/kg	0.0000075	NP	--	**0.0000016 LJ**	**0.000068**	**0.0000016 LJ**	0.000002 U	0.00002 U	**0.000022**	**0.00035**	**0.00046**
PCB-208	52663-77-1	mg/kg	0.0000249	NP	--	**0.0000049**	**0.00016**	**0.0000038**	0.000002 U	**0.000017 LJ**	**0.000056**	**0.00071**	**0.00091**
PCB-209	2051-24-3	mg/kg	0.000063	NP	--	**0.0000085**	**0.00042**	**0.0000094**	0.000002 U	**0.000049**	**0.00018**	**0.0015**	**0.0021**
PCB-22	38444-85-8	mg/kg	0.0000087	NP	--	**0.0000074**	**0.00031**	**0.0000055**	**0.0000019 LJ**	**0.000082**	**0.000074**	**0.0053**	**0.01**
PCB-23	55720-44-0	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U
PCB-24	55702-45-9	mg/kg	0.000002	NP	--	0.000002 U	**0.000034**	0.000002 U	0.000002 U	**0.0000099 LJ**	**0.000009 LJ**	**0.0014**	**0.0023**
PCB-25	55712-37-3	mg/kg	0.000006	NP	--	**0.0000028**	**0.000098**	**0.0000019 LJ**	0.000002 U	**0.000027**	**0.000021**	**0.0015**	**0.0033**
PCB-26	38444-81-4	mg/kg	0.000006	NP	--	**0.0000048**	**0.00016**	**0.000003**	0.000002 U	**0.000044**	**0.000035**	**0.0024**	**0.0056**
PCB-27	38444-76-7	mg/kg	0.000002	NP	--	0.000002 U	**0.000036**	0.000002 U	0.000002 U	**0.000014 LJ**	**0.0000083 LJ**	**0.0014**	**0.0023**
PCB-28	7012-37-5	mg/kg	0.000036	NP	--	**0.00002**	**0.00093**	**0.000016**	**0.0000062**	**0.00026**	**0.00021**	**0.017**	**0.036**
PCB-29	15862-07-4	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	**0.00015**	**0.00021**
PCB-3	2051-62-9	mg/kg	0.000006	NP	--	0.000002 U	**0.000013 LJ**	**0.00000079 LJ**	0.000002 U	**0.0000097 LJ**	**0.000058**	**0.00088**	**0.0015**
PCB-30	35693-92-6	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	**0.000047 LJ**	**0.000076 LJ**
PCB-31	16606-02-3	mg/kg	0.0000117	NP	--	**0.000015**	**0.00073**	**0.000011**	**0.0000033**	**0.00017**	**0.00014**	**0.014**	**0.022**
PCB-32	38444-77-8	mg/kg	0.000006	NP	--	**0.0000064**	**0.00024**	**0.0000038**	0.000002 U	**0.000072**	**0.000063**	**0.0088**	**0.014**
PCB-34	37680-68-5	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	**0.00023**	**0.00038**
PCB-35	37680-69-6	mg/kg	0.000002	NP	--	0.000002 U	**0.000023 LJ**	0.000002 U	0.000002 U	0.00002 U	0.00002 U	**0.00039**	**0.00034**
PCB-36	38444-87-0	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U
PCB-37	38444-90-5	mg/kg	0.00003	NP	--	**0.0000071**	**0.00026**	**0.0000052**	**0.0000024**	**0.000074**	**0.000069**	**0.0059**	**0.01**
PCB-38	53555-66-1	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U

Table 4-3 (continued)
Summary of Sediment Sample Results, North Lake, 24-36 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 24 - 36 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L01	L01	L01	L01	L01	L01	L01	L01
					Station	SED01	SED02	SED03	SED04	SED05	SED06	SED07	SED07
					Sample ID	CL-L01-SED01-36-51	CL-L01-SED02-36-51	CL-L01-SED03-36-51	CL-L01-SED04-36-51	CL-L01-SED05-36-51	CL-L01-SED06-36-51	CL-L01-SED07-36-51	CL-L01-SED07-36-52
					Depths	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36
					Date	04/04/2022	04/04/2022	04/05/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022	04/06/2022
					Type	FS	FS	FS	FS	FS	FS	FS	FD
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)													
PCB-39	38444-88-1	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U
PCB-4	13029-08-8	mg/kg	0.000002	NP	--	**0.0000034**	**0.00027**	**0.0000037**	0.000002 U	**0.000092**	**0.000065**	**0.0039**	**0.0054**
PCB-40	38444-93-8	mg/kg	0.0000078	NP	--	**0.0000026**	**0.000092**	**0.0000021**	0.000002 U	**0.000029**	**0.000028**	**0.0026**	**0.0032**
PCB-41/64/71/72	52663-59-9/52663-58-8/41464-46-4/41464-42-0	mg/kg	0.000048	NP	--	**0.000015**	**0.00049**	**0.000012**	**0.0000037 LJ**	**0.00013**	**0.00016**	**0.013**	**0.018**
PCB-42/59	36559-22-5/74472-33-6	mg/kg	0.0000267	NP	--	**0.0000059**	**0.00019**	**0.0000053**	**0.0000018 LJ**	**0.000062**	**0.000063**	**0.0053**	**0.0074**
PCB-43/49	70362-46-8/41464-40-8	mg/kg	0.000099	NP	--	**0.000017**	**0.00057**	**0.000019**	**0.0000038 LJ**	**0.00016**	**0.00027**	**0.012**	**0.016**
PCB-44	41464-39-5	mg/kg	0.000054	NP	--	**0.00002**	**0.00057**	**0.000016**	**0.0000044**	**0.00017**	**0.00027**	**0.014**	**0.019**
PCB-45	70362-45-7	mg/kg	0.0000045	NP	--	**0.0000032**	**0.00011**	**0.0000022**	0.000002 U	**0.000029**	**0.000021**	**0.0024**	**0.0033**
PCB-46	41464-47-5	mg/kg	0.000006	NP	--	**0.0000014 LJ**	**0.000048**	**0.0000011 LJ**	0.000002 U	**0.000014 LJ**	**0.000011 LJ**	**0.0011**	**0.0013**
PCB-47	2437-79-8	mg/kg	0.000048	NP	--	**0.0000066**	**0.00021**	**0.0000066**	**0.000002**	**0.000055**	**0.000075**	**0.0053**	**0.0076**
PCB-48/75	70362-47-9/32598-12-2	mg/kg	0.0000084	NP	--	**0.000004**	**0.00013**	**0.0000025 LJ**	0.000004 U	**0.000035 LJ**	**0.000033 LJ**	**0.0025**	**0.0036**
PCB-5	16605-91-7	mg/kg	0.000002	NP	--	0.000002 U	**0.000035**	0.000002 U	0.000002 U	0.00002 U	**0.000011 LJ**	**0.00032**	**0.00046**
PCB-50	62796-65-0	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	**0.000065 LJ**	**0.000093 LJ**
PCB-51	68194-04-7	mg/kg	0.000002	NP	--	**0.0000023**	**0.000044**	0.000002 U	0.000002 U	**0.000011 LJ**	**0.000008 LJ**	**0.00088**	**0.0013**
PCB-52/69	35693-99-3/60233-24-1	mg/kg	0.000093	NP	--	**0.000033**	**0.0008**	**0.000028**	**0.0000055**	**0.00022**	**0.00049**	**0.014**	**0.022**
PCB-53	41464-41-9	mg/kg	0.000006	NP	--	**0.0000044**	**0.00012**	**0.0000024**	0.000002 U	**0.000028**	**0.000027**	**0.0024**	**0.003**
PCB-54	15968-05-5	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	**0.000067 LJ**	**0.000075 LJ**
PCB-55	74338-24-2	mg/kg	0.000006	NP	--	0.000002 U	**0.000022 LJ**	0.000002 U	0.000002 U	0.00002 U	**0.000007 LJ**	**0.00032**	**0.00038**
PCB-56/60	41464-43-1/33025-41-1	mg/kg	0.0000267	NP	--	**0.0000088**	**0.00054**	**0.0000086**	**0.0000025 LJ**	**0.00011**	**0.00015**	**0.017**	**0.021**
PCB-57	70424-67-8	mg/kg	0.000002	NP	--	0.000002 U	**0.0000076 LJ**	0.000002 U	0.000002 U	0.00002 U	0.00002 U	**0.00012**	**0.00016**
PCB-58	41464-49-7	mg/kg	0.000002	NP	--	0.000002 U	**0.0000037 LJ**	0.000002 U	0.000002 U	0.00002 U	**0.0000035 LJ**	**0.000072 LJ**	**0.000098 LJ**
PCB-6	25569-80-6	mg/kg	0.0000084	NP	--	**0.0000024**	**0.000094**	**0.0000011 LJ**	0.000002 U	**0.000027**	**0.000037**	**0.0018**	**0.0026**
PCB-61/70	33284-53-6/32598-11-1	mg/kg	0.000063	NP	--	**0.000026**	**0.00081**	**0.000024**	**0.0000041**	**0.00021**	**0.00046**	**0.019**	**0.025**
PCB-62	54230-22-7	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U
PCB-63	74472-34-7	mg/kg	0.000006	NP	--	0.000002 U	**0.000028 LJ**	0.000002 U	0.000002 U	**0.0000069 LJ**	**0.000012 LJ**	**0.00061**	**0.00088**
PCB-65	33284-54-7	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U
PCB-66/76	32598-10-0/70362-48-0	mg/kg	0.000099	NP	--	**0.000021**	**0.00063**	**0.00002**	**0.0000041**	**0.00015**	**0.00027**	**0.014**	**0.019**
PCB-67	73575-53-8	mg/kg	0.000006	NP	--	0.000002 U	**0.000027 LJ**	0.000002 U	0.000002 U	**0.0000068 LJ**	**0.0000081 LJ**	**0.00057**	**0.00086**
PCB-68	73575-52-7	mg/kg	0.000002	NP	--	0.000002 U	**0.0000067 LJ**	0.000002 U	0.000002 U	0.00002 U	**0.0000049 LJ**	**0.00012**	**0.00014**
PCB-7	33284-50-3	mg/kg	0.000002	NP	--	0.000002 U	**0.000025 LJ**	0.000002 U	0.000002 U	**0.0000078 LJ**	**0.000013 LJ**	**0.00055**	**0.00073**
PCB-73	74338-23-1	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U
PCB-74	32690-93-0	mg/kg	0.0000255	NP	--	**0.00001**	**0.00033**	**0.000008**	**0.0000023**	**0.000072**	**0.00012**	**0.0078**	**0.01**
PCB-78	70362-49-1	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U
PCB-79	41464-48-6	mg/kg	0.0000048	NP	--	0.000002 U	**0.000025 LJ**	0.000002 U	0.000002 U	**0.0000074 LJ**	**0.000017 LJ**	**0.00047**	**0.00058**
PCB-8	34883-43-7	mg/kg	0.0000258	NP	--	**0.0000062**	**0.00037**	**0.0000042**	0.000002 U	**0.0001**	**0.00013**	**0.0069**	**0.011**
PCB-80	33284-52-5	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U
PCB-82	52663-62-4	mg/kg	0.0000177	NP	--	**0.0000049**	**0.0001**	**0.0000037**	0.000002 U	**0.000022**	**0.000084**	**0.0038**	**0.0043**
PCB-83/112	60145-20-2/74472-36-9	mg/kg	0.0000105	NP	--	**0.0000021 LJ**	**0.000047 LJ**	**0.0000021 LJ**	0.000004 U	**0.000012 LJ**	**0.000042**	**0.0015**	**0.002**
PCB-84/92	52663-60-2/52663-61-3	mg/kg	0.000102	NP	--	**0.000025**	**0.00063**	**0.000024**	**0.0000028 LJ**	**0.00012**	**0.00046**	**0.014**	**0.019**
PCB-85/116	65510-45-4/18259-05-7	mg/kg	0.0000249	NP	--	**0.0000061**	**0.00014**	**0.0000057**	0.000004 U	**0.000034 LJ**	**0.00012**	**0.0053**	**0.0072**
PCB-86	55312-69-1	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U
PCB-87/117/125	38380-02-8/68194-11-6/74472-39-2	mg/kg	0.000051	NP	--	**0.000019**	**0.00039**	**0.000016**	**0.0000018 LJ**	**0.000077**	**0.00035**	**0.012**	**0.016**
PCB-88/91	55215-17-3/68194-05-8	mg/kg	0.000066	NP	--	**0.0000074**	**0.00037**	**0.00001**	0.000004 U	**0.000047**	**0.00014**	**0.0037**	**0.0048**
PCB-89	73575-57-2	mg/kg	0.000002	NP	--	0.000002 U	**0.000013 LJ**	0.000002 U	0.000002 U	0.00002 U	**0.0000068 LJ**	**0.00055**	**0.00077**
PCB-9	34883-39-1	mg/kg	0.000002	NP	--	0.000002 U	**0.000033**	0.000002 U	0.000002 U	**0.000012 LJ**	**0.000014 LJ**	**0.00053**	**0.00085**
PCB-90/101	68194-07-0/37680-73-2	mg/kg	0.00027	NP	--	**0.00009**	**0.002**	**0.000086**	**0.0000067**	**0.00033**	**0.0013**	**0.036**	**0.05**
PCB-93	73575-56-1	mg/kg	0.000002	NP	--	0.000002 U	0.00003 U	0.000002 U	0.000002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U
PCB-94	73575-55-0	mg/kg	0.000002	NP	--	0.000002 U	**0.000015 LJ**	0.000002 U	0.000002 U	0.00002 U	0.00002 U	**0.00019**	**0.00024**
PCB-95	38379-99-6	mg/kg	0.000201	NP	--	0.000002 U	**0.0022**	0.000002 U	**0.0000055**	**0.00029**	**0.0011**	**0.023**	**0.03**

Table 4-3 (continued)
Summary of Sediment Sample Results, North Lake, 24-36 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 24 - 36 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L01	L01	L01	L01	L01	L01	L01	L01
					Station	SED01	SED02	SED03	SED04	SED05	SED06	SED07	SED07
					Sample ID	CL-L01-SED01-36-51	CL-L01-SED02-36-51	CL-L01-SED03-36-51	CL-L01-SED04-36-51	CL-L01-SED05-36-51	CL-L01-SED06-36-51	CL-L01-SED07-36-51	CL-L01-SED07-36-52
					Depths	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36
					Date	04/04/2022	04/04/2022	04/05/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022	04/06/2022
					Type	FS	FS	FS	FS	FS	FS	FS	FD
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)													
PCB-96	73575-54-9	mg/kg	0.000002	NP	--	0.000002 U	**0.000011 LJ**	0.000002 U	0.000002 U	0.00002 U	0.00002 U	**0.00023**	**0.00029**
PCB-97	41464-51-1	mg/kg	0.000081	NP	--	**0.000014**	**0.00033**	**0.000014**	**0.000002**	**0.000078**	**0.00031**	**0.011**	**0.015**
PCB-98/102	60233-25-2/68194-06-9	mg/kg	0.000004	NP	--	**0.000081**	0.00006 U	**0.000066**	0.000004 U	0.00004 U	0.000039 U	0.0002 U	0.0002 U
PCB-99	38380-01-7	mg/kg	0.000189	NP	--	**0.000021**	**0.00072**	**0.000029**	**0.0000028**	**0.00012**	**0.00046**	**0.015**	**0.021**
TEQ (Bird)	2222-22-3	mg/kg	0.00000153	NP	--	**0.00000011**	**0.00001**	**0.00000025**	**0.00000000019**	**0.0000012**	**0.0000049**	**0.00026**	**0.00034**
TEQ (Fish)	2222-22-4	mg/kg	2.61E-08	NP	--	**0.00000000046**	**0.00000016**	**0.0000000061**	**0.00000000003**	**0.0000000037**	**0.000000078**	**0.0000028**	**0.0000037**
TEQ (Mammal)	2222-22-2	mg/kg	0.00000045	NP	--	**0.0000000016**	**0.0000026**	**0.00000011**	**0.00000000018**	**0.000000011**	**0.0000012**	**0.000042**	**0.000055**
Total DiCB	25512-42-9	mg/kg	0.000048	NP	--	**0.000017 J**	**0.0013 J**	**0.000013 J**		**0.00032 J**	**0.00036 J**	**0.022 J**	**0.032 J**
Total HpCB	28655-71-2	mg/kg	0.00078	NP	--	**0.00066 J**	**0.017 J**	**0.0005 J**	**0.000028 J**	**0.0017 J**	**0.0063 J**	**0.14 J**	**0.19 J**
Total HxCB	26601-64-9	mg/kg	0.00159	NP	--	**0.0008 J**	**0.024 J**	**0.00064 J**	**0.000042 J**	**0.002 J**	**0.0081 J**	**0.18 J**	**0.24 J**
Total MoCB	27323-18-8	mg/kg	0.0000102	NP	--		**0.000047 J**	**0.0000018 LJ**		**0.000039 J**	**0.00016 J**	**0.0024 J**	**0.0039 J**
Total NoCB	53742-07-7	mg/kg	0.000081	NP	--	**0.000022 J**	**0.0007 J**	**0.000017 J**		**0.000068 J**	**0.00026 J**	**0.0037 J**	**0.0048 J**
Total OcCB	55722-26-4	mg/kg	0.000207	NP	--	**0.00016 J**	**0.0042 J**	**0.00011 J**	**0.0000045 J**	**0.00035 J**	**0.0014 J**	**0.027 J**	**0.03 J**
TOTAL PCBs	1111-11-1	mg/kg	0.0051	NP	--	**0.0024 J**	**0.069 J**	**0.0019 J**	**0.00017 J**	**0.0092 J**	**0.027 J**	**0.84 J**	**1.2 J**
Total PeCB	25429-29-2	mg/kg	0.00162	NP	--	**0.00039 J**	**0.011 J**	**0.00039 J**	**0.000033 J**	**0.0018 J**	**0.0071 J**	**0.19 J**	**0.26 J**
Total TeCB	26914-33-0	mg/kg	0.00066	NP	--	**0.00018 J**	**0.0059 J**	**0.00016 J**	**0.000034 J**	**0.0015 J**	**0.0026 J**	**0.14 J**	**0.19 J**
Total TrCB	25323-68-6	mg/kg	0.000177	NP	--	**0.00011 J**	**0.005 J**	**0.000078 J**	**0.000024 J**	**0.0013 J**	**0.0011 J**	**0.13 J**	**0.22 J**
CLP Organics by CLP SOW SFAM01.1/3151.0													
1,2,4,5-Tetrachlorobenzene	95-94-3	mg/kg	0.22	0.23	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
1,4-Dioxane	123-91-1	mg/kg	0.086	5.3	--	0.063 U	0.076 U	0.052 U	0.081 U	0.063 U	0.056 U	0.067 U	0.1 U
1-Methylnaphthalene	90-12-0	mg/kg	0.22	18	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
2,3,4,6-Tetrachlorophenol	58-90-2	mg/kg	0.22	190	--	0.16 U	0.19 U	0.13 UJ	0.2 U	0.16 U	0.14 U	0.17 UJ	0.26 U
Metals by CLP SOW SFAM01.1													
Aluminum	7429-90-5	mg/kg	105000	7700	--	**19000**	**35000**	**30000**	**29000**	**33000**	**31000**	**20000**	**20000**
Antimony	7440-36-0	mg/kg	2.2	3.1	--	1.2 U	**6.5**	1.1 U	1.3 U	**0.92 LJ**	**0.55 LJ**	**2.6**	**3.3**
Arsenic	7440-38-2	mg/kg	24.9	0.68	--	**10**	**21**	**12**	**8.8**	**9.3**	**5.4**	**19**	**20**
Barium	7440-39-3	mg/kg	810	1500	--	**190**	**320**	**270**	**290**	**230**	**250**	**300**	**400**
Beryllium	7440-41-7	mg/kg	3.6	16	--	**0.64**	**1.2**	**1.2**	**1.1**	**1.1**	**1.1**	**0.48 LJ**	**0.61 LJ**
Cadmium	7440-43-9	mg/kg	1.95	0.71	--	**0.73**	**2**	**0.71**	**0.59 LJ**	0.86 U	0.76 U	**2.1**	**2.5**
Calcium	7440-70-2	mg/kg	19500	NP	--	**2000**	**3600**	**3500**	**3900**	**6200**	**5100**	**5300**	**5200**
Chromium	7440-47-3	mg/kg	48	NP	--	**9 J**	**17 J**	**12 J**	**15 J**	**14 J**	**13 J**	**25 J**	**31 J**
Cobalt	7440-48-4	mg/kg	18.6	2.3	--	**4 J**	**6.7 J**	**4.6 J**	**7.1 J**	**3.6 J**	**4 J**	**5 J**	**6.2 J**
Copper	7440-50-8	mg/kg	60	310	--	**8.9 J**	**20 J**	**9.7 J**	**12 J**	**33**	**30**	**61**	**50 J**
Iron	7439-89-6	mg/kg	96000	5500	--	**19000**	**33000**	**27000**	**30000**	**25000**	**28000**	**22000**	**22000**
Lead	7439-92-1	mg/kg	216	400	--	**33**	**130**	**30**	**30**	**30**	**28**	**440**	**490**
Magnesium	7439-95-4	mg/kg	22200	NP	--	**2300**	**3900**	**4100**	**5500**	**5900**	**5600**	**2700**	**2600**
Manganese	7439-96-5	mg/kg	1800	180	--	**500**	**1100**	**710**	**580**	**390**	**400**	**530**	**540**
Mercury	7439-97-6	mg/kg	0.6	1.1	--	0.14 U	**0.28**	**0.13 LJ**	**0.15**	**0.065 LJ**	**0.085 LJ**	**0.64**	**0.62**
Nickel	7440-02-0	mg/kg	72	150	--	**15**	**28**	**22**	**26**	**12 J**	**12 J**	**13 J**	**19**
Potassium	7440-09-7	mg/kg	13500	NP	--	**1500**	**2700**	**2500**	**3400**	**3900**	**3400**	**1600**	**1600**
Selenium	7782-49-2	mg/kg	4.2	39	--	**0.58 LJ**	**1.1 LJ**	**1.1 LJ**	**0.88 LJ**	**1 LJ**	**1.2 LJ**	4.4 U	**0.74 LJ**
Silver	7440-22-4	mg/kg	0.69	39	--	**0.23 LJ**	**1.4**	**0.27 LJ**	**0.12 LJ**	**0.95**	**0.24 LJ**	**3.1**	**3.7**
Sodium	7440-23-5	mg/kg	930	NP	--	**140 LJ**	**200 LJ**	**160 LJ**	**170 LJ**	**180 LJ**	**160 LJ**	**110 LJ**	**110 LJ**
Thallium	7440-28-0	mg/kg	1.1	0.078	--	0.58 U	0.92 U	0.53 U	0.64 U	0.86 U	0.76 U	0.89 U	1 U
Vanadium	7440-62-2	mg/kg	42	39	--	**7.7 J**	**14 J**	**7.4 J**	**9.9 J**	**9.9 J**	**9.5 J**	**9.3 J**	**13 J**
Zinc	7440-66-6	mg/kg	252	2300	--	**44 J**	**100 J**	**31 J**	**45 J**	**53 J**	**37 J**	**280 J**	**320 J**
Pesticides by CLP SOW SFAM01.1													
4,4'-DDD	72-54-8	mg/kg	0.0085	0.19	--	0.0063 U	0.0075 U	0.0052 U	0.0081 U	0.0063 U	0.0056 U	0.0067 U	0.01 U
4,4'-DDE	72-55-9	mg/kg	0.0085	2	--	0.0063 U	0.0075 U	0.0052 U	0.0081 U	0.0063 U	0.0056 U	**0.0085**	0.01 U

Table 4-3 (continued)
Summary of Sediment Sample Results, North Lake, 24-36 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 24 - 36 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L01	L01	L01	L01	L01	L01	L01	L01
					Station	SED01	SED02	SED03	SED04	SED05	SED06	SED07	SED07
					Sample ID	CL-L01-SED01-36-51	CL-L01-SED02-36-51	CL-L01-SED03-36-51	CL-L01-SED04-36-51	CL-L01-SED05-36-51	CL-L01-SED06-36-51	CL-L01-SED07-36-51	CL-L01-SED07 36-52
					Depths	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36
					Date	04/04/2022	04/04/2022	04/05/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022	04/06/2022
					Type	FS	FS	FS	FS	FS	FS	FS	FD
Pesticides by CLP SOW SFAM01.1 (continued)													
4,4'-DDT	50-29-3	mg/kg	0.0085	1.9	--	0.0063 U	0.0075 U	0.0052 U	0.0081 U	0.0063 U	0.0056 U	0.0067 U	0.01 U
Aldrin	309-00-2	mg/kg	0.0044	0.039	--	0.0032 U	0.0039 U	0.0027 U	0.0042 U	0.0032 U	0.0029 U	0.0034 U	0.0053 U
alpha-BHC	319-84-6	mg/kg	0.0044	0.086	--	0.0032 U	0.0039 U	0.0027 U	0.0042 U	0.0032 U	0.0029 U	0.0034 U	0.0053 U
beta-BHC	319-85-7	mg/kg	0.0044	0.3	--	0.0032 U	0.0039 U	0.0027 U	0.0042 U	0.0032 U	0.0029 U	0.0034 U	0.0053 U
cis-Chlordane	5103-71-9	mg/kg	0.0044	3.6	--	0.0032 U	0.0039 U	0.0027 U	0.0042 U	0.0032 U	0.0029 U	0.0034 U	0.0053 U
delta-BHC	319-86-8	mg/kg	0.0044	NP	--	0.0032 U	0.0039 U	0.0027 U	0.0042 U	0.0032 U	0.0029 U	0.0034 U	0.0053 U
Dieldrin	60-57-1	mg/kg	0.0085	0.034	--	0.0063 U	0.0075 U	0.0052 U	0.0081 U	0.0063 U	0.0056 U	0.0067 U	0.01 U
Endosulfan I	959-98-8	mg/kg	0.0044	NP	--	0.0032 U	0.0039 U	0.0027 U	0.0042 U	0.0032 U	0.0029 U	0.0034 U	0.0053 U
Endosulfan II	33213-65-9	mg/kg	0.0085	NP	--	0.0063 U	0.0075 U	0.0052 U	0.0081 U	0.0063 U	0.0056 U	0.0067 U	0.01 U
Endosulfan sulfate	1031-07-8	mg/kg	0.0085	38	--	0.0063 U	0.0075 U	0.0052 U	0.0081 U	0.0063 U	0.0056 U	0.0067 U	0.01 U
Endrin	72-20-8	mg/kg	0.0085	1.9	--	0.0063 U	0.0075 U	0.0052 U	0.0081 U	0.0063 U	0.0056 U	0.0067 U	0.01 U
Endrin aldehyde	7421-93-4	mg/kg	0.0085	NP	--	0.0063 U	0.0075 U	0.0052 U	0.0081 U	0.0063 U	0.0056 U	0.0067 U	0.01 U
Endrin ketone	53494-70-5	mg/kg	0.0085	NP	--	0.0063 U	0.0075 U	0.0052 U	0.0081 U	0.0063 U	0.0056 U	0.0067 U	0.01 U
gamma-BHC (Lindane)	58-89-9	mg/kg	0.0044	0.071	--	0.0032 U	0.0039 U	0.0027 U	0.0042 U	0.0032 U	0.0029 U	0.0034 U	0.0053 U
Heptachlor	76-44-8	mg/kg	0.0044	0.13	--	0.0032 U	0.0039 U	0.0027 U	0.0042 U	0.0032 U	0.0029 U	0.0034 U	0.0053 U
Heptachlor epoxide	1024-57-3	mg/kg	0.0044	0.07	--	0.0032 U	0.0039 U	0.0027 U	0.0042 U	0.0032 U	0.0029 U	0.0034 U	0.0053 U
Methoxychlor	72-43-5	mg/kg	0.93	32	--	**0.26**	**0.099**	0.027 U	0.042 U	**0.15**	0.029 U	0.034 U	0.053 U
Toxaphene	8001-35-2	mg/kg	0.44	0.49	--	0.32 U	0.39 U	0.27 U	0.42 U	0.32 U	0.29 U	0.34 U	0.53 U
trans-Chlordane	5103-74-2	mg/kg	0.0044	3.6	--	0.0032 U	0.0039 U	0.0027 U	0.0042 U	0.0032 U	0.0029 U	0.0034 U	0.0053 U
SVOCs by CLP SOW SFAM01.1/3151.0													
1,1'-Biphenyl	92-52-4	mg/kg	0.22	4.7	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
2,2'-Oxybis(1-chloropropane)	108-60-1	mg/kg	0.43	310	--	0.32 U	0.38 U	0.26 U	0.41 U	0.32 U	0.28 U	0.34 U	0.52 U
2,4,5-Trichlorophenol	95-95-4	mg/kg	0.22	630	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
2,4,6-Trichlorophenol	88-06-2	mg/kg	0.22	6.3	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
2,4-Dichlorophenol	120-83-2	mg/kg	0.22	19	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
2,4-Dimethylphenol	105-67-9	mg/kg	0.22	130	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
2,4-Dinitrophenol	51-28-5	mg/kg	0.43	13	--	0.32 U	0.38 U	0.26 U	0.41 U	0.32 U	0.28 U	0.34 U	0.52 U
2,4-Dinitrotoluene	121-14-2	mg/kg	0.22	1.7	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
2,6-Dinitrotoluene	606-20-2	mg/kg	0.22	0.36	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
2-Chloronaphthalene	91-58-7	mg/kg	0.22	480	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
2-Chlorophenol	95-57-8	mg/kg	0.22	39	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 UJ
2-Methylnaphthalene	91-57-6	mg/kg	0.22	24	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
2-Methylphenol	95-48-7	mg/kg	0.43	320	--	0.32 U	0.38 U	0.26 U	0.41 U	0.32 U	0.28 U	0.34 U	0.52 U
2-Nitroaniline	88-74-4	mg/kg	0.22	63	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
2-Nitrophenol	88-75-5	mg/kg	0.22	NP	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.43	1.2	--	0.32 U	0.38 U	0.26 U	0.41 U	0.32 U	0.28 U	0.34 U	0.52 U
3-Nitroaniline	99-09-2	mg/kg	0.43	NP	--	0.32 U	0.38 U	0.26 U	0.41 U	0.32 U	0.28 U	0.34 U	0.52 U
4,6-Dinitro-2-methylphenol	534-52-1	mg/kg	0.43	0.51	--	0.32 U	0.38 U	0.26 U	0.41 U	0.32 U	0.28 U	0.34 U	0.52 UJ
4-Bromophenyl-phenylether	101-55-3	mg/kg	0.22	NP	--	0.16 U	0.19 U	0.13 U	0.2 UJ	0.16 U	0.14 U	0.17 U	0.26 UJ
4-Chloro-3-methylphenol	59-50-7	mg/kg	0.22	630	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
4-Chloroaniline	106-47-8	mg/kg	0.43	2.7	--	0.32 U	0.38 U	0.26 U	0.41 U	0.32 U	0.28 U	0.34 U	0.52 U
4-Chlorophenyl-phenyl ether	7005-72-3	mg/kg	0.22	NP	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
4-Methylphenol	106-44-5	mg/kg	0.43	130	--	0.32 U	0.38 U	0.26 U	0.41 U	0.32 U	0.28 U	0.34 U	0.52 U
4-Nitroaniline	100-01-6	mg/kg	0.43	25	--	0.32 U	0.38 U	0.26 U	0.41 U	0.32 U	0.28 U	0.34 U	0.52 U
4-Nitrophenol	100-02-7	mg/kg	0.43	NP	--	0.32 U	0.38 U	0.26 U	0.41 U	0.32 U	0.28 U	0.34 U	0.52 U
Acenaphthene	83-32-9	mg/kg	0.22	360	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
Acenaphthylene	208-96-8	mg/kg	0.22	NP	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
Acetophenone	98-86-2	mg/kg	0.43	780	--	0.32 U	0.38 U	0.26 U	0.41 U	0.32 U	0.28 U	0.34 U	0.52 U
Anthracene	120-12-7	mg/kg	0.22	1800	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	**0.14 LJ**	0.26 U

Table 4-3 (continued)
Summary of Sediment Sample Results, North Lake, 24-36 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 24 - 36 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L01	L01	L01	L01	L01	L01	L01	L01
					Station	SED01	SED02	SED03	SED04	SED05	SED06	SED07	SED07
					Sample ID	CL-L01-SED01-36-51	CL-L01-SED02-36-51	CL-L01-SED03-36-51	CL-L01-SED04-36-51	CL-L01-SED05-36-51	CL-L01-SED06-36-51	CL-L01-SED07-36-51	CL-L01-SED07-36-52
					Depths	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36
					Date	04/04/2022	04/04/2022	04/05/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022	04/06/2022
					Type	FS	FS	FS	FS	FS	FS	FS	FD
SVOCs by CLP SOW SFAM01.1/3151.0 (continued)													
Atrazine	1912-24-9	mg/kg	0.43	2.4	--	0.32 U	0.38 U	0.26 U	0.41 U	0.32 U	0.28 U	0.34 U	0.52 U
Benzaldehyde	100-52-7	mg/kg	0.43	170	--	0.32 U	0.38 U	0.26 U	0.41 U	0.32 U	0.28 U	0.34 U	0.52 U
Benzo(a)anthracene	56-55-3	mg/kg	0.22	1.1	--	0.16 U	0.19 U	0.13 U	**0.81**	0.16 U	0.14 U	**0.78**	**0.79**
Benzo(a)pyrene	50-32-8	mg/kg	0.22	0.11	--	0.16 U	0.19 U	0.13 U	**0.82**	0.16 U	0.14 U	**0.9**	**0.89**
Benzo(b)fluoranthene	205-99-2	mg/kg	0.22	1.1	--	0.16 U	0.19 U	0.13 U	**1.4 J**	0.16 U	0.14 U	**1.4 J**	**1.3 J**
Benzo(g,h,i)perylene	191-24-2	mg/kg	0.22	NP	--	0.16 U	0.19 U	0.13 U	**0.63**	0.16 U	0.14 U	**0.69**	**0.69**
Benzo(k)fluoranthene	207-08-9	mg/kg	0.22	11	--	0.16 U	0.19 U	0.13 U	**0.5 J**	0.16 U	0.14 U	**0.48 J**	**0.44 J**
Bis(2-chloroethoxy)methane	111-91-1	mg/kg	0.22	19	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
Bis(2-chloroethyl)ether	111-44-4	mg/kg	0.43	0.23	--	0.32 U	0.38 U	0.26 U	0.41 U	0.32 U	0.28 U	0.34 U	0.52 U
Bis(2-ethylhexyl)phthalate	117-81-7	mg/kg	0.22	39	--	0.16 U	**0.15 LJ**	0.13 U	**7.6**	**0.15 LJ**	0.14 U	**1**	**9.4**
Butylbenzylphthalate	85-68-7	mg/kg	0.22	290	--	0.16 U	0.19 U	0.13 U	**0.21**	0.16 U	0.14 U	**0.19**	**0.24 LJ**
Caprolactam	105-60-2	mg/kg	0.43	3100	--	0.32 U	0.38 U	0.26 U	0.41 U	0.32 U	0.28 U	0.34 U	0.52 U
Carbazole	86-74-8	mg/kg	0.43	NP	--	0.32 U	0.38 U	0.26 U	0.41 U	0.32 U	0.28 U	**0.13 LJ**	0.52 U
Chrysene	218-01-9	mg/kg	0.22	110	--	0.16 U	0.19 U	0.13 U	**1**	0.16 U	0.14 U	**1.1**	**1**
Dibenzo(a,h)anthracene	53-70-3	mg/kg	0.22	0.11	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	**0.16 LJ**	0.26 U
Dibenzofuran	132-64-9	mg/kg	0.22	7.8	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
Diethylphthalate	84-66-2	mg/kg	0.22	5100	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
Dimethylphthalate	131-11-3	mg/kg	0.22	NP	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
Di-n-butylphthalate	84-74-2	mg/kg	0.22	630	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	**0.15 LJ**	0.26 U
Di-n-octylphthalate	117-84-0	mg/kg	0.43	63	--	0.32 U	0.38 U	0.26 U	**1.5**	0.32 U	0.28 U	**0.1 LJ**	**2.2**
Fluoranthene	206-44-0	mg/kg	0.22	240	--	0.16 U	0.19 U	0.13 U	**1.8**	0.16 U	0.14 U	**2**	**1.7**
Fluorene	86-73-7	mg/kg	0.22	240	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
Hexachlorobenzene	118-74-1	mg/kg	0.22	0.078	--	0.16 U	0.19 U	0.13 U	0.2 UJ	0.16 U	0.14 U	0.17 U	0.26 UJ
Hexachlorobutadiene	87-68-3	mg/kg	0.22	1.2	--	0.16 U	0.19 U	0.13 U	0.2 UJ	0.16 U	0.14 U	0.17 U	0.26 UJ
Hexachlorocyclo-pentadiene	77-47-4	mg/kg	1.29	0.18	--	0.32 U	0.38 UJ	0.26 UJ	0.41 U	0.32 UJ	0.28 UJ	0.34 UJ	0.52 U
Hexachloroethane	67-72-1	mg/kg	0.22	1.8	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	0.22	1.1	--	0.16 U	0.19 U	0.13 U	**0.49**	0.16 U	0.14 U	**0.84**	**0.78**
Isophorone	78-59-1	mg/kg	0.22	570	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
Naphthalene	91-20-3	mg/kg	0.22	2	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
Nitrobenzene	98-95-3	mg/kg	0.22	5.1	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
N-Nitroso-di-n propylamine	621-64-7	mg/kg	0.22	0.078	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
N-Nitrosodiphenylamine	86-30-6	mg/kg	0.22	110	--	0.16 U	0.19 U	0.13 U	0.2 U	0.16 U	0.14 U	0.17 U	0.26 U
Pentachlorophenol	87-86-5	mg/kg	0.00082	1	--	0.32 U	0.38 U	0.26 U	0.41 U	0.32 U	0.28 U	0.34 U	0.52 U
Phenanthrene	85-01-8	mg/kg	0.22	NP	--	0.16 U	0.19 U	0.13 U	**0.97**	0.16 U	0.14 U	**0.91**	**0.74**
Phenol	108-95-2	mg/kg	0.43	1900	--	0.32 U	0.38 U	0.26 U	0.41 U	0.32 U	0.28 U	0.34 U	0.52 U
Pyrene	129-00-0	mg/kg	0.22	180	--	0.16 U	0.19 U	0.13 U	**1.6**	0.16 U	0.14 U	**1.5**	**1.4**

Table 4-3 (continued)
Summary of Sediment Sample Results, North Lake, 24-36 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 24 - 36 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L01	L01	L01	L01	L01	L01	L01	L01
					Station	SED01	SED02	SED03	SED04	SED05	SED06	SED07	SED07
					Sample ID	CL-L01-SED01-36-51	CL-L01-SED02-36-51	CL-L01-SED03-36-51	CL-L01-SED04-36-51	CL-L01-SED05-36-51	CL-L01-SED06-36-51	CL-L01-SED07-36-51	CL-L01-SED07-36-52
					Depths	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36
					Date	04/04/2022	04/04/2022	04/05/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022	04/06/2022
					Type	FS	FS	FS	FS	FS	FS	FS	FD

Notes

mg/kg - milligrams/kilogram

U - Not detected at reported quantitation limit.

J - estimated value.

+ - High biased. Actual concentration may be lower than the concentration reported.

R - Unusable, rejected should not be used.

L - Reported concentration is below the Contract Required Quantitation Limit (CRQL).

K - Unknown bias.

NP - Not published.

FS - Field Sample.

FD - Field Duplicate.

RSL - Regional Screening level, May 2022.

TR - Targeted Risk for cancer.

THQ - Target Hazard Quotient.

Yellow Highlight - exceeds background

Orange highlight - does not exceed background, but exceeds RSL

Table 4-4
Summary of Sediment Sample Results, South Lake and University Lake, 0-12 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 0 - 12 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L02	L02	L02	L03	L03
					Station	SED08	SED09	SED10	SED11	SED12
					Sample ID	CL-L02-SED08-12-51	CL-L02-SED09-12-51	CL-L02-SED10-12-51	CL-L03-SED11-12-51	CL-L03-SED12-12-51
					Depths	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
					Date	04/07/2022	04/07/2022	04/07/2022	04/04/2022	04/04/2022
					Type	FS	FS	FS	FS	FS
Herbicides by SW846 Method 8151										
2,4,5-T	93-76-5	mg/kg	0.0037	63	--	0.0017 UJK	0.0024 UJK	0.00097 U	0.0037 U	0.0035 U
2,4-D	94-75-7	mg/kg	0.054	70	--	0.024 UJK	0.035 UJK	0.014 U	0.054 U	0.052 U
2,4-DB	94-82-6	mg/kg	0.045	NP	--	0.02 UJK	0.029 UJK	0.012 U	0.045 U	0.043 U
Dalapon	75-99-0	mg/kg	0.22	190	--	0.1 UJK	0.14 UJK	0.058 U	0.22 U	0.21 U
Dicamba	1918-00-9	mg/kg	0.018	190	--	0.0081 UJK	0.012 UJK	0.0047 U	0.018 U	0.017 U
Dichlorprop	120-36-5	mg/kg	0.041	NP	--	0.018 UJK	0.026 UJK	0.011 U	0.041 U	0.039 U
Dinoseb	88-85-7	mg/kg	0.041	6.3	--	0.018 UJK	0.026 UJK	0.011 U	0.041 U	0.039 U
MCPA	94-74-6	mg/kg	3.4	3.2	--	1.5 UJK	2.2 UJK	0.9 U	3.4 U	3.3 U
MCPP	93-65-2	mg/kg	17	6.3	--	7.7 UJK	11 UJK	4.5 U	17 U	16 U
Pentachlorophenol	87-86-5	mg/kg	0.0015	1	--	**0.0016 JQK**	**0.0028 JQK**	**0.0031**	0.0015 U	0.0014 U
Silvex (2,4,5-TP)	93-72-1	mg/kg	0.0034	51	--	0.0015 UJK	0.0022 UJK	0.00088 U	0.0034 U	0.0032 U
PCB Aroclors by CLP SOW SFAM01.1/3150.0										
Aroclor-1016	12674-11-2	mg/kg	0.0053	0.41	--	0.0044 U	**0.077 JK**	0.0023 U	0.0053 U	0.0053 U
Aroclor-1221	11104-28-2	mg/kg	0.0053	0.2	--	0.0044 U	0.0066 UJK	0.0023 U	0.0053 U	0.0053 U
Aroclor-1232	11141-16-5	mg/kg	0.0053	0.17	--	0.0044 U	0.0066 UJK	0.0023 U	0.0053 U	0.0053 U
Aroclor-1242	53469-21-9	mg/kg	0.0053	0.23	--	0.0044 U	0.0066 UJK	0.0023 U	0.0053 U	0.0053 U
Aroclor-1248	12672-29-6	mg/kg	0.0053	0.23	--	0.0044 U	0.0066 UJK	0.0023 U	0.0053 U	0.0053 U
Aroclor-1254	11097-69-1	mg/kg	0.0053	0.12	--	0.0044 U	0.0066 UJK	0.0023 U	0.0053 U	0.0053 U
Aroclor-1260	11096-82-5	mg/kg	0.0053	0.24	--	**0.044**	**0.092 JK**	**0.053 J**	0.0053 U	0.0053 U
Aroclor-1262	37324-23-5	mg/kg	0.0053	NP	--	0.0044 U	0.0066 UJK	0.0023 U	0.0053 U	0.0053 U
Aroclor-1268	11100-14-4	mg/kg	0.0053	NP	--	0.0044 U	0.0066 UJK	0.0023 U	0.0053 U	0.0053 U
PCB Aroclor Congeners Group 1 by CLP SOW HRSM02.1										
PCB-105	32598-14-4	mg/kg	0.000036	0.12	--	**0.0025**	**0.001**	**0.0029**	**0.0000016 LJ**	**0.000012**
PCB-114	74472-37-0	mg/kg	0.00000097	0.12	--	**0.00017**	**0.000067**	**0.0002**	0.00000096 U	0.00000097 U
PCB-118	31508-00-6	mg/kg	0.000054	0.12	--	**0.0031**	**0.0014**	**0.0028**	**0.0000029**	**0.000018**
PCB-123	65510-44-3	mg/kg	0.0000009	0.12	--	**0.00011**	**0.000061**	**0.00016**	0.00000089 U	0.0000009 U
PCB-126	57465-28-8	mg/kg	0.00000066	0.000036	--	**0.00014**	**0.000051**	**0.000086**	0.00000065 U	0.00000066 U
PCB-156	38380-08-4	mg/kg	0.0000186	0.12	--	**0.0012**	**0.00047**	**0.00072**	0.00000096 U	**0.0000062**
PCB-157	69782-90-7	mg/kg	0.0000051	0.12	--	**0.00026**	**0.00011**	**0.00017**	0.00000084 U	**0.0000017 LJ**
PCB-167	52663-72-6	mg/kg	0.000009	0.12	--	**0.00064**	**0.00025**	**0.00033**	0.00000078 U	**0.000003**
PCB-169	32774-16-6	mg/kg	0.00000093	0.00012	--	**0.000017 LJ**	0.000012 U	**0.000011 LJ**	0.00000092 U	0.00000093 U
PCB-189	39635-31-9	mg/kg	0.0000036	0.13	--	**0.0002**	**0.000077**	**0.000091**	0.00000086 U	**0.0000012 LJ**
PCB-77	32598-13-3	mg/kg	0.0000066	0.038	--	**0.0007**	**0.00027**	**0.0013**	0.00000082 U	**0.0000022**
PCB-81	70362-50-4	mg/kg	0.00000222	0.012	--	**0.000091**	**0.000041**	**0.00015**	0.00000059 U	**0.00000074 LJ**
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1										
PCB-1	2051-60-7	mg/kg	0.000006	NP	--	**0.00057**	**0.00012**	**0.0014**	0.000002 U	**0.00000093 LJ**
PCB-10	33146-45-1	mg/kg	0.000002	NP	--	**0.000093**	**0.00003**	**0.00032**	0.000002 U	0.000002 U
PCB-100	39485-83-1	mg/kg	0.000002	NP	--	**0.000082**	**0.000043**	**0.00017**	0.000002 U	0.000002 U
PCB-103	60145-21-3	mg/kg	0.000002	NP	--	**0.0001**	**0.000049**	**0.00013**	0.000002 U	0.000002 U
PCB-104	56558-16-8	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	**0.000014 LJ**	0.000002 U	0.000002 U
PCB-106	70424-69-0	mg/kg	0.000048	NP	--	**0.003**	**0.0011**	**0.0031**	**0.0000028**	**0.000016**
PCB-107	70424-68-9	mg/kg	0.000006	NP	--	**0.0003**	**0.00011**	**0.00034**	0.000002 U	**0.0000019 LJ**
PCB-108	70362-41-3	mg/kg	0.000006	NP	--	**0.00026**	**0.00014**	**0.00029**	0.000002 U	**0.0000019 LJ**
PCB-109	74472-35-8	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.000002 U	0.000002 U
PCB-11	2050-67-1	mg/kg	0.000006	NP	--	**0.00028**	**0.000081**	**0.00054**	0.000002 U	**0.0000011 LJ**
PCB-110	38380-03-9	mg/kg	0.000144	NP	--	**0.006**	**0.0032**	**0.012**	**0.0000077**	**0.000048**

Table 4-4 (continued)
Summary of Sediment Sample Results, South Lake and University Lake, 0-12 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 0 - 12 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L02	L02	L02	L03	L03
					Station	SED08	SED09	SED10	SED11	SED12
					Sample ID	CL-L02-SED08-12-51	CL-L02-SED09-12-51	CL-L02-SED10-12-51	CL-L03-SED11-12-51	CL-L03-SED12-12-51
					Depths	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
					Date	04/07/2022	04/07/2022	04/07/2022	04/04/2022	04/04/2022
					Type	FS	FS	FS	FS	FS
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)										
PCB-111/115	39635-32-0/74472-38-1	mg/kg	0.000004	NP	--	**0.000053**	**0.000026 LJ**	**0.00016**	0.000004 U	0.000004 U
PCB-113	68194-10-5	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.000002 U	0.000002 U
PCB-119	56558-17-9	mg/kg	0.0000069	NP	--	**0.00017**	**0.0001**	**0.00034**	0.000002 U	**0.0000023**
PCB-12	2974-92-7	mg/kg	0.000002	NP	--	**0.0002**	**0.00009**	**0.00085**	0.000002 U	0.000002 U
PCB-120	68194-12-7	mg/kg	0.000002	NP	--	**0.000016 LJ**	0.00002 U	**0.000021**	0.000002 U	0.000002 U
PCB-121	56558-18-0	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.000002 U	0.000002 U
PCB-122	76842-07-4	mg/kg	0.000002	NP	--	**0.000068**	**0.000025**	**0.0001**	0.000002 U	0.000002 U
PCB-124	70424-70-3	mg/kg	0.000006	NP	--	**0.00032**	**0.00012**	**0.00029**	0.000002 U	**0.0000016 LJ**
PCB-127	39635-33-1	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.000002 U	0.000002 U
PCB-128/162	38380-07-3/39635-34-2	mg/kg	0.000036	NP	--	**0.0021**	**0.00078**	**0.0014**	**0.0000018 LJ**	**0.000012**
PCB-129	55215-18-4	mg/kg	0.0000081	NP	--	**0.00046**	**0.00016**	**0.00038**	0.000002 U	**0.0000027**
PCB-13	2974-90-5	mg/kg	0.000002	NP	--	**0.00024**	**0.000065**	**0.00079**	0.000002 U	0.000002 U
PCB-130	52663-66-8	mg/kg	0.0000159	NP	--	**0.00075**	**0.00029**	**0.00051**	0.000002 U	**0.0000053**
PCB-131/133	61798-70-7/35694-04-3	mg/kg	0.000012	NP	--	**0.00038**	**0.00014**	**0.00029**	0.000004 U	**0.0000025 LJ**
PCB-132/161	38380-05-1/74472-43-8	mg/kg	0.000045	NP	--	**0.0043**	**0.0013**	**0.0026**	**0.0000017 LJ**	**0.000015**
PCB-134/143	52704-70-8/68194-15-0	mg/kg	0.000012	NP	--	**0.00064**	**0.00022**	**0.00052**	0.000004 U	**0.0000032 LJ**
PCB-135	52744-13-5	mg/kg	0.0000216	NP	--	**0.0021**	**0.00085**	**0.0015**	0.000002 U	**0.0000072**
PCB-136	38411-22-2	mg/kg	0.0000228	NP	--	**0.0014**	**0.00054**	**0.0011**	0.000002 U	**0.0000076**
PCB-137	35694-06-5	mg/kg	0.0000096	NP	--	**0.00062**	**0.00024**	**0.00048**	0.000002 U	**0.0000032**
PCB-138/163/164	35065-28-2/74472-44-9/74472-45-0	mg/kg	0.000174	NP	--	**0.016**	**0.0055**	**0.01**	**0.0000091**	**0.000058**
PCB-139/149	56030-56-9/38380-04-0	mg/kg	0.000135	NP	--	**0.013**	**0.0045**	**0.0088**	**0.0000068**	**0.000045**
PCB-14	34883-41-5	mg/kg	0.000002	NP	--	**0.0000095 LJ**	0.00002 U	0.00002 U	0.000002 U	0.000002 U
PCB-140	59291-64-4	mg/kg	0.000002	NP	--	**0.000068**	**0.000044**	**0.000066**	0.000002 U	0.000002 U
PCB-141	52712-04-6	mg/kg	0.0000219	NP	--	**0.0031**	**0.00098**	**0.0018**	0.000002 U	**0.0000073**
PCB-142	41411-61-4	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.000002 U	0.000002 U
PCB-144	68194-14-9	mg/kg	0.000006	NP	--	**0.00062**	**0.00018**	**0.0004**	0.000002 U	**0.000002**
PCB-145	74472-40-5	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.000002 U	0.000002 U
PCB-146/165	51908-16-8/74472-46-1	mg/kg	0.000036	NP	--	**0.0022**	**0.0008**	**0.0013**	**0.0000025 LJ**	**0.000012**
PCB-147	68194-13-8	mg/kg	0.000006	NP	--	**0.00016**	**0.000089**	**0.00023**	0.000002 U	**0.0000014 LJ**
PCB-148	74472-41-6	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.000002 U	0.000002 U
PCB-15	2050-68-2	mg/kg	0.0000084	NP	--	**0.0023**	**0.00082**	**0.0096**	0.000002 U	**0.0000028**
PCB-150	68194-08-1	mg/kg	0.000002	NP	--	**0.000032**	**0.000014 LJ**	**0.000021**	0.000002 U	0.000002 U
PCB-151	52663-63-5	mg/kg	0.00003	NP	--	**0.0035**	**0.0011**	**0.0025**	**0.0000015 LJ**	**0.00001**
PCB-152	68194-09-2	mg/kg	0.000002	NP	--	**0.0000096 LJ**	0.00002 U	**0.000011 LJ**	0.000002 U	0.000002 U
PCB-153	35065-27-1	mg/kg	0.000186	NP	--	**0.013**	**0.0049**	**0.008**	**0.00001**	**0.000062**
PCB-154	60145-22-4	mg/kg	0.0000087	NP	--	**0.00015**	**0.000076**	**0.0001**	0.000002 U	**0.0000029**
PCB-155	33979-03-2	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.000002 U	0.000002 U
PCB-158/160	74472-42-7/41411-62-5	mg/kg	0.0000171	NP	--	**0.0015**	**0.00055**	**0.0011**	0.000004 U	**0.0000057**
PCB-159	39635-35-3	mg/kg	0.000002	NP	--	**0.00015**	**0.000049**	**0.000077**	0.000002 U	0.000002 U
PCB-16	38444-78-9	mg/kg	0.000002	NP	--	**0.0022**	**0.00063**	**0.0084**	0.000002 U	0.000002 U
PCB-166	41411-63-6	mg/kg	0.000002	NP	--	**0.000026**	**0.000012 LJ**	**0.000028**	0.000002 U	0.000002 U
PCB-168	59291-65-5	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.000002 U	0.000002 U
PCB-17	37680-66-3	mg/kg	0.0000078	NP	--	**0.0035**	**0.0011**	**0.015**	0.000002 U	**0.0000026**
PCB-170	35065-30-6	mg/kg	0.000045	NP	--	**0.0044**	**0.0017**	**0.0019**	**0.000003**	**0.000015**
PCB-171	52663-71-5	mg/kg	0.0000141	NP	--	**0.0013**	**0.00052**	**0.00066**	0.000002 U	**0.0000047**
PCB-172	52663-74-8	mg/kg	0.0000096	NP	--	**0.00082**	**0.00034**	**0.00039**	0.000002 U	**0.0000032**

Table 4-4 (continued)
Summary of Sediment Sample Results, South Lake and University Lake, 0-12 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 0 - 12 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L02	L02	L02	L03	L03
					Station	SED08	SED09	SED10	SED11	SED12
					Sample ID	CL-L02-SED08-12-51	CL-L02-SED09-12-51	CL-L02-SED10-12-51	CL-L03-SED11-12-51	CL-L03-SED12-12-51
					Depths	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
					Date	04/07/2022	04/07/2022	04/07/2022	04/04/2022	04/04/2022
					Type	FS	FS	FS	FS	FS
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)										
PCB-173	68194-16-1	mg/kg	0.000002	NP	--	**0.000094**	**0.000038**	**0.000049**	0.000002 U	0.000002 U
PCB-174	38411-25-5	mg/kg	0.000042	NP	--	**0.0046**	**0.0017**	**0.0025**	**0.0000028**	**0.000014**
PCB-175	40186-70-7	mg/kg	0.000002	NP	--	**0.000072**	**0.000088**	**0.0001**	0.000002 U	0.000002 U
PCB-176	52663-65-7	mg/kg	0.000006	NP	--	**0.00057**	**0.00021**	**0.00035**	0.000002 U	**0.0000017 LJ**
PCB-177	52663-70-4	mg/kg	0.0000276	NP	--	**0.0028**	**0.0011**	**0.0015**	0.000002 U	**0.0000092**
PCB-178	52663-67-9	mg/kg	0.000012	NP	--	**0.00099**	**0.00039**	**0.00052**	0.000002 U	**0.000004**
PCB-179	52663-64-6	mg/kg	0.0000168	NP	--	**0.0019**	**0.00069**	**0.0011**	0.000002 U	**0.0000056**
PCB-18	37680-65-2	mg/kg	0.0000111	NP	--	**0.0059**	**0.0018**	**0.021**	0.000002 U	**0.0000037**
PCB-180	35065-29-3	mg/kg	0.000084	NP	--	**0.012**	**0.0045**	**0.0054**	**0.0000061**	**0.000028**
PCB-181	74472-47-2	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.000002 U	0.000002 U
PCB-182/187	60145-23-5/52663-68-0	mg/kg	0.00006	NP	--	**0.0061**	**0.0023**	**0.0032**	**0.0000035 LJ**	**0.00002**
PCB-183	52663-69-1	mg/kg	0.0000243	NP	--	**0.0026**	**0.001**	**0.0014**	**0.0000021**	**0.0000081**
PCB-184	74472-48-3	mg/kg	0.000002	NP	--	**0.000013 LJ**	**0.0000074 LJ**	0.00002 U	0.000002 U	0.000002 U
PCB-185	52712-05-7	mg/kg	0.000002	NP	--	**0.00055**	**0.00021**	**0.00031**	0.000002 U	0.000002 U
PCB-186	74472-49-4	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.000002 U	0.000002 U
PCB-188	74487-85-7	mg/kg	0.000002	NP	--	**0.000018 LJ**	**0.0000073 LJ**	**0.0000086 LJ**	0.000002 U	0.000002 U
PCB-19	38444-73-4	mg/kg	0.000002	NP	--	**0.00092**	**0.00024**	**0.0043**	0.000002 U	0.000002 U
PCB-190	41411-64-7	mg/kg	0.0000096	NP	--	**0.00096**	**0.00036**	**0.00038**	0.000002 U	**0.0000032**
PCB-191	74472-50-7	mg/kg	0.000002	NP	--	**0.00019**	**0.000079**	**0.000094**	0.000002 U	0.000002 U
PCB-192	74472-51-8	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.000002 U	0.000002 U
PCB-193	69782-91-8	mg/kg	0.0000063	NP	--	**0.0005**	**0.0002**	**0.00023**	0.000002 U	**0.0000021**
PCB-194	35694-08-7	mg/kg	0.0000183	NP	--	**0.0023**	**0.00089**	**0.00069**	**0.0000015 LJ**	**0.0000061**
PCB-195	52663-78-2	mg/kg	0.0000072	NP	--	**0.00099**	**0.0004**	**0.00035**	0.000002 U	**0.0000024**
PCB-196/203	42740-50-1/52663-76-0	mg/kg	0.0000255	NP	--	**0.0024**	**0.00094**	**0.001**	**0.0000018 LJ**	**0.0000085**
PCB-197	33091-17-7	mg/kg	0.000002	NP	--	**0.000078**	**0.000038**	**0.000039**	0.000002 U	0.000002 U
PCB-198	68194-17-2	mg/kg	0.000002	NP	--	**0.000076**	**0.000019 LJ**	**0.00003**	0.000002 U	0.000002 U
PCB-199	52663-75-9	mg/kg	0.00003	NP	--	**0.0023**	**0.0009**	**0.001**	**0.0000018 LJ**	**0.00001**
PCB-2	2051-61-8	mg/kg	0.000002	NP	--	**0.00033**	**0.000075**	**0.0003**	0.000002 U	0.000002 U
PCB-20/21/33	38444-84-7/55702-46-0/38444-86-9	mg/kg	0.0000228	NP	--	**0.0044**	**0.0017**	**0.012**	0.0000059 U	**0.0000076**
PCB-200	52663-73-7	mg/kg	0.000002	NP	--	**0.00022**	**0.00009**	**0.00012**	0.000002 U	0.000002 U
PCB-201	40186-71-8	mg/kg	0.000006	NP	--	**0.00024**	**0.00011**	**0.00013**	0.000002 U	**0.0000013 LJ**
PCB-202	2136-99-4	mg/kg	0.0000075	NP	--	**0.00044**	**0.00018**	**0.00024**	0.000002 U	**0.0000025**
PCB-204	74472-52-9	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.000002 U	0.000002 U
PCB-205	74472-53-0	mg/kg	0.000002	NP	--	**0.00015**	**0.000062**	**0.000043**	0.000002 U	0.000002 U
PCB-206	40186-72-9	mg/kg	0.000024	NP	--	**0.0011**	**0.00063**	**0.00052**	**0.0000018 LJ**	**0.000008**
PCB-207	52663-79-3	mg/kg	0.000006	NP	--	**0.00012**	**0.00006**	**0.000062**	0.000002 U	**0.0000011 LJ**
PCB-208	52663-77-1	mg/kg	0.0000117	NP	--	**0.0003**	**0.00016**	**0.00016**	0.000002 U	**0.0000039**
PCB-209	2051-24-3	mg/kg	0.0000267	NP	--	**0.00084**	**0.0004**	**0.00041**	**0.0000019 LJ**	**0.0000089**
PCB-22	38444-85-8	mg/kg	0.000006	NP	--	**0.0034**	**0.0014**	**0.0091**	0.000002 U	**0.0000019 LJ**
PCB-23	55720-44-0	mg/kg	0.000002	NP	--	**0.000018 LJ**	**0.0000093 LJ**	**0.000062**	0.000002 U	0.000002 U
PCB-24	55702-45-9	mg/kg	0.000002	NP	--	**0.00038**	**0.0001**	**0.0013**	0.000002 U	0.000002 U
PCB-25	55712-37-3	mg/kg	0.000002	NP	--	**0.0011**	**0.00055**	**0.0036**	0.000002 U	0.000002 U
PCB-26	38444-81-4	mg/kg	0.000002	NP	--	**0.0017**	**0.00068**	**0.0057**	0.000002 U	0.000002 U
PCB-27	38444-76-7	mg/kg	0.000002	NP	--	**0.00031**	**0.00011**	**0.0014**	0.000002 U	0.000002 U
PCB-28	7012-37-5	mg/kg	0.0000225	NP	--	**0.0096**	**0.0041**	**0.028**	0.000002 U	**0.0000075**
PCB-29	15862-07-4	mg/kg	0.000002	NP	--	**0.000067**	**0.000027**	**0.00018**	0.000002 U	0.000002 U

Table 4-4 (continued)
Summary of Sediment Sample Results, South Lake and University Lake, 0-12 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 0 - 12 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L02	L02	L02	L03	L03
					Station	SED08	SED09	SED10	SED11	SED12
					Sample ID	CL-L02-SED08-12-51	CL-L02-SED09-12-51	CL-L02-SED10-12-51	CL-L03-SED11-12-51	CL-L03-SED12-12-51
					Depths	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
					Date	04/07/2022	04/07/2022	04/07/2022	04/04/2022	04/04/2022
					Type	FS	FS	FS	FS	FS
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)										
PCB-3	2051-62-9	mg/kg	0.000006	NP	--	**0.00043**	**0.00012**	**0.0011**	0.000002 U	**0.0000011 LJ**
PCB-30	35693-92-6	mg/kg	0.000002	NP	--	**0.0000081 LJ**	0.00002 U	**0.000025**	0.000002 U	0.000002 U
PCB-31	16606-02-3	mg/kg	0.0000069	NP	--	**0.0075**	**0.0034**	**0.023**	0.000002 U	**0.0000023**
PCB-32	38444-77-8	mg/kg	0.000002	NP	--	**0.0022**	**0.00069**	**0.0086**	0.000002 U	0.000002 U
PCB-34	37680-68-5	mg/kg	0.000002	NP	--	**0.00008**	**0.000035**	**0.00023**	0.000002 U	0.000002 U
PCB-35	37680-69-6	mg/kg	0.000002	NP	--	**0.00013**	**0.000039**	**0.00033**	0.000002 U	0.000002 U
PCB-36	38444-87-0	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.000002 U	0.000002 U
PCB-37	38444-90-5	mg/kg	0.0000147	NP	--	**0.0027**	**0.00092**	**0.0063**	0.000002 U	**0.0000049**
PCB-38	53555-66-1	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.000002 U	0.000002 U
PCB-39	38444-88-1	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.000002 U	0.000002 U
PCB-4	13029-08-8	mg/kg	0.000002	NP	--	**0.0026**	**0.00055**	**0.0099**	0.000002 U	0.000002 U
PCB-40	38444-93-8	mg/kg	0.000006	NP	--	**0.00096**	**0.00031**	**0.0022**	0.000002 U	**0.0000019 LJ**
PCB-41/64/71/72	52663-59-9/52663-58-8/41464-46-4/41464-42-0	mg/kg	0.0000225	NP	--	**0.0053**	**0.0016**	**0.012**	**0.0000016 LJ**	**0.0000075 LJ**
PCB-42/59	36559-22-5/74472-33-6	mg/kg	0.0000117	NP	--	**0.0023**	**0.00077**	**0.0053**	**0.000001 LJ**	**0.0000039 LJ**
PCB-43/49	70362-46-8/41464-40-8	mg/kg	0.000045	NP	--	**0.0056**	**0.0019**	**0.013**	**0.0000029 LJ**	**0.000015**
PCB-44	41464-39-5	mg/kg	0.00003	NP	--	**0.0058**	**0.0017**	**0.012**	**0.0000017 LJ**	**0.00001**
PCB-45	70362-45-7	mg/kg	0.000002	NP	--	**0.0011**	**0.00034**	**0.0028**	0.000002 U	0.000002 U
PCB-46	41464-47-5	mg/kg	0.000002	NP	--	**0.00052**	**0.00016**	**0.0014**	0.000002 U	0.000002 U
PCB-47	2437-79-8	mg/kg	0.0000207	NP	--	**0.0031**	**0.0011**	**0.0075**	**0.0000019 LJ**	**0.0000069**
PCB-48/75	70362-47-9/32598-12-2	mg/kg	0.000012	NP	--	**0.00085**	**0.00025**	**0.0026**	0.000004 U	**0.0000019 LJ**
PCB-5	16605-91-7	mg/kg	0.000002	NP	--	**0.0002**	**0.000055**	**0.00067**	0.000002 U	0.000002 U
PCB-50	62796-65-0	mg/kg	0.000002	NP	--	**0.000022**	**0.000011 LJ**	**0.000095**	0.000002 U	0.000002 U
PCB-51	68194-04-7	mg/kg	0.000002	NP	--	**0.00061**	**0.00018**	**0.002**	0.000002 U	0.000002 U
PCB-52/69	35693-99-3/60233-24-1	mg/kg	0.000051	NP	--	**0.0065**	**0.0021**	**0.014**	**0.000003 LJ**	**0.000017**
PCB-53	41464-41-9	mg/kg	0.000006	NP	--	**0.0013**	**0.0004**	**0.0042**	0.000002 U	**0.0000013 LJ**
PCB-54	15968-05-5	mg/kg	0.000002	NP	--	**0.000033**	**0.000011 LJ**	**0.00017**	0.000002 U	0.000002 U
PCB-55	74338-24-2	mg/kg	0.000002	NP	--	**0.00011**	**0.000032**	**0.00018**	0.000002 U	0.000002 U
PCB-56/60	41464-43-1/33025-41-1	mg/kg	0.0000153	NP	--	**0.0034**	**0.0012**	**0.0073**	**0.0000014 LJ**	**0.0000051**
PCB-57	70424-67-8	mg/kg	0.000002	NP	--	**0.000046**	**0.000017 LJ**	**0.00011**	0.000002 U	0.000002 U
PCB-58	41464-49-7	mg/kg	0.000002	NP	--	**0.000019 LJ**	**0.0000078 LJ**	**0.00004**	0.000002 U	0.000002 U
PCB-6	25569-80-6	mg/kg	0.000006	NP	--	**0.0014**	**0.00044**	**0.0056**	0.000002 U	**0.0000011 LJ**
PCB-61/70	33284-53-6/32598-11-1	mg/kg	0.0000285	NP	--	**0.0052**	**0.002**	**0.0094**	**0.0000022 LJ**	**0.0000095**
PCB-62	54230-22-7	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.000002 U	0.000002 U
PCB-63	74472-34-7	mg/kg	0.000002	NP	--	**0.00023**	**0.000089**	**0.00047**	0.000002 U	0.000002 U
PCB-65	33284-54-7	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.000002 U	0.000002 U
PCB-66/76	32598-10-0/70362-48-0	mg/kg	0.000051	NP	--	**0.0043**	**0.0017**	**0.008**	**0.0000037 LJ**	**0.000017**
PCB-67	73575-53-8	mg/kg	0.000002	NP	--	**0.00021**	**0.00009**	**0.0004**	0.000002 U	0.000002 U
PCB-68	73575-52-7	mg/kg	0.000002	NP	--	**0.000051**	**0.000021**	**0.00015**	0.000002 U	0.000002 U
PCB-7	33284-50-3	mg/kg	0.000002	NP	--	**0.00024**	**0.000063**	**0.00064**	0.000002 U	0.000002 U
PCB-73	74338-23-1	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.000002 U	0.000002 U
PCB-74	32690-93-0	mg/kg	0.000018	NP	--	**0.0023**	**0.00091**	**0.0044**	**0.0000013 LJ**	**0.000006**
PCB-78	70362-49-1	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.000002 U	0.000002 U
PCB-79	41464-48-6	mg/kg	0.000006	NP	--	**0.000079**	**0.000041**	**0.000088**	0.000002 U	**0.00000088 LJ**
PCB-8	34883-43-7	mg/kg	0.0000174	NP	--	**0.0043**	**0.0011**	**0.015**	0.000002 U	**0.0000058**
PCB-80	33284-52-5	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.000002 U	0.000002 U
PCB-82	52663-62-4	mg/kg	0.0000108	NP	--	**0.00059**	**0.00029**	**0.0016**	0.000002 U	**0.0000036**

Table 4-4 (continued)
Summary of Sediment Sample Results, South Lake and University Lake, 0-12 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 0 - 12 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L02	L02	L02	L03	L03
					Station	SED08	SED09	SED10	SED11	SED12
					Sample ID	CL-L02-SED08-12-51	CL-L02-SED09-12-51	CL-L02-SED10-12-51	CL-L03-SED11-12-51	CL-L03-SED12-12-51
					Depths	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
					Date	04/07/2022	04/07/2022	04/07/2022	04/04/2022	04/04/2022
					Type	FS	FS	FS	FS	FS
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)										
PCB-83/112	60145-20-2/74472-36-9	mg/kg	0.000012	NP	--	**0.00023**	**0.0001**	**0.00058**	0.000004 U	**0.0000021 LJ**
PCB-84/92	52663-60-2/52663-61-3	mg/kg	0.000057	NP	--	**0.0023**	**0.0011**	**0.0048**	**0.0000024 LJ**	**0.000019**
PCB-85/116	65510-45-4/18259-05-7	mg/kg	0.0000162	NP	--	**0.00082**	**0.00045**	**0.0019**	0.000004 U	**0.0000054**
PCB-86	55312-69-1	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.000002 U	0.000002 U
PCB-87/117/125	38380-02-8/68194-11-6/74472-39-2	mg/kg	0.000039	NP	--	**0.0018**	**0.00091**	**0.0038**	**0.0000018 LJ**	**0.000013**
PCB-88/91	55215-17-3/68194-05-8	mg/kg	0.0000231	NP	--	**0.0011**	**0.00051**	**0.0019**	0.000004 U	**0.0000077**
PCB-89	73575-57-2	mg/kg	0.000002	NP	--	**0.000053**	**0.000031**	**0.00026**	0.000002 U	0.000002 U
PCB-9	34883-39-1	mg/kg	0.000002	NP	--	**0.00025**	**0.000073**	**0.00083**	0.000002 U	0.000002 U
PCB-90/101	68194-07-0/37680-73-2	mg/kg	0.000144	NP	--	**0.0061**	**0.003**	**0.0095**	**0.0000076**	**0.000048**
PCB-93	73575-56-1	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.000002 U	0.000002 U
PCB-94	73575-55-0	mg/kg	0.000002	NP	--	**0.000069**	**0.000023**	**0.00017**	0.000002 U	0.000002 U
PCB-95	38379-99-6	mg/kg	0.000105	NP	--	**0.0057**	**0.0023**	**0.0074**	**0.0000044**	**0.000035**
PCB-96	73575-54-9	mg/kg	0.000002	NP	--	**0.000067**	**0.000024**	**0.00017**	0.000002 U	0.000002 U
PCB-97	41464-51-1	mg/kg	0.000042	NP	--	**0.0016**	**0.00082**	**0.0034**	**0.000002**	**0.000014**
PCB-98/102	60233-25-2/68194-06-9	mg/kg	0.000004	NP	--	0.00004 U	0.00004 U	0.000039 U	0.000004 U	0.000004 U
PCB-99	38380-01-7	mg/kg	0.00009	NP	--	**0.0024**	**0.0013**	**0.004**	**0.0000053**	**0.00003**
TEQ (Bird)	2222-22-3	mg/kg	0.00000057	NP	--	**0.000059**	**0.000023**	**0.000089**	**0.00000000019**	**0.00000019**
TEQ (Fish)	2222-22-4	mg/kg	2.4E-09	NP	--	**0.00000086**	**0.00000033**	**0.00000067**	**0.000000000023**	**0.0000000008**
TEQ (Mammal)	2222-22-2	mg/kg	5.1E-09	NP	--	**0.000015**	**0.0000052**	**0.0000093**	**0.00000000014**	**0.0000000017**
Total DiCB	25512-42-9	mg/kg	0.000033	NP	--	**0.012 J**	**0.0034 J**	**0.045 J**		**0.000011 J**
Total HpCB	28655-71-2	mg/kg	0.00036	NP	--	**0.041 J**	**0.016 J**	**0.02 J**	**0.000018 J**	**0.00012 J**
Total HxCB	26601-64-9	mg/kg	0.00084	NP	--	**0.068 J**	**0.024 J**	**0.044 J**	**0.000033 J**	**0.00028 J**
Total MoCB	27323-18-8	mg/kg	0.000006	NP	--	**0.0013 J**	**0.00032 J**	**0.0028 J**		**0.000002 J**
Total NoCB	53742-07-7	mg/kg	0.000039	NP	--	**0.0015 J**	**0.00085 J**	**0.00074 J**	**0.0000018 LJ**	**0.000013 J**
Total OcCB	55722-26-4	mg/kg	0.000093	NP	--	**0.0092 J**	**0.0036 J**	**0.0036 J**	**0.0000051 J**	**0.000031 J**
TOTAL PCBs	1111-11-1	mg/kg	0.00264	NP	--	**0.27 J**	**0.1 J**	**0.44 J**	**0.00012 J**	**0.00088 J**
Total PeCB	25429-29-2	mg/kg	0.00084	NP	--	**0.039 J**	**0.018 J**	**0.063 J**	**0.000039 J**	**0.00028 J**
Total TeCB	26914-33-0	mg/kg	0.00033	NP	--	**0.051 J**	**0.017 J**	**0.11 J**	**0.000021 J**	**0.00011 J**
Total TrCB	25323-68-6	mg/kg	0.000093	NP	--	**0.046 J**	**0.018 J**	**0.15 J**		**0.000031 J**
CLP Organics by CLP SOW SFAM01.1/3151.0										
1,2,4,5-Tetrachlorobenzene	95-94-3	mg/kg	0.22	0.23	--	0.18 U	0.27 U	0.095 U	0.22 U	0.22 U
1,4-Dioxane	123-91-1	mg/kg	0.088	5.3	--	0.073 U	0.11 U	0.038 U	0.088 U	0.088 U
1-Methylnaphthalene	90-12-0	mg/kg	0.22	18	--	0.18 U	0.27 U	0.095 U	0.22 U	0.22 U
2,3,4,6-Tetrachlorophenol	58-90-2	mg/kg	0.22	190	--	0.18 U	0.27 U	0.095 UJ	0.22 U	0.22 U
Metals by CLP SOW SFAM01.1										
Aluminum	7429-90-5	mg/kg	90000	7700	--	**8300**	**24000**	**2100**	**30000**	**28000**
Antimony	7440-36-0	mg/kg	0.95	3.1	--	**1.1 LJ**	**1.6 LJ**	**0.77 LJ**	0.82 U	0.95 U
Arsenic	7440-38-2	mg/kg	24	0.68	--	**4**	**7 J**	**3.3 J**	**6.9**	**8**
Barium	7440-39-3	mg/kg	540	1500	--	**160**	**220 J**	**74 J**	**170**	**180**
Beryllium	7440-41-7	mg/kg	2.7	16	--	**0.24 LJ**	**0.6 LJ**	**0.23 LJ**	**0.86**	**0.9**
Cadmium	7440-43-9	mg/kg	1.77	0.71	--	**0.92**	**1.7**	**0.57**	**0.58**	**0.59**
Calcium	7440-70-2	mg/kg	14400	NP	--	**5100**	**8300**	**19000**	**4800**	**4600**
Chromium	7440-47-3	mg/kg	36	NP	--	**14 J**	**25**	**16**	**11 J**	**12 J**
Cobalt	7440-48-4	mg/kg	12.6	2.3	--	**3.1 J**	**5.9**	**4.9**	**4 J**	**4.2 J**
Copper	7440-50-8	mg/kg	45	310	--	**44**	**82 J**	**18 J**	**14 J**	**15 J**
Iron	7439-89-6	mg/kg	87000	5500	--	**9800**	**26000**	**6300**	**29000**	**27000**

Table 4-4 (continued)
Summary of Sediment Sample Results, South Lake and University Lake, 0-12 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 0 - 12 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L02	L02	L02	L03	L03
					Station	SED08	SED09	SED10	SED11	SED12
					Sample ID	CL-L02-SED08-12-51	CL-L02-SED09-12-51	CL-L02-SED10-12-51	CL-L03-SED11-12-51	CL-L03-SED12-12-51
					Depths	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
					Date	04/07/2022	04/07/2022	04/07/2022	04/04/2022	04/04/2022
					Type	FS	FS	FS	FS	FS
Metals by CLP SOW SFAM01.1 (continued)										
Lead	7439-92-1	mg/kg	228	400	--	**130**	**210**	**210**	**76**	**73**
Magnesium	7439-95-4	mg/kg	14400	NP	--	**1500**	**4100**	**840**	**4800**	**4400**
Manganese	7439-96-5	mg/kg	1500	180	--	**190**	**520 J**	**120 J**	**500**	**490**
Mercury	7439-97-6	mg/kg	0.69	1.1	--	**0.21**	**0.31**	**0.12 LJ**	**0.23**	**0.18**
Nickel	7440-02-0	mg/kg	57	150	--	**9 J**	**16**	**10**	**18**	**19**
Potassium	7440-09-7	mg/kg	11400	NP	--	**620 LJ**	**2100**	**130**	**3800**	**3400**
Selenium	7782-49-2	mg/kg	2.64	39	--	3 U	**0.81 LJ**	2.7 U	**0.81 LJ**	**0.88 LJ**
Silver	7440-22-4	mg/kg	0.72	39	--	**1.1**	**2.2**	**0.26 LJ**	**0.22 LJ**	**0.24 LJ**
Sodium	7440-23-5	mg/kg	960	NP	--	**65 LJ**	**160 LJ**	**73 LJ**	**320 LJ**	**240 LJ**
Thallium	7440-28-0	mg/kg	0.48	0.078	--	0.6 U	1.1 U	0.53 U	0.41 U	0.48 U
Vanadium	7440-62-2	mg/kg	26.1	39	--	**5.8 J**	**13**	**5.3**	**6.8 J**	**8.7 J**
Zinc	7440-66-6	mg/kg	195	2300	--	**210 J**	**560 J**	**160 J**	**64 J**	**65 J**
Pesticides by CLP SOW SFAM01.1										
4,4'-DDD	72-54-8	mg/kg	0.0088	0.19	--	0.0073 U	0.011 U	0.0038 U	0.0088 U	0.0087 U
4,4'-DDE	72-55-9	mg/kg	0.0088	2	--	**0.0081 J**	0.011 U	**0.0029 LJ**	0.0088 U	0.0087 U
4,4'-DDT	50-29-3	mg/kg	0.0088	1.9	--	0.0073 U	0.011 U	0.0038 U	0.0088 U	0.0087 U
Aldrin	309-00-2	mg/kg	0.0045	0.039	--	0.0038 U	0.0056 U	0.0019 U	0.0045 U	0.0045 U
alpha-BHC	319-84-6	mg/kg	0.0045	0.086	--	0.0038 U	0.0056 U	0.0019 U	0.0045 U	0.0045 U
beta-BHC	319-85-7	mg/kg	0.0045	0.3	--	**0.0047 J**	0.0056 U	0.0019 U	0.0045 U	0.0045 U
cis-Chlordane	5103-71-9	mg/kg	0.0045	3.6	--	0.0038 U	**0.0038 JQK**	**0.0033**	0.0045 U	0.0045 U
delta-BHC	319-86-8	mg/kg	0.0045	NP	--	0.0038 U	0.0056 U	**0.0025 J**	0.0045 U	0.0045 U
Dieldrin	60-57-1	mg/kg	0.0088	0.034	--	0.0073 U	0.011 U	0.0038 U	0.0088 U	0.0087 U
Endosulfan I	959-98-8	mg/kg	0.0045	NP	--	0.0038 U	0.0056 U	0.0019 U	0.0045 U	0.0045 U
Endosulfan II	33213-65-9	mg/kg	0.0088	NP	--	0.0073 U	0.011 U	0.0038 U	0.0088 U	0.0087 U
Endosulfan sulfate	1031-07-8	mg/kg	0.0088	38	--	0.0073 U	0.011 U	0.0038 U	0.0088 U	0.0087 U
Endrin	72-20-8	mg/kg	0.0088	1.9	--	0.0073 U	0.011 U	0.0038 U	0.0088 U	0.0087 U
Endrin aldehyde	7421-93-4	mg/kg	0.0088	NP	--	0.0073 U	0.011 U	0.0038 U	0.0088 U	0.0087 U
Endrin ketone	53494-70-5	mg/kg	0.0088	NP	--	0.0073 U	0.011 U	0.0038 U	0.0088 U	0.0087 U
gamma-BHC (Lindane)	58-89-9	mg/kg	0.0045	0.071	--	0.0038 U	0.0056 U	0.0019 U	0.0045 U	0.0045 U
Heptachlor	76-44-8	mg/kg	0.0045	0.13	--	0.0038 U	0.0056 U	0.0019 U	0.0045 U	0.0045 U
Heptachlor epoxide	1024-57-3	mg/kg	0.0045	0.07	--	0.0038 U	0.0056 U	0.0019 U	0.0045 U	0.0045 U
Methoxychlor	72-43-5	mg/kg	1.08	32	--	0.038 U	0.056 U	0.019 U	**0.36**	**0.054**
Toxaphene	8001-35-2	mg/kg	0.45	0.49	--	0.38 U	0.56 U	0.19 U	0.45 U	0.45 U
trans-Chlordane	5103-74-2	mg/kg	0.0045	3.6	--	0.0038 U	**0.007 JK**	**0.0057 J**	0.0045 U	0.0045 U
SVOCs by CLP SOW SFAM01.1/3151.0										
1,1'-Biphenyl	92-52-4	mg/kg	0.22	4.7	--	0.18 U	0.27 U	0.095 U	0.22 U	0.22 U
2,2'-Oxybis(1-chloropropane)	108-60-1	mg/kg	0.45	310	--	0.37 U	0.55 UJK	0.19 U	0.45 U	0.44 U
2,4,5-Trichlorophenol	95-95-4	mg/kg	0.22	630	--	0.18 U	0.27 UJK	0.095 U	0.22 U	0.22 U
2,4,6-Trichlorophenol	88-06-2	mg/kg	0.22	6.3	--	0.18 U	0.27 U	0.095 U	0.22 U	0.22 U
2,4-Dichlorophenol	120-83-2	mg/kg	0.22	19	--	0.18 U	0.27 U	0.095 U	0.22 U	0.22 U
2,4-Dimethylphenol	105-67-9	mg/kg	0.22	130	--	0.18 U	0.27 U	0.095 U	0.22 U	0.22 U
2,4-Dinitrophenol	51-28-5	mg/kg	0.45	13	--	0.37 U	0.55 U	0.19 U	0.45 U	0.44 U
2,4-Dinitrotoluene	121-14-2	mg/kg	0.22	1.7	--	0.18 U	0.27 U	0.095 U	0.22 U	0.22 U
2,6-Dinitrotoluene	606-20-2	mg/kg	0.22	0.36	--	0.18 U	0.27 U	0.095 U	0.22 U	0.22 U
2-Chloronaphthalene	91-58-7	mg/kg	0.22	480	--	0.18 U	0.27 U	0.095 U	0.22 U	0.22 U
2-Chlorophenol	95-57-8	mg/kg	0.22	39	--	0.18 U	0.27 U	0.095 U	0.22 U	0.22 U

Table 4-4 (continued)
Summary of Sediment Sample Results, South Lake and University Lake, 0-12 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 0 - 12 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L02	L02	L02	L03	L03
					Station	SED08	SED09	SED10	SED11	SED12
					Sample ID	CL-L02-SED08-12-51	CL-L02-SED09-12-51	CL-L02-SED10-12-51	CL-L03-SED11-12-51	CL-L03-SED12-12-51
					Depths	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
					Date	04/07/2022	04/07/2022	04/07/2022	04/04/2022	04/04/2022
					Type	FS	FS	FS	FS	FS
SVOCs by CLP SOW SFAM01.1/3151.0 (continued)										
2-Methylnaphthalene	91-57-6	mg/kg	0.22	24	--	0.18 U	0.27 U	0.095 U	0.22 U	0.22 U
2-Methylphenol	95-48-7	mg/kg	0.45	320	--	0.37 U	0.55 U	0.19 U	0.45 U	0.44 U
2-Nitroaniline	88-74-4	mg/kg	0.22	63	--	0.18 U	0.27 U	0.095 U	0.22 U	0.22 U
2-Nitrophenol	88-75-5	mg/kg	0.22	NP	--	0.18 U	0.27 UJK	0.095 U	0.22 U	0.22 U
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.45	1.2	--	0.37 U	0.55 U	0.19 U	0.45 U	0.44 U
3-Nitroaniline	99-09-2	mg/kg	0.45	NP	--	0.37 U	0.55 U	0.19 U	0.45 U	0.44 U
4,6-Dinitro-2-methylphenol	534-52-1	mg/kg	0.45	0.51	--	0.37 U	0.55 U	0.19 U	0.45 U	0.44 U
4-Bromophenyl-phenylether	101-55-3	mg/kg	0.22	NP	--	0.18 U	0.27 UJK	0.095 U	0.22 U	0.22 U
4-Chloro-3-methylphenol	59-50-7	mg/kg	0.22	630	--	0.18 U	0.27 U	0.095 U	0.22 U	0.22 U
4-Chloroaniline	106-47-8	mg/kg	0.45	2.7	--	0.37 U	0.55 U	0.19 U	0.45 U	0.44 U
4-Chlorophenyl-phenyl ether	7005-72-3	mg/kg	0.22	NP	--	0.18 U	0.27 U	0.095 U	0.22 U	0.22 U
4-Methylphenol	106-44-5	mg/kg	0.45	130	--	0.37 U	0.55 U	0.19 U	0.45 U	0.44 U
4-Nitroaniline	100-01-6	mg/kg	0.45	25	--	0.37 U	0.55 U	0.19 U	0.45 U	0.44 U
4-Nitrophenol	100-02-7	mg/kg	0.45	NP	--	0.37 U	0.55 U	0.19 U	0.45 U	0.44 U
Acenaphthene	83-32-9	mg/kg	0.22	360	--	0.18 U	0.27 U	0.095 U	0.22 U	0.22 U
Acenaphthylene	208-96-8	mg/kg	0.22	NP	--	0.18 U	0.27 U	**0.066 LJ**	0.22 U	0.22 U
Acetophenone	98-86-2	mg/kg	0.45	780	--	0.37 U	0.55 U	0.19 U	0.45 U	0.44 U
Anthracene	120-12-7	mg/kg	0.22	1800	--	**0.31**	0.27 U	**0.17**	0.22 U	0.22 U
Atrazine	1912-24-9	mg/kg	0.45	2.4	--	0.37 U	0.55 U	0.19 U	0.45 U	0.44 U
Benzaldehyde	100-52-7	mg/kg	0.45	170	--	0.37 U	0.55 U	0.19 U	0.45 U	0.44 U
Benzo(a)anthracene	56-55-3	mg/kg	0.66	1.1	--	**1.8**	**0.82**	**0.81**	**0.17 LJ**	0.22 U
Benzo(a)pyrene	50-32-8	mg/kg	0.87	0.11	--	**1.9**	**0.99**	**0.7**	**0.29 J+**	**0.11 LJ+**
Benzo(b)fluoranthene	205-99-2	mg/kg	0.75	1.1	--	**2.9 J**	**1.5 JK**	**1.2 J**	**0.25 J+**	**0.16 LJ+**
Benzo(g,h,i)perylene	191-24-2	mg/kg	0.69	NP	--	**1.1**	**0.8 JK**	**0.41**	**0.23 J+**	0.22 U
Benzo(k)fluoranthene	207-08-9	mg/kg	0.87	11	--	**0.95 J**	**0.55 JK**	**0.37 J**	**0.29 J+**	0.22 U
Bis(2-chloroethoxy)methane	111-91-1	mg/kg	0.22	19	--	0.18 U	0.27 U	0.095 U	0.22 U	0.22 U
Bis(2-chloroethyl)ether	111-44-4	mg/kg	0.45	0.23	--	0.37 U	0.55 U	0.19 U	0.45 U	0.44 U
Bis(2-ethylhexyl)phthalate	117-81-7	mg/kg	0.22	39	--	**4.3**	**2.2**	**1.3**	0.22 U	0.22 U
Butylbenzylphthalate	85-68-7	mg/kg	0.22	290	--	**0.21**	0.27 U	**0.094 LJ**	0.22 U	0.22 U
Caprolactam	105-60-2	mg/kg	0.45	3100	--	0.37 U	0.55 U	0.19 U	0.45 U	0.44 U
Carbazole	86-74-8	mg/kg	0.45	NP	--	**0.28 LJ**	0.55 U	**0.091 LJ**	0.45 U	0.44 U
Chrysene	218-01-9	mg/kg	0.66	110	--	**2.1**	**1.1**	**0.89**	**0.17 LJ**	0.22 U
Dibenzo(a,h)anthracene	53-70-3	mg/kg	0.22	0.11	--	**0.42**	0.27 U	**0.17**	0.22 U	0.22 U
Dibenzofuran	132-64-9	mg/kg	0.22	7.8	--	0.18 U	0.27 U	0.095 U	0.22 U	0.22 U
Diethylphthalate	84-66-2	mg/kg	0.22	5100	--	0.18 U	0.27 U	0.095 U	0.22 U	0.22 U
Dimethylphthalate	131-11-3	mg/kg	0.22	NP	--	0.18 U	0.27 U	0.095 U	0.22 U	0.22 U
Di-n-butylphthalate	84-74-2	mg/kg	0.22	630	--	0.18 U	0.27 U	**0.13**	0.22 U	0.22 U
Di-n-octylphthalate	117-84-0	mg/kg	0.45	63	--	0.37 U	0.55 U	**0.26**	0.45 U	0.44 U
Fluoranthene	206-44-0	mg/kg	0.84	240	--	**4.1**	**2**	**1.9**	**0.28**	0.22 U
Fluorene	86-73-7	mg/kg	0.22	240	--	0.18 U	0.27 U	0.095 U	0.22 U	0.22 U
Hexachlorobenzene	118-74-1	mg/kg	0.22	0.078	--	0.18 U	0.27 UJK	0.095 U	0.22 U	0.22 U
Hexachlorobutadiene	87-68-3	mg/kg	0.22	1.2	--	0.18 U	0.27 UJK	0.095 U	0.22 U	0.22 U
Hexachlorocyclo-pentadiene	77-47-4	mg/kg	0.45	0.18	--	0.37 U	0.55 U	0.19 UJ	0.45 U	0.44 U
Hexachloroethane	67-72-1	mg/kg	0.22	1.8	--	0.18 U	0.27 U	0.095 U	0.22 U	0.22 U
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	0.72	1.1	--	**1.3**	**0.94 JK**	**0.43**	**0.24 J+**	0.22 U
Isophorone	78-59-1	mg/kg	0.22	570	--	0.18 U	0.27 U	0.095 U	0.22 U	0.22 U

Table 4-4 (continued)
Summary of Sediment Sample Results, South Lake and University Lake, 0-12 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 0 - 12 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L02	L02	L02	L03	L03
					Station	SED08	SED09	SED10	SED11	SED12
					Sample ID	CL-L02-SED08-12-51	CL-L02-SED09-12-51	CL-L02-SED10-12-51	CL-L03-SED11-12-51	CL-L03-SED12-12-51
					Depths	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
					Date	04/07/2022	04/07/2022	04/07/2022	04/04/2022	04/04/2022
					Type	FS	FS	FS	FS	FS
SVOCs by CLP SOW SFAM01.1/3151.0 (continued)										
Naphthalene	91-20-3	mg/kg	0.22	2	--	0.18 U	0.27 U	0.095 U	0.22 U	0.22 U
Nitrobenzene	98-95-3	mg/kg	0.22	5.1	--	0.18 U	0.27 U	0.095 U	0.22 U	0.22 U
N-Nitroso-di-n propylamine	621-64-7	mg/kg	0.22	0.078	--	0.18 U	0.27 U	0.095 U	0.22 U	0.22 U
N-Nitrosodiphenylamine	86-30-6	mg/kg	0.22	110	--	0.18 U	0.27 U	0.095 U	0.22 U	0.22 U
Pentachlorophenol	87-86-5	mg/kg	0.0015	1	--	0.37 U	0.55 U	0.19 U	0.45 U	0.44 U
Phenanthrene	85-01-8	mg/kg	0.22	NP	--	**1.7**	**0.68**	**0.88**	0.22 U	0.22 U
Phenol	108-95-2	mg/kg	0.45	1900	--	0.37 U	0.55 U	0.19 U	0.45 U	0.44 U
Pyrene	129-00-0	mg/kg	0.84	180	--	**3.1**	**1.5**	**1.4**	**0.28**	0.22 U

Notes

mg/kg - milligrams/kilogram

U - Not detected at reported quantitation limit.

J - estimated value.

+ - High biased. Actual concentration may be lower than the concentration reported.

R - Unusable, rejected should not be used.

L - Reported concentration is below the Contract Required Quantitation Limit (CRQL).

K - Unknown bias.

NP - Not Published.

FS - Field Sample.

FD - Field Duplicate.

RSL - Regional Screening level, May 2022.

TR - Targeted Risk for cancer.

THQ - Target Hazard Quotient.

Yellow Highlight - exceeds background

Orange highlight - does not exceed background, but exceeds RSL

Table 4-5
Summary of Sediment Sample Results, South Lake and University Lake, 12-24 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 12 - 24 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L02	L02	L02	L02	L03	L03	L03
					Station	SED08	SED09	SED10	SED10	SED11	SED12	SED12
					Sample ID	CL-L02-SED08-24-51	CL-L02-SED09-24-51	CL-L02-SED10-24-51	CL-L02-SED10-24-52	CL-L03-SED11-24-51	CL-L03-SED12-24-51	CL-L03-SED12-24-52
					Depths	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24
					Date	04/07/2022	04/07/2022	04/07/2022	04/07/2022	04/04/2022	04/04/2022	04/04/2022
					Type	FS	FS	FS	FD	FS	FS	FD
Herbicides by SW846 Method 8151												
2,4,5-T	93-76-5	mg/kg	0.0028	63	--	0.0016 U	0.0021 U	0.0012 U	0.0012 U	0.0028 UJK	0.0024 U	0.0024 U
2,4-D	94-75-7	mg/kg	0.04	70	--	0.024 U	0.031 U	0.018 U	0.018 U	0.04 UJK	0.036 U	0.036 U
2,4-DB	94-82-6	mg/kg	0.034	NP	--	0.02 U	0.025 U	0.015 U	0.015 U	0.034 UJK	0.03 U	0.03 U
Dalapon	75-99-0	mg/kg	0.16	190	--	0.098 U	0.12 U	0.074 U	0.074 U	0.16 U	0.15 U	0.15 U
Dicamba	1918-00-9	mg/kg	0.013	190	--	0.008 U	0.01 U	0.0061 U	0.006 U	0.013 UJK	0.012 U	0.012 U
Dichlorprop	120-36-5	mg/kg	0.03	NP	--	0.018 U	0.023 U	0.014 U	0.014 U	0.03 UJK	0.027 U	0.027 U
Dinoseb	88-85-7	mg/kg	0.03	6.3	--	0.018 U	0.023 U	0.014 U	0.014 U	0.03 UR	0.027 U	0.027 U
MCPA	94-74-6	mg/kg	2.6	3.2	--	**7.3 JK**	1.9 U	**3.1 JQK**	**3.7 JQK**	2.6 UJK	2.3 U	2.2 U
MCPP	93-65-2	mg/kg	13	6.3	--	7.6 U	9.7 U	5.8 U	5.7 U	13 UJK	11 U	11 U
Pentachlorophenol	87-86-5	mg/kg	0.0011	1	--	**0.0067**	**0.0038 JQK**	**0.0085**	**0.011**	0.0011 UJK	0.00098 U	0.00098 U
Silvex (2,4,5-TP)	93-72-1	mg/kg	0.0025	51	--	0.0015 U	0.0019 U	0.0011 U	**0.0048 JK**	0.0025 UJK	0.0022 U	0.0022 U
PCB Aroclors by CLP SOW SFAM01.1/3150.0												
Aroclor-1016	12674-11-2	mg/kg	0.0062	0.41	--	**0.15 J-**	**0.11 JK**	0.0031 U	**0.51 J-**	0.004 U	0.0061 U	0.0062 U
Aroclor-1221	11104-28-2	mg/kg	0.0062	0.2	--	0.0037 UJ	0.0051 UJK	0.0031 U	0.0032 UJ	0.004 U	0.0061 U	0.0062 U
Aroclor-1232	11141-16-5	mg/kg	0.0062	0.17	--	0.0037 UJ	0.0051 UJK	0.0031 U	0.0032 UJ	0.004 U	0.0061 U	0.0062 U
Aroclor-1242	53469-21-9	mg/kg	0.0062	0.23	--	0.0037 UJ	0.0051 UJK	0.0031 U	0.0032 UJ	0.004 U	0.0061 U	0.0062 U
Aroclor-1248	12672-29-6	mg/kg	0.0062	0.23	--	0.0037 UJ	0.0051 UJK	0.0031 U	0.0032 UJ	0.004 U	0.0061 U	0.0062 U
Aroclor-1254	11097-69-1	mg/kg	0.0062	0.12	--	0.0037 UJ	0.0051 UJK	0.0031 U	0.0032 UJ	0.004 U	0.0061 U	0.0062 U
Aroclor-1260	11096-82-5	mg/kg	0.0062	0.24	--	**0.18 J-**	**0.16 JK**	**0.21 J+**	**0.19 J-**	0.004 U	0.0061 U	0.0062 U
Aroclor-1262	37324-23-5	mg/kg	0.0062	NP	--	0.0037 UJ	0.0051 UJK	0.0031 U	0.0032 UJ	0.004 U	0.0061 U	0.0062 U
Aroclor-1268	11100-14-4	mg/kg	0.0062	NP	--	0.0037 UJ	0.0051 UJK	0.0031 U	0.0032 UJ	0.004 U	0.0061 U	0.0062 U
PCB Aroclor Congeners Group 1 by CLP SOW HRSM02.1												
PCB-105	32598-14-4	mg/kg	0.000057	0.12	--	**0.016**	**0.0041**	**0.029**	**0.021**	**0.000011**	**0.0000083**	**0.000019**
PCB-114	74472-37-0	mg/kg	0.0000039	0.12	--	**0.00093**	**0.00023**	**0.0024**	**0.0018**	0.00000096 U	0.00000097 U	**0.0000013 LJ**
PCB-118	31508-00-6	mg/kg	0.000105	0.12	--	**0.017**	**0.005**	**0.035**	**0.024**	**0.000018**	**0.000016**	**0.000035**
PCB-123	65510-44-3	mg/kg	0.0000051	0.12	--	**0.00048**	**0.00021**	**0.0015**	**0.00093**	0.00000089 U	0.0000009 U	**0.0000017 LJ**
PCB-126	57465-28-8	mg/kg	0.0000039	0.000036	--	**0.00062**	**0.0003**	**0.00076**	**0.00058**	0.00000065 U	0.00000066 U	**0.0000013 LJ**
PCB-156	38380-08-4	mg/kg	0.000033	0.12	--	**0.0063**	**0.0028**	**0.0067**	**0.0059**	**0.0000049**	**0.0000049**	**0.000011**
PCB-157	69782-90-7	mg/kg	0.0000102	0.12	--	**0.0013**	**0.0005**	**0.0015**	**0.0011**	**0.0000019 LJ**	**0.0000016 LJ**	**0.0000034**
PCB-167	52663-72-6	mg/kg	0.0000177	0.12	--	**0.0031**	**0.0014**	**0.0029**	**0.0024**	**0.0000023**	**0.0000026**	**0.0000059**
PCB-169	32774-16-6	mg/kg	0.00000093	0.00012	--	**0.00007 LJ**	**0.000053**	0.000046 U	0.000046 U	0.00000092 U	0.00000093 U	0.00000092 U
PCB-189	39635-31-9	mg/kg	0.0000057	0.13	--	**0.0012**	**0.00064**	**0.00081**	**0.00073**	0.00000086 U	**0.0000011 LJ**	**0.0000019 LJ**
PCB-77	32598-13-3	mg/kg	0.00003	0.038	--	**0.0059**	**0.0012**	**0.014**	**0.01**	**0.0000029**	**0.0000043**	**0.00001**
PCB-81	70362-50-4	mg/kg	0.000003	0.012	--	**0.00087**	**0.00018**	**0.0016**	**0.0012**	**0.00000085 LJ**	0.0000006 U	**0.000001 LJ**
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1												
PCB-1	2051-60-7	mg/kg	0.0000066	NP	--	**0.0013**	**0.0002**	**0.015**	**0.021**	**0.0000012 LJ**	**0.0000014 LJ**	**0.0000022**
PCB-10	33146-45-1	mg/kg	0.000002	NP	--	**0.00052**	**0.000071**	**0.0018**	**0.0018**	0.000002 U	0.000002 U	0.000002 U
PCB-100	39485-83-1	mg/kg	0.0000078	NP	--	**0.00021**	**0.00011**	**0.00033**	**0.00023**	0.000002 U	**0.0000015 LJ**	**0.0000026**
PCB-103	60145-21-3	mg/kg	0.0000114	NP	--	**0.00039**	**0.00022**	**0.00074**	**0.00052**	0.000002 U	**0.0000019 LJ**	**0.0000038**
PCB-104	56558-16-8	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.000099 U	0.000099 U	0.000002 U	0.000002 U	0.000002 U
PCB-106	70424-69-0	mg/kg	0.000102	NP	--	**0.022**	**0.0077**	**0.033**	**0.028**	**0.000016**	**0.000014**	**0.000034**
PCB-107	70424-68-9	mg/kg	0.0000105	NP	--	**0.0014**	**0.00056**	**0.0031**	**0.0019**	**0.0000015 LJ**	**0.000002**	**0.0000035**
PCB-108	70362-41-3	mg/kg	0.0000111	NP	--	**0.0017**	**0.00064**	**0.0028**	**0.0023**	**0.0000016 LJ**	**0.0000017 LJ**	**0.0000037**
PCB-109	74472-35-8	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.000099 U	0.000099 U	0.000002 U	0.000002 U	0.000002 U
PCB-11	2050-67-1	mg/kg	0.000006	NP	--	**0.00063**	**0.00021**	**0.00063**	**0.00059**	0.000002 U	0.000002 U	**0.000001 LJ**

Table 4-5 (continued)
Summary of Sediment Sample Results, South Lake and University Lake, 12-24 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 12 - 24 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L02	L02	L02	L02	L03	L03	L03
					Station	SED08	SED09	SED10	SED10	SED11	SED12	SED12
					Sample ID	CL-L02-SED08-24-51	CL-L02-SED09-24-51	CL-L02-SED10-24-51	CL-L02-SED10-24-52	CL-L03-SED11-24-51	CL-L03-SED12-24-51	CL-L03-SED12-24-52
					Depths	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24
					Date	04/07/2022	04/07/2022	04/07/2022	04/07/2022	04/04/2022	04/04/2022	04/04/2022
					Type	FS	FS	FS	FD	FS	FS	FD
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)												
PCB-110	38380-03-9	mg/kg	0.00036	NP	--	**0.056**	**0.026**	**0.14**	**0.093**	**0.000048**	**0.000051**	**0.00012**
PCB-111/115	39635-32-0/74472-38-1	mg/kg	0.000004	NP	--	**0.0012**	**0.00034**	**0.002**	**0.0013**	0.000004 U	0.000004 U	0.000004 U
PCB-113	68194-10-5	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.000099 U	0.000099 U	0.000002 U	0.000002 U	0.000002 U
PCB-119	56558-17-9	mg/kg	0.0000219	NP	--	**0.00087**	**0.00073**	**0.003**	**0.0017**	**0.0000027**	**0.0000035**	**0.0000073**
PCB-12	2974-92-7	mg/kg	0.000006	NP	--	**0.001**	**0.00014**	**0.0035**	**0.0039**	0.000002 U	0.000002 U	**0.000001 LJ**
PCB-120	68194-12-7	mg/kg	0.000006	NP	--	0.0001 U	**0.000075**	**0.00019**	**0.00014**	0.000002 U	0.000002 U	**0.0000013 LJ**
PCB-121	56558-18-0	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.000099 U	0.000099 U	0.000002 U	0.000002 U	0.000002 U
PCB-122	76842-07-4	mg/kg	0.000002	NP	--	**0.00053**	**0.00012**	**0.00073**	**0.0006**	0.000002 U	0.000002 U	0.000002 U
PCB-124	70424-70-3	mg/kg	0.0000084	NP	--	**0.0025**	**0.00051**	**0.0035**	**0.0025**	**0.0000011 LJ**	**0.0000013 LJ**	**0.0000028**
PCB-127	39635-33-1	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.000099 U	0.000099 U	0.000002 U	0.000002 U	0.000002 U
PCB-128/162	38380-07-3/39635-34-2	mg/kg	0.000069	NP	--	**0.0097**	**0.0042**	**0.012**	**0.0094**	**0.00001**	**0.0000091**	**0.000023**
PCB-129	55215-18-4	mg/kg	0.0000141	NP	--	**0.0028**	**0.001**	**0.0039**	**0.003**	**0.0000021**	**0.0000018 LJ**	**0.0000047**
PCB-13	2974-90-5	mg/kg	0.000006	NP	--	**0.00093**	**0.00011**	**0.0041**	**0.0032**	0.000002 U	0.000002 U	**0.0000017 LJ**
PCB-130	52663-66-8	mg/kg	0.000036	NP	--	**0.0036**	**0.0016**	**0.0049**	**0.0039**	**0.0000053**	**0.0000047**	**0.000012**
PCB-131/133	61798-70-7/35694-04-3	mg/kg	0.0000138	NP	--	**0.0019**	**0.00093**	**0.0026**	**0.002**	**0.0000022 LJ**	**0.0000021 LJ**	**0.0000046**
PCB-132/161	38380-05-1/74472-43-8	mg/kg	0.000078	NP	--	**0.021**	**0.0092**	**0.026**	**0.02**	**0.000012**	**0.000011**	**0.000026**
PCB-134/143	52704-70-8/68194-15-0	mg/kg	0.0000168	NP	--	**0.0035**	**0.0017**	**0.0051**	**0.0041**	**0.0000024 LJ**	**0.0000023 LJ**	**0.0000056**
PCB-135	52744-13-5	mg/kg	0.000054	NP	--	**0.012**	**0.0069**	**0.014**	**0.012**	**0.0000064**	**0.0000076**	**0.000018**
PCB-136	38411-22-2	mg/kg	0.000051	NP	--	**0.013**	**0.0036**	**0.01**	**0.0087**	**0.0000061**	**0.0000082**	**0.000017**
PCB-137	35694-06-5	mg/kg	0.000018	NP	--	**0.0031**	**0.0014**	**0.0046**	**0.0036**	**0.0000021**	**0.0000021**	**0.000006**
PCB-138/163/164	35065-28-2/74472-44-9/74472-45-0	mg/kg	0.00036	NP	--	**0.077**	**0.038**	**0.086**	**0.072**	**0.000051**	**0.000051**	**0.00012**
PCB-139/149	56030-56-9/38380-04-0	mg/kg	0.00036	NP	--	**0.07**	**0.042**	**0.086**	**0.072**	**0.00004**	**0.000051**	**0.00012**
PCB-14	34883-41-5	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.000099 U	0.000099 U	0.000002 U	0.000002 U	0.000002 U
PCB-140	59291-64-4	mg/kg	0.000006	NP	--	**0.00048**	**0.00035**	**0.00071**	**0.00044**	0.000002 U	0.000002 U	**0.0000017 LJ**
PCB-141	52712-04-6	mg/kg	0.000048	NP	--	**0.016**	**0.0081**	**0.018**	**0.016**	**0.0000056**	**0.0000062**	**0.000016**
PCB-142	41411-61-4	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.000099 U	0.000099 U	0.000002 U	0.000002 U	0.000002 U
PCB-144	68194-14-9	mg/kg	0.0000111	NP	--	**0.0035**	**0.0021**	**0.0045**	**0.0032**	**0.0000011 LJ**	**0.0000013 LJ**	**0.0000037**
PCB-145	74472-40-5	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	**0.000036 LJ**	**0.000035 LJ**	0.000002 U	0.000002 U	0.000002 U
PCB-146/165	51908-16-8/74472-46-1	mg/kg	0.000087	NP	--	**0.01**	**0.0057**	**0.012**	**0.01**	**0.000011**	**0.000012**	**0.000029**
PCB-147	68194-13-8	mg/kg	0.0000111	NP	--	**0.00095**	**0.00054**	**0.0015**	**0.0011**	**0.0000012 LJ**	**0.0000017 LJ**	**0.0000037**
PCB-148	74472-41-6	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.000099 U	0.000099 U	0.000002 U	0.000002 U	0.000002 U
PCB-15	2050-68-2	mg/kg	0.000018	NP	--	**0.013**	**0.002**	**0.052**	**0.045**	**0.0000031**	**0.0000027**	**0.000006**
PCB-150	68194-08-1	mg/kg	0.000006	NP	--	**0.00018**	**0.00008**	**0.00012**	**0.000086 LJ**	0.000002 U	0.000002 U	**0.0000011 LJ**
PCB-151	52663-63-5	mg/kg	0.000081	NP	--	**0.021**	**0.013**	**0.025**	**0.021**	**0.000009**	**0.00001**	**0.000027**
PCB-152	68194-09-2	mg/kg	0.000002	NP	--	**0.000072 LJ**	**0.000018 LJ**	**0.000073 LJ**	**0.000047 LJ**	0.000002 U	0.000002 U	0.000002 U
PCB-153	35065-27-1	mg/kg	0.00048	NP	--	**0.073**	**0.036**	**0.08**	**0.064**	**0.000056**	**0.000063**	**0.00016**
PCB-154	60145-22-4	mg/kg	0.0000252	NP	--	**0.00096**	**0.00038**	**0.00064**	**0.00048**	**0.0000032**	**0.0000039**	**0.0000084**
PCB-155	33979-03-2	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.000099 U	0.000099 U	0.000002 U	0.000002 U	0.000002 U
PCB-158/160	74472-42-7/41411-62-5	mg/kg	0.0000249	NP	--	**0.0073**	**0.0034**	**0.009**	**0.0078**	**0.0000036 LJ**	**0.0000033 LJ**	**0.0000083**
PCB-159	39635-35-3	mg/kg	0.000006	NP	--	**0.00064**	**0.00029**	**0.00075**	**0.00064**	0.000002 U	0.000002 U	**0.0000015 LJ**
PCB-16	38444-78-9	mg/kg	0.0000081	NP	--	**0.016**	**0.0022**	**0.064**	**0.055**	0.000002 U	0.000002 U	**0.0000027**
PCB-166	41411-63-6	mg/kg	0.000002	NP	--	**0.00014**	**0.000049 LJ**	**0.00028**	**0.00016**	0.000002 U	0.000002 U	0.000002 U
PCB-168	59291-65-5	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.000099 U	0.000099 U	0.000002 U	0.000002 U	0.000002 U
PCB-17	37680-66-3	mg/kg	0.0000147	NP	--	**0.019**	**0.0029**	**0.085**	**0.079**	**0.0000025**	**0.0000026**	**0.0000049**
PCB-170	35065-30-6	mg/kg	0.000111	NP	--	**0.022**	**0.012**	**0.017**	**0.016**	**0.000014**	**0.000016**	**0.000037**

Table 4-5 (continued)
Summary of Sediment Sample Results, South Lake and University Lake, 12-24 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 12 - 24 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L02	L02	L02	L02	L03	L03	L03
					Station	SED08	SED09	SED10	SED10	SED11	SED12	SED12
					Sample ID	CL-L02-SED08-24-51	CL-L02-SED09-24-51	CL-L02-SED10-24-51	CL-L02-SED10-24-52	CL-L03-SED11-24-51	CL-L03-SED12-24-51	CL-L03-SED12-24-52
					Depths	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24
					Date	04/07/2022	04/07/2022	04/07/2022	04/07/2022	04/04/2022	04/04/2022	04/04/2022
					Type	FS	FS	FS	FD	FS	FS	FD
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)												
PCB-171	52663-71-5	mg/kg	0.000033	NP	--	**0.0078**	**0.0041**	**0.0058**	**0.0053**	**0.0000046**	**0.0000042**	**0.000011**
PCB-172	52663-74-8	mg/kg	0.0000237	NP	--	**0.0048**	**0.0024**	**0.0037**	**0.0031**	**0.0000032**	**0.000004**	**0.0000079**
PCB-173	68194-16-1	mg/kg	0.000002	NP	--	**0.00058**	**0.00031**	**0.00047**	**0.00042**	0.000002 U	0.000002 U	0.000002 U
PCB-174	38411-25-5	mg/kg	0.000102	NP	--	**0.029**	**0.015**	**0.023**	**0.021**	**0.000012**	**0.000014**	**0.000034**
PCB-175	40186-70-7	mg/kg	0.0000066	NP	--	**0.00015**	**0.0005**	**0.00085**	**0.0011**	0.000002 U	0.000002 U	**0.0000022**
PCB-176	52663-65-7	mg/kg	0.0000132	NP	--	**0.0037**	**0.0019**	**0.0034**	**0.003**	**0.0000018 LJ**	**0.0000021**	**0.0000044**
PCB-177	52663-70-4	mg/kg	0.000066	NP	--	**0.016**	**0.0093**	**0.013**	**0.012**	**0.0000091**	**0.0000089**	**0.000022**
PCB-178	52663-67-9	mg/kg	0.0000264	NP	--	**0.0054**	**0.0031**	**0.0048**	**0.0044**	**0.0000037**	**0.0000037**	**0.0000088**
PCB-179	52663-64-6	mg/kg	0.000045	NP	--	**0.011**	**0.0063**	**0.012**	**0.01**	**0.0000056**	**0.000007**	**0.000015**
PCB-18	37680-65-2	mg/kg	0.0000225	NP	--	**0.046**	**0.0064**	**0.22**	**0.2**	**0.0000034**	**0.000004**	**0.0000075**
PCB-180	35065-29-3	mg/kg	0.000228	NP	--	**0.064**	**0.033**	**0.049**	**0.043**	**0.000027**	**0.000033**	**0.000076**
PCB-181	74472-47-2	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.000099 U	0.000099 U	0.000002 U	0.000002 U	0.000002 U
PCB-182/187	60145-23-5/52663-68-0	mg/kg	0.000153	NP	--	**0.034**	**0.019**	**0.031**	**0.027**	**0.000019**	**0.000021**	**0.000051**
PCB-183	52663-69-1	mg/kg	0.000063	NP	--	**0.015**	**0.0091**	**0.014**	**0.012**	**0.0000076**	**0.0000083**	**0.000021**
PCB-184	74472-48-3	mg/kg	0.000002	NP	--	**0.000058 LJ**	**0.000025 LJ**	**0.000037 LJ**	0.000099 U	0.000002 U	0.000002 U	0.000002 U
PCB-185	52712-05-7	mg/kg	0.000009	NP	--	**0.0035**	**0.0018**	**0.0031**	**0.0028**	0.000002 U	**0.0000016 LJ**	**0.000003**
PCB-186	74472-49-4	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.000099 U	0.000099 U	0.000002 U	0.000002 U	0.000002 U
PCB-188	74487-85-7	mg/kg	0.000002	NP	--	**0.000079 LJ**	**0.000046 LJ**	**0.000053 LJ**	**0.000041 LJ**	0.000002 U	0.000002 U	0.000002 U
PCB-19	38444-73-4	mg/kg	0.000002	NP	--	**0.0041**	**0.00068**	**0.017**	**0.016**	0.000002 U	0.000002 U	0.000002 U
PCB-190	41411-64-7	mg/kg	0.0000186	NP	--	**0.004**	**0.0023**	**0.0035**	**0.0032**	**0.0000026**	**0.0000033**	**0.0000062**
PCB-191	74472-50-7	mg/kg	0.000006	NP	--	**0.0011**	**0.00056**	**0.00074**	**0.00071**	0.000002 U	0.000002 U	**0.0000012 LJ**
PCB-192	74472-51-8	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.000099 U	0.000099 U	0.000002 U	0.000002 U	0.000002 U
PCB-193	69782-91-8	mg/kg	0.0000153	NP	--	**0.0022**	**0.0014**	**0.002**	**0.0018**	**0.0000024**	**0.0000022**	**0.0000051**
PCB-194	35694-08-7	mg/kg	0.000051	NP	--	**0.0077**	**0.0053**	**0.0081**	**0.0074**	**0.0000064**	**0.0000076**	**0.000017**
PCB-195	52663-78-2	mg/kg	0.0000183	NP	--	**0.0043**	**0.0024**	**0.0036**	**0.0033**	**0.0000025**	**0.0000028**	**0.0000061**
PCB-196/203	42740-50-1/52663-76-0	mg/kg	0.000066	NP	--	**0.0082**	**0.0041**	**0.013**	**0.01**	**0.0000086**	**0.0000097**	**0.000022**
PCB-197	33091-17-7	mg/kg	0.000002	NP	--	**0.00042**	**0.00023**	**0.00045**	**0.00042**	0.000002 U	0.000002 U	0.000002 U
PCB-198	68194-17-2	mg/kg	0.000002	NP	--	**0.000089 LJ**	**0.00015**	**0.00054**	**0.00023**	0.000002 U	0.000002 U	0.000002 U
PCB-199	52663-75-9	mg/kg	0.000072	NP	--	**0.008**	**0.0039**	**0.011**	**0.0099**	**0.0000099**	**0.00001**	**0.000024**
PCB-2	2051-61-8	mg/kg	0.000002	NP	--	**0.00046**	**0.00013**	**0.0014**	**0.0026**	0.000002 U	0.000002 U	0.000002 U
PCB-20/21/33	38444-84-7/55702-46-0/38444-86-9	mg/kg	0.000057	NP	--	**0.029**	**0.006**	**0.11**	**0.094**	**0.0000082**	**0.000011**	**0.000019**
PCB-200	52663-73-7	mg/kg	0.000002	NP	--	**0.00088**	**0.00051**	**0.0013**	**0.0013**	0.000002 U	0.000002 U	0.000002 U
PCB-201	40186-71-8	mg/kg	0.0000108	NP	--	**0.0014**	**0.0007**	**0.0017**	**0.0015**	**0.0000015 LJ**	**0.0000021**	**0.0000036**
PCB-202	2136-99-4	mg/kg	0.0000198	NP	--	**0.002**	**0.0012**	**0.003**	**0.0025**	**0.0000022**	**0.0000025**	**0.0000066**
PCB-204	74472-52-9	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.000099 U	0.000099 U	0.000002 U	0.000002 U	0.000002 U
PCB-205	74472-53-0	mg/kg	0.000002	NP	--	**0.00053**	**0.00032**	**0.00044**	**0.0005**	0.000002 U	0.000002 U	0.000002 U
PCB-206	40186-72-9	mg/kg	0.000057	NP	--	**0.004**	**0.0024**	**0.0063**	**0.0048**	**0.0000081**	**0.0000084**	**0.000019**
PCB-207	52663-79-3	mg/kg	0.0000087	NP	--	**0.0005**	**0.00028**	**0.00081**	**0.00061**	**0.0000011 LJ**	**0.0000011 LJ**	**0.0000029**
PCB-208	52663-77-1	mg/kg	0.000027	NP	--	**0.0012**	**0.00058**	**0.0017**	**0.0014**	**0.0000041**	**0.0000043**	**0.000009**
PCB-209	2051-24-3	mg/kg	0.000072	NP	--	**0.0027**	**0.0015**	**0.0031**	**0.003**	**0.0000096**	**0.0000094**	**0.000024**
PCB-22	38444-85-8	mg/kg	0.0000126	NP	--	**0.02**	**0.0043**	**0.055**	**0.043**	**0.0000021**	**0.0000021**	**0.0000042**
PCB-23	55720-44-0	mg/kg	0.000002	NP	--	**0.000055 LJ**	**0.000018 LJ**	**0.00022**	**0.00024**	0.000002 U	0.000002 U	0.000002 U
PCB-24	55702-45-9	mg/kg	0.000002	NP	--	**0.0019**	**0.00035**	**0.0087**	**0.007**	0.000002 U	0.000002 U	0.000002 U
PCB-25	55712-37-3	mg/kg	0.0000063	NP	--	**0.006**	**0.0013**	**0.016**	**0.01**	0.000002 U	0.000002 U	**0.0000021**
PCB-26	38444-81-4	mg/kg	0.000006	NP	--	**0.0094**	**0.0023**	**0.027**	**0.02**	0.000002 U	0.000002 U	**0.0000015 LJ**

Table 4-5 (continued)
Summary of Sediment Sample Results, South Lake and University Lake, 12-24 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 12 - 24 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L02	L02	L02	L02	L03	L03	L03
					Station	SED08	SED09	SED10	SED10	SED11	SED12	SED12
					Sample ID	CL-L02-SED08-24-51	CL-L02-SED09-24-51	CL-L02-SED10-24-51	CL-L02-SED10-24-52	CL-L03-SED11-24-51	CL-L03-SED12-24-51	CL-L03-SED12-24-52
					Depths	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24
					Date	04/07/2022	04/07/2022	04/07/2022	04/07/2022	04/04/2022	04/04/2022	04/04/2022
					Type	FS	FS	FS	FD	FS	FS	FD
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)												
PCB-27	38444-76-7	mg/kg	0.000002	NP	--	**0.0021**	**0.00032**	**0.0076**	**0.0072**	0.000002 U	0.000002 U	0.000002 U
PCB-28	7012-37-5	mg/kg	0.000051	NP	--	**0.057**	**0.015**	**0.12**	**0.11**	**0.0000077**	**0.0000086**	**0.000017**
PCB-29	15862-07-4	mg/kg	0.000002	NP	--	**0.00048**	**0.000096**	**0.0013**	**0.00099**	0.000002 U	0.000002 U	0.000002 U
PCB-3	2051-62-9	mg/kg	0.000006	NP	--	**0.001**	**0.00018**	**0.0084**	**0.016**	**0.0000013 LJ**	**0.0000013 LJ**	**0.000002**
PCB-30	35693-92-6	mg/kg	0.000002	NP	--	**0.000044 LJ**	0.00005 U	**0.00017**	**0.00015**	0.000002 U	0.000002 U	0.000002 U
PCB-31	16606-02-3	mg/kg	0.0000132	NP	--	**0.049**	**0.0098**	**0.15**	**0.11**	**0.0000024**	**0.0000022**	**0.0000044**
PCB-32	38444-77-8	mg/kg	0.0000066	NP	--	**0.014**	**0.0023**	**0.063**	**0.06**	0.000002 U	0.000002 U	**0.0000022**
PCB-34	37680-68-5	mg/kg	0.000002	NP	--	**0.00046**	**0.00012**	**0.0011**	**0.0008**	0.000002 U	0.000002 U	0.000002 U
PCB-35	37680-69-6	mg/kg	0.000002	NP	--	**0.00065**	**0.00017**	**0.0018**	**0.0017**	0.000002 U	0.000002 U	0.000002 U
PCB-36	38444-87-0	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.000099 U	0.000099 U	0.000002 U	0.000002 U	0.000002 U
PCB-37	38444-90-5	mg/kg	0.000045	NP	--	**0.015**	**0.003**	**0.046**	**0.042**	**0.0000052**	**0.0000063**	**0.000015**
PCB-38	53555-66-1	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.000099 U	0.000099 U	0.000002 U	0.000002 U	0.000002 U
PCB-39	38444-88-1	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.000099 U	0.000099 U	0.000002 U	0.000002 U	0.000002 U
PCB-4	13029-08-8	mg/kg	0.000006	NP	--	**0.0085**	**0.0014**	**0.037**	**0.035**	0.000002 U	0.000002 U	**0.0000016 LJ**
PCB-40	38444-93-8	mg/kg	0.000009	NP	--	**0.0067**	**0.0013**	**0.021**	**0.019**	**0.0000016 LJ**	0.000002 U	**0.000003**
PCB-41/64/71/72	52663-59-9/52663-58-8/41464-46-4/41464-42-0	mg/kg	0.00006	NP	--	**0.033**	**0.0062**	**0.1**	**0.085**	**0.0000086**	**0.000009**	**0.00002**
PCB-42/59	36559-22-5/74472-33-6	mg/kg	0.000033	NP	--	**0.013**	**0.0029**	**0.044**	**0.038**	**0.000004**	**0.0000051**	**0.000011**
PCB-43/49	70362-46-8/41464-40-8	mg/kg	0.000129	NP	--	**0.032**	**0.0068**	**0.095**	**0.074**	**0.000016**	**0.000019**	**0.000043**
PCB-44	41464-39-5	mg/kg	0.000066	NP	--	**0.037**	**0.0072**	**0.11**	**0.095**	**0.000011**	**0.0000097**	**0.000022**
PCB-45	70362-45-7	mg/kg	0.000006	NP	--	**0.0076**	**0.0012**	**0.023**	**0.02**	0.000002 U	0.000002 U	**0.000002**
PCB-46	41464-47-5	mg/kg	0.000006	NP	--	**0.003**	**0.0005**	**0.0094**	**0.0083**	0.000002 U	0.000002 U	**0.0000014 LJ**
PCB-47	2437-79-8	mg/kg	0.000066	NP	--	**0.014**	**0.0032**	**0.04**	**0.03**	**0.0000078**	**0.0000098**	**0.000022**
PCB-48/75	70362-47-9/32598-12-2	mg/kg	0.0000126	NP	--	**0.0072**	**0.0013**	**0.025**	**0.021**	**0.0000015 LJ**	**0.0000019 LJ**	**0.0000042**
PCB-5	16605-91-7	mg/kg	0.000002	NP	--	**0.00094**	**0.00015**	**0.004**	**0.0058**	0.000002 U	0.000002 U	0.000002 U
PCB-50	62796-65-0	mg/kg	0.000002	NP	--	**0.00016**	**0.000031 LJ**	**0.00048**	**0.00041**	0.000002 U	0.000002 U	0.000002 U
PCB-51	68194-04-7	mg/kg	0.000006	NP	--	**0.0024**	**0.00048**	**0.007**	**0.006**	0.000002 U	0.000002 U	**0.000001 LJ**
PCB-52/69	35693-99-3/60233-24-1	mg/kg	0.000111	NP	--	**0.043**	**0.0089**	**0.12**	**0.096**	**0.000018**	**0.000017**	**0.000037**
PCB-53	41464-41-9	mg/kg	0.0000069	NP	--	**0.0066**	**0.0012**	**0.022**	**0.02**	**0.0000011 LJ**	**0.000001 LJ**	**0.0000023**
PCB-54	15968-05-5	mg/kg	0.000002	NP	--	**0.00015**	**0.00003 LJ**	**0.00039**	**0.00039**	0.000002 U	0.000002 U	0.000002 U
PCB-55	74338-24-2	mg/kg	0.000006	NP	--	**0.00078**	**0.00012**	**0.002**	**0.002**	0.000002 U	0.000002 U	**0.0000016 LJ**
PCB-56/60	41464-43-1/33025-41-1	mg/kg	0.0000297	NP	--	**0.041**	**0.0051**	**0.11**	**0.086**	**0.0000053**	**0.0000049**	**0.0000099**
PCB-57	70424-67-8	mg/kg	0.000002	NP	--	**0.00025**	**0.000063**	**0.00081**	**0.00067**	0.000002 U	0.000002 U	0.000002 U
PCB-58	41464-49-7	mg/kg	0.000002	NP	--	**0.00015**	**0.000045 LJ**	**0.0003**	**0.00029**	0.000002 U	0.000002 U	0.000002 U
PCB-6	25569-80-6	mg/kg	0.0000105	NP	--	**0.0045**	**0.00068**	**0.02**	**0.021**	**0.0000018 LJ**	**0.0000023**	**0.0000035**
PCB-61/70	33284-53-6/32598-11-1	mg/kg	0.000066	NP	--	**0.049**	**0.0088**	**0.14**	**0.12**	**0.000013**	**0.0000098**	**0.000022**
PCB-62	54230-22-7	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.000099 U	0.000099 U	0.000002 U	0.000002 U	0.000002 U
PCB-63	74472-34-7	mg/kg	0.000006	NP	--	**0.0017**	**0.00031**	**0.0048**	**0.004**	0.000002 U	0.000002 U	**0.0000012 LJ**
PCB-65	33284-54-7	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.000099 U	0.000099 U	0.000002 U	0.000002 U	0.000002 U
PCB-66/76	32598-10-0/70362-48-0	mg/kg	0.00012	NP	--	**0.036**	**0.0075**	**0.11**	**0.093**	**0.000017**	**0.000018**	**0.00004**
PCB-67	73575-53-8	mg/kg	0.000006	NP	--	**0.0015**	**0.00029**	**0.005**	**0.0042**	0.000002 U	0.000002 U	**0.0000013 LJ**
PCB-68	73575-52-7	mg/kg	0.000006	NP	--	**0.00015**	**0.00008**	**0.00061**	**0.00057**	0.000002 U	0.000002 U	**0.0000014 LJ**
PCB-7	33284-50-3	mg/kg	0.000006	NP	--	**0.0012**	**0.00019**	**0.0057**	**0.0061**	0.000002 U	0.000002 U	**0.00000091 LJ**
PCB-73	74338-23-1	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.000099 U	0.000099 U	0.000002 U	0.000002 U	0.000002 U
PCB-74	32690-93-0	mg/kg	0.000033	NP	--	**0.02**	**0.0036**	**0.066**	**0.051**	**0.0000057**	**0.0000055**	**0.000011**
PCB-78	70362-49-1	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.000099 U	0.000099 U	0.000002 U	0.000002 U	0.000002 U

Table 4-5 (continued)
Summary of Sediment Sample Results, South Lake and University Lake, 12-24 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 12 - 24 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L02	L02	L02	L02	L03	L03	L03
					Station	SED08	SED09	SED10	SED10	SED11	SED12	SED12
					Sample ID	CL-L02-SED08-24-51	CL-L02-SED09-24-51	CL-L02-SED10-24-51	CL-L02-SED10-24-52	CL-L03-SED11-24-51	CL-L03-SED12-24-51	CL-L03-SED12-24-52
					Depths	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24
					Date	04/07/2022	04/07/2022	04/07/2022	04/07/2022	04/04/2022	04/04/2022	04/04/2022
					Type	FS	FS	FS	FD	FS	FS	FD
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)												
PCB-79	41464-48-6	mg/kg	0.0000069	NP	--	**0.00054**	**0.0002**	**0.0011**	**0.00076**	**0.0000011 LJ**	**0.0000011 LJ**	**0.0000023**
PCB-8	34883-43-7	mg/kg	0.000036	NP	--	**0.02**	**0.0023**	**0.09**	**0.092**	**0.0000062**	**0.0000069**	**0.000012**
PCB-80	33284-52-5	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.000099 U	0.000099 U	0.000002 U	0.000002 U	0.000002 U
PCB-82	52663-62-4	mg/kg	0.0000174	NP	--	**0.0055**	**0.002**	**0.02**	**0.014**	**0.0000032**	**0.0000025**	**0.0000058**
PCB-83/112	60145-20-2/74472-36-9	mg/kg	0.0000108	NP	--	**0.0018**	**0.00091**	**0.0069**	**0.0044**	**0.0000019 LJ**	**0.0000017 LJ**	**0.0000036 LJ**
PCB-84/92	52663-60-2/52663-61-3	mg/kg	0.000123	NP	--	**0.017**	**0.0099**	**0.061**	**0.04**	**0.000017**	**0.000017**	**0.000041**
PCB-85/116	65510-45-4/18259-05-7	mg/kg	0.0000252	NP	--	**0.0064**	**0.003**	**0.025**	**0.016**	**0.0000051**	**0.0000039 LJ**	**0.0000084**
PCB-86	55312-69-1	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.000099 U	0.000099 U	0.000002 U	0.000002 U	0.000002 U
PCB-87/117/125	38380-02-8/68194-11-6/74472-39-2	mg/kg	0.000048	NP	--	**0.016**	**0.0069**	**0.052**	**0.034**	**0.00001**	**0.0000066**	**0.000016**
PCB-88/91	55215-17-3/68194-05-8	mg/kg	0.000087	NP	--	**0.0056**	**0.002**	**0.014**	**0.0099**	**0.0000087**	**0.000012**	**0.000029**
PCB-89	73575-57-2	mg/kg	0.000002	NP	--	**0.00058**	**0.00023**	**0.0033**	**0.0022**	0.000002 U	0.000002 U	0.000002 U
PCB-9	34883-39-1	mg/kg	0.000006	NP	--	**0.0014**	**0.00016**	**0.0066**	**0.007**	0.000002 U	0.000002 U	**0.00000076 LJ**
PCB-90/101	68194-07-0/37680-73-2	mg/kg	0.00033	NP	--	**0.043**	**0.028**	**0.14**	**0.092**	**0.000046**	**0.000045**	**0.00011**
PCB-93	73575-56-1	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.000099 U	0.000099 U	0.000002 U	0.000002 U	0.000002 U
PCB-94	73575-55-0	mg/kg	0.000002	NP	--	**0.00032**	**0.000094**	**0.00072**	**0.00054**	0.000002 U	0.000002 U	0.000002 U
PCB-95	38379-99-6	mg/kg	0.000231	NP	--	**0.034**	**0.012**	**0.066**	**0.052**	0.000002 U	**0.000032**	**0.000077**
PCB-96	73575-54-9	mg/kg	0.000002	NP	--	**0.0004**	**0.000092**	**0.00095**	**0.00072**	0.000002 U	0.000002 U	0.000002 U
PCB-97	41464-51-1	mg/kg	0.00009	NP	--	**0.014**	**0.0064**	**0.049**	**0.032**	**0.000014**	**0.000012**	**0.00003**
PCB-98/102	60233-25-2/68194-06-9	mg/kg	0.00009	NP	--	0.0002 U	0.0001 U	0.0002 U	0.0002 U	**0.00003**	0.000004 U	0.000004 U
PCB-99	38380-01-7	mg/kg	0.000234	NP	--	**0.017**	**0.01**	**0.057**	**0.036**	**0.000031**	**0.000035**	**0.000078**
TEQ (Bird)	2222-22-3	mg/kg	0.00000219	NP	--	**0.00045**	**0.00011**	**0.00094**	**0.00068**	**0.00000024**	**0.00000022**	**0.00000073**
TEQ (Fish)	2222-22-4	mg/kg	2.52E-08	NP	--	**0.0000044**	**0.0000018**	**0.0000064**	**0.0000048**	**0.00000000091**	**0.0000000006**	**0.0000000084**
TEQ (Mammal)	2222-22-2	mg/kg	0.00000039	NP	--	**0.000066**	**0.000032**	**0.00008**	**0.000061**	**0.0000000017**	**0.0000000015**	**0.00000013**
Total DiCB	25512-42-9	mg/kg	0.000084	NP	--	**0.053 J**	**0.0074 J**	**0.23 J**	**0.22 J**	**0.000011 J**	**0.000012 J**	**0.000028 J**
Total HpCB	28655-71-2	mg/kg	0.00093	NP	--	**0.23 J**	**0.12 J**	**0.19 J**	**0.17 J**	**0.00011 J**	**0.00013 J**	**0.00031 J**
Total HxCB	26601-64-9	mg/kg	0.00192	NP	--	**0.36 J**	**0.19 J**	**0.42 J**	**0.35 J**	**0.00024 J**	**0.00026 J**	**0.00064 J**
Total MoCB	27323-18-8	mg/kg	0.0000126	NP	--	**0.0028 J**	**0.00051 J**	**0.025 J**	**0.04 J**	**0.0000025 J**	**0.0000027 J**	**0.0000042 J**
Total NoCB	53742-07-7	mg/kg	0.000093	NP	--	**0.0057 J**	**0.0033 J**	**0.0088 J**	**0.0068 J**	**0.000013 J**	**0.000014 J**	**0.000031 J**
Total OcCB	55722-26-4	mg/kg	0.000237	NP	--	**0.034 J**	**0.019 J**	**0.043 J**	**0.037 J**	**0.000031 J**	**0.000035 J**	**0.000079 J**
TOTAL PCBs	1111-11-1	mg/kg	0.0063	NP	--	**1.6 J**	**0.59 J**	**3.7 J**	**3.1 J**	**0.00083 J**	**0.00089 J**	**0.0021 J**
Total PeCB	25429-29-2	mg/kg	0.00192	NP	--	**0.28 J**	**0.13 J**	**0.75 J**	**0.51 J**	**0.00027 J**	**0.00027 J**	**0.00064 J**
Total TeCB	26914-33-0	mg/kg	0.00081	NP	--	**0.36 J**	**0.069 J**	**1.1 J**	**0.89 J**	**0.00012 J**	**0.00012 J**	**0.00027 J**
Total TrCB	25323-68-6	mg/kg	0.000243	NP	--	**0.29 J**	**0.057 J**	**0.99 J**	**0.86 J**	**0.000032 J**	**0.000037 J**	**0.000081 J**
CLP Organics by CLP SOW SFAM01.1/3151.0												
1,2,4,5-Tetrachlorobenzene	95-94-3	mg/kg	0.26	0.23	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
1,4-Dioxane	123-91-1	mg/kg	0.1	5.3	--	0.061 U	0.086 U	0.051 U	0.053 U	0.066 U	0.1 U	0.1 U
1-Methylnaphthalene	90-12-0	mg/kg	0.26	18	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
2,3,4,6-Tetrachlorophenol	58-90-2	mg/kg	0.26	190	--	0.15 UJ	0.22 U	0.13 UJ	0.13 UJ	0.17 U	0.25 U	0.26 U
Metals by CLP SOW SFAM01.1												
Aluminum	7429-90-5	mg/kg	102000	7700	--	**12000**	**25000**	**16000**	**21000**	**31000**	**34000**	**34000**
Antimony	7440-36-0	mg/kg	2.6	3.1	--	**1.4**	**1.9**	**2**	**10**	2.6 U	2 U	2.6 U
Arsenic	7440-38-2	mg/kg	28.8	0.68	--	**9.4**	**14 J**	**12 J**	**26 J**	**9.6**	**8.3**	**8.8**
Barium	7440-39-3	mg/kg	690	1500	--	**350**	**330 J**	**240 J**	**290 J**	**210**	**230**	**220**
Beryllium	7440-41-7	mg/kg	3.3	16	--	**0.38 LJ**	**0.72 LJ**	**0.48**	**0.64**	**1 LJ**	**1.1**	**1.1 LJ**
Cadmium	7440-43-9	mg/kg	2.67	0.71	--	**2.4**	**3.4**	**1.7**	**2.2**	**0.89 LJ**	**0.58 LJ**	**0.57 LJ**

Table 4-5 (continued)
Summary of Sediment Sample Results, South Lake and University Lake, 12-24 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 12 - 24 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L02	L02	L02	L02	L03	L03	L03
					Station	SED08	SED09	SED10	SED10	SED11	SED12	SED12
					Sample ID	CL-L02-SED08-24-51	CL-L02-SED09-24-51	CL-L02-SED10-24-51	CL-L02-SED10-24-52	CL-L03-SED11-24-51	CL-L03-SED12-24-51	CL-L03-SED12-24-52
					Depths	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24
					Date	04/07/2022	04/07/2022	04/07/2022	04/07/2022	04/04/2022	04/04/2022	04/04/2022
					Type	FS	FS	FS	FD	FS	FS	FD
Metals by CLP SOW SFAM01.1 (continued)												
Calcium	7440-70-2	mg/kg	15600	NP	--	4900	6700	3700	7300	4700	5100	5200
Chromium	7440-47-3	mg/kg	48	NP	--	22 J	34	24	36	16 J	15 J	16 J
Cobalt	7440-48-4	mg/kg	22.5	2.3	--	4.1 J	6.7 J	3.5 J	4.7 J	7.5 J	6.2 J	6.4 J
Copper	7440-50-8	mg/kg	75	310	--	75	100 J	39 J	56 J	25 J	21 J	22 J
Iron	7439-89-6	mg/kg	90000	5500	--	14000	29000	18000	25000	30000	30000	30000
Lead	7439-92-1	mg/kg	261	400	--	580	490	310	450	87	60	62
Magnesium	7439-95-4	mg/kg	18300	NP	--	1800	3600	2100	2900	5000	6100	6100
Manganese	7439-96-5	mg/kg	1590	180	--	250	450 J	370 J	520 J	530	470	510
Mercury	7439-97-6	mg/kg	0.69	1.1	--	0.52	0.55	0.36 LJ	0.45 LJ	0.23 LJ	0.15 LJ	0.14 LJ
Nickel	7440-02-0	mg/kg	72	150	--	11 J	19 J	8.6 J	11 J	22	24	24
Potassium	7440-09-7	mg/kg	12600	NP	--	920	2200	1300	1700	3700	4200	4100
Selenium	7782-49-2	mg/kg	3.6	39	--	0.68 LJ	1.1 LJ	0.43 LJ	0.57 LJ	1.1 LJ	1.2 LJ	1.1 LJ
Silver	7440-22-4	mg/kg	1.05	39	--	2.9	3.1	0.99	1.4	0.35 LJ	0.26 LJ	0.23 LJ
Sodium	7440-23-5	mg/kg	690	NP	--	84 LJ	190 LJ	98 LJ	130 LJ	190 LJ	230 LJ	230 LJ
Thallium	7440-28-0	mg/kg	1.3	0.078	--	0.68 U	0.89 U	0.47 U	0.56 U	1.3 U	1 U	1.3 U
Vanadium	7440-62-2	mg/kg	51	39	--	6.5 J	11 J	6.3 J	7.8 J	17 J	15 J	17 J
Zinc	7440-66-6	mg/kg	330	2300	--	270 J	770 J	240 J	320 J	110 J	80 J	89 J
Pesticides by CLP SOW SFAM01.1												
4,4'-DDD	72-54-8	mg/kg	0.03	0.19	--	0.0061 U	0.0085 U	0.0051 U	0.0053 U	0.01 J	0.01 U	0.01 U
4,4'-DDE	72-55-9	mg/kg	0.045	2	--	0.018 J	0.023	0.026 J	0.0071	0.015	0.01 U	0.01 U
4,4'-DDT	50-29-3	mg/kg	0.042	1.9	--	0.027	0.03	0.0051 U	0.0053 U	0.014 J	0.01 U	0.01 U
Aldrin	309-00-2	mg/kg	0.0201	0.039	--	0.0031 U	0.0016 JQK	0.0098 J	0.0027 U	0.0067 J	0.0052 U	0.0052 U
alpha-BHC	319-84-6	mg/kg	0.0156	0.086	--	0.0031 U	0.0028 JQK	0.0026 U	0.0027 U	0.0046 J	0.0052 U	0.0052 U
beta-BHC	319-85-7	mg/kg	0.0052	0.3	--	0.0054 J	0.0044 U	0.016	0.0027 U	0.0034 U	0.0052 U	0.0052 U
cis-Chlordane	5103-71-9	mg/kg	0.0168	3.6	--	0.0069 J	0.0044 U	0.0026 U	0.0027 U	0.0056	0.0052 U	0.0052 U
delta-BHC	319-86-8	mg/kg	0.0052	NP	--	0.0031 U	0.0044 U	0.026 J	0.0027 U	0.0034 U	0.0052 U	0.0052 U
Dieldrin	60-57-1	mg/kg	0.01	0.034	--	0.0047 LJ	0.0085 U	0.0057 J	0.0053 U	0.0066 U	0.01 U	0.01 U
Endosulfan I	959-98-8	mg/kg	0.0156	NP	--	0.0031 U	0.0044 U	0.0026 U	0.0027 U	0.0028 LJ	0.0052 U	0.0052 U
Endosulfan II	33213-65-9	mg/kg	0.01	NP	--	0.0061 U	0.0085 U	0.0051 U	0.0053 U	0.0066 U	0.01 U	0.01 U
Endosulfan sulfate	1031-07-8	mg/kg	0.01	38	--	0.0061 U	0.0085 U	0.0082 J	0.0053 U	0.0066 U	0.01 U	0.01 U
Endrin	72-20-8	mg/kg	0.01	1.9	--	0.0061 U	0.0085 U	0.0031 LJ	0.0053 U	0.0066 U	0.01 U	0.01 U
Endrin aldehyde	7421-93-4	mg/kg	0.01	NP	--	0.0075 J	0.013	0.0064 J	0.0053 U	0.0066 U	0.01 U	0.01 U
Endrin ketone	53494-70-5	mg/kg	0.01	NP	--	0.0061 U	0.0085 U	0.0051 U	0.0053 U	0.0066 U	0.01 U	0.01 U
gamma-BHC (Lindane)	58-89-9	mg/kg	0.0156	0.071	--	0.0022 LJ	0.0044 U	0.0026 U	0.0027 U	0.0039 J	0.0052 U	0.0052 U
Heptachlor	76-44-8	mg/kg	0.0198	0.13	--	0.0026 LJ	0.0044 U	0.012 J	0.0027 U	0.0066 J	0.0052 U	0.0052 U
Heptachlor epoxide	1024-57-3	mg/kg	0.0156	0.07	--	0.0079 J	0.0044 JK	0.0026 U	0.0027 U	0.0029 LJ	0.0052 U	0.0052 U
Methoxychlor	72-43-5	mg/kg	1.44	32	--	0.031 U	0.044 U	0.026 U	0.027 U	0.14 J	0.27	0.48
Toxaphene	8001-35-2	mg/kg	0.52	0.49	--	0.31 U	0.44 U	0.26 U	0.27 U	0.34 U	0.52 U	0.52 U
trans-Chlordane	5103-74-2	mg/kg	0.0052	3.6	--	0.013 J	0.0044 U	0.0084 J	0.0027 U	0.0034 U	0.0052 U	0.0052 U
SVOCs by CLP SOW SFAM01.1/3151.0												
1,1'-Biphenyl	92-52-4	mg/kg	0.26	4.7	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
2,2'-Oxybis(1-chloropropane)	108-60-1	mg/kg	0.52	310	--	0.31 U	0.43 UJK	0.26 U	0.27 U	0.34 U	0.51 U	0.52 U
2,4,5-Trichlorophenol	95-95-4	mg/kg	0.26	630	--	0.15 U	0.22 UJK	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
2,4,6-Trichlorophenol	88-06-2	mg/kg	0.26	6.3	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
2,4-Dichlorophenol	120-83-2	mg/kg	0.26	19	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U

Table 4-5 (continued)
Summary of Sediment Sample Results, South Lake and University Lake, 12-24 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 12 - 24 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L02	L02	L02	L02	L03	L03	L03
					Station	SED08	SED09	SED10	SED10	SED11	SED12	SED12
					Sample ID	CL-L02-SED08-24-51	CL-L02-SED09-24-51	CL-L02-SED10-24-51	CL-L02-SED10-24-52	CL-L03-SED11-24-51	CL-L03-SED12-24-51	CL-L03-SED12-24-52
					Depths	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24
					Date	04/07/2022	04/07/2022	04/07/2022	04/07/2022	04/04/2022	04/04/2022	04/04/2022
					Type	FS	FS	FS	FD	FS	FS	FD
SVOCs by CLP SOW SFAM01.1/3151.0 (continued)												
2,4-Dimethylphenol	105-67-9	mg/kg	0.26	130	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
2,4-Dinitrophenol	51-28-5	mg/kg	0.52	13	--	0.31 U	0.43 U	0.26 U	0.27 U	0.34 U	0.51 U	0.52 U
2,4-Dinitrotoluene	121-14-2	mg/kg	0.26	1.7	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
2,6-Dinitrotoluene	606-20-2	mg/kg	0.26	0.36	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
2-Chloronaphthalene	91-58-7	mg/kg	0.26	480	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
2-Chlorophenol	95-57-8	mg/kg	0.26	39	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
2-Methylnaphthalene	91-57-6	mg/kg	0.26	24	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
2-Methylphenol	95-48-7	mg/kg	0.52	320	--	0.31 U	0.43 U	0.26 U	0.27 U	0.34 U	0.51 U	0.52 U
2-Nitroaniline	88-74-4	mg/kg	0.26	63	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
2-Nitrophenol	88-75-5	mg/kg	0.26	NP	--	0.15 U	0.22 UJK	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.52	1.2	--	0.31 U	0.43 U	0.26 U	0.27 U	0.34 U	0.51 U	0.52 U
3-Nitroaniline	99-09-2	mg/kg	0.52	NP	--	0.31 U	0.43 U	0.26 U	0.27 U	0.34 U	0.51 U	0.52 U
4,6-Dinitro-2-methylphenol	534-52-1	mg/kg	0.52	0.51	--	0.31 U	0.43 U	0.26 U	0.27 UJ	0.34 U	0.51 U	0.52 U
4-Bromophenyl-phenylether	101-55-3	mg/kg	0.26	NP	--	0.15 U	0.22 UJK	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
4-Chloro-3-methylphenol	59-50-7	mg/kg	0.26	630	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
4-Chloroaniline	106-47-8	mg/kg	0.52	2.7	--	0.31 U	0.43 U	0.26 U	0.27 U	0.34 U	0.51 U	0.52 U
4-Chlorophenyl-phenyl ether	7005-72-3	mg/kg	0.26	NP	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
4-Methylphenol	106-44-5	mg/kg	0.52	130	--	0.31 U	0.43 U	0.26 U	0.27 U	0.34 U	0.51 U	0.52 U
4-Nitroaniline	100-01-6	mg/kg	0.52	25	--	0.31 U	0.43 U	0.26 U	0.27 U	0.34 U	0.51 U	0.52 U
4-Nitrophenol	100-02-7	mg/kg	0.52	NP	--	0.31 U	0.43 U	0.26 U	0.27 U	0.34 U	0.51 U	0.52 U
Acenaphthene	83-32-9	mg/kg	0.26	360	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
Acenaphthylene	208-96-8	mg/kg	0.26	NP	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
Acetophenone	98-86-2	mg/kg	0.52	780	--	0.31 U	0.43 U	0.26 U	0.27 U	0.34 U	0.51 U	0.52 U
Anthracene	120-12-7	mg/kg	0.26	1800	--	**0.36**	**0.28**	**0.27**	**0.25**	0.17 U	0.25 U	0.26 U
Atrazine	1912-24-9	mg/kg	0.52	2.4	--	0.31 U	0.43 U	0.26 U	0.27 U	0.34 U	0.51 U	0.52 U
Benzaldehyde	100-52-7	mg/kg	0.52	170	--	0.31 U	0.43 U	0.26 U	0.27 U	0.34 U	0.51 U	0.52 U
Benzo(a)anthracene	56-55-3	mg/kg	0.78	1.1	--	**0.75**	**0.99**	**0.46**	**0.63**	**0.14 LJ+**	0.25 U	0.26 U
Benzo(a)pyrene	50-32-8	mg/kg	0.78	0.11	--	**0.9**	**1.2**	**0.43**	**0.58**	**0.2 J+**	0.25 U	0.26 U
Benzo(b)fluoranthene	205-99-2	mg/kg	0.87	1.1	--	**1.4 J**	**1.8 JK**	**0.76 J**	**1 J**	**0.29 J+**	0.25 U	0.26 U
Benzo(g,h,i)perylene	191-24-2	mg/kg	0.78	NP	--	**0.19**	**1.1 JK**	**0.49**	**0.5**	**0.17 J+**	0.25 U	0.26 U
Benzo(k)fluoranthene	207-08-9	mg/kg	0.26	11	--	**0.54 J**	**0.64 JK**	**0.35 J**	**0.42 J**	0.17 U	0.25 U	0.26 U
Bis(2-chloroethoxy)methane	111-91-1	mg/kg	0.26	19	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
Bis(2-chloroethyl)ether	111-44-4	mg/kg	0.52	0.23	--	0.31 U	0.43 U	0.26 U	0.27 U	0.34 U	0.51 U	0.52 U
Bis(2-ethylhexyl)phthalate	117-81-7	mg/kg	0.26	39	--	**3.8**	**6.7**	**1.6**	**1.3**	0.17 U	0.25 U	0.26 U
Butylbenzylphthalate	85-68-7	mg/kg	0.26	290	--	**0.36**	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
Caprolactam	105-60-2	mg/kg	0.52	3100	--	0.31 U	0.43 U	0.26 U	0.27 U	0.34 U	0.51 U	0.52 U
Carbazole	86-74-8	mg/kg	0.52	NP	--	0.31 U	0.43 U	**0.14 LJ**	0.27 U	0.34 U	0.51 U	0.52 U
Chrysene	218-01-9	mg/kg	0.78	110	--	**1.1**	**1.3**	**0.44**	**0.69**	**0.15 LJ+**	0.25 U	0.26 U
Dibenzo(a,h)anthracene	53-70-3	mg/kg	0.26	0.11	--	0.15 U	**0.29**	0.13 U	**0.14**	0.17 U	0.25 U	0.26 U
Dibenzofuran	132-64-9	mg/kg	0.26	7.8	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
Diethylphthalate	84-66-2	mg/kg	0.78	5100	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	**0.18 LJ**	0.26 U
Dimethylphthalate	131-11-3	mg/kg	0.26	NP	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
Di-n-butylphthalate	84-74-2	mg/kg	0.26	630	--	**0.34**	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
Di-n-octylphthalate	117-84-0	mg/kg	0.52	63	--	0.31 U	0.43 U	0.26 U	0.27 U	0.34 U	0.51 U	0.52 U
Fluoranthene	206-44-0	mg/kg	0.78	240	--	**2**	**2.3**	**1.3**	**1.4**	**0.25 J+**	0.25 U	0.26 U

Table 4-5 (continued)
Summary of Sediment Sample Results, South Lake and University Lake, 12-24 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 12 - 24 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L02	L02	L02	L02	L03	L03	L03
					Station	SED08	SED09	SED10	SED10	SED11	SED12	SED12
					Sample ID	CL-L02-SED08-24-51	CL-L02-SED09-24-51	CL-L02-SED10-24-51	CL-L02-SED10-24-52	CL-L03-SED11-24-51	CL-L03-SED12-24-51	CL-L03-SED12-24-52
					Depths	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24
					Date	04/07/2022	04/07/2022	04/07/2022	04/07/2022	04/04/2022	04/04/2022	04/04/2022
					Type	FS	FS	FS	FD	FS	FS	FD
SVOCs by CLP SOW SFAM01.1/3151.0 (continued)												
Fluorene	86-73-7	mg/kg	0.26	240	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
Hexachlorobenzene	118-74-1	mg/kg	0.26	0.078	--	0.15 U	0.22 UJK	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
Hexachlorobutadiene	87-68-3	mg/kg	0.26	1.2	--	0.15 U	0.22 UJK	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
Hexachlorocyclo-pentadiene	77-47-4	mg/kg	1.56	0.18	--	0.31 UJ	0.43 U	0.26 UJ	0.27 UJ	0.34 UR	0.51 UR	0.52 U
Hexachloroethane	67-72-1	mg/kg	0.26	1.8	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	0.78	1.1	--	**0.47**	**1.2 JK**	**0.49**	**0.52**	**0.17 J+**	0.25 U	0.26 U
Isophorone	78-59-1	mg/kg	0.26	570	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
Naphthalene	91-20-3	mg/kg	0.26	2	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
Nitrobenzene	98-95-3	mg/kg	0.26	5.1	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
N-Nitroso-di-n propylamine	621-64-7	mg/kg	0.26	0.078	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
N-Nitrosodiphenylamine	86-30-6	mg/kg	0.26	110	--	0.15 U	0.22 U	0.13 U	0.13 U	0.17 U	0.25 U	0.26 U
Pentachlorophenol	87-86-5	mg/kg	0.0011	1	--	0.31 U	0.43 U	0.26 U	0.27 U	0.34 U	0.51 U	0.52 U
Phenanthrene	85-01-8	mg/kg	0.26	NP	--	**1.8**	**1**	**0.77**	**0.79**	0.17 U	0.25 U	0.26 U
Phenol	108-95-2	mg/kg	0.52	1900	--	0.31 U	0.43 U	0.26 U	0.27 U	0.34 U	0.51 U	0.52 U
Pyrene	129-00-0	mg/kg	0.78	180	--	**1.7**	**1.8**	**0.98**	**1.1**	**0.25 J+**	0.25 U	0.26 U

Notes

mg/kg - milligrams/kilogram
U - Not detected at reported quantitation limit.
J - estimated value.
+ - High biased. Actual concentration may be lower than the concentration reported.
R - Unusable, rejected should not be used.
L - Reported concentration is below the Contract Required Quantitation Limit (CRQL).
K - Unknown bias.
NP - Not published.
FS - Field Sample.
FD - Field Duplicate.
RSL - Regional Screening level, May 2022.
TR - Targeted Risk for cancer.
THQ - Target Hazard Quotient.
Yellow Highlight - exceeds background
Orange highlight - does not exceed background, but exceeds RSL

Table 4-6
Summary of Sediment Sample Results, South Lake and University Lake, 24-36 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 24 - 36 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L02	L02	L02	L03	L03
					Station	SED08	SED09	SED10	SED11	SED12
					Sample ID	CL-L02-SED08-36-51	CL-L02-SED09-36-51	CL-L02-SED10-36-51	CL-L03-SED11-36-51	CL-L03-SED12-36-51
					Depths	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36
					Date	04/07/2022	04/07/2022	04/07/2022	04/04/2022	04/04/2022
					Type	FS	FS	FS	FS	FS
Herbicides by SW846 Method 8151										
2,4,5-T	93-76-5	mg/kg	0.002	63	--	0.0013 U	0.0015 U	0.0012 U	0.002 U	0.002 U
2,4-D	94-75-7	mg/kg	0.03	70	--	0.019 U	0.022 U	0.018 U	0.03 U	0.03 U
2,4-DB	94-82-6	mg/kg	0.025	NP	--	0.016 U	0.019 U	0.015 U	0.025 U	0.025 U
Dalapon	75-99-0	mg/kg	0.12	190	--	0.078 U	0.091 U	0.073 U	0.12 U	0.12 U
Dicamba	1918-00-9	mg/kg	0.0099	190	--	0.0064 U	0.0074 U	0.0059 U	0.0099 U	0.0099 U
Dichlorprop	120-36-5	mg/kg	0.022	NP	--	0.014 U	0.017 U	0.013 U	0.022 U	0.022 U
Dinoseb	88-85-7	mg/kg	0.022	6.3	--	0.014 U	0.017 U	0.013 U	0.022 U	0.022 U
MCPA	94-74-6	mg/kg	1.9	3.2	--	**7.9 JK**	**5.9**	1.1 U	1.9 U	1.9 U
MCPP	93-65-2	mg/kg	9.4	6.3	--	6.1 U	7.1 U	5.6 U	9.4 U	9.4 U
Pentachlorophenol	87-86-5	mg/kg	0.00082	1	--	**0.0076**	**0.0043**	**0.0021 JQK**	0.00082 U	0.00081 U
Silvex (2,4,5-TP)	93-72-1	mg/kg	0.0019	51	--	**0.0021 JQK**	0.0014 U	**0.0015 JQK**	0.0019 U	0.0018 U
PCB Aroclors by CLP SOW SFAM01.1/3150.0										
Aroclor-1016	12674-11-2	mg/kg	0.0052	0.41	--	**0.43**	**1.2 JK**	0.0029 U	0.0052 U	0.005 U
Aroclor-1221	11104-28-2	mg/kg	0.0052	0.2	--	0.0034 U	0.0045 UJK	0.0029 U	0.0052 U	0.005 U
Aroclor-1232	11141-16-5	mg/kg	0.0052	0.17	--	0.0034 U	0.0045 UJK	0.0029 U	0.0052 U	0.005 U
Aroclor-1242	53469-21-9	mg/kg	0.0052	0.23	--	0.0034 U	0.0045 UJK	0.0029 U	0.0052 U	0.005 U
Aroclor-1248	12672-29-6	mg/kg	0.0052	0.23	--	0.0034 U	0.0045 UJK	0.0029 U	0.0052 U	0.005 U
Aroclor-1254	11097-69-1	mg/kg	0.0052	0.12	--	0.0034 U	0.0045 UJK	0.0029 U	0.0052 U	0.005 U
Aroclor-1260	11096-82-5	mg/kg	0.0052	0.24	--	**0.11 J**	**0.29 JK**	**0.072**	0.0052 U	0.005 U
Aroclor-1262	37324-23-5	mg/kg	0.0052	NP	--	0.0034 U	0.0045 UJK	0.0029 U	0.0052 U	0.005 U
Aroclor-1268	11100-14-4	mg/kg	0.0052	NP	--	0.0034 U	0.0045 UJK	0.0029 U	0.0052 U	0.005 U
PCB Aroclor Congeners Group 1 by CLP SOW HRSM02.1										
PCB-105	32598-14-4	mg/kg	0.00006	0.12	--	**0.016**	**0.022**	**0.0032**	**0.00002**	**0.000016**
PCB-114	74472-37-0	mg/kg	0.00000097	0.12	--	**0.0011**	**0.0017**	**0.00018**	0.00000096 U	0.00000097 U
PCB-118	31508-00-6	mg/kg	0.000102	0.12	--	**0.019**	**0.025**	**0.0038**	**0.000034**	**0.000024**
PCB-123	65510-44-3	mg/kg	0.0000045	0.12	--	**0.00079**	**0.0011**	**0.00013**	**0.0000015 LJ**	0.0000009 U
PCB-126	57465-28-8	mg/kg	0.0000045	0.000036	--	**0.00051**	**0.00065**	**0.00008**	0.00000065 U	**0.0000015 LJ**
PCB-156	38380-08-4	mg/kg	0.000033	0.12	--	**0.005**	**0.0055**	**0.0012**	**0.000011**	**0.0000087**
PCB-157	69782-90-7	mg/kg	0.0000093	0.12	--	**0.001**	**0.0011**	**0.00025**	**0.0000031**	**0.0000029**
PCB-167	52663-72-6	mg/kg	0.0000162	0.12	--	**0.0023**	**0.0026**	**0.00048**	**0.0000054**	**0.0000045**
PCB-169	32774-16-6	mg/kg	0.00000093	0.00012	--	**0.000055 LJ**	**0.000057**	0.0000098 U	0.00000092 U	0.00000093 U
PCB-189	39635-31-9	mg/kg	0.0000051	0.13	--	**0.00081**	**0.00081**	**0.00019**	**0.0000017 LJ**	**0.0000017 LJ**
PCB-77	32598-13-3	mg/kg	0.000024	0.038	--	**0.0075**	**0.013**	**0.0014**	**0.000008**	**0.0000033**
PCB-81	70362-50-4	mg/kg	0.0000036	0.012	--	**0.00076**	**0.00098**	**0.00017**	**0.0000011 LJ**	**0.0000012 LJ**
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1										
PCB-1	2051-60-7	mg/kg	0.000006	NP	--	**0.005**	**0.005**	**0.0053**	**0.0000017 LJ**	0.000002 U
PCB-10	33146-45-1	mg/kg	0.000002	NP	--	**0.0012**	**0.0014**	**0.00034**	0.000002 U	0.000002 U
PCB-100	39485-83-1	mg/kg	0.0000063	NP	--	**0.00018**	**0.00023**	**0.000033**	**0.0000021**	0.000002 U
PCB-103	60145-21-3	mg/kg	0.0000081	NP	--	**0.00036**	**0.00056**	**0.00008**	**0.0000027**	0.000002 U
PCB-104	56558-16-8	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.00002 U	0.000002 U	0.000002 U
PCB-106	70424-69-0	mg/kg	0.000087	NP	--	**0.022**	**0.029**	**0.0049**	**0.000029**	**0.000024**
PCB-107	70424-68-9	mg/kg	0.0000111	NP	--	**0.0014**	**0.0024**	**0.00039**	**0.0000037**	**0.0000036**
PCB-108	70362-41-3	mg/kg	0.000009	NP	--	**0.0016**	**0.0024**	**0.00028**	**0.000003**	**0.0000027**
PCB-109	74472-35-8	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.00002 U	0.000002 U	0.000002 U
PCB-11	2050-67-1	mg/kg	0.000002	NP	--	**0.00062**	**0.00049**	**0.00011**	0.000002 U	0.000002 U
PCB-110	38380-03-9	mg/kg	0.000297	NP	--	**0.049**	**0.086**	**0.019**	**0.000099**	**0.000077**

Table 4-6 (continued)
Summary of Sediment Sample Results, South Lake and University Lake, 24-36 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 24 - 36 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L02	L02	L02	L03	L03
					Station	SED08	SED09	SED10	SED11	SED12
					Sample ID	CL-L02-SED08-36-51	CL-L02-SED09-36-51	CL-L02-SED10-36-51	CL-L03-SED11-36-51	CL-L03-SED12-36-51
					Depths	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36
					Date	04/07/2022	04/07/2022	04/07/2022	04/04/2022	04/04/2022
					Type	FS	FS	FS	FS	FS
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)										
PCB-111/115	39635-32-0/74472-38-1	mg/kg	0.000004	NP	--	**0.001**	**0.0017**	**0.00029**	0.000004 U	0.000004 U
PCB-113	68194-10-5	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.00002 U	0.000002 U	0.000002 U
PCB-119	56558-17-9	mg/kg	0.0000165	NP	--	**0.00096**	**0.0019**	**0.00032**	**0.0000055**	**0.0000021**
PCB-12	2974-92-7	mg/kg	0.000002	NP	--	**0.002**	**0.0029**	**0.00057**	0.000002 U	0.000002 U
PCB-120	68194-12-7	mg/kg	0.000002	NP	--	0.0001 U	**0.000093**	**0.000023**	0.000002 U	0.000002 U
PCB-121	56558-18-0	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.00002 U	0.000002 U	0.000002 U
PCB-122	76842-07-4	mg/kg	0.000002	NP	--	**0.00049**	**0.00068**	**0.000092**	0.000002 U	0.000002 U
PCB-124	70424-70-3	mg/kg	0.0000081	NP	--	**0.0021**	**0.0022**	**0.00045**	**0.0000024**	**0.0000027**
PCB-127	39635-33-1	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.00002 U	0.000002 U	0.000002 U
PCB-128/162	38380-07-3/39635-34-2	mg/kg	0.00006	NP	--	**0.008**	**0.009**	**0.0019**	**0.00002**	**0.000018**
PCB-129	55215-18-4	mg/kg	0.0000135	NP	--	**0.0022**	**0.0028**	**0.00057**	**0.0000042**	**0.0000045**
PCB-13	2974-90-5	mg/kg	0.000002	NP	--	**0.0023**	**0.0023**	**0.00058**	0.000002 U	0.000002 U
PCB-130	52663-66-8	mg/kg	0.00003	NP	--	**0.0031**	**0.0041**	**0.00066**	**0.00001**	**0.00001**
PCB-131/133	61798-70-7/35694-04-3	mg/kg	0.0000117	NP	--	**0.0015**	**0.0021**	**0.00037**	**0.0000039 LJ**	**0.0000037 LJ**
PCB-132/161	38380-05-1/74472-43-8	mg/kg	0.000078	NP	--	**0.02**	**0.024**	**0.0047**	**0.000024**	**0.000026**
PCB-134/143	52704-70-8/68194-15-0	mg/kg	0.0000153	NP	--	**0.0029**	**0.0043**	**0.00079**	**0.0000049**	**0.0000051**
PCB-135	52744-13-5	mg/kg	0.000048	NP	--	**0.0084**	**0.013**	**0.0027**	**0.000016**	**0.000012**
PCB-136	38411-22-2	mg/kg	0.000042	NP	--	**0.0076**	**0.0076**	**0.0017**	**0.000014**	**0.0000097**
PCB-137	35694-06-5	mg/kg	0.0000144	NP	--	**0.0027**	**0.0035**	**0.00066**	**0.0000045**	**0.0000048**
PCB-138/163/164	35065-28-2/74472-44-9/74472-45-0	mg/kg	0.00033	NP	--	**0.062**	**0.071**	**0.014**	**0.00011**	**0.00009**
PCB-139/149	56030-56-9/38380-04-0	mg/kg	0.000288	NP	--	**0.054**	**0.078**	**0.016**	**0.000096**	**0.000071**
PCB-14	34883-41-5	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.00002 U	0.000002 U	0.000002 U
PCB-140	59291-64-4	mg/kg	0.0000045	NP	--	**0.00032**	**0.00055**	**0.00007**	**0.0000015 LJ**	**0.0000013 LJ**
PCB-141	52712-04-6	mg/kg	0.000042	NP	--	**0.013**	**0.017**	**0.0034**	**0.000014**	**0.000012**
PCB-142	41411-61-4	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.00002 U	0.000002 U	0.000002 U
PCB-144	68194-14-9	mg/kg	0.000009	NP	--	**0.0026**	**0.0038**	**0.00082**	**0.000003**	**0.0000026**
PCB-145	74472-40-5	mg/kg	0.000002	NP	--	**0.000015 LJ**	**0.000019 LJ**	0.00002 U	0.000002 U	0.000002 U
PCB-146/165	51908-16-8/74472-46-1	mg/kg	0.000069	NP	--	**0.0077**	**0.011**	**0.002**	**0.000023**	**0.000018**
PCB-147	68194-13-8	mg/kg	0.0000084	NP	--	**0.00064**	**0.0011**	**0.00018**	**0.0000028**	**0.0000022**
PCB-148	74472-41-6	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.00002 U	0.000002 U	0.000002 U
PCB-15	2050-68-2	mg/kg	0.0000132	NP	--	**0.024**	**0.037**	**0.0067**	**0.0000044**	**0.0000025**
PCB-150	68194-08-1	mg/kg	0.000002	NP	--	**0.000096 LJ**	**0.000089**	**0.000017 LJ**	0.000002 U	0.000002 U
PCB-151	52663-63-5	mg/kg	0.000063	NP	--	**0.015**	**0.022**	**0.0053**	**0.000021**	**0.000016**
PCB-152	68194-09-2	mg/kg	0.000002	NP	--	**0.000037 LJ**	**0.000047 LJ**	**0.000011 LJ**	0.000002 U	0.000002 U
PCB-153	35065-27-1	mg/kg	0.00036	NP	--	**0.051**	**0.072**	**0.013**	**0.00012**	**0.000082**
PCB-154	60145-22-4	mg/kg	0.0000174	NP	--	**0.00051**	**0.00051**	**0.000093**	**0.0000058**	**0.0000029**
PCB-155	33979-03-2	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.00002 U	0.000002 U	0.000002 U
PCB-158/160	74472-42-7/41411-62-5	mg/kg	0.0000243	NP	--	**0.0058**	**0.0067**	**0.0014**	**0.0000081**	**0.000008**
PCB-159	39635-35-3	mg/kg	0.0000042	NP	--	**0.00056**	**0.00041**	**0.00012**	**0.0000014 LJ**	**0.0000013 LJ**
PCB-16	38444-78-9	mg/kg	0.000006	NP	--	**0.029**	**0.043**	**0.009**	**0.0000018 LJ**	0.000002 U
PCB-166	41411-63-6	mg/kg	0.000002	NP	--	**0.00015**	**0.00016**	**0.000027**	0.000002 U	0.000002 U
PCB-168	59291-65-5	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.00002 U	0.000002 U	0.000002 U
PCB-17	37680-66-3	mg/kg	0.0000111	NP	--	**0.034**	**0.058**	**0.012**	**0.0000037**	**0.0000018 LJ**
PCB-170	35065-30-6	mg/kg	0.00009	NP	--	**0.014**	**0.017**	**0.0035**	**0.00003**	**0.000023**
PCB-171	52663-71-5	mg/kg	0.0000288	NP	--	**0.0055**	**0.0053**	**0.0014**	**0.0000096**	**0.0000078**
PCB-172	52663-74-8	mg/kg	0.0000189	NP	--	**0.0027**	**0.0034**	**0.00085**	**0.0000063**	**0.0000052**

Table 4-6 (continued)
Summary of Sediment Sample Results, South Lake and University Lake, 24-36 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 24 - 36 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L02	L02	L02	L03	L03
					Station	SED08	SED09	SED10	SED11	SED12
					Sample ID	CL-L02-SED08-36-51	CL-L02-SED09-36-51	CL-L02-SED10-36-51	CL-L03-SED11-36-51	CL-L03-SED12-36-51
					Depths	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36
					Date	04/07/2022	04/07/2022	04/07/2022	04/04/2022	04/04/2022
					Type	FS	FS	FS	FS	FS
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)										
PCB-173	68194-16-1	mg/kg	0.000002	NP	--	**0.00034**	**0.00041**	**0.00011**	0.000002 U	0.000002 U
PCB-174	38411-25-5	mg/kg	0.000087	NP	--	**0.022**	**0.021**	**0.0059**	**0.000029**	**0.000022**
PCB-175	40186-70-7	mg/kg	0.000006	NP	--	**0.0026**	**0.0021**	**0.000099**	**0.0000014 LJ**	0.000002 U
PCB-176	52663-65-7	mg/kg	0.0000099	NP	--	**0.0028**	**0.0029**	**0.00076**	**0.0000033**	**0.0000029**
PCB-177	52663-70-4	mg/kg	0.00006	NP	--	**0.012**	**0.012**	**0.0033**	**0.00002**	**0.000013**
PCB-178	52663-67-9	mg/kg	0.0000201	NP	--	**0.0041**	**0.0044**	**0.0012**	**0.0000067**	**0.0000056**
PCB-179	52663-64-6	mg/kg	0.000039	NP	--	**0.0088**	**0.01**	**0.0027**	**0.000013**	**0.0000085**
PCB-18	37680-65-2	mg/kg	0.0000186	NP	--	**0.087**	**0.15**	**0.032**	**0.0000062**	**0.0000033**
PCB-180	35065-29-3	mg/kg	0.000195	NP	--	**0.043**	**0.048**	**0.012**	**0.000065**	**0.000048**
PCB-181	74472-47-2	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.00002 U	0.000002 U	0.000002 U
PCB-182/187	60145-23-5/52663-68-0	mg/kg	0.000123	NP	--	**0.024**	**0.027**	**0.0076**	**0.000041**	**0.00003**
PCB-183	52663-69-1	mg/kg	0.000051	NP	--	**0.012**	**0.013**	**0.0034**	**0.000017**	**0.000013**
PCB-184	74472-48-3	mg/kg	0.000002	NP	--	**0.000026 LJ**	**0.000027 LJ**	**0.000011 LJ**	0.000002 U	0.000002 U
PCB-185	52712-05-7	mg/kg	0.0000075	NP	--	**0.0026**	**0.0026**	**0.00076**	**0.0000025**	**0.0000021**
PCB-186	74472-49-4	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.00002 U	0.000002 U	0.000002 U
PCB-188	74487-85-7	mg/kg	0.000002	NP	--	**0.00004 LJ**	**0.000048 LJ**	**0.000012 LJ**	0.000002 U	0.000002 U
PCB-19	38444-73-4	mg/kg	0.000002	NP	--	**0.0072**	**0.011**	**0.0028**	0.000002 U	0.000002 U
PCB-190	41411-64-7	mg/kg	0.0000159	NP	--	**0.0029**	**0.0034**	**0.00073**	**0.0000053**	**0.0000036**
PCB-191	74472-50-7	mg/kg	0.000006	NP	--	**0.00066**	**0.00072**	**0.00018**	**0.0000013 LJ**	0.000002 U
PCB-192	74472-51-8	mg/kg	0.000002	NP	--	**0.0021**	0.00005 U	0.00002 U	0.000002 U	0.000002 U
PCB-193	69782-91-8	mg/kg	0.0000135	NP	--	**0.0017**	**0.002**	**0.00047**	**0.0000045**	**0.0000028**
PCB-194	35694-08-7	mg/kg	0.000039	NP	--	**0.0069**	**0.0087**	**0.0019**	**0.000013**	**0.0000097**
PCB-195	52663-78-2	mg/kg	0.0000159	NP	--	**0.0037**	**0.0036**	**0.00014**	**0.0000053**	**0.0000039**
PCB-196/203	42740-50-1/52663-76-0	mg/kg	0.000054	NP	--	**0.0064**	**0.0091**	**0.0023**	**0.000018**	**0.000013**
PCB-197	33091-17-7	mg/kg	0.000006	NP	--	**0.00031**	**0.00038**	**0.00011**	**0.0000014 LJ**	0.000002 U
PCB-198	68194-17-2	mg/kg	0.000002	NP	--	**0.000043 LJ**	**0.00041**	**0.00019**	0.000002 U	0.000002 U
PCB-199	52663-75-9	mg/kg	0.000063	NP	--	**0.0057**	**0.0077**	**0.002**	**0.000021**	**0.000016**
PCB-2	2051-61-8	mg/kg	0.000002	NP	--	**0.00062**	**0.00059**	**0.00065**	0.000002 U	0.000002 U
PCB-20/21/33	38444-84-7/55702-46-0/38444-86-9	mg/kg	0.000042	NP	--	**0.071**	**0.11**	**0.033**	**0.000014**	**0.0000094**
PCB-200	52663-73-7	mg/kg	0.0000051	NP	--	**0.00064**	**0.00097**	**0.00028**	**0.0000017 LJ**	**0.0000014 LJ**
PCB-201	40186-71-8	mg/kg	0.0000108	NP	--	**0.00089**	**0.0012**	**0.0004**	**0.0000036**	**0.0000023**
PCB-202	2136-99-4	mg/kg	0.0000156	NP	--	**0.0016**	**0.002**	**0.00073**	**0.0000052**	**0.0000042**
PCB-204	74472-52-9	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.00002 U	0.000002 U	0.000002 U
PCB-205	74472-53-0	mg/kg	0.000006	NP	--	**0.00045**	**0.00053**	**0.00012**	0.000002 U	**0.0000013 LJ**
PCB-206	40186-72-9	mg/kg	0.000048	NP	--	**0.0034**	**0.0048**	**0.002**	**0.000016**	**0.000016**
PCB-207	52663-79-3	mg/kg	0.0000075	NP	--	**0.00037**	**0.00064**	**0.00023**	**0.0000025**	**0.0000025**
PCB-208	52663-77-1	mg/kg	0.0000249	NP	--	**0.001**	**0.0013**	**0.00064**	**0.0000083**	**0.0000078**
PCB-209	2051-24-3	mg/kg	0.000063	NP	--	**0.0021**	**0.0025**	**0.002**	**0.000019**	**0.000021**
PCB-22	38444-85-8	mg/kg	0.0000087	NP	--	**0.042**	**0.063**	**0.018**	**0.0000029**	**0.0000017 LJ**
PCB-23	55720-44-0	mg/kg	0.000002	NP	--	**0.000094 LJ**	**0.00016**	**0.00007**	0.000002 U	0.000002 U
PCB-24	55702-45-9	mg/kg	0.000002	NP	--	**0.0029**	**0.0058**	**0.0011**	0.000002 U	0.000002 U
PCB-25	55712-37-3	mg/kg	0.000006	NP	--	**0.012**	**0.018**	**0.0044**	**0.0000015 LJ**	0.000002 U
PCB-26	38444-81-4	mg/kg	0.000006	NP	--	**0.021**	**0.029**	**0.0089**	**0.0000013 LJ**	0.000002 U
PCB-27	38444-76-7	mg/kg	0.000002	NP	--	**0.0034**	**0.005**	**0.001**	0.000002 U	0.000002 U
PCB-28	7012-37-5	mg/kg	0.000036	NP	--	**0.1**	**0.2**	**0.041**	**0.000012**	**0.0000063**
PCB-29	15862-07-4	mg/kg	0.000002	NP	--	**0.00099**	**0.0016**	**0.00046**	0.000002 U	0.000002 U

Table 4-6 (continued)
Summary of Sediment Sample Results, South Lake and University Lake, 24-36 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 24 - 36 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L02	L02	L02	L03	L03
					Station	SED08	SED09	SED10	SED11	SED12
					Sample ID	CL-L02-SED08-36-51	CL-L02-SED09-36-51	CL-L02-SED10-36-51	CL-L03-SED11-36-51	CL-L03-SED12-36-51
					Depths	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36
					Date	04/07/2022	04/07/2022	04/07/2022	04/04/2022	04/04/2022
					Type	FS	FS	FS	FS	FS
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)										
PCB-3	2051-62-9	mg/kg	0.000006	NP	--	**0.0031**	**0.0033**	**0.0038**	**0.0000017 LJ**	0.000002 U
PCB-30	35693-92-6	mg/kg	0.000002	NP	--	**0.00007 LJ**	**0.00013**	**0.000022**	0.000002 U	0.000002 U
PCB-31	16606-02-3	mg/kg	0.0000117	NP	--	**0.12**	**0.15**	**0.044**	**0.0000039**	**0.0000032**
PCB-32	38444-77-8	mg/kg	0.000006	NP	--	**0.02**	**0.042**	**0.0089**	**0.0000018 LJ**	0.000002 U
PCB-34	37680-68-5	mg/kg	0.000002	NP	--	**0.00084**	**0.0012**	**0.00031**	0.000002 U	0.000002 U
PCB-35	37680-69-6	mg/kg	0.000002	NP	--	**0.0017**	**0.0027**	**0.00037**	0.000002 U	0.000002 U
PCB-36	38444-87-0	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.00002 U	0.000002 U	0.000002 U
PCB-37	38444-90-5	mg/kg	0.00003	NP	--	**0.035**	**0.051**	**0.0084**	**0.00001**	**0.0000044**
PCB-38	53555-66-1	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.00002 U	0.000002 U	0.000002 U
PCB-39	38444-88-1	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.00002 U	0.000002 U	0.000002 U
PCB-4	13029-08-8	mg/kg	0.000002	NP	--	**0.021**	**0.025**	**0.0066**	0.000002 U	0.000002 U
PCB-40	38444-93-8	mg/kg	0.0000078	NP	--	**0.011**	**0.018**	**0.0019**	**0.0000026**	**0.0000021**
PCB-41/64/71/72	52663-59-9/52663-58-8/41464-46-4/41464-42-0	mg/kg	0.000048	NP	--	**0.053**	**0.087**	**0.0079**	**0.000016**	**0.0000098**
PCB-42/59	36559-22-5/74472-33-6	mg/kg	0.0000267	NP	--	**0.023**	**0.037**	**0.0039**	**0.0000089**	**0.0000049**
PCB-43/49	70362-46-8/41464-40-8	mg/kg	0.000099	NP	--	**0.049**	**0.081**	**0.0085**	**0.000033**	**0.000015**
PCB-44	41464-39-5	mg/kg	0.000054	NP	--	**0.059**	**0.095**	**0.0096**	**0.000018**	**0.000012**
PCB-45	70362-45-7	mg/kg	0.0000045	NP	--	**0.012**	**0.02**	**0.0024**	**0.0000015 LJ**	**0.0000015 LJ**
PCB-46	41464-47-5	mg/kg	0.000006	NP	--	**0.0048**	**0.0072**	**0.00099**	**0.0000013 LJ**	0.000002 U
PCB-47	2437-79-8	mg/kg	0.000048	NP	--	**0.021**	**0.033**	**0.0034**	**0.000016**	**0.0000058**
PCB-48/75	70362-47-9/32598-12-2	mg/kg	0.0000084	NP	--	**0.012**	**0.022**	**0.0021**	**0.0000028 LJ**	**0.0000017 LJ**
PCB-5	16605-91-7	mg/kg	0.000002	NP	--	**0.003**	**0.0031**	**0.0008**	0.000002 U	0.000002 U
PCB-50	62796-65-0	mg/kg	0.000002	NP	--	**0.00025**	**0.0004**	**0.000047**	0.000002 U	0.000002 U
PCB-51	68194-04-7	mg/kg	0.000002	NP	--	**0.0035**	**0.0057**	**0.00074**	0.000002 U	0.000002 U
PCB-52/69	35693-99-3/60233-24-1	mg/kg	0.000093	NP	--	**0.063**	**0.095**	**0.01**	**0.000031**	**0.00002**
PCB-53	41464-41-9	mg/kg	0.000006	NP	--	**0.011**	**0.019**	**0.0023**	**0.000002**	**0.0000016 LJ**
PCB-54	15968-05-5	mg/kg	0.000002	NP	--	**0.0002**	**0.0003**	**0.000054**	0.000002 U	0.000002 U
PCB-55	74338-24-2	mg/kg	0.000006	NP	--	**0.001**	**0.0014**	**0.00025**	**0.0000013 LJ**	0.000002 U
PCB-56/60	41464-43-1/33025-41-1	mg/kg	0.0000267	NP	--	**0.057**	**0.082**	**0.011**	**0.0000089**	**0.0000075**
PCB-57	70424-67-8	mg/kg	0.000002	NP	--	**0.00038**	**0.00065**	**0.000071**	0.000002 U	0.000002 U
PCB-58	41464-49-7	mg/kg	0.000002	NP	--	**0.00021**	**0.00029**	**0.000038**	0.000002 U	0.000002 U
PCB-6	25569-80-6	mg/kg	0.0000084	NP	--	**0.011**	**0.011**	**0.0037**	**0.0000028**	0.000002 U
PCB-61/70	33284-53-6/32598-11-1	mg/kg	0.000063	NP	--	**0.074**	**0.11**	**0.013**	**0.000021**	**0.000019**
PCB-62	54230-22-7	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.00002 U	0.000002 U	0.000002 U
PCB-63	74472-34-7	mg/kg	0.000006	NP	--	**0.0025**	**0.0039**	**0.0004**	**0.000001 LJ**	0.000002 U
PCB-65	33284-54-7	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.00002 U	0.000002 U	0.000002 U
PCB-66/76	32598-10-0/70362-48-0	mg/kg	0.000099	NP	--	**0.054**	**0.09**	**0.0091**	**0.000033**	**0.000019**
PCB-67	73575-53-8	mg/kg	0.000006	NP	--	**0.0025**	**0.0041**	**0.0005**	**0.0000012 LJ**	0.000002 U
PCB-68	73575-52-7	mg/kg	0.000002	NP	--	**0.000099 LJ**	**0.00052**	**0.000068**	0.000002 U	0.000002 U
PCB-7	33284-50-3	mg/kg	0.000002	NP	--	**0.0029**	**0.0041**	**0.0012**	0.000002 U	0.000002 U
PCB-73	74338-23-1	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.00002 U	0.000002 U	0.000002 U
PCB-74	32690-93-0	mg/kg	0.0000255	NP	--	**0.031**	**0.049**	**0.0052**	**0.0000085**	**0.0000059**
PCB-78	70362-49-1	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.00002 U	0.000002 U	0.000002 U
PCB-79	41464-48-6	mg/kg	0.0000048	NP	--	**0.00044**	**0.00049**	**0.000097**	**0.0000016 LJ**	**0.0000012 LJ**
PCB-8	34883-43-7	mg/kg	0.0000258	NP	--	**0.046**	**0.046**	**0.018**	**0.0000086**	**0.0000051**
PCB-80	33284-52-5	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.00002 U	0.000002 U	0.000002 U
PCB-82	52663-62-4	mg/kg	0.0000177	NP	--	**0.0036**	**0.013**	**0.0013**	**0.0000059**	**0.0000059**

Table 4-6 (continued)
Summary of Sediment Sample Results, South Lake and University Lake, 24-36 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 24 - 36 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L02	L02	L02	L03	L03
					Station	SED08	SED09	SED10	SED11	SED12
					Sample ID	CL-L02-SED08-36-51	CL-L02-SED09-36-51	CL-L02-SED10-36-51	CL-L03-SED11-36-51	CL-L03-SED12-36-51
					Depths	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36
					Date	04/07/2022	04/07/2022	04/07/2022	04/04/2022	04/04/2022
					Type	FS	FS	FS	FS	FS
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)										
PCB-83/112	60145-20-2/74472-36-9	mg/kg	0.0000105	NP	--	**0.0017**	**0.0043**	**0.00076**	**0.0000034 LJ**	**0.0000035 LJ**
PCB-84/92	52663-60-2/52663-61-3	mg/kg	0.000102	NP	--	**0.017**	**0.038**	**0.0077**	**0.000034**	**0.00003**
PCB-85/116	65510-45-4/18259-05-7	mg/kg	0.0000249	NP	--	**0.0062**	**0.015**	**0.0025**	**0.0000083**	**0.0000062**
PCB-86	55312-69-1	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.00002 U	0.000002 U	0.000002 U
PCB-87/117/125	38380-02-8/68194-11-6/74472-39-2	mg/kg	0.000051	NP	--	**0.015**	**0.032**	**0.0062**	**0.000017**	**0.000016**
PCB-88/91	55215-17-3/68194-05-8	mg/kg	0.000066	NP	--	**0.0058**	**0.01**	**0.0015**	**0.000022**	**0.00001**
PCB-89	73575-57-2	mg/kg	0.000002	NP	--	**0.00072**	**0.002**	**0.00023**	0.000002 U	0.000002 U
PCB-9	34883-39-1	mg/kg	0.000002	NP	--	**0.0036**	**0.0033**	**0.0012**	0.000002 U	0.000002 U
PCB-90/101	68194-07-0/37680-73-2	mg/kg	0.00027	NP	--	**0.038**	**0.085**	**0.019**	**0.00009**	**0.00006**
PCB-93	73575-56-1	mg/kg	0.000002	NP	--	0.0001 U	0.00005 U	0.00002 U	0.000002 U	0.000002 U
PCB-94	73575-55-0	mg/kg	0.000002	NP	--	**0.00034**	**0.00052**	**0.000066**	0.000002 U	0.000002 U
PCB-95	38379-99-6	mg/kg	0.000201	NP	--	**0.033**	**0.049**	**0.009**	**0.000067**	**0.000052**
PCB-96	73575-54-9	mg/kg	0.000002	NP	--	**0.0005**	**0.00077**	**0.000081**	0.000002 U	0.000002 U
PCB-97	41464-51-1	mg/kg	0.000081	NP	--	**0.013**	**0.03**	**0.0059**	**0.000027**	**0.000019**
PCB-98/102	60233-25-2/68194-06-9	mg/kg	0.000004	NP	--	0.0002 U	0.0001 U	0.00004 U	0.000004 U	0.000004 U
PCB-99	38380-01-7	mg/kg	0.000189	NP	--	**0.017**	**0.036**	**0.0069**	**0.000063**	**0.000032**
TEQ (Bird)	2222-22-3	mg/kg	0.00000153	NP	--	**0.00051**	**0.00082**	**0.000096**	**0.00000051**	**0.00000044**
TEQ (Fish)	2222-22-4	mg/kg	2.61E-08	NP	--	**0.000004**	**0.0000054**	**0.00000067**	**0.0000000017**	**0.0000000087**
TEQ (Mammal)	2222-22-2	mg/kg	0.00000045	NP	--	**0.000055**	**0.00007**	**0.0000085**	**0.0000000034**	**0.00000015**
Total DiCB	25512-42-9	mg/kg	0.000048	NP	--	**0.12 J**	**0.14 J**	**0.04 J**	**0.000016 J**	**0.0000076 J**
Total HpCB	28655-71-2	mg/kg	0.00078	NP	--	**0.16 J**	**0.18 J**	**0.045 J**	**0.00026 J**	**0.00019 J**
Total HxCB	26601-64-9	mg/kg	0.00159	NP	--	**0.28 J**	**0.36 J**	**0.072 J**	**0.00053 J**	**0.00042 J**
Total MoCB	27323-18-8	mg/kg	0.0000102	NP	--	**0.0087 J**	**0.0089 J**	**0.0098 J**	**0.0000034 J**	
Total NoCB	53742-07-7	mg/kg	0.000081	NP	--	**0.0048 J**	**0.0067 J**	**0.0029 J**	**0.000027 J**	**0.000026 J**
Total OcCB	55722-26-4	mg/kg	0.000207	NP	--	**0.027 J**	**0.035 J**	**0.0082 J**	**0.000069 J**	**0.000052 J**
TOTAL PCBs	1111-11-1	mg/kg	0.0051	NP	--	**2 J**	**3 J**	**0.6 J**	**0.0017 J**	**0.0013 J**
Total PeCB	25429-29-2	mg/kg	0.00162	NP	--	**0.27 J**	**0.49 J**	**0.094 J**	**0.00054 J**	**0.00039 J**
Total TeCB	26914-33-0	mg/kg	0.00066	NP	--	**0.55 J**	**0.88 J**	**0.095 J**	**0.00022 J**	**0.00013 J**
Total TrCB	25323-68-6	mg/kg	0.000177	NP	--	**0.59 J**	**0.94 J**	**0.23 J**	**0.000059 J**	**0.00003 J**
CLP Organics by CLP SOW SFAM01.1/3151.0										
1,2,4,5-Tetrachlorobenzene	95-94-3	mg/kg	0.22	0.23	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U
1,4-Dioxane	123-91-1	mg/kg	0.086	5.3	--	0.056 U	0.075 U	0.048 U	0.086 U	0.083 U
1-Methylnaphthalene	90-12-0	mg/kg	0.22	18	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U
2,3,4,6-Tetrachlorophenol	58-90-2	mg/kg	0.22	190	--	0.14 U	0.19 U	0.12 UJ	0.22 U	0.21 U
Metals by CLP SOW SFAM01.1										
Aluminum	7429-90-5	mg/kg	105000	7700	--	**18000**	**24000**	**28000**	**32000**	**35000**
Antimony	7440-36-0	mg/kg	2.2	3.1	--	**3.7**	**1.5 LJ**	**7.1**	1.8 U	2.2 U
Arsenic	7440-38-2	mg/kg	24.9	0.68	--	**29**	**27 J**	**32 J**	**8.3**	**6.9**
Barium	7440-39-3	mg/kg	810	1500	--	**380**	**300 J**	**300 J**	**230**	**270**
Beryllium	7440-41-7	mg/kg	3.6	16	--	**0.53 LJ**	**0.68 LJ**	**0.82**	**1**	**1.2**
Cadmium	7440-43-9	mg/kg	1.95	0.71	--	**2.7**	**2.5**	**2.5**	**0.65 LJ**	**0.51 LJ**
Calcium	7440-70-2	mg/kg	19500	NP	--	**5600**	**5200**	**5100**	**4900**	**6500**
Chromium	7440-47-3	mg/kg	48	NP	--	**44 J**	**42**	**28**	**15 J**	**16 J**
Cobalt	7440-48-4	mg/kg	18.6	2.3	--	**5.9 J**	**5.4 J**	**5.3 J**	**6.2 J**	**5.8 J**
Copper	7440-50-8	mg/kg	60	310	--	**80**	**71 J**	**42 J**	**20 J**	**20 J**
Iron	7439-89-6	mg/kg	96000	5500	--	**21000**	**26000**	**32000**	**30000**	**32000**

Table 4-6 (continued)
Summary of Sediment Sample Results, South Lake and University Lake, 24-36 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 24 - 36 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L02	L02	L02	L03	L03
					Station	SED08	SED09	SED10	SED11	SED12
					Sample ID	CL-L02-SED08-36-51	CL-L02-SED09-36-51	CL-L02-SED10-36-51	CL-L03-SED11-36-51	CL-L03-SED12-36-51
					Depths	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36
					Date	04/07/2022	04/07/2022	04/07/2022	04/04/2022	04/04/2022
					Type	FS	FS	FS	FS	FS
Metals by CLP SOW SFAM01.1 (continued)										
Lead	7439-92-1	mg/kg	216	400	--	**810**	**660**	**300**	**72**	**44**
Magnesium	7439-95-4	mg/kg	22200	NP	--	**2500**	**3200**	**3700**	**5600**	**7400**
Manganese	7439-96-5	mg/kg	1800	180	--	**420**	**450 J**	**730 J**	**600**	**440**
Mercury	7439-97-6	mg/kg	0.6	1.1	--	**0.68**	**0.62**	**0.35 LJ**	**0.2 LJ**	**0.12 LJ**
Nickel	7440-02-0	mg/kg	72	150	--	**15 J**	**16 J**	**12 J**	**22**	**24**
Potassium	7440-09-7	mg/kg	13500	NP	--	**1400**	**2100**	**2400**	**3800**	**4500**
Selenium	7782-49-2	mg/kg	4.2	39	--	**0.47 LJ**	**0.69 LJ**	**0.73 LJ**	**1 LJ**	**1.4 LJ**
Silver	7440-22-4	mg/kg	0.69	39	--	**2.5**	**2.3**	**1.3**	**0.23 LJ**	**0.17 LJ**
Sodium	7440-23-5	mg/kg	930	NP	--	**120 LJ**	**170 LJ**	**170 LJ**	**230 LJ**	**310 LJ**
Thallium	7440-28-0	mg/kg	1.1	0.078	--	0.77 U	0.82 U	0.69 U	0.92 U	1.1 U
Vanadium	7440-62-2	mg/kg	42	39	--	**8.8 J**	**9.4 J**	**8.9 J**	**13 J**	**14 J**
Zinc	7440-66-6	mg/kg	252	2300	--	**260 J**	**440 J**	**250 J**	**84 J**	**75 J**
Pesticides by CLP SOW SFAM01.1										
4,4'-DDD	72-54-8	mg/kg	0.0085	0.19	--	0.0056 U	0.0074 U	0.0048 U	0.0085 U	0.0083 U
4,4'-DDE	72-55-9	mg/kg	0.0085	2	--	**0.026 J**	**0.031 JK**	**0.016**	0.0085 U	0.0083 U
4,4'-DDT	50-29-3	mg/kg	0.0085	1.9	--	0.0056 U	**0.044**	0.0048 U	0.0085 U	0.0083 U
Aldrin	309-00-2	mg/kg	0.0044	0.039	--	0.0029 U	**0.011 JK**	0.0025 U	0.0044 U	0.0043 U
alpha-BHC	319-84-6	mg/kg	0.0044	0.086	--	0.0029 U	0.0038 U	0.0025 U	0.0044 U	0.0043 U
beta-BHC	319-85-7	mg/kg	0.0044	0.3	--	0.0029 U	0.0038 U	0.0025 U	0.0044 U	0.0043 U
cis-Chlordane	5103-71-9	mg/kg	0.0044	3.6	--	**0.0065**	0.0038 U	**0.0015 LJ**	0.0044 U	0.0043 U
delta-BHC	319-86-8	mg/kg	0.0044	NP	--	**0.03 J**	**0.028 JK**	0.0025 U	0.0044 U	0.0043 U
Dieldrin	60-57-1	mg/kg	0.0085	0.034	--	**0.0083 J**	**0.0076 JK**	0.0048 U	0.0085 U	0.0083 U
Endosulfan I	959-98-8	mg/kg	0.0044	NP	--	**0.006**	0.0038 U	0.0025 U	0.0044 U	0.0043 U
Endosulfan II	33213-65-9	mg/kg	0.0085	NP	--	0.0056 U	0.0074 U	0.0048 U	0.0085 U	0.0083 U
Endosulfan sulfate	1031-07-8	mg/kg	0.0085	38	--	0.0056 U	0.0074 U	**0.0054 J**	0.0085 U	0.0083 U
Endrin	72-20-8	mg/kg	0.0085	1.9	--	**0.0046 LJ**	**0.0056 JQK**	0.0048 U	0.0085 U	0.0083 U
Endrin aldehyde	7421-93-4	mg/kg	0.0085	NP	--	0.0056 U	**0.013 JK**	0.0048 U	0.0085 U	0.0083 U
Endrin ketone	53494-70-5	mg/kg	0.0085	NP	--	0.0056 U	0.0074 U	0.0048 U	0.0085 U	0.0083 U
gamma-BHC (Lindane)	58-89-9	mg/kg	0.0044	0.071	--	**0.0043 J**	0.0038 U	**0.0017 LJ**	0.0044 U	0.0043 U
Heptachlor	76-44-8	mg/kg	0.0044	0.13	--	0.0029 U	**0.01 JK**	**0.0029 J**	0.0044 U	0.0043 U
Heptachlor epoxide	1024-57-3	mg/kg	0.0044	0.07	--	0.0029 U	0.0038 U	**0.0054**	0.0044 U	0.0043 U
Methoxychlor	72-43-5	mg/kg	0.93	32	--	**0.026 LJ**	0.038 U	**0.11**	**0.31**	**0.086**
Toxaphene	8001-35-2	mg/kg	0.44	0.49	--	0.29 U	0.38 U	0.25 U	0.44 U	0.43 U
trans-Chlordane	5103-74-2	mg/kg	0.0044	3.6	--	**0.015 J**	0.0038 U	**0.0058 J**	0.0044 U	0.0043 U
SVOCs by CLP SOW SFAM01.1/3151.0										
1,1'-Biphenyl	92-52-4	mg/kg	0.22	4.7	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U
2,2'-Oxybis(1-chloropropane)	108-60-1	mg/kg	0.43	310	--	0.28 U	0.38 UJK	0.25 U	0.43 U	0.42 U
2,4,5-Trichlorophenol	95-95-4	mg/kg	0.22	630	--	0.14 U	0.19 UJK	0.12 U	0.22 U	0.21 U
2,4,6-Trichlorophenol	88-06-2	mg/kg	0.22	6.3	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U
2,4-Dichlorophenol	120-83-2	mg/kg	0.22	19	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U
2,4-Dimethylphenol	105-67-9	mg/kg	0.22	130	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U
2,4-Dinitrophenol	51-28-5	mg/kg	0.43	13	--	0.28 U	0.38 U	0.25 U	0.43 U	0.42 U
2,4-Dinitrotoluene	121-14-2	mg/kg	0.22	1.7	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U
2,6-Dinitrotoluene	606-20-2	mg/kg	0.22	0.36	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U
2-Chloronaphthalene	91-58-7	mg/kg	0.22	480	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U
2-Chlorophenol	95-57-8	mg/kg	0.22	39	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U

Table 4-6 (continued)
Summary of Sediment Sample Results, South Lake and University Lake, 24-36 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 24 - 36 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L02	L02	L02	L03	L03
					Station	SED08	SED09	SED10	SED11	SED12
					Sample ID	CL-L02-SED08-36-51	CL-L02-SED09-36-51	CL-L02-SED10-36-51	CL-L03-SED11-36-51	CL-L03-SED12-36-51
					Depths	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36
					Date	04/07/2022	04/07/2022	04/07/2022	04/04/2022	04/04/2022
					Type	FS	FS	FS	FS	FS
SVOCs by CLP SOW SFAM01.1/3151.0 (continued)										
2-Methylnaphthalene	91-57-6	mg/kg	0.22	24	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U
2-Methylphenol	95-48-7	mg/kg	0.43	320	--	0.28 U	0.38 U	0.25 U	0.43 U	0.42 U
2-Nitroaniline	88-74-4	mg/kg	0.22	63	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U
2-Nitrophenol	88-75-5	mg/kg	0.22	NP	--	0.14 U	0.19 UJK	0.12 U	0.22 U	0.21 U
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.43	1.2	--	0.28 U	0.38 U	0.25 U	0.43 U	0.42 U
3-Nitroaniline	99-09-2	mg/kg	0.43	NP	--	0.28 U	0.38 U	0.25 U	0.43 U	0.42 U
4,6-Dinitro-2-methylphenol	534-52-1	mg/kg	0.43	0.51	--	0.28 U	0.38 U	0.25 U	0.43 U	0.42 U
4-Bromophenyl-phenylether	101-55-3	mg/kg	0.22	NP	--	0.14 U	0.19 UJK	0.12 U	0.22 U	0.21 U
4-Chloro-3-methylphenol	59-50-7	mg/kg	0.22	630	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U
4-Chloroaniline	106-47-8	mg/kg	0.43	2.7	--	0.28 U	0.38 U	0.25 U	0.43 U	0.42 U
4-Chlorophenyl-phenyl ether	7005-72-3	mg/kg	0.22	NP	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U
4-Methylphenol	106-44-5	mg/kg	0.43	130	--	0.28 U	0.38 U	0.25 U	0.43 U	0.42 U
4-Nitroaniline	100-01-6	mg/kg	0.43	25	--	0.28 U	0.38 U	0.25 U	0.43 U	0.42 U
4-Nitrophenol	100-02-7	mg/kg	0.43	NP	--	0.28 U	0.38 U	0.25 U	0.43 U	0.42 U
Acenaphthene	83-32-9	mg/kg	0.22	360	--	**0.14**	0.19 U	**0.49 J+**	0.22 U	0.21 U
Acenaphthylene	208-96-8	mg/kg	0.22	NP	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U
Acetophenone	98-86-2	mg/kg	0.43	780	--	0.28 U	0.38 U	0.25 U	0.43 U	0.42 U
Anthracene	120-12-7	mg/kg	0.22	1800	--	**0.33**	**0.43**	**0.58**	0.22 U	0.21 U
Atrazine	1912-24-9	mg/kg	0.43	2.4	--	0.28 U	0.38 U	0.25 U	0.43 U	0.42 U
Benzaldehyde	100-52-7	mg/kg	0.43	170	--	0.28 U	0.38 U	0.25 U	0.43 U	0.42 U
Benzo(a)anthracene	56-55-3	mg/kg	0.22	1.1	--	**0.71**	**0.79**	**0.92 J+**	0.22 U	0.21 U
Benzo(a)pyrene	50-32-8	mg/kg	0.22	0.11	--	**0.74**	**0.74**	**0.9 J+**	0.22 U	0.21 U
Benzo(b)fluoranthene	205-99-2	mg/kg	0.22	1.1	--	**1.3 J**	**1.3 JK**	**1.3 J+**	0.22 U	0.21 U
Benzo(g,h,i)perylene	191-24-2	mg/kg	0.22	NP	--	**0.6**	**0.58 JK**	**0.48 J+**	0.22 U	0.21 U
Benzo(k)fluoranthene	207-08-9	mg/kg	0.22	11	--	**0.4 J**	**0.44 JK**	**0.43 J+**	0.22 U	0.21 U
Bis(2-chloroethoxy)methane	111-91-1	mg/kg	0.22	19	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U
Bis(2-chloroethyl)ether	111-44-4	mg/kg	0.43	0.23	--	0.28 U	0.38 U	0.25 U	0.43 U	0.42 U
Bis(2-ethylhexyl)phthalate	117-81-7	mg/kg	0.22	39	--	**3.5**	**4.1**	**0.56**	0.22 U	0.21 U
Butylbenzylphthalate	85-68-7	mg/kg	0.22	290	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U
Caprolactam	105-60-2	mg/kg	0.43	3100	--	0.28 U	0.38 U	0.25 U	0.43 U	0.42 U
Carbazole	86-74-8	mg/kg	0.43	NP	--	0.28 U	0.38 U	0.25 U	0.43 U	0.42 U
Chrysene	218-01-9	mg/kg	0.22	110	--	**0.96**	**0.99**	**1 J+**	0.22 U	0.21 U
Dibenzo(a,h)anthracene	53-70-3	mg/kg	0.22	0.11	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U
Dibenzofuran	132-64-9	mg/kg	0.22	7.8	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U
Diethylphthalate	84-66-2	mg/kg	0.22	5100	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U
Dimethylphthalate	131-11-3	mg/kg	0.22	NP	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U
Di-n-butylphthalate	84-74-2	mg/kg	0.22	630	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U
Di-n-octylphthalate	117-84-0	mg/kg	0.43	63	--	0.28 U	0.38 U	0.25 U	0.43 U	0.42 U
Fluoranthene	206-44-0	mg/kg	0.22	240	--	**1.7**	**1.9**	**1.8 J+**	0.22 U	0.21 U
Fluorene	86-73-7	mg/kg	0.22	240	--	**0.13 LJ**	0.19 U	**0.25 J+**	0.22 U	0.21 U
Hexachlorobenzene	118-74-1	mg/kg	0.22	0.078	--	0.14 U	0.19 UJK	0.12 U	0.22 U	0.21 U
Hexachlorobutadiene	87-68-3	mg/kg	0.22	1.2	--	0.14 U	0.19 UJK	0.12 U	0.22 U	0.21 U
Hexachlorocyclo-pentadiene	77-47-4	mg/kg	1.29	0.18	--	0.28 U	0.38 U	0.25 UJ	0.43 U	0.42 UR
Hexachloroethane	67-72-1	mg/kg	0.22	1.8	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	0.22	1.1	--	**0.5**	**0.67 JK**	**0.54 J+**	0.22 U	0.21 U
Isophorone	78-59-1	mg/kg	0.22	570	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U

Table 4-6 (continued)
Summary of Sediment Sample Results, South Lake and University Lake, 24-36 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 24 - 36 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L02	L02	L02	L03	L03
					Station	SED08	SED09	SED10	SED11	SED12
					Sample ID	CL-L02-SED08-36-51	CL-L02-SED09-36-51	CL-L02-SED10-36-51	CL-L03-SED11-36-51	CL-L03-SED12-36-51
					Depths	24 - 36	24 - 36	24 - 36	24 - 36	24 - 36
					Date	04/07/2022	04/07/2022	04/07/2022	04/04/2022	04/04/2022
					Type	FS	FS	FS	FS	FS
SVOCs by CLP SOW SFAM01.1/3151.0 (continued)										
Naphthalene	91-20-3	mg/kg	0.22	2	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U
Nitrobenzene	98-95-3	mg/kg	0.22	5.1	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U
N-Nitroso-di-n propylamine	621-64-7	mg/kg	0.22	0.078	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U
N-Nitrosodiphenylamine	86-30-6	mg/kg	0.22	110	--	0.14 U	0.19 U	0.12 U	0.22 U	0.21 U
Pentachlorophenol	87-86-5	mg/kg	0.00082	1	--	0.28 U	0.38 U	0.25 U	0.43 U	0.42 U
Phenanthrene	85-01-8	mg/kg	0.22	NP	--	**1.1**	**1.1**	**1.8**	0.22 U	0.21 U
Phenol	108-95-2	mg/kg	0.43	1900	--	0.28 U	0.38 U	0.25 U	0.43 U	0.42 U
Pyrene	129-00-0	mg/kg	0.22	180	--	**1.9**	**1.6**	**1.7 J+**	0.22 U	0.21 U

Notes
mg/kg - milligrams/kilogram
U - Not detected at reported quantitation limit.
J - estimated value.
+ - High biased. Actual concentration may be lower than the concentration reported.
R - Unusable, rejected should not be used.
L - Reported concentration is below the Contract Required Quantitation Limit (CRQL).
K - Unknown bias.
NP - Not published.
FS - Field Sample.
FD - Field Duplicate.
RSL - Regional Screening level, May 2022.
TR - Targeted Risk for cancer.
THQ - Target Hazard Quotient.
Yellow Highlight - exceeds background
Orange highlight - does not exceed background, but does exceeds RSL

Table 4-7
Summary of Sediment Sample Results, Drainage Paths, 0-12 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 0 - 12 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L04	L04	L04	L01	L01	L05	L06	L01
					Station	SED13	SED14	SED15	SED16	SED16	SED17	SED18	SED19
					Sample ID	CL-L04-SED13-12-51	CL-L04-SED14-12-51	CL-L04-SED15-12-51	CL-L01-SED16-12-51	CL-L01-SED16-12-52	CL-L05-SED17-12-51	CL-L06-SED18-12-51	CL-L01-SED19-12-51
					Depths	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
					Date	04/07/2022	04/08/2022	04/08/2022	04/06/2022	04/06/2022	04/08/2022	04/07/2022	04/06/2022
					Type	FS	FS	FS	FS	FD	FS	FS	FS
Herbicides by SW846 Method 8151													
2,4,5-T	93-76-5	mg/kg	0.0037	63	--	0.0012 U	0.0012 U	0.0011 U	0.0017 U	0.0017 U	0.001 U	0.00099 U	0.004 U
2,4-D	94-75-7	mg/kg	0.054	70	--	0.018 U	0.018 U	0.016 U	0.025 U	0.025 U	0.015 U	0.015 U	0.024 U
2,4-DB	94-82-6	mg/kg	0.045	NP	--	0.015 U	0.015 U	0.013 U	0.021 U	0.021 U	0.012 U	0.012 U	0.3 U
Dalapon	75-99-0	mg/kg	0.22	190	--	0.074 U	0.074 U	0.064 U	0.1 U	0.1 U	0.06 U	0.059 U	0.098 U
Dicamba	1918-00-9	mg/kg	0.018	190	--	0.006 U	0.006 U	0.0052 U	0.0084 U	0.0084 U	0.0049 U	0.0048 U	0.008 U
Dichlorprop	120-36-5	mg/kg	0.041	NP	--	0.014 U	0.014 U	0.012 U	0.019 U	0.019 U	0.011 U	0.011 U	0.018 U
Dinoseb	88-85-7	mg/kg	0.041	6.3	--	0.014 UR	0.014 U	0.012 U	0.019 U	0.019 U	0.011 UR	0.011 U	0.018 U
MCPA	94-74-6	mg/kg	3.4	3.2	--	1.1 U	1.1 U	1 U	1.6 U	1.6 U	0.93 U	0.92 U	1.5 U
MCPP	93-65-2	mg/kg	17	6.3	--	5.7 U	5.7 U	5 U	8 U	8 U	4.7 U	4.6 U	7.6 U
Pentachlorophenol	87-86-5	mg/kg	0.0015	1	--	0.0005 U	**0.003**	**0.002 JQK**	**0.0026 JQK**	**0.0019 JQK**	**0.0011 JQK**	**0.0019 JQK**	**0.0017 JQK**
Silvex (2,4,5-TP)	93-72-1	mg/kg	0.0034	51	--	0.0011 U	0.0011 U	0.00098 U	0.0016 U	0.0016 U	**0.004 JK**	0.00091 U	0.0065 U
PCB Aroclors by CLP SOW SFAM01.1/3150.0													
Aroclor-1016	12674-11-2	mg/kg	0.0053	0.41	--	0.003 U	0.0028 U	0.0025 U	0.0043 U	0.0046 U	0.0024 U	0.0023 U	0.003 U
Aroclor-1221	11104-28-2	mg/kg	0.0053	0.2	--	0.003 U	0.0028 U	0.0025 U	0.0043 U	0.0046 U	0.0024 U	0.0023 U	0.003 U
Aroclor-1232	11141-16-5	mg/kg	0.0053	0.17	--	0.003 U	0.0028 U	0.0025 U	0.0043 U	0.0046 U	0.0024 U	0.0023 U	0.003 U
Aroclor-1242	53469-21-9	mg/kg	0.0053	0.23	--	0.003 U	0.0028 U	0.0025 U	0.0043 U	0.0046 U	0.0024 U	0.0023 U	0.003 U
Aroclor-1248	12672-29-6	mg/kg	0.0053	0.23	--	0.003 U	0.0028 U	0.0025 U	0.0043 U	0.0046 U	0.0024 U	0.0023 U	0.003 U
Aroclor-1254	11097-69-1	mg/kg	0.0053	0.12	--	0.003 U	0.0028 U	0.0025 U	0.0043 U	0.0046 U	0.0024 U	0.0023 U	0.003 U
Aroclor-1260	11096-82-5	mg/kg	0.0053	0.24	--	**0.074 JK**	**0.0092 JK**	**0.0065 JK**	**0.092**	**0.069**	0.0024 U	**0.01**	0.003 U
Aroclor-1262	37324-23-5	mg/kg	0.0053	NP	--	0.003 U	0.0028 U	0.0025 U	0.0043 U	0.0046 U	0.0024 U	0.0023 U	0.003 U
Aroclor-1268	11100-14-4	mg/kg	0.0053	NP	--	0.003 U	0.0028 U	0.0025 U	0.0043 U	0.0046 U	0.0024 U	0.0023 U	0.003 U
PCB Aroclor Congeners Group 1 by CLP SOW HRSM02.1													
PCB-105	32598-14-4	mg/kg	0.000036	0.12	--	**0.00071**	**0.00086**	**0.0012**	**0.0035**	**0.0017**	**0.00067**	**0.002**	**0.0095**
PCB-114	74472-37-0	mg/kg	0.00000097	0.12	--	**0.000016 LJ**	**0.000045**	**0.00007**	**0.00028**	**0.00014**	**0.000044**	**0.00015**	**0.00065**
PCB-118	31508-00-6	mg/kg	0.000054	0.12	--	**0.002**	**0.00075**	**0.0014**	**0.0065**	**0.0033**	**0.00077**	**0.0023**	**0.011**
PCB-123	65510-44-3	mg/kg	0.0000009	0.12	--	**0.000025**	**0.000041**	**0.000055**	**0.00025**	**0.000096**	**0.00003**	**0.000089**	**0.00059**
PCB-126	57465-28-8	mg/kg	0.00000066	0.000036	--	**0.000094**	**0.00004**	**0.000035**	**0.00022**	**0.0001**	**0.000027**	**0.000054**	**0.00041**
PCB-156	38380-08-4	mg/kg	0.0000186	0.12	--	**0.0025**	**0.00064**	**0.00058**	**0.0017**	**0.0008**	**0.00024**	**0.00078**	**0.0037**
PCB-157	69782-90-7	mg/kg	0.0000051	0.12	--	**0.00015**	**0.00018**	**0.00017**	**0.00036**	**0.00018**	**0.000073**	**0.00019**	**0.0009**
PCB-167	52663-72-6	mg/kg	0.000009	0.12	--	**0.0012**	**0.0003**	**0.00023**	**0.00091**	**0.00042**	**0.00012**	**0.00032**	**0.0019**
PCB-169	32774-16-6	mg/kg	0.00000093	0.00012	--	**0.00002**	**0.0000093 LJ**	0.0000093 U	**0.000022**	**0.000011 LJ**	0.0000093 U	0.0000093 U	**0.000041**
PCB-189	39635-31-9	mg/kg	0.0000036	0.13	--	**0.00068**	**0.00013**	**0.000066**	**0.00039**	**0.00014**	**0.000024**	**0.000082**	**0.00066**
PCB-77	32598-13-3	mg/kg	0.0000066	0.038	--	**0.000067**	**0.000098**	**0.000092**	**0.0011**	**0.00057**	**0.00014**	**0.0004**	**0.0023**
PCB-81	70362-50-4	mg/kg	0.00000222	0.012	--	**0.000058**	**0.00003**	**0.000044**	**0.00019**	**0.000081**	**0.00003**	**0.00012**	**0.00051**
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1													
PCB-1	2051-60-7	mg/kg	0.000006	NP	--	0.00002 U	**0.0000066 LJ**	**0.0000056 LJ**	**0.00013**	**0.000055**	**0.000061**	**0.00047**	**0.0001**
PCB-10	33146-45-1	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	**0.000051**	**0.000023**	**0.0000052 LJ**	**0.00011**	**0.000091**
PCB-100	39485-83-1	mg/kg	0.000002	NP	--	**0.00013**	0.00002 U	**0.0000059 LJ**	**0.00012**	**0.000042**	**0.000011 LJ**	**0.00008**	**0.00025**
PCB-103	60145-21-3	mg/kg	0.000002	NP	--	**0.0003**	**0.0000066 LJ**	**0.000011 LJ**	**0.00017**	**0.000073**	**0.000015 LJ**	**0.000065**	**0.00037**
PCB-104	56558-16-8	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U
PCB-106	70424-69-0	mg/kg	0.000048	NP	--	**0.0019**	**0.00094**	**0.0013**	**0.0048**	**0.0019**	**0.00077**	**0.0025**	**0.012**
PCB-107	70424-68-9	mg/kg	0.000006	NP	--	**0.00019**	**0.000073**	**0.00011**	**0.00049**	**0.00022**	**0.00008**	**0.00017**	**0.001**
PCB-108	70362-41-3	mg/kg	0.000006	NP	--	**0.00021**	**0.000089**	**0.00011**	**0.00044**	**0.00029**	**0.000069**	**0.00021**	**0.0012**
PCB-109	74472-35-8	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U
PCB-11	2050-67-1	mg/kg	0.000006	NP	--	**0.000011 LJ**	**0.000044**	**0.000047**	**0.00015**	**0.000061**	**0.000053**	**0.00023**	**0.000095**
PCB-110	38380-03-9	mg/kg	0.000144	NP	--	**0.01**	**0.002**	**0.0031**	**0.012**	**0.0049**	**0.0022**	**0.0063**	**0.032**

Table 4-7 (continued)
Summary of Sediment Sample Results, Drainage Paths, 0-12 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 0 - 12 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L04	L04	L04	L01	L01	L05	L06	L01
					Station	SED13	SED14	SED15	SED16	SED16	SED17	SED18	SED19
					Sample ID	CL-L04-SED13-12-51	CL-L04-SED14-12-51	CL-L04-SED15-12-51	CL-L01-SED16-12-51	CL-L01-SED16-12-52	CL-L05-SED17-12-51	CL-L06-SED18-12-51	CL-L01-SED19-12-51
					Depths	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
					Date	04/07/2022	04/08/2022	04/08/2022	04/06/2022	04/06/2022	04/08/2022	04/07/2022	04/06/2022
					Type	FS	FS	FS	FS	FD	FS	FS	FS
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)													
PCB-111/115	39635-32-0/74472-38-1	mg/kg	0.000004	NP	--	**0.00003 LJ**	**0.000053**	**0.000038 LJ**	**0.00023**	**0.000052**	**0.000031 LJ**	**0.000079**	**0.00045**
PCB-113	68194-10-5	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U
PCB-119	56558-17-9	mg/kg	0.0000069	NP	--	**0.00031**	**0.000029**	**0.00004**	**0.0004**	**0.00014**	**0.000037**	**0.00012**	**0.00065**
PCB-12	2974-92-7	mg/kg	0.000002	NP	--	**0.0000046 LJ**	**0.0000045 LJ**	**0.000012 LJ**	**0.00013**	**0.000046**	**0.000054**	**0.00023**	**0.00024**
PCB-120	68194-12-7	mg/kg	0.000002	NP	--	**0.0088**	**0.0000071 LJ**	**0.0000064 LJ**	0.00002 U	**0.000015 LJ**	0.00002 U	**0.0000092 LJ**	**0.000052**
PCB-121	56558-18-0	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U
PCB-122	76842-07-4	mg/kg	0.000002	NP	--	**0.000011 LJ**	**0.000026**	**0.000032**	**0.00012**	**0.000068**	**0.000018 LJ**	**0.000064**	**0.00046**
PCB-124	70424-70-3	mg/kg	0.000006	NP	--	**0.00015**	**0.000093**	**0.00015**	**0.00048**	**0.00027**	**0.00008**	**0.00027**	**0.0016**
PCB-127	39635-33-1	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U
PCB-128/162	38380-07-3/39635-34-2	mg/kg	0.000036	NP	--	**0.0029**	**0.0013**	**0.0011**	**0.0029**	**0.0013**	**0.00049**	**0.0012**	**0.0064**
PCB-129	55215-18-4	mg/kg	0.0000081	NP	--	**0.00062**	**0.00015**	**0.00023**	**0.00072**	**0.00034**	**0.00011**	**0.0004**	**0.0019**
PCB-13	2974-90-5	mg/kg	0.000002	NP	--	**0.0000048 LJ**	**0.0000075 LJ**	**0.00001 LJ**	**0.00011**	**0.00006**	**0.000049**	**0.00023**	**0.00024**
PCB-130	52663-66-8	mg/kg	0.0000159	NP	--	**0.0017**	**0.00036**	**0.00029**	**0.001**	**0.00052**	**0.00016**	**0.00043**	**0.0029**
PCB-131/133	61798-70-7/35694-04-3	mg/kg	0.000012	NP	--	**0.00085**	**0.00014**	**0.00013**	**0.00061**	**0.00027**	**0.000071**	**0.00023**	**0.0014**
PCB-132/161	38380-05-1/74472-43-8	mg/kg	0.000045	NP	--	**0.0096**	**0.00095**	**0.001**	**0.0068**	**0.0026**	**0.00061**	**0.0021**	**0.014**
PCB-134/143	52704-70-8/68194-15-0	mg/kg	0.000012	NP	--	**0.0017**	**0.00016**	**0.00022**	**0.001**	**0.00045**	**0.00013**	**0.00045**	**0.0024**
PCB-135	52744-13-5	mg/kg	0.0000216	NP	--	**0.0065**	**0.00046**	**0.00043**	**0.0031**	**0.0014**	**0.0003**	**0.00086**	**0.0069**
PCB-136	38411-22-2	mg/kg	0.0000228	NP	--	**0.0065**	**0.00035**	**0.00036**	**0.0026**	**0.001**	**0.00022**	**0.00092**	**0.0076**
PCB-137	35694-06-5	mg/kg	0.0000096	NP	--	**0.0003**	**0.00028**	**0.00033**	**0.00098**	**0.00045**	**0.00016**	**0.0005**	**0.0019**
PCB-138/163/164	35065-28-2/74472-44-9/74472-45-0	mg/kg	0.000174	NP	--	**0.043**	**0.0076**	**0.0051**	**0.023**	**0.0099**	**0.0023**	**0.0077**	**0.048**
PCB-139/149	56030-56-9/38380-04-0	mg/kg	0.000135	NP	--	**0.048**	**0.003**	**0.0024**	**0.019**	**0.0081**	**0.0016**	**0.0051**	**0.042**
PCB-14	34883-41-5	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	**0.000015 LJ**	0.00002 U	0.00002 U	0.00002 U	0.00002 U
PCB-140	59291-64-4	mg/kg	0.000002	NP	--	**0.00014**	**0.000034**	**0.000022**	**0.0001**	**0.000073**	**0.000015 LJ**	**0.000034**	**0.00024**
PCB-141	52712-04-6	mg/kg	0.0000219	NP	--	**0.01**	**0.00081**	**0.00063**	**0.0042**	**0.002**	**0.00033**	**0.0014**	**0.0099**
PCB-142	41411-61-4	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U
PCB-144	68194-14-9	mg/kg	0.000006	NP	--	**0.0026**	**0.00014**	**0.00012**	**0.0008**	**0.00039**	**0.000074**	**0.00037**	**0.0025**
PCB-145	74472-40-5	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U
PCB-146/165	51908-16-8/74472-46-1	mg/kg	0.000036	NP	--	**0.007**	**0.00089**	**0.00056**	**0.0034**	**0.0015**	**0.00029**	**0.00089**	**0.0073**
PCB-147	68194-13-8	mg/kg	0.000006	NP	--	**0.00031**	**0.000088**	**0.000079**	**0.00026**	**0.00012**	**0.000058**	**0.00015**	**0.0008**
PCB-148	74472-41-6	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U
PCB-15	2050-68-2	mg/kg	0.0000084	NP	--	**0.000024**	**0.000086**	**0.000056**	**0.0015**	**0.00062**	**0.00025**	**0.0021**	**0.0039**
PCB-150	68194-08-1	mg/kg	0.000002	NP	--	**0.000067**	**0.0000035 LJ**	**0.0000052 LJ**	**0.000062**	**0.000021**	**0.0000042 LJ**	**0.000018 LJ**	**0.00011**
PCB-151	52663-63-5	mg/kg	0.00003	NP	--	**0.016**	**0.00081**	**0.00047**	**0.0053**	**0.0023**	**0.00031**	**0.0014**	**0.013**
PCB-152	68194-09-2	mg/kg	0.000002	NP	--	**0.000014 LJ**	0.00002 U	**0.0000046 LJ**	0.00002 U	**0.0000073 LJ**	0.00002 U	**0.00001 LJ**	**0.00006**
PCB-153	35065-27-1	mg/kg	0.000186	NP	--	**0.0089**	**0.0045**	**0.0029**	**0.018**	**0.0089**	**0.0015**	**0.0056**	**0.042**
PCB-154	60145-22-4	mg/kg	0.0000087	NP	--	**0.00033**	**0.000021**	**0.000026**	**0.00031**	**0.00012**	**0.000022**	**0.000072**	**0.00065**
PCB-155	33979-03-2	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U
PCB-158/160	74472-42-7/41411-62-5	mg/kg	0.0000171	NP	--	**0.0039**	**0.00078**	**0.00061**	**0.0021**	**0.001**	**0.00028**	**0.00094**	**0.0042**
PCB-159	39635-35-3	mg/kg	0.000002	NP	--	**0.00052**	**0.00009**	**0.000032**	**0.00023**	**0.00012**	**0.000021**	**0.000045**	**0.0004**
PCB-16	38444-78-9	mg/kg	0.000002	NP	--	**0.000038**	**0.000023**	**0.000023**	**0.0018**	**0.0007**	**0.00024**	**0.0024**	**0.0054**
PCB-166	41411-63-6	mg/kg	0.000002	NP	--	**0.000009 LJ**	**0.000021**	**0.000021**	**0.000032**	**0.000023**	**0.000012 LJ**	**0.000034**	**0.00014**
PCB-168	59291-65-5	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U
PCB-17	37680-66-3	mg/kg	0.0000078	NP	--	**0.000026**	**0.000022**	**0.000027**	**0.0024**	**0.00095**	**0.00029**	**0.0045**	**0.0063**
PCB-170	35065-30-6	mg/kg	0.000045	NP	--	**0.017**	**0.003**	**0.0012**	**0.0084**	**0.0032**	**0.00041**	**0.0019**	**0.015**
PCB-171	52663-71-5	mg/kg	0.0000141	NP	--	**0.0049**	**0.00067**	**0.00033**	**0.0028**	**0.00095**	**0.00013**	**0.00056**	**0.0055**
PCB-172	52663-74-8	mg/kg	0.0000096	NP	--	**0.0028**	**0.00056**	**0.00024**	**0.0018**	**0.00059**	**0.000094**	**0.00036**	**0.0036**

Table 4-7 (continued)
Summary of Sediment Sample Results, Drainage Paths, 0-12 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 0 - 12 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L04	L04	L04	L01	L01	L05	L06	L01
					Station	SED13	SED14	SED15	SED16	SED16	SED17	SED18	SED19
					Sample ID	CL-L04-SED13-12-51	CL-L04-SED14-12-51	CL-L04-SED15-12-51	CL-L01-SED16-12-51	CL-L01-SED16-12-52	CL-L05-SED17-12-51	CL-L06-SED18-12-51	CL-L01-SED19-12-51
					Depths	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
					Date	04/07/2022	04/08/2022	04/08/2022	04/06/2022	04/06/2022	04/08/2022	04/07/2022	04/06/2022
					Type	FS	FS	FS	FS	FD	FS	FS	FS
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)													
PCB-173	68194-16-1	mg/kg	0.000002	NP	--	**0.00034**	**0.00004**	**0.00003**	**0.0002**	**0.000074**	**0.000012 LJ**	**0.000057**	**0.00037**
PCB-174	38411-25-5	mg/kg	0.000042	NP	--	**0.018**	**0.0023**	**0.001**	**0.0092**	**0.0031**	**0.00044**	**0.0018**	**0.021**
PCB-175	40186-70-7	mg/kg	0.000002	NP	--	**0.00079**	**0.000097**	**0.000051**	**0.00013**	**0.00018**	**0.000026**	**0.000086**	**0.00079**
PCB-176	52663-65-7	mg/kg	0.000006	NP	--	**0.0024**	**0.00021**	**0.0001**	**0.0012**	**0.00041**	**0.000058**	**0.00025**	**0.0026**
PCB-177	52663-70-4	mg/kg	0.0000276	NP	--	**0.01**	**0.0016**	**0.00067**	**0.0058**	**0.002**	**0.00026**	**0.0012**	**0.012**
PCB-178	52663-67-9	mg/kg	0.000012	NP	--	**0.0032**	**0.00064**	**0.00025**	**0.0021**	**0.00071**	**0.00012**	**0.0004**	**0.0045**
PCB-179	52663-64-6	mg/kg	0.0000168	NP	--	**0.0077**	**0.00084**	**0.00035**	**0.0039**	**0.0014**	**0.00019**	**0.00077**	**0.0088**
PCB-18	37680-65-2	mg/kg	0.0000111	NP	--	**0.000061**	**0.000071**	**0.000086**	**0.0051**	**0.0022**	**0.00068**	**0.0067**	**0.016**
PCB-180	35065-29-3	mg/kg	0.000084	NP	--	**0.043**	**0.0074**	**0.0031**	**0.024**	**0.0083**	**0.0013**	**0.0048**	**0.051**
PCB-181	74472-47-2	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U
PCB-182/187	60145-23-5/52663-68-0	mg/kg	0.00006	NP	--	**0.021**	**0.0038**	**0.0015**	**0.013**	**0.0044**	**0.00082**	**0.0025**	**0.027**
PCB-183	52663-69-1	mg/kg	0.0000243	NP	--	**0.011**	**0.0013**	**0.0006**	**0.0057**	**0.0019**	**0.00029**	**0.0011**	**0.012**
PCB-184	74472-48-3	mg/kg	0.000002	NP	--	**0.0000078 LJ**	0.00002 U	0.00002 U	**0.000014 LJ**	0.00002 U	0.00002 U	0.00002 U	**0.000026**
PCB-185	52712-05-7	mg/kg	0.000002	NP	--	**0.002**	**0.00027**	**0.00012**	**0.0012**	**0.0004**	**0.000066**	**0.00024**	**0.0027**
PCB-186	74472-49-4	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U
PCB-188	74487-85-7	mg/kg	0.000002	NP	--	**0.000018 LJ**	**0.0000073 LJ**	**0.0000061 LJ**	**0.000032**	**0.000011 LJ**	0.00002 U	0.00002 U	**0.000035**
PCB-19	38444-73-4	mg/kg	0.000002	NP	--	**0.000025**	**0.00001 LJ**	**0.000011 LJ**	**0.0005**	**0.0002**	**0.000072**	**0.0014**	**0.0025**
PCB-190	41411-64-7	mg/kg	0.0000096	NP	--	**0.0034**	**0.00069**	**0.00029**	**0.0015**	**0.00064**	**0.000084**	**0.00042**	**0.0031**
PCB-191	74472-50-7	mg/kg	0.000002	NP	--	**0.00067**	**0.0001**	**0.000057**	**0.00038**	**0.00014**	**0.000021**	**0.000082**	**0.00077**
PCB-192	74472-51-8	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U
PCB-193	69782-91-8	mg/kg	0.0000063	NP	--	**0.0017**	**0.0004**	**0.00015**	**0.0009**	**0.00034**	**0.000051**	**0.00021**	**0.0021**
PCB-194	35694-08-7	mg/kg	0.0000183	NP	--	**0.0063**	**0.002**	**0.00078**	**0.0032**	**0.0015**	**0.00049**	**0.00059**	**0.0065**
PCB-195	52663-78-2	mg/kg	0.0000072	NP	--	**0.0026**	**0.00078**	**0.0003**	**0.0015**	**0.0007**	**0.00014**	**0.00033**	**0.0037**
PCB-196/203	42740-50-1/52663-76-0	mg/kg	0.0000255	NP	--	**0.0087**	**0.0025**	**0.00099**	**0.0028**	**0.0019**	**0.00077**	**0.00084**	**0.0086**
PCB-197	33091-17-7	mg/kg	0.000002	NP	--	**0.00031**	**0.000059**	**0.00003**	**0.00016**	**0.000073**	**0.00002**	**0.000039**	**0.00036**
PCB-198	68194-17-2	mg/kg	0.000002	NP	--	**0.00038**	**0.00011**	**0.000051**	**0.000082**	**0.000053**	**0.000026**	**0.000042**	**0.00049**
PCB-199	52663-75-9	mg/kg	0.00003	NP	--	**0.0071**	**0.0025**	**0.00095**	**0.0027**	**0.0016**	**0.00079**	**0.00079**	**0.0062**
PCB-2	2051-61-8	mg/kg	0.000002	NP	--	0.00002 U	**0.000004 LJ**	**0.0000054 LJ**	**0.000095**	**0.000037**	**0.000067**	**0.000073**	**0.000044**
PCB-20/21/33	38444-84-7/55702-46-0/38444-86-9	mg/kg	0.0000228	NP	--	**0.000097**	**0.000071**	**0.0001**	**0.0027**	**0.0013**	**0.0011**	**0.0023**	**0.0039**
PCB-200	52663-73-7	mg/kg	0.000002	NP	--	**0.00084**	**0.00023**	**0.000092**	**0.00037**	**0.00019**	**0.00007**	**0.000099**	**0.00083**
PCB-201	40186-71-8	mg/kg	0.000006	NP	--	**0.00085**	**0.00021**	**0.000091**	**0.00049**	**0.0002**	**0.000093**	**0.00012**	**0.0012**
PCB-202	2136-99-4	mg/kg	0.0000075	NP	--	**0.0011**	**0.00047**	**0.00018**	**0.00084**	**0.00034**	**0.00021**	**0.00019**	**0.002**
PCB-204	74472-52-9	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U
PCB-205	74472-53-0	mg/kg	0.000002	NP	--	**0.00035**	**0.00012**	**0.000059**	**0.00022**	**0.000091**	**0.000025**	**0.000054**	**0.00031**
PCB-206	40186-72-9	mg/kg	0.000024	NP	--	**0.0013**	**0.0012**	**0.0006**	**0.0019**	**0.00075**	**0.00074**	**0.00031**	**0.0021**
PCB-207	52663-79-3	mg/kg	0.000006	NP	--	**0.00018**	**0.00012**	**0.000079**	**0.00021**	**0.000081**	**0.000077**	**0.000045**	**0.0003**
PCB-208	52663-77-1	mg/kg	0.0000117	NP	--	**0.00026**	**0.00032**	**0.00018**	**0.00049**	**0.00018**	**0.0002**	**0.0001**	**0.00051**
PCB-209	2051-24-3	mg/kg	0.0000267	NP	--	**0.00028**	**0.00046**	**0.00045**	**0.0012**	**0.00032**	**0.00018**	**0.00022**	**0.0017**
PCB-22	38444-85-8	mg/kg	0.000006	NP	--	**0.000062**	**0.000043**	**0.000076**	**0.0022**	**0.001**	**0.00072**	**0.0018**	**0.0031**
PCB-23	55720-44-0	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	**0.000021**	0.00002 U	**0.000029**	**0.000014 LJ**	0.00002 U
PCB-24	55702-45-9	mg/kg	0.000002	NP	--	0.00002 U	**0.0000031 LJ**	**0.0000051 LJ**	**0.00029**	**0.00011**	**0.000037**	**0.0004**	**0.00092**
PCB-25	55712-37-3	mg/kg	0.000002	NP	--	**0.000013 LJ**	**0.00001 LJ**	**0.000016 LJ**	**0.00071**	**0.00037**	**0.00024**	**0.00072**	**0.0011**
PCB-26	38444-81-4	mg/kg	0.000002	NP	--	**0.00002**	**0.00002**	**0.00003**	**0.0013**	**0.00062**	**0.00035**	**0.00095**	**0.0017**
PCB-27	38444-76-7	mg/kg	0.000002	NP	--	0.00002 U	**0.0000034 LJ**	**0.0000047 LJ**	**0.00024**	**0.00012**	**0.000034**	**0.00045**	**0.00086**
PCB-28	7012-37-5	mg/kg	0.0000225	NP	--	**0.00017**	**0.00011**	**0.00017**	**0.0056**	**0.0041**	**0.002**	**0.0039**	**0.011**
PCB-29	15862-07-4	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	**0.000054**	**0.000026**	**0.000034**	**0.00004**	**0.000067**

Table 4-7 (continued)
Summary of Sediment Sample Results, Drainage Paths, 0-12 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 0 - 12 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L04	L04	L04	L01	L01	L05	L06	L01
					Station	SED13	SED14	SED15	SED16	SED16	SED17	SED18	SED19
					Sample ID	CL-L04-SED13-12-51	CL-L04-SED14-12-51	CL-L04-SED15-12-51	CL-L01-SED16-12-51	CL-L01-SED16-12-52	CL-L05-SED17-12-51	CL-L06-SED18-12-51	CL-L01-SED19-12-51
					Depths	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
					Date	04/07/2022	04/08/2022	04/08/2022	04/06/2022	04/06/2022	04/08/2022	04/07/2022	04/06/2022
					Type	FS	FS	FS	FS	FD	FS	FS	FS
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)													
PCB-3	2051-62-9	mg/kg	0.000006	NP	--	0.00002 U	**0.000011 LJ**	**0.0000083 LJ**	**0.00016**	**0.000059**	**0.00015**	**0.00021**	**0.00012**
PCB-30	35693-92-6	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	**0.000011 LJ**	0.00002 U
PCB-31	16606-02-3	mg/kg	0.0000069	NP	--	**0.00011**	**0.0001**	**0.00014**	**0.007**	**0.0022**	**0.0014**	**0.0037**	**0.0056**
PCB-32	38444-77-8	mg/kg	0.000002	NP	--	**0.00003**	**0.00002**	**0.000029**	**0.0016**	**0.00069**	**0.00023**	**0.0029**	**0.0053**
PCB-34	37680-68-5	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	**0.000076**	**0.000028**	**0.000014 LJ**	**0.000042**	**0.00011**
PCB-35	37680-69-6	mg/kg	0.000002	NP	--	0.00002 U	**0.0000082 LJ**	**0.000016 LJ**	0.00002 U	**0.000063**	**0.000042**	**0.000087**	**0.00016**
PCB-36	38444-87-0	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U
PCB-37	38444-90-5	mg/kg	0.0000147	NP	--	**0.000076**	**0.00012**	**0.00013**	**0.0025**	**0.0011**	**0.0004**	**0.0011**	**0.0038**
PCB-38	53555-66-1	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U
PCB-39	38444-88-1	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U
PCB-4	13029-08-8	mg/kg	0.000002	NP	--	**0.000018 LJ**	**0.000013 LJ**	**0.000025**	**0.00067**	**0.0003**	**0.0001**	**0.0037**	**0.0017**
PCB-40	38444-93-8	mg/kg	0.000006	NP	--	**0.000022**	**0.000043**	**0.000045**	**0.00085**	**0.00051**	**0.00011**	**0.00052**	**0.0029**
PCB-41/64/71/72	52663-59-9/52663-58-8/41464-46-4/41464-42-0	mg/kg	0.0000225	NP	--	**0.00026**	**0.00024**	**0.0003**	**0.0041**	**0.0026**	**0.0005**	**0.003**	**0.012**
PCB-42/59	36559-22-5/74472-33-6	mg/kg	0.0000117	NP	--	**0.000051**	**0.000066**	**0.000076**	**0.0018**	**0.0011**	**0.00023**	**0.0012**	**0.0054**
PCB-43/49	70362-46-8/41464-40-8	mg/kg	0.000045	NP	--	**0.00052**	**0.00021**	**0.00031**	**0.0048**	**0.0027**	**0.00059**	**0.0037**	**0.013**
PCB-44	41464-39-5	mg/kg	0.00003	NP	--	**0.00016**	**0.00037**	**0.00055**	**0.0047**	**0.0028**	**0.00062**	**0.0033**	**0.014**
PCB-45	70362-45-7	mg/kg	0.000002	NP	--	**0.000024**	**0.000043**	**0.000042**	**0.00079**	**0.00046**	**0.00012**	**0.00061**	**0.003**
PCB-46	41464-47-5	mg/kg	0.000002	NP	--	**0.000019 LJ**	**0.000021**	**0.000016 LJ**	**0.00033**	**0.0002**	**0.000057**	**0.00033**	**0.0013**
PCB-47	2437-79-8	mg/kg	0.0000207	NP	--	**0.00041**	**0.000051**	**0.000062**	**0.0024**	**0.0014**	**0.00028**	**0.0018**	**0.0051**
PCB-48/75	70362-47-9/32598-12-2	mg/kg	0.000012	NP	--	**0.000029 LJ**	**0.000034 LJ**	**0.000043**	**0.00062**	**0.00038**	**0.00011**	**0.00062**	**0.0022**
PCB-5	16605-91-7	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	**0.000069**	**0.00003**	**0.000016 LJ**	**0.00015**	**0.00024**
PCB-50	62796-65-0	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	**0.000023**	**0.000012 LJ**	0.00002 U	**0.000024**	**0.000069**
PCB-51	68194-04-7	mg/kg	0.000002	NP	--	**0.0003**	**0.000012 LJ**	**0.000013 LJ**	**0.00038**	**0.00019**	**0.000059**	**0.00054**	**0.0013**
PCB-52/69	35693-99-3/60233-24-1	mg/kg	0.000051	NP	--	**0.00089**	**0.00069**	**0.0013**	**0.0068**	**0.0037**	**0.00083**	**0.0048**	**0.019**
PCB-53	41464-41-9	mg/kg	0.000006	NP	--	**0.00028**	**0.000049**	**0.000054**	**0.00087**	**0.00045**	**0.00014**	**0.00098**	**0.0033**
PCB-54	15968-05-5	mg/kg	0.000002	NP	--	**0.00007**	0.00002 U	0.00002 U	**0.000025**	**0.000013 LJ**	0.00002 U	**0.000046**	**0.0001**
PCB-55	74338-24-2	mg/kg	0.000002	NP	--	**0.000028**	**0.0000079 LJ**	**0.000013 LJ**	**0.0001**	**0.000063**	**0.000018 LJ**	**0.000082**	**0.00023**
PCB-56/60	41464-43-1/33025-41-1	mg/kg	0.0000153	NP	--	**0.00013**	**0.0002**	**0.00026**	**0.0047**	**0.0023**	**0.00047**	**0.0023**	**0.0099**
PCB-57	70424-67-8	mg/kg	0.000002	NP	--	**0.0000071 LJ**	0.00002 U	0.00002 U	**0.000045**	**0.000025**	0.00002 U	**0.00003**	**0.00011**
PCB-58	41464-49-7	mg/kg	0.000002	NP	--	**0.000004 LJ**	0.00002 U	0.00002 U	**0.000024**	**0.000015 LJ**	0.00002 U	**0.000013 LJ**	**0.000057**
PCB-6	25569-80-6	mg/kg	0.000006	NP	--	**0.0000046 LJ**	**0.0000091 LJ**	**0.000019 LJ**	**0.00043**	**0.00015**	**0.00011**	**0.0015**	**0.0011**
PCB-61/70	33284-53-6/32598-11-1	mg/kg	0.0000285	NP	--	**0.00034**	**0.00054**	**0.00082**	**0.0065**	**0.0039**	**0.00081**	**0.0032**	**0.018**
PCB-62	54230-22-7	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U
PCB-63	74472-34-7	mg/kg	0.000002	NP	--	**0.000011 LJ**	**0.000012 LJ**	**0.000017 LJ**	**0.00027**	**0.00015**	**0.00029**	**0.00014**	**0.00062**
PCB-65	33284-54-7	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U
PCB-66/76	32598-10-0/70362-48-0	mg/kg	0.000051	NP	--	**0.00052**	**0.00031**	**0.00035**	**0.0056**	**0.0034**	**0.00056**	**0.0023**	**0.014**
PCB-67	73575-53-8	mg/kg	0.000002	NP	--	**0.000017 LJ**	**0.0000057 LJ**	**0.0000069 LJ**	**0.00025**	**0.00013**	**0.000032**	**0.00011**	**0.0005**
PCB-68	73575-52-7	mg/kg	0.000002	NP	--	**0.0000095 LJ**	**0.0000039 LJ**	0.00002 U	**0.000051**	**0.000037**	0.00002 U	**0.000037**	**0.000085**
PCB-7	33284-50-3	mg/kg	0.000002	NP	--	0.00002 U	**0.0000025 LJ**	**0.0000049 LJ**	**0.00014**	**0.000045**	**0.000022**	**0.00018**	**0.00026**
PCB-73	74338-23-1	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U
PCB-74	32690-93-0	mg/kg	0.000018	NP	--	**0.00011**	**0.00016**	**0.0002**	**0.0029**	**0.0016**	**0.00028**	**0.0013**	**0.0068**
PCB-78	70362-49-1	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U
PCB-79	41464-48-6	mg/kg	0.000006	NP	--	**0.000043**	**0.000017 LJ**	**0.000021**	**0.0002**	**0.000091**	**0.000031**	**0.000063**	**0.0003**
PCB-8	34883-43-7	mg/kg	0.0000174	NP	--	**0.00002**	**0.000043**	**0.000071**	**0.0014**	**0.00052**	**0.00031**	**0.0043**	**0.0037**
PCB-80	33284-52-5	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U
PCB-82	52663-62-4	mg/kg	0.0000108	NP	--	**0.0001**	**0.00015**	**0.00026**	**0.00056**	**0.00048**	**0.00019**	**0.00067**	**0.00019**

Table 4-7 (continued)
Summary of Sediment Sample Results, Drainage Paths, 0-12 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 0 - 12 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L04	L04	L04	L01	L01	L05	L06	L01
					Station	SED13	SED14	SED15	SED16	SED16	SED17	SED18	SED19
					Sample ID	CL-L04-SED13-12-51	CL-L04-SED14-12-51	CL-L04-SED15-12-51	CL-L01-SED16-12-51	CL-L01-SED16-12-52	CL-L05-SED17-12-51	CL-L06-SED18-12-51	CL-L01-SED19-12-51
					Depths	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
					Date	04/07/2022	04/08/2022	04/08/2022	04/06/2022	04/06/2022	04/08/2022	04/07/2022	04/06/2022
					Type	FS	FS	FS	FS	FD	FS	FS	FS
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)													
PCB-83/112	60145-20-2/74472-36-9	mg/kg	0.000012	NP	--	**0.0001**	**0.00006**	**0.0001**	**0.00039**	**0.0002**	**0.000079**	**0.00028**	**0.0015**
PCB-84/92	52663-60-2/52663-61-3	mg/kg	0.000057	NP	--	**0.0037**	**0.00059**	**0.0011**	**0.0046**	**0.0019**	**0.00067**	**0.0026**	**0.013**
PCB-85/116	65510-45-4/18259-05-7	mg/kg	0.0000162	NP	--	**0.000098**	**0.00025**	**0.00035**	**0.0014**	**0.00067**	**0.00025**	**0.00085**	**0.0042**
PCB-86	55312-69-1	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U
PCB-87/117/125	38380-02-8/68194-11-6/74472-39-2	mg/kg	0.000039	NP	--	**0.0018**	**0.00056**	**0.001**	**0.0036**	**0.0015**	**0.0006**	**0.0023**	**0.011**
PCB-88/91	55215-17-3/68194-05-8	mg/kg	0.0000231	NP	--	**0.0011**	**0.0002**	**0.00032**	**0.0016**	**0.00077**	**0.00028**	**0.0009**	**0.0042**
PCB-89	73575-57-2	mg/kg	0.000002	NP	--	**0.000019 LJ**	**0.000019 LJ**	**0.000018 LJ**	**0.000086**	**0.000047**	**0.000016 LJ**	**0.000082**	**0.00045**
PCB-9	34883-39-1	mg/kg	0.000002	NP	--	0.00002 U	**0.0000029 LJ**	**0.0000044 LJ**	**0.00008**	**0.000048**	**0.000065**	**0.00027**	**0.00023**
PCB-90/101	68194-07-0/37680-73-2	mg/kg	0.000144	NP	--	**0.018**	**0.0014**	**0.0026**	**0.012**	**0.0049**	**0.0015**	**0.006**	**0.032**
PCB-93	73575-56-1	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00002 U
PCB-94	73575-55-0	mg/kg	0.000002	NP	--	**0.000093**	**0.0000072 LJ**	**0.0000096 LJ**	**0.000094**	**0.00004**	**0.000014 LJ**	**0.00007**	**0.00028**
PCB-95	38379-99-6	mg/kg	0.000105	NP	--	**0.014**	**0.0012**	**0.0021**	**0.0099**	**0.0047**	**0.0017**	**0.0054**	**0.03**
PCB-96	73575-54-9	mg/kg	0.000002	NP	--	**0.000041**	**0.0000096 LJ**	**0.000013 LJ**	**0.000087**	**0.000037**	**0.000012 LJ**	**0.000059**	**0.0003**
PCB-97	41464-51-1	mg/kg	0.000042	NP	--	**0.0007**	**0.00044**	**0.00081**	**0.0033**	**0.0014**	**0.00053**	**0.0019**	**0.0098**
PCB-98/102	60233-25-2/68194-06-9	mg/kg	0.000004	NP	--	0.000039 U	0.00004 U	0.00004 U	0.00004 U	0.00004 U	0.00004 U	0.00004 U	0.00004 U
PCB-99	38380-01-7	mg/kg	0.00009	NP	--	**0.0019**	**0.0005**	**0.00089**	**0.0043**	**0.0018**	**0.00062**	**0.002**	**0.012**
TEQ (Bird)	2222-22-3	mg/kg	0.00000057	NP	--	**0.000019**	**0.000012**	**0.000013**	**0.000097**	**0.000047**	**0.000013**	**0.000038**	**0.00021**
TEQ (Fish)	2222-22-4	mg/kg	2.4E-09	NP	--	**0.00000054**	**0.00000024**	**0.00000023**	**0.0000014**	**0.00000063**	**0.00000018**	**0.0000004**	**0.0000027**
TEQ (Mammal)	2222-22-2	mg/kg	5.1E-09	NP	--	**0.00001**	**0.0000044**	**0.0000036**	**0.000023**	**0.000011**	**0.0000028**	**0.0000057**	**0.000043**
Total DiCB	25512-42-9	mg/kg	0.000033	NP	--	**0.000087 J**	**0.00021 J**	**0.00025 J**	**0.0047 J**	**0.0019 J**	**0.001 J**	**0.013 J**	**0.012 J**
Total HpCB	28655-71-2	mg/kg	0.00036	NP	--	**0.15 J**	**0.024 J**	**0.01 J**	**0.083 J**	**0.029 J**	**0.0044 J**	**0.017 J**	**0.17 J**
Total HxCB	26601-64-9	mg/kg	0.00084	NP	--	**0.18 J**	**0.024 J**	**0.018 J**	**0.099 J**	**0.044 J**	**0.0095 J**	**0.032 J**	**0.22 J**
Total MoCB	27323-18-8	mg/kg	0.000006	NP	--		**0.000022 J**	**0.000019 LJ**	**0.00039 J**	**0.00015 J**	**0.00028 J**	**0.00075 J**	**0.00026 J**
Total NoCB	53742-07-7	mg/kg	0.000039	NP	--	**0.0017 J**	**0.0016 J**	**0.00086 J**	**0.0026 J**	**0.001 J**	**0.001 J**	**0.00046 J**	**0.0029 J**
Total OcCB	55722-26-4	mg/kg	0.000093	NP	--	**0.029 J**	**0.009 J**	**0.0035 J**	**0.012 J**	**0.0066 J**	**0.0026 J**	**0.0031 J**	**0.03 J**
TOTAL PCBs	1111-11-1	mg/kg	0.00264	NP	--	**0.43 J**	**0.074 J**	**0.056 J**	**0.36 J**	**0.16 J**	**0.044 J**	**0.17 J**	**0.84 J**
Total PeCB	25429-29-2	mg/kg	0.00084	NP	--	**0.067 J**	**0.01 J**	**0.017 J**	**0.072 J**	**0.032 J**	**0.011 J**	**0.038 J**	**0.19 J**
Total TeCB	26914-33-0	mg/kg	0.00033	NP	--	**0.0044 J**	**0.0032 J**	**0.0046 J**	**0.05 J**	**0.029 J**	**0.006 J**	**0.032 J**	**0.14 J**
Total TrCB	25323-68-6	mg/kg	0.000093	NP	--	**0.00073 J**	**0.00063 J**	**0.00086 J**	**0.034 J**	**0.016 J**	**0.0079 J**	**0.033 J**	**0.068 J**
CLP Organics by CLP SOW SFAM01.1/3151.0													
1,2,4,5-Tetrachlorobenzene	95-94-3	mg/kg	0.22	0.23	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
1,4-Dioxane	123-91-1	mg/kg	0.088	5.3	--	0.05 U	0.046 U	0.042 U	0.072 U	0.076 U	0.039 U	0.039 U	0.05 U
1-Methylnaphthalene	90-12-0	mg/kg	0.22	18	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
2,3,4,6-Tetrachlorophenol	58-90-2	mg/kg	0.22	190	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 UJ
Metals by CLP SOW SFAM01.1													
Aluminum	7429-90-5	mg/kg	90000	7700	--	**24000**	**23000**	**12000**	**8700**	**14000**	**7300**	**2600**	**15000**
Antimony	7440-36-0	mg/kg	0.95	3.1	--	**1.1 LJ**	**0.83 LJ**	**1.3**	**1.3 LJ**	**1.8**	**0.34 LJ**	**17**	**2.1**
Arsenic	7440-38-2	mg/kg	24	0.68	--	**14 J**	**12 J**	**38 J**	**4.2**	**8**	**3.6 J**	**4.1**	**9.6**
Barium	7440-39-3	mg/kg	540	1500	--	**150 J**	**3500 J**	**240 J**	**120**	**210**	**320 J**	**50**	**340**
Beryllium	7440-41-7	mg/kg	2.7	16	--	**0.75**	**0.65**	**0.62**	**0.22 LJ**	**0.39 LJ**	**0.24 LJ**	0.68 U	**0.47 LJ**
Cadmium	7440-43-9	mg/kg	1.77	0.71	--	**1.8**	**0.71**	**1.5**	**0.75**	**1.2**	**1.5**	0.68 U	0.6 U
Calcium	7440-70-2	mg/kg	14400	NP	--	**4000**	**39000**	**37000**	**7600**	**9700**	**98000**	**38000**	**5300**
Chromium	7440-47-3	mg/kg	36	NP	--	**14**	**17**	**69**	**9.4 J**	**15 J**	**9.8**	**11**	**14 J**
Cobalt	7440-48-4	mg/kg	12.6	2.3	--	**4.9 J**	**4.5 J**	**5.3 J**	**3.4 J**	**5.6 J**	**2**	**4**	**7.4 J**
Copper	7440-50-8	mg/kg	45	310	--	**28 J**	**36 J**	**62 J**	**49**	**83**	**18 J**	**37**	**28**
Iron	7439-89-6	mg/kg	87000	5500	--	**26000**	**33000**	**23000**	**10000**	**17000**	**14000**	**6100**	**18000**

Table 4-7 (continued)
Summary of Sediment Sample Results, Drainage Paths, 0-12 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 0 - 12 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L04	L04	L04	L01	L01	L05	L06	L01
					Station	SED13	SED14	SED15	SED16	SED16	SED17	SED18	SED19
					Sample ID	CL-L04-SED13-12-51	CL-L04-SED14-12-51	CL-L04-SED15-12-51	CL-L01-SED16-12-51	CL-L01-SED16-12-52	CL-L05-SED17-12-51	CL-L06-SED18-12-51	CL-L01-SED19-12-51
					Depths	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
					Date	04/07/2022	04/08/2022	04/08/2022	04/06/2022	04/06/2022	04/08/2022	04/07/2022	04/06/2022
					Type	FS	FS	FS	FS	FD	FS	FS	FS
Metals by CLP SOW SFAM01.1 (continued)													
Lead	7439-92-1	mg/kg	228	400	--	**91**	**170**	**420**	**96**	**180**	**29**	**700**	**90**
Magnesium	7439-95-4	mg/kg	14400	NP	--	**2800**	**4400**	**3000**	**1700**	**2500**	**6100**	**1700**	**2400**
Manganese	7439-96-5	mg/kg	1500	180	--	**210 J**	**1700 J**	**520 J**	**230**	**380**	**690 J**	**110**	**320**
Mercury	7439-97-6	mg/kg	0.69	1.1	--	**0.12 LJ**	**0.11 LJ**	**0.093 LJ**	**0.18**	**0.29**	**0.044 LJ**	**0.097 LJ**	**3.6**
Nickel	7440-02-0	mg/kg	57	150	--	**13 J**	**12 J**	**15 J**	**7.8 J**	**12 J**	**5.2**	**7.7 J**	**11 J**
Potassium	7440-09-7	mg/kg	11400	NP	--	**2000**	**2000**	**1000**	**670 LJ**	**1200**	**680**	**200 LJ**	**1400**
Selenium	7782-49-2	mg/kg	2.64	39	--	**0.83 LJ**	**0.84 LJ**	**0.66 LJ**	3.6 U	**0.54 LJ**	**0.36 LJ**	3.4 U	**0.37 LJ**
Silver	7440-22-4	mg/kg	0.72	39	--	**0.094 LJ**	**0.1 LJ**	**0.15 LJ**	**0.96**	**1.5**	**0.82**	**0.12 LJ**	**0.2 LJ**
Sodium	7440-23-5	mg/kg	960	NP	--	**110 LJ**	**120 LJ**	**100 LJ**	780 U	**84 LJ**	**290 LJ**	**120 LJ**	**130 LJ**
Thallium	7440-28-0	mg/kg	0.48	0.078	--	0.7 U	0.63 U	0.46 U	0.73 U	0.85 U	0.5 U	0.68 U	0.6 U
Vanadium	7440-62-2	mg/kg	26.1	39	--	**12 J**	**10 J**	**6.9 J**	**6.2 J**	**8.8 J**	**3.2**	**4.6 LJ**	**8.9 J**
Zinc	7440-66-6	mg/kg	195	2300	--	**300 J**	**120 J**	**300 J**	**140 J**	**200 J**	**260 J**	**150 J**	**110 J**
Pesticides by CLP SOW SFAM01.1													
4,4'-DDD	72-54-8	mg/kg	0.0088	0.19	--	0.0049 U	0.0046 U	0.0041 U	0.0072 U	0.0076 U	**0.059**	0.0039 U	0.0049 U
4,4'-DDE	72-55-9	mg/kg	0.0088	2	--	0.0049 U	0.0046 U	0.0041 U	**0.019**	**0.048**	**0.041**	0.0039 U	0.0049 U
4,4'-DDT	50-29-3	mg/kg	0.0088	1.9	--	0.0049 U	0.0046 U	**0.0033 JQK**	0.0072 U	0.0076 U	**0.0087**	0.0039 U	0.0049 U
Aldrin	309-00-2	mg/kg	0.0045	0.039	--	0.0025 U	0.0023 U	0.0021 U	0.0037 U	0.0039 U	0.002 U	0.002 U	0.0025 U
alpha-BHC	319-84-6	mg/kg	0.0045	0.086	--	0.0025 U	0.0023 U	0.0021 U	0.0037 U	0.0039 U	0.002 U	0.002 U	0.0025 U
beta-BHC	319-85-7	mg/kg	0.0045	0.3	--	0.0025 U	0.0023 U	0.0021 U	0.0037 U	0.0039 U	0.002 U	0.002 U	0.0025 U
cis-Chlordane	5103-71-9	mg/kg	0.0045	3.6	--	0.0025 U	0.0023 U	0.0021 U	0.0037 U	0.0039 U	**0.0042 JK**	**0.004 J**	0.0025 U
delta-BHC	319-86-8	mg/kg	0.0045	NP	--	0.0025 U	0.0023 U	0.0021 U	0.0037 U	**0.0089 J**	0.002 U	0.002 U	0.0025 U
Dieldrin	60-57-1	mg/kg	0.0088	0.034	--	0.0049 U	0.0046 U	0.0041 U	0.0072 U	0.0076 U	0.0039 U	0.0039 U	0.0049 U
Endosulfan I	959-98-8	mg/kg	0.0045	NP	--	0.0025 U	0.0023 U	0.0021 U	0.0037 U	**0.0077**	0.002 U	0.002 U	0.0025 U
Endosulfan II	33213-65-9	mg/kg	0.0088	NP	--	0.0049 U	0.0046 U	0.0041 U	0.0072 U	0.0076 U	0.0039 U	0.0039 U	0.0049 U
Endosulfan sulfate	1031-07-8	mg/kg	0.0088	38	--	0.0049 U	0.0046 U	0.0041 U	0.0072 U	0.0076 U	0.0039 U	0.0039 U	0.0049 U
Endrin	72-20-8	mg/kg	0.0088	1.9	--	0.0049 U	0.0046 U	0.0041 U	0.0072 U	**0.013 J**	0.0039 U	0.0039 U	0.0049 U
Endrin aldehyde	7421-93-4	mg/kg	0.0088	NP	--	0.0049 U	0.0046 U	0.0041 U	0.0072 U	**0.012**	**0.0083**	0.0039 U	0.0049 U
Endrin ketone	53494-70-5	mg/kg	0.0088	NP	--	0.0049 U	0.0046 U	**0.0036 JQK**	0.0072 U	0.0076 U	0.0039 U	0.0039 U	0.0049 U
gamma-BHC (Lindane)	58-89-9	mg/kg	0.0045	0.071	--	0.0025 U	0.0023 U	0.0021 U	0.0037 U	**0.0028 LJ**	0.002 U	0.002 U	0.0025 U
Heptachlor	76-44-8	mg/kg	0.0045	0.13	--	0.0025 U	0.0023 U	0.0021 U	0.0037 U	0.0039 U	0.002 U	0.002 U	0.0025 U
Heptachlor epoxide	1024-57-3	mg/kg	0.0045	0.07	--	0.0025 U	0.0023 U	0.0021 U	0.0037 U	**0.0076**	0.002 U	0.002 U	0.0025 U
Methoxychlor	72-43-5	mg/kg	1.08	32	--	0.025 U	0.023 U	**0.025 JK**	0.037 U	**0.2**	**0.021**	0.02 U	**0.029**
Toxaphene	8001-35-2	mg/kg	0.45	0.49	--	0.25 U	0.23 U	0.21 U	0.37 U	0.39 U	0.2 U	0.2 U	0.25 U
trans-Chlordane	5103-74-2	mg/kg	0.0045	3.6	--	0.0025 U	0.0023 U	**0.0043 JK**	0.0037 U	0.0039 U	**0.016**	**0.0047 J**	0.0025 U
SVOCs by CLP SOW SFAM01.1/3151.0													
1,1'-Biphenyl	92-52-4	mg/kg	0.22	4.7	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
2,2'-Oxybis(1-chloropropane)	108-60-1	mg/kg	0.45	310	--	0.25 UJK	0.23 UJK	0.21 UJK	0.36 U	0.39 U	0.2 UJK	0.2 U	0.25 U
2,4,5-Trichlorophenol	95-95-4	mg/kg	0.22	630	--	0.13 U	0.12 UJK	0.1 UJK	0.18 U	0.19 U	0.099 UJK	0.097 U	0.13 U
2,4,6-Trichlorophenol	88-06-2	mg/kg	0.22	6.3	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
2,4-Dichlorophenol	120-83-2	mg/kg	0.22	19	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
2,4-Dimethylphenol	105-67-9	mg/kg	0.22	130	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
2,4-Dinitrophenol	51-28-5	mg/kg	0.45	13	--	0.25 U	0.23 U	0.21 U	0.36 U	0.39 U	0.2 U	0.2 U	0.25 U
2,4-Dinitrotoluene	121-14-2	mg/kg	0.22	1.7	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
2,6-Dinitrotoluene	606-20-2	mg/kg	0.22	0.36	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
2-Chloronaphthalene	91-58-7	mg/kg	0.22	480	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
2-Chlorophenol	95-57-8	mg/kg	0.22	39	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U

Table 4-7 (continued)
Summary of Sediment Sample Results, Drainage Paths, 0-12 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 0 - 12 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L04	L04	L04	L01	L01	L05	L06	L01
					Station	SED13	SED14	SED15	SED16	SED16	SED17	SED18	SED19
					Sample ID	CL-L04-SED13-12-51	CL-L04-SED14-12-51	CL-L04-SED15-12-51	CL-L01-SED16-12-51	CL-L01-SED16-12-52	CL-L05-SED17-12-51	CL-L06-SED18-12-51	CL-L01-SED19-12-51
					Depths	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
					Date	04/07/2022	04/08/2022	04/08/2022	04/06/2022	04/06/2022	04/08/2022	04/07/2022	04/06/2022
					Type	FS	FS	FS	FS	FD	FS	FS	FS
SVOCs by CLP SOW SFAM01.1/3151.0 (continued)													
2-Methylnaphthalene	91-57-6	mg/kg	0.22	24	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
2-Methylphenol	95-48-7	mg/kg	0.45	320	--	0.25 U	0.23 U	0.21 U	0.36 U	0.39 U	0.2 U	0.2 U	0.25 U
2-Nitroaniline	88-74-4	mg/kg	0.22	63	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
2-Nitrophenol	88-75-5	mg/kg	0.22	NP	--	0.13 UJK	0.12 UJK	0.1 UJK	0.18 U	0.19 U	0.099 UJK	0.097 U	0.13 U
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.45	1.2	--	0.25 U	0.23 U	0.21 U	0.36 U	0.39 U	0.2 U	0.2 U	0.25 U
3-Nitroaniline	99-09-2	mg/kg	0.45	NP	--	0.25 U	0.23 U	0.21 U	0.36 U	0.39 U	0.2 U	0.2 U	0.25 U
4,6-Dinitro-2-methylphenol	534-52-1	mg/kg	0.45	0.51	--	0.25 U	0.23 U	0.21 U	0.36 U	0.39 U	0.2 U	0.2 U	0.25 U
4-Bromophenyl-phenylether	101-55-3	mg/kg	0.22	NP	--	0.13 UJK	0.12 UJK	0.1 UJK	0.18 U	0.19 U	0.099 UJK	0.097 U	0.13 U
4-Chloro-3-methylphenol	59-50-7	mg/kg	0.22	630	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
4-Chloroaniline	106-47-8	mg/kg	0.45	2.7	--	0.25 U	0.23 U	0.21 U	0.36 U	0.39 U	0.2 U	0.2 U	0.25 U
4-Chlorophenyl-phenyl ether	7005-72-3	mg/kg	0.22	NP	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
4-Methylphenol	106-44-5	mg/kg	0.45	130	--	0.25 U	0.23 U	0.21 U	0.36 U	0.39 U	0.2 U	0.2 U	0.25 U
4-Nitroaniline	100-01-6	mg/kg	0.45	25	--	0.25 U	0.23 U	0.21 U	0.36 U	0.39 U	0.2 U	0.2 U	0.25 U
4-Nitrophenol	100-02-7	mg/kg	0.45	NP	--	0.25 U	0.23 U	0.21 U	0.36 U	0.39 U	0.2 U	0.2 U	0.25 U
Acenaphthene	83-32-9	mg/kg	0.22	360	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
Acenaphthylene	208-96-8	mg/kg	0.22	NP	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
Acetophenone	98-86-2	mg/kg	0.45	780	--	0.25 U	0.23 U	0.21 U	0.36 U	0.39 U	0.2 U	0.2 U	0.25 U
Anthracene	120-12-7	mg/kg	0.22	1800	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	**0.072 LJ**	0.13 U
Atrazine	1912-24-9	mg/kg	0.45	2.4	--	0.25 U	0.23 U	0.21 U	0.36 U	0.39 U	0.2 U	0.2 U	0.25 U
Benzaldehyde	100-52-7	mg/kg	0.45	170	--	0.25 U	0.23 U	0.21 U	0.36 U	0.39 U	0.2 U	0.2 U	0.25 U
Benzo(a)anthracene	56-55-3	mg/kg	0.66	1.1	--	0.13 U	0.12 U	**0.17**	**0.38**	**0.37**	0.099 U	**0.38**	0.13 U
Benzo(a)pyrene	50-32-8	mg/kg	0.87	0.11	--	0.13 U	**0.15**	**0.24**	**0.47**	**0.45**	0.099 U	**0.38**	0.13 U
Benzo(b)fluoranthene	205-99-2	mg/kg	0.75	1.1	--	0.13 UJK	**0.31 JK**	**0.45 JK**	**0.69 J**	**0.66 J**	0.099 UJK	**0.58 J**	0.13 U
Benzo(g,h,i)perylene	191-24-2	mg/kg	0.69	NP	--	0.13 UJK	**0.13 JK**	**0.15 JK**	**0.41**	**0.43**	0.099 UJK	**0.11**	0.13 U
Benzo(k)fluoranthene	207-08-9	mg/kg	0.87	11	--	0.13 UJK	**0.099 JQK**	**0.15 JK**	**0.26 J**	**0.26 J**	0.099 UJK	**0.15 J**	0.13 U
Bis(2-chloroethoxy)methane	111-91-1	mg/kg	0.22	19	--	0.13 U	0.12 U	0.1 UJK	0.18 U	0.19 U	0.099 UJK	0.097 U	0.13 U
Bis(2-chloroethyl)ether	111-44-4	mg/kg	0.45	0.23	--	0.25 U	0.23 U	0.21 UJK	0.36 U	0.39 U	0.2 UJK	0.2 U	0.25 U
Bis(2-ethylhexyl)phthalate	117-81-7	mg/kg	0.22	39	--	0.13 U	0.12 U	**0.17**	**1.8**	**2.4**	**0.16**	**0.72**	0.13 U
Butylbenzylphthalate	85-68-7	mg/kg	0.22	290	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
Caprolactam	105-60-2	mg/kg	0.45	3100	--	0.25 U	0.23 U	0.21 U	0.36 U	0.39 U	0.2 U	0.2 U	0.25 U
Carbazole	86-74-8	mg/kg	0.45	NP	--	0.25 U	0.23 U	0.21 U	0.36 U	0.39 U	0.2 U	**0.085 LJ**	0.25 U
Chrysene	218-01-9	mg/kg	0.66	110	--	0.13 U	0.12 U	**0.23**	**0.4**	**0.45**	0.099 U	**0.43**	0.13 U
Dibenzo(a,h)anthracene	53-70-3	mg/kg	0.22	0.11	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
Dibenzofuran	132-64-9	mg/kg	0.22	7.8	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
Diethylphthalate	84-66-2	mg/kg	0.22	5100	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
Dimethylphthalate	131-11-3	mg/kg	0.22	NP	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
Di-n-butylphthalate	84-74-2	mg/kg	0.22	630	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
Di-n-octylphthalate	117-84-0	mg/kg	0.45	63	--	0.25 U	0.23 U	0.21 U	0.36 U	0.39 U	0.2 U	**0.15 LJ**	0.25 U
Fluoranthene	206-44-0	mg/kg	0.84	240	--	0.13 U	**0.12**	**0.24**	**0.75**	**0.76**	**0.14**	**0.9**	0.13 U
Fluorene	86-73-7	mg/kg	0.22	240	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
Hexachlorobenzene	118-74-1	mg/kg	0.22	0.078	--	0.13 UJK	0.12 UJK	0.1 UJK	0.18 U	0.19 U	0.099 UJK	0.097 U	0.13 U
Hexachlorobutadiene	87-68-3	mg/kg	0.22	1.2	--	0.13 UJK	0.12 UJK	0.1 UJK	0.18 U	0.19 U	0.099 UJK	0.097 U	0.13 U
Hexachlorocyclo-pentadiene	77-47-4	mg/kg	0.45	0.18	--	0.25 U	0.23 U	0.21 U	0.36 U	0.39 U	0.2 U	0.2 U	0.25 UJ
Hexachloroethane	67-72-1	mg/kg	0.22	1.8	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	0.72	1.1	--	0.13 U	**0.13 JK**	**0.17 JK**	**0.4**	**0.43**	0.099 UJK	**0.26**	0.13 U
Isophorone	78-59-1	mg/kg	0.22	570	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U

Table 4-7 (continued)
Summary of Sediment Sample Results, Drainage Paths, 0-12 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 0 - 12 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L04	L04	L04	L01	L01	L05	L06	L01
					Station	SED13	SED14	SED15	SED16	SED16	SED17	SED18	SED19
					Sample ID	CL-L04-SED13-12-51	CL-L04-SED14-12-51	CL-L04-SED15-12-51	CL-L01-SED16-12-51	CL-L01-SED16-12-52	CL-L05-SED17-12-51	CL-L06-SED18-12-51	CL-L01-SED19-12-51
					Depths	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
					Date	04/07/2022	04/08/2022	04/08/2022	04/06/2022	04/06/2022	04/08/2022	04/07/2022	04/06/2022
					Type	FS	FS	FS	FS	FD	FS	FS	FS
SVOCs by CLP SOW SFAM01.1/3151.0 (continued)													
Naphthalene	91-20-3	mg/kg	0.22	2	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
Nitrobenzene	98-95-3	mg/kg	0.22	5.1	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
N-Nitroso-di-n propylamine	621-64-7	mg/kg	0.22	0.078	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
N-Nitrosodiphenylamine	86-30-6	mg/kg	0.22	110	--	0.13 U	0.12 U	0.1 U	0.18 U	0.19 U	0.099 U	0.097 U	0.13 U
Pentachlorophenol	87-86-5	mg/kg	0.0015	1	--	0.25 U	0.23 U	0.21 U	0.36 U	0.39 U	0.2 U	0.2 U	0.25 U
Phenanthrene	85-01-8	mg/kg	0.22	NP	--	0.13 U	0.12 U	0.1 U	**0.33**	**0.34**	0.099 U	**0.54**	0.13 U
Phenol	108-95-2	mg/kg	0.45	1900	--	0.25 U	0.23 U	0.21 U	0.36 U	0.39 U	0.2 U	0.2 U	0.25 U
Pyrene	129-00-0	mg/kg	0.84	180	--	0.13 U	**0.11 J**	**0.24**	**0.7**	**0.68**	**0.12**	**0.69**	0.13 U

Notes
mg/kg - milligrams/kilogram
U - Not detected at reported quantitation limit.
J - estimated value.
+ - High biased. Actual concentration may be lower than the concentration reported.
R - Unusable, rejected should not be used.
L - Reported concentration is below the Contract Required Quantitation Limit (CRQL).
K - Unknown bias.
NP - Not Published.
FS - Field Sample.
FD - Field Duplicate.
RSL - Regional Screening level, May 2022.
TR - Targeted Risk for cancer.
THQ - Target Hazard Quotient.
Yellow Highlight - exceeds background
Orange highlight - does not exceed background, but exceeds RSL

Table 4-8
Summary of Sediment Sample Results, Drainage Paths, 12-24 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 12 - 24 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L04	L04	L04	L01	L05	L05	L06	L01
					Station	SED13	SED14	SED15	SED16	SED17	SED17	SED18	SED19
					Sample ID	CL-L04-SED13-24-51	CL-L04-SED14-24-51	CL-L04-SED15-24-51	CL-L01-SED16-24-51	CL-L05-SED17-24-51	CL-L05-SED17-24-52	CL-L06-SED18-24-51	CL-L01-SED19-24-51
					Depths	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24
					Date	04/07/2022	04/08/2022	04/08/2022	04/06/2022	04/08/2022	04/08/2022	04/07/2022	04/06/2022
					Type	FS	FS	FS	FS	FS	FD	FS	FS
Herbicides by SW846 Method 8151													
2,4,5-T	93-76-5	mg/kg	0.0028	63	--	0.0011 U	0.001 U	0.0011 U	0.0014 U	**0.053 JK**	**0.043 JK**	0.0012 U	0.0013 U
2,4-D	94-75-7	mg/kg	0.04	70	--	0.016 U	0.015 U	0.016 U	0.021 U	**0.24 JK**	**0.22 JK**	0.018 U	0.019 U
2,4-DB	94-82-6	mg/kg	0.034	NP	--	0.014 U	0.012 U	0.013 U	0.017 U	**3.7 JK**	**2.7 JK**	0.015 U	0.015 U
Dalapon	75-99-0	mg/kg	0.16	190	--	0.066 U	0.061 U	0.063 U	0.084 U	0.09 U	0.088 U	0.073 U	0.076 U
Dicamba	1918-00-9	mg/kg	0.013	190	--	0.0054 U	0.005 U	0.0052 U	0.0068 U	0.073 U	0.072 U	0.0059 U	0.0062 U
Dichlorprop	120-36-5	mg/kg	0.03	NP	--	0.012 U	0.011 U	0.012 U	0.015 U	**0.38 JK**	**0.49 JK**	0.013 U	0.014 U
Dinoseb	88-85-7	mg/kg	0.03	6.3	--	0.012 U	0.011 U	0.012 U	0.015 U	**0.039 JQK**	**0.034 JQK**	0.013 U	0.014 U
MCPA	94-74-6	mg/kg	2.6	3.2	--	1 U	0.95 U	0.98 U	**3.5 JQK**	**15 JK**	**15 JK**	1.1 U	**2.9 JQK**
MCPP	93-65-2	mg/kg	13	6.3	--	5.1 U	4.7 U	4.9 U	6.5 U	7 U	6.9 U	5.6 U	5.9 U
Pentachlorophenol	87-86-5	mg/kg	0.0011	1	--	0.00045 U	0.00041 U	0.00043 U	**0.0017 JQK**	**0.1 JK**	**0.066 JK**	0.00049 U	**0.00065 JQK**
Silvex (2,4,5-TP)	93-72-1	mg/kg	0.0025	51	--	0.001 U	0.00093 U	0.00097 U	0.0013 U	**0.073 JK**	**0.11 JK**	0.0011 U	0.0012 U
PCB Aroclors by CLP SOW SFAM01.1/3150.0													
Aroclor-1016	12674-11-2	mg/kg	0.0062	0.41	--	0.0027 U	0.0025 U	0.0026 U	0.0034 U	0.0033 U	0.0033 UJK	0.003 U	**0.37**
Aroclor-1221	11104-28-2	mg/kg	0.0062	0.2	--	0.0027 U	0.0025 U	0.0026 U	0.0034 U	0.0033 U	0.0033 UJK	0.003 U	0.005 U
Aroclor-1232	11141-16-5	mg/kg	0.0062	0.17	--	0.0027 U	0.0025 U	0.0026 U	0.0034 U	0.0033 U	0.0033 UJK	0.003 U	0.005 U
Aroclor-1242	53469-21-9	mg/kg	0.0062	0.23	--	0.0027 U	0.0025 U	0.0026 U	0.0034 U	0.0033 U	0.0033 UJK	0.003 U	0.005 U
Aroclor-1248	12672-29-6	mg/kg	0.0062	0.23	--	0.0027 U	0.0025 U	0.0026 U	0.0034 U	0.0033 U	0.0033 UJK	0.003 U	0.005 U
Aroclor-1254	11097-69-1	mg/kg	0.0062	0.12	--	0.0027 U	0.0025 U	0.0026 U	0.0034 U	0.0033 U	0.0033 UJK	0.003 U	0.005 U
Aroclor-1260	11096-82-5	mg/kg	0.0062	0.24	--	0.0027 U	**0.004 JK**	0.0026 U	**0.1**	**0.13 JK**	**0.21 JK**	0.003 U	**0.28**
Aroclor-1262	37324-23-5	mg/kg	0.0062	NP	--	0.0027 U	0.0025 U	0.0026 U	0.0034 U	0.0033 U	0.0033 UJK	0.003 U	0.005 U
Aroclor-1268	11100-14-4	mg/kg	0.0062	NP	--	0.0027 U	0.0025 U	0.0026 U	0.0034 U	0.0033 U	0.0033 UJK	0.003 U	0.005 U
PCB Aroclor Congeners Group 1 by CLP SOW HRSM02.1													
PCB-105	32598-14-4	mg/kg	0.000057	0.12	--	0.0000092 U	**0.00056**	**0.00078**	**0.0088**	**0.026**	**0.022**	**0.000025**	**0.068**
PCB-114	74472-37-0	mg/kg	0.0000039	0.12	--	0.0000096 U	**0.000029**	**0.000049**	**0.0007**	**0.0016**	**0.0013**	0.0000096 U	**0.003**
PCB-118	31508-00-6	mg/kg	0.000105	0.12	--	0.0000068 U	**0.0005**	**0.00087**	**0.012**	**0.034**	**0.026**	**0.00003**	**0.095**
PCB-123	65510-44-3	mg/kg	0.0000051	0.12	--	0.0000089 U	**0.000025**	**0.000044**	**0.00039**	**0.0011**	**0.0011**	0.0000089 U	**0.0033**
PCB-126	57465-28-8	mg/kg	0.0000039	0.000036	--	0.0000065 U	**0.000023**	**0.00002**	**0.00032**	**0.0011**	**0.0011**	0.0000065 U	**0.0039**
PCB-156	38380-08-4	mg/kg	0.000033	0.12	--	0.0000096 U	**0.0004**	**0.00061**	**0.0029**	**0.0088**	**0.007**	0.0000096 U	**0.036**
PCB-157	69782-90-7	mg/kg	0.0000102	0.12	--	0.0000084 U	**0.0001**	**0.00017**	**0.00054**	**0.0022**	**0.002**	0.0000084 U	**0.007**
PCB-167	52663-72-6	mg/kg	0.0000177	0.12	--	0.0000078 U	**0.00016**	**0.00025**	**0.0014**	**0.0041**	**0.0033**	0.0000078 U	**0.018**
PCB-169	32774-16-6	mg/kg	0.00000093	0.00012	--	0.0000092 U	0.0000093 U	0.0000093 U	**0.000029**	**0.00006 LJ**	**0.000058 LJ**	0.0000092 U	**0.00033**
PCB-189	39635-31-9	mg/kg	0.0000057	0.13	--	0.0000086 U	**0.000058**	**0.000074**	**0.0004**	**0.00066**	**0.00048**	0.0000086 U	**0.0069**
PCB-77	32598-13-3	mg/kg	0.00003	0.038	--	0.0000082 U	**0.000071**	**0.000037**	**0.0035**	**0.0057**	**0.0053**	**0.000014 LJ**	**0.014**
PCB-81	70362-50-4	mg/kg	0.000003	0.012	--	0.0000059 U	**0.000017 LJ**	**0.00002**	**0.00051**	**0.0013**	**0.001**	0.0000059 U	**0.0052**
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1													
PCB-1	2051-60-7	mg/kg	0.0000066	NP	--	0.00002 U	**0.0000068 LJ**	0.00002 U	**0.00049**	**0.0028**	**0.0014**	**0.000065**	**0.00061**
PCB-10	33146-45-1	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	**0.00019**	**0.0002**	**0.0001**	**0.0000086 LJ**	**0.00034**
PCB-100	39485-83-1	mg/kg	0.0000078	NP	--	0.00002 U	0.00002 U	**0.0000047 LJ**	**0.00012**	**0.00018**	**0.00019**	0.00002 U	**0.00049**
PCB-103	60145-21-3	mg/kg	0.0000114	NP	--	0.00002 U	**0.0000041 LJ**	**0.0000061 LJ**	**0.00025**	**0.0004**	**0.00039**	0.00002 U	**0.0019**
PCB-104	56558-16-8	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U	0.00002 U	0.0001 U
PCB-106	70424-69-0	mg/kg	0.000102	NP	--	0.00002 U	**0.00061**	**0.00082**	**0.015**	**0.035**	**0.03**	**0.000033**	**0.11**
PCB-107	70424-68-9	mg/kg	0.0000105	NP	--	0.00002 U	**0.000061**	**0.000091**	**0.0009**	**0.0027**	**0.0025**	0.00002 U	**0.0095**
PCB-108	70362-41-3	mg/kg	0.0000111	NP	--	0.00002 U	**0.00005**	**0.00011**	**0.00095**	**0.0032**	**0.0025**	0.00002 U	**0.0084**
PCB-109	74472-35-8	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U	0.00002 U	0.0001 U
PCB-11	2050-67-1	mg/kg	0.000006	NP	--	0.00002 U	**0.000014 LJ**	**0.000022**	**0.00013**	**0.00038**	**0.00032**	**0.000015 LJ**	**0.0003**

Table 4-8 (continued)
Summary of Sediment Sample Results, Drainage Paths, 12-24 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 12 - 24 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1									
					Lake	L04	L04	L04	L01	L05	L05	L06	L01
					Station	SED13	SED14	SED15	SED16	SED17	SED17	SED18	SED19
					Sample ID	CL-L04-SED13-24-51	CL-L04-SED14-24-51	CL-L04-SED15-24-51	CL-L01-SED16-24-51	CL-L05-SED17-24-51	CL-L05-SED17-24-52	CL-L06-SED18-24-51	CL-L01-SED19-24-51
					Depths	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24
					Date	04/07/2022	04/08/2022	04/08/2022	04/06/2022	04/08/2022	04/08/2022	04/07/2022	04/06/2022
					Type	FS	FS	FS	FS	FS	FD	FS	FS
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)													
PCB-110	38380-03-9	mg/kg	0.00036	NP	--	**0.000012 LJ**	**0.0011**	**0.0025**	**0.024**	**0.1**	**0.077**	**0.000088**	**0.3**
PCB-111/115	39635-32-0/74472-38-1	mg/kg	0.000004	NP	--	0.000039 U	**0.000034 LJ**	**0.000052**	**0.00078**	**0.0016**	**0.0014**	**0.000068**	**0.0043**
PCB-113	68194-10-5	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U	0.00002 U	0.0001 U
PCB-119	56558-17-9	mg/kg	0.0000219	NP	--	0.00002 U	**0.00002**	**0.00006**	**0.00068**	**0.0013**	**0.0012**	0.00002 U	**0.0043**
PCB-12	2974-92-7	mg/kg	0.000006	NP	--	0.00002 U	**0.0000062 LJ**	0.00002 U	**0.00051**	**0.00089**	**0.00064**	**0.0000084 LJ**	**0.0006**
PCB-120	68194-12-7	mg/kg	0.000006	NP	--	0.00002 U	0.00002 U	**0.0000072 LJ**	0.00002 U	**0.00011**	**0.000078 LJ**	0.00002 U	**0.0009**
PCB-121	56558-18-0	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U	0.00002 U	0.0001 U
PCB-122	76842-07-4	mg/kg	0.000002	NP	--	0.00002 U	**0.000015 LJ**	**0.000027**	**0.00027**	**0.00071**	**0.00052**	0.00002 U	**0.0023**
PCB-124	70424-70-3	mg/kg	0.0000084	NP	--	0.00002 U	**0.000059**	**0.0001**	**0.0017**	**0.0038**	**0.0032**	0.00002 U	**0.014**
PCB-127	39635-33-1	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U	0.00002 U	0.0001 U
PCB-128/162	38380-07-3/39635-34-2	mg/kg	0.000069	NP	--	0.000039 U	**0.00075**	**0.0014**	**0.0045**	**0.017**	**0.013**	**0.000015 LJ**	**0.052**
PCB-129	55215-18-4	mg/kg	0.0000141	NP	--	0.00002 U	**0.000093**	**0.00022**	**0.0012**	**0.0057**	**0.0043**	0.00002 U	**0.015**
PCB-13	2974-90-5	mg/kg	0.000006	NP	--	0.00002 U	**0.0000064 LJ**	0.00002 U	**0.00048**	**0.00071**	**0.00052**	**0.0000079 LJ**	**0.00054**
PCB-130	52663-66-8	mg/kg	0.000036	NP	--	0.00002 U	**0.00016**	**0.00038**	**0.0016**	**0.006**	**0.0042**	0.00002 U	**0.023**
PCB-131/133	61798-70-7/35694-04-3	mg/kg	0.0000138	NP	--	0.000039 U	**0.000073**	**0.0002**	**0.00093**	**0.0032**	**0.0022**	0.00004 U	**0.013**
PCB-132/161	38380-05-1/74472-43-8	mg/kg	0.000078	NP	--	**0.000011 LJ**	**0.00047**	**0.0014**	**0.013**	**0.031**	**0.023**	**0.000026 LJ**	**0.15**
PCB-134/143	52704-70-8/68194-15-0	mg/kg	0.0000168	NP	--	0.000039 U	**0.000083**	**0.00027**	**0.0016**	**0.0059**	**0.0043**	0.00004 U	**0.022**
PCB-135	52744-13-5	mg/kg	0.000054	NP	--	**0.0000061 LJ**	**0.00022**	**0.00066**	**0.0046**	**0.014**	**0.01**	**0.000012 LJ**	**0.075**
PCB-136	38411-22-2	mg/kg	0.000051	NP	--	**0.0000061 LJ**	**0.00016**	**0.00058**	**0.0044**	**0.0094**	**0.0066**	**0.000014 LJ**	**0.097**
PCB-137	35694-06-5	mg/kg	0.000018	NP	--	0.00002 U	**0.00024**	**0.00064**	**0.0018**	**0.0072**	**0.0056**	0.00002 U	**0.019**
PCB-138/163/164	35065-28-2/74472-44-9/74472-45-0	mg/kg	0.00036	NP	--	**0.000039 LJ**	**0.0039**	**0.008**	**0.034**	**0.094**	**0.068**	**0.000096**	**0.46**
PCB-139/149	56030-56-9/38380-04-0	mg/kg	0.00036	NP	--	**0.000038 LJ**	**0.0012**	**0.0042**	**0.027**	**0.071**	**0.05**	**0.000067**	**0.46**
PCB-14	34883-41-5	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U	0.00002 U	0.0001 U
PCB-140	59291-64-4	mg/kg	0.000006	NP	--	0.00002 U	**0.00002**	**0.000046**	**0.00015**	**0.00062**	**0.00042**	0.00002 U	**0.0015**
PCB-141	52712-04-6	mg/kg	0.000048	NP	--	**0.0000094 LJ**	**0.00041**	**0.00096**	**0.0066**	**0.016**	**0.011**	**0.000016 LJ**	**0.11**
PCB-142	41411-61-4	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U	0.00002 U	0.0001 U
PCB-144	68194-14-9	mg/kg	0.0000111	NP	--	0.00002 U	**0.000061**	**0.00029**	**0.0015**	**0.0035**	**0.0024**	0.00002 U	**0.023**
PCB-145	74472-40-5	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	**0.0000028 LJ**	0.00002 U	**0.000047 LJ**	**0.000038 LJ**	0.00002 U	0.0001 U
PCB-146/165	51908-16-8/74472-46-1	mg/kg	0.000087	NP	--	**0.0000075 LJ**	**0.00044**	**0.00099**	**0.0048**	**0.012**	**0.0083**	**0.000014 LJ**	**0.078**
PCB-147	68194-13-8	mg/kg	0.0000111	NP	--	0.00002 U	**0.00005**	**0.00016**	**0.0003**	**0.002**	**0.0015**	0.00002 U	**0.0039**
PCB-148	74472-41-6	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U	0.00002 U	0.0001 U
PCB-15	2050-68-2	mg/kg	0.000018	NP	--	0.00002 U	**0.000075**	**0.0000054 LJ**	**0.0072**	**0.0049**	**0.0032**	**0.000089**	**0.0087**
PCB-150	68194-08-1	mg/kg	0.000006	NP	--	0.00002 U	**0.0000033 LJ**	**0.00001 LJ**	**0.000064**	**0.00014**	**0.0001**	0.00002 U	**0.00066**
PCB-151	52663-63-5	mg/kg	0.000081	NP	--	**0.000014 LJ**	**0.0004**	**0.0014**	**0.0076**	**0.014**	**0.0094**	**0.000017 LJ**	**0.14**
PCB-152	68194-09-2	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	**0.000007 LJ**	**0.000027**	**0.000088 LJ**	**0.000072 LJ**	0.00002 U	**0.00031**
PCB-153	35065-27-1	mg/kg	0.00048	NP	--	**0.000044**	**0.0023**	**0.0058**	**0.027**	**0.063**	**0.046**	**0.000078**	**0.44**
PCB-154	60145-22-4	mg/kg	0.0000252	NP	--	0.00002 U	**0.000017 LJ**	**0.000056**	**0.00034**	**0.0008**	**0.00057**	0.00002 U	**0.0042**
PCB-155	33979-03-2	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U	0.00002 U	0.0001 U
PCB-158/160	74472-42-7/41411-62-5	mg/kg	0.0000249	NP	--	0.000039 U	**0.00045**	**0.001**	**0.0028**	**0.011**	**0.0081**	**0.000012 LJ**	**0.042**
PCB-159	39635-35-3	mg/kg	0.000006	NP	--	0.00002 U	**0.000036**	**0.000096**	**0.00031**	**0.00033**	**0.00024**	0.00002 U	**0.0056**
PCB-16	38444-78-9	mg/kg	0.0000081	NP	--	0.00002 U	**0.000011 LJ**	**0.0000057 LJ**	**0.0087**	**0.0041**	**0.0029**	**0.000076**	**0.011**
PCB-166	41411-63-6	mg/kg	0.000002	NP	--	0.00002 U	**0.000015 LJ**	**0.000028**	**0.000058**	**0.00043**	**0.00032**	0.00002 U	**0.0013**
PCB-168	59291-65-5	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U	0.00002 U	0.0001 U
PCB-17	37680-66-3	mg/kg	0.0000147	NP	--	0.00002 U	**0.000011 LJ**	**0.0000067 LJ**	**0.012**	**0.0057**	**0.0039**	**0.00011**	**0.013**
PCB-170	35065-30-6	mg/kg	0.000111	NP	--	**0.000018 LJ**	**0.0011**	**0.0016**	**0.011**	**0.011**	**0.008**	**0.000033**	**0.16**

Table 4-8 (continued)
Summary of Sediment Sample Results, Drainage Paths, 12-24 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 12 - 24 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L04	L04	L04	L01	L05	L05	L06	L01
					Station	SED13	SED14	SED15	SED16	SED17	SED17	SED18	SED19
					Sample ID	CL-L04-SED13-24-51	CL-L04-SED14-24-51	CL-L04-SED15-24-51	CL-L01-SED16-24-51	CL-L05-SED17-24-51	CL-L05-SED17-24-52	CL-L06-SED18-24-51	CL-L01-SED19-24-51
					Depths	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24
					Date	04/07/2022	04/08/2022	04/08/2022	04/06/2022	04/08/2022	04/08/2022	04/07/2022	04/06/2022
					Type	FS	FS	FS	FS	FS	FD	FS	FS
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)													
PCB-171	52663-71-5	mg/kg	0.000033	NP	--	**0.0000053 LJ**	**0.00029**	**0.00054**	**0.0035**	**0.0043**	**0.0029**	**0.000012 LJ**	**0.058**
PCB-172	52663-74-8	mg/kg	0.0000237	NP	--	**0.0000054 LJ**	**0.00021**	**0.00034**	**0.0023**	**0.0025**	**0.0018**	0.00002 U	**0.04**
PCB-173	68194-16-1	mg/kg	0.000002	NP	--	0.00002 U	**0.00002**	**0.00004**	**0.00027**	**0.00039**	**0.00028**	0.00002 U	**0.0038**
PCB-174	38411-25-5	mg/kg	0.000102	NP	--	**0.000017 LJ**	**0.00089**	**0.002**	**0.012**	**0.013**	**0.009**	**0.000032**	**0.23**
PCB-175	40186-70-7	mg/kg	0.0000066	NP	--	0.00002 U	**0.000042**	**0.00012**	**0.00034**	**0.00071**	**0.00075**	0.00002 U	**0.0073**
PCB-176	52663-65-7	mg/kg	0.0000132	NP	--	0.00002 U	**0.000088**	**0.0003**	**0.0017**	**0.0021**	**0.0012**	0.00002 U	**0.031**
PCB-177	52663-70-4	mg/kg	0.000066	NP	--	**0.00001 LJ**	**0.00059**	**0.0011**	**0.0076**	**0.0085**	**0.0055**	**0.000023**	**0.13**
PCB-178	52663-67-9	mg/kg	0.0000264	NP	--	0.00002 U	**0.00023**	**0.00061**	**0.0026**	**0.0033**	**0.0021**	0.00002 U	**0.049**
PCB-179	52663-64-6	mg/kg	0.000045	NP	--	**0.0000077 LJ**	**0.00033**	**0.0012**	**0.0054**	**0.0063**	**0.0038**	**0.000018 LJ**	**0.1**
PCB-18	37680-65-2	mg/kg	0.0000225	NP	--	0.00002 U	**0.000034**	**0.00002**	**0.031**	**0.014**	**0.009**	**0.00025**	**0.038**
PCB-180	35065-29-3	mg/kg	0.000228	NP	--	**0.000043**	**0.0029**	**0.0059**	**0.031**	**0.034**	**0.024**	**0.000087**	**0.52**
PCB-181	74472-47-2	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U	0.00002 U	0.0001 U
PCB-182/187	60145-23-5/52663-68-0	mg/kg	0.000153	NP	--	**0.000021 LJ**	**0.0014**	**0.0043**	**0.017**	**0.023**	**0.014**	**0.000051**	**0.29**
PCB-183	52663-69-1	mg/kg	0.000063	NP	--	**0.000013 LJ**	**0.00053**	**0.0015**	**0.0074**	**0.0097**	**0.006**	**0.000024**	**0.13**
PCB-184	74472-48-3	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	**0.000014 LJ**	**0.000014 LJ**	**0.00005 LJ**	**0.000037 LJ**	0.00002 U	**0.00015**
PCB-185	52712-05-7	mg/kg	0.000009	NP	--	0.00002 U	**0.00012**	**0.00035**	**0.0016**	**0.002**	**0.0012**	0.00002 U	**0.029**
PCB-186	74472-49-4	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U	0.00002 U	0.0001 U
PCB-188	74487-85-7	mg/kg	0.000002	NP	--	0.00002 U	**0.0000064 LJ**	**0.000022**	**0.000026**	**0.000091 LJ**	**0.00007 LJ**	0.00002 U	**0.00024**
PCB-19	38444-73-4	mg/kg	0.000002	NP	--	0.00002 U	**0.0000056 LJ**	0.00002 U	**0.0023**	**0.0014**	**0.0009**	**0.000043**	**0.0038**
PCB-190	41411-64-7	mg/kg	0.0000186	NP	--	**0.0000044 LJ**	**0.00026**	**0.0004**	**0.0019**	**0.0022**	**0.0015**	**0.000011 LJ**	**0.032**
PCB-191	74472-50-7	mg/kg	0.000006	NP	--	0.00002 U	**0.000043**	**0.000081**	**0.00049**	**0.00053**	**0.0004**	0.00002 U	**0.0075**
PCB-192	74472-51-8	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U	0.00002 U	0.0001 U
PCB-193	69782-91-8	mg/kg	0.0000153	NP	--	0.00002 U	**0.00015**	**0.00022**	**0.0011**	**0.0013**	**0.00082**	0.00002 U	**0.021**
PCB-194	35694-08-7	mg/kg	0.000051	NP	--	**0.0000091 LJ**	**0.00074**	**0.0019**	**0.0043**	**0.011**	**0.0073**	**0.000017 LJ**	**0.052**
PCB-195	52663-78-2	mg/kg	0.0000183	NP	--	**0.0000028 LJ**	**0.00027**	**0.0006**	**0.0021**	**0.0029**	**0.0019**	0.00002 U	**0.034**
PCB-196/203	42740-50-1/52663-76-0	mg/kg	0.000066	NP	--	**0.000013 LJ**	**0.00089**	**0.0035**	**0.0043**	**0.01**	**0.0094**	**0.000021 LJ**	**0.074**
PCB-197	33091-17-7	mg/kg	0.000002	NP	--	0.00002 U	**0.000025**	**0.00015**	**0.0002**	**0.00041**	**0.00026**	0.00002 U	**0.0035**
PCB-198	68194-17-2	mg/kg	0.000002	NP	--	0.00002 U	**0.000039**	**0.00016**	**0.000049**	**0.00042**	**0.00025**	0.00002 U	**0.0026**
PCB-199	52663-75-9	mg/kg	0.000072	NP	--	**0.0000094 LJ**	**0.00095**	**0.0037**	**0.0036**	**0.012**	**0.0098**	**0.00002**	**0.072**
PCB-2	2051-61-8	mg/kg	0.000002	NP	--	0.00002 U	**0.000003 LJ**	0.00002 U	**0.00012**	**0.0027**	**0.0019**	**0.0000072 LJ**	**0.00017**
PCB-20/21/33	38444-84-7/55702-46-0/38444-86-9	mg/kg	0.000057	NP	--	0.000059 U	**0.000049 LJ**	**0.000013 LJ**	**0.02**	**0.015**	**0.01**	**0.00011**	**0.016**
PCB-200	52663-73-7	mg/kg	0.000002	NP	--	0.00002 U	**0.000082**	**0.0003**	**0.00052**	**0.0012**	**0.00087**	0.00002 U	**0.009**
PCB-201	40186-71-8	mg/kg	0.0000108	NP	--	0.00002 U	**0.000084**	**0.00051**	**0.00063**	**0.0018**	**0.0013**	0.00002 U	**0.011**
PCB-202	2136-99-4	mg/kg	0.0000198	NP	--	0.00002 U	**0.00019**	**0.0014**	**0.001**	**0.004**	**0.0029**	0.00002 U	**0.018**
PCB-204	74472-52-9	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U	0.00002 U	0.0001 U
PCB-205	74472-53-0	mg/kg	0.000002	NP	--	**0.0000022 LJ**	**0.000042**	**0.00012**	**0.00026**	**0.00036**	**0.0003**	0.00002 U	**0.0028**
PCB-206	40186-72-9	mg/kg	0.000057	NP	--	0.00002 U	**0.00073**	**0.01**	**0.002**	**0.014**	**0.0098**	**0.000013 LJ**	**0.017**
PCB-207	52663-79-3	mg/kg	0.0000087	NP	--	0.00002 U	**0.000074**	**0.0017**	**0.00024**	**0.0014**	**0.001**	0.00002 U	**0.0024**
PCB-208	52663-77-1	mg/kg	0.000027	NP	--	0.00002 U	**0.00022**	**0.0052**	**0.00047**	**0.0032**	**0.0026**	0.00002 U	**0.0036**
PCB-209	2051-24-3	mg/kg	0.000072	NP	--	0.00002 U	**0.00061**	**0.037**	**0.00089**	**0.0024**	**0.0017**	0.00002 U	**0.0036**
PCB-22	38444-85-8	mg/kg	0.0000126	NP	--	0.00002 U	**0.000037**	**0.0000074 LJ**	**0.012**	**0.0076**	**0.0063**	**0.000057**	**0.0084**
PCB-23	55720-44-0	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	**0.000041**	**0.00027**	**0.00025**	0.00002 U	0.0001 U
PCB-24	55702-45-9	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	**0.0012**	**0.00063**	**0.00042**	**0.0000069 LJ**	**0.0016**
PCB-25	55712-37-3	mg/kg	0.0000063	NP	--	0.00002 U	**0.000009 LJ**	0.00002 U	**0.0035**	**0.002**	**0.0015**	**0.000016 LJ**	**0.0029**
PCB-26	38444-81-4	mg/kg	0.000006	NP	--	0.00002 U	**0.000013 LJ**	**0.0000044 LJ**	**0.0087**	**0.0038**	**0.0027**	**0.000027**	**0.0054**

Table 4-8 (continued)
Summary of Sediment Sample Results, Drainage Paths, 12-24 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 12 - 24 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L04	L04	L04	L01	L05	L05	L06	L01
					Station	SED13	SED14	SED15	SED16	SED17	SED17	SED18	SED19
					Sample ID	CL-L04-SED13-24-51	CL-L04-SED14-24-51	CL-L04-SED15-24-51	CL-L01-SED16-24-51	CL-L05-SED17-24-51	CL-L05-SED17-24-52	CL-L06-SED18-24-51	CL-L01-SED19-24-51
					Depths	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24
					Date	04/07/2022	04/08/2022	04/08/2022	04/06/2022	04/08/2022	04/08/2022	04/07/2022	04/06/2022
					Type	FS	FS	FS	FS	FS	FD	FS	FS
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)													
PCB-27	38444-76-7	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	**0.0013**	**0.00055**	**0.00036**	**0.000016 LJ**	**0.0016**
PCB-28	7012-37-5	mg/kg	0.000051	NP	--	0.00002 U	**0.000097**	**0.000016 LJ**	**0.024**	**0.02**	**0.017**	**0.00015**	**0.029**
PCB-29	15862-07-4	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	**0.00035**	**0.00037**	**0.00032**	0.00002 U	**0.00027**
PCB-3	2051-62-9	mg/kg	0.000006	NP	--	0.00002 U	**0.000011 LJ**	0.00002 U	**0.00041**	**0.0039**	**0.0026**	**0.000024**	**0.00057**
PCB-30	35693-92-6	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U	0.00002 U	**0.000043 LJ**
PCB-31	16606-02-3	mg/kg	0.0000132	NP	--	0.00002 U	**0.000072**	**0.000019 LJ**	**0.047**	**0.018**	**0.014**	**0.00012**	**0.026**
PCB-32	38444-77-8	mg/kg	0.0000066	NP	--	0.00002 U	**0.000013 LJ**	**0.0000065 LJ**	**0.0093**	**0.0045**	**0.0031**	**0.000077**	**0.011**
PCB-34	37680-68-5	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	**0.00035**	**0.00014**	**0.00013**	0.00002 U	**0.00032**
PCB-35	37680-69-6	mg/kg	0.000002	NP	--	0.00002 U	**0.0000063 LJ**	0.00002 U	**0.00047**	**0.00055**	**0.00046**	0.00002 U	0.0001 U
PCB-36	38444-87-0	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U	0.00002 U	0.0001 U
PCB-37	38444-90-5	mg/kg	0.000045	NP	--	0.00002 U	**0.000097**	**0.000017 LJ**	**0.012**	**0.0069**	**0.0053**	**0.000056**	**0.008**
PCB-38	53555-66-1	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U	0.00002 U	0.0001 U
PCB-39	38444-88-1	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U	0.00002 U	0.0001 U
PCB-4	13029-08-8	mg/kg	0.000006	NP	--	0.00002 U	**0.00001 LJ**	0.00002 U	**0.0044**	**0.0038**	**0.0023**	**0.00012**	**0.0053**
PCB-40	38444-93-8	mg/kg	0.000009	NP	--	0.00002 U	**0.000016 LJ**	**0.000013 LJ**	**0.0039**	**0.0021**	**0.0017**	**0.000022**	**0.0044**
PCB-41/64/71/72	52663-59-9/52663-58-8/41464-46-4/41464-42-0	mg/kg	0.00006	NP	--	0.000079 U	**0.0001**	**0.000078 LJ**	**0.019**	**0.011**	**0.0098**	**0.000083**	**0.026**
PCB-42/59	36559-22-5/74472-33-6	mg/kg	0.000033	NP	--	0.000039 U	**0.000028 LJ**	**0.000016 LJ**	**0.0079**	**0.0041**	**0.0038**	**0.000036 LJ**	**0.008**
PCB-43/49	70362-46-8/41464-40-8	mg/kg	0.000129	NP	--	0.000039 U	**0.00011**	**0.000097**	**0.02**	**0.013**	**0.012**	**0.000086**	**0.029**
PCB-44	41464-39-5	mg/kg	0.000066	NP	--	0.00002 U	**0.00017**	**0.00018**	**0.021**	**0.018**	**0.015**	**0.000095**	**0.038**
PCB-45	70362-45-7	mg/kg	0.000006	NP	--	0.00002 U	**0.0000093 LJ**	**0.0000081 LJ**	**0.0039**	**0.0019**	**0.0014**	**0.000023**	**0.0039**
PCB-46	41464-47-5	mg/kg	0.000006	NP	--	0.00002 U	**0.0000051 LJ**	0.00002 U	**0.0017**	**0.00081**	**0.00083**	**0.000011 LJ**	**0.0015**
PCB-47	2437-79-8	mg/kg	0.000066	NP	--	0.00002 U	**0.000028**	**0.000015 LJ**	**0.0072**	**0.0044**	**0.0052**	**0.00004**	**0.0084**
PCB-48/75	70362-47-9/32598-12-2	mg/kg	0.0000126	NP	--	0.000039 U	**0.000012 LJ**	**0.00001 LJ**	**0.0028**	**0.0019**	**0.0015**	**0.000019 LJ**	**0.0036**
PCB-5	16605-91-7	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	**0.00044**	**0.00057**	**0.00029**	**0.000011 LJ**	**0.00054**
PCB-50	62796-65-0	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	**0.000089**	**0.000047 LJ**	**0.000041 LJ**	0.00002 U	**0.000082 LJ**
PCB-51	68194-04-7	mg/kg	0.000006	NP	--	0.00002 U	**0.0000039 LJ**	0.00002 U	**0.0013**	**0.00051**	**0.00084**	**0.0000099 LJ**	**0.0011**
PCB-52/69	35693-99-3/60233-24-1	mg/kg	0.000111	NP	--	0.000039 U	**0.00039**	**0.00045**	**0.024**	**0.029**	**0.025**	**0.0001**	**0.071**
PCB-53	41464-41-9	mg/kg	0.0000069	NP	--	0.00002 U	**0.000016 LJ**	**0.000011 LJ**	**0.0036**	**0.0021**	**0.0022**	**0.000022**	**0.0041**
PCB-54	15968-05-5	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	**0.000069**	**0.000038 LJ**	**0.000064 LJ**	0.00002 U	**0.000079 LJ**
PCB-55	74338-24-2	mg/kg	0.000006	NP	--	0.00002 U	**0.0000053 LJ**	**0.0000062 LJ**	**0.00037**	**0.00045**	**0.00034**	0.00002 U	**0.0013**
PCB-56/60	41464-43-1/33025-41-1	mg/kg	0.0000297	NP	--	0.000039 U	**0.00012**	**0.000056**	**0.023**	**0.014**	**0.01**	**0.000073**	**0.035**
PCB-57	70424-67-8	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	**0.00015**	**0.0001**	**0.000094 LJ**	0.00002 U	**0.00023**
PCB-58	41464-49-7	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	**0.000065**	**0.000073 LJ**	**0.000075 LJ**	0.00002 U	**0.00016**
PCB-6	25569-80-6	mg/kg	0.0000105	NP	--	0.00002 U	**0.0000099 LJ**	0.00002 U	**0.0019**	**0.0021**	**0.0013**	**0.000044**	**0.0025**
PCB-61/70	33284-53-6/32598-11-1	mg/kg	0.000066	NP	--	0.000039 U	**0.00035**	**0.00029**	**0.029**	**0.027**	**0.024**	**0.0001**	**0.059**
PCB-62	54230-22-7	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U	0.00002 U	0.0001 U
PCB-63	74472-34-7	mg/kg	0.000006	NP	--	0.00002 U	**0.0000073 LJ**	**0.0000049 LJ**	**0.001**	**0.00054**	**0.00058**	**0.0000045 LJ**	**0.0011**
PCB-65	33284-54-7	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U	0.00002 U	0.0001 U
PCB-66/76	32598-10-0/70362-48-0	mg/kg	0.00012	NP	--	0.000039 U	**0.00019**	**0.00011**	**0.021**	**0.014**	**0.012**	**0.000083**	**0.038**
PCB-67	73575-53-8	mg/kg	0.000006	NP	--	0.00002 U	**0.0000044 LJ**	0.00002 U	**0.00099**	**0.00052**	**0.00045**	**0.0000047 LJ**	**0.00098**
PCB-68	73575-52-7	mg/kg	0.000006	NP	--	0.00002 U	**0.0000035 LJ**	0.00002 U	**0.00014**	**0.00013**	**0.00016**	0.00002 U	**0.00017**
PCB-7	33284-50-3	mg/kg	0.000006	NP	--	0.00002 U	0.00002 U	0.00002 U	**0.00051**	**0.001**	**0.00066**	**0.000014 LJ**	**0.00063**
PCB-73	74338-23-1	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U	0.00002 U	0.0001 U
PCB-74	32690-93-0	mg/kg	0.000033	NP	--	0.00002 U	**0.00011**	**0.000065**	**0.012**	**0.007**	**0.0058**	**0.000042**	**0.016**
PCB-78	70362-49-1	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U	0.00002 U	0.0001 U

Table 4-8 (continued)
Summary of Sediment Sample Results, Drainage Paths, 12-24 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 12 - 24 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1									
					Lake	L04	L04	L04	L01	L05	L05	L06	L01
					Station	SED13	SED14	SED15	SED16	SED17	SED17	SED18	SED19
					Sample ID	CL-L04-SED13-24-51	CL-L04-SED14-24-51	CL-L04-SED15-24-51	CL-L01-SED16-24-51	CL-L05-SED17-24-51	CL-L05-SED17-24-52	CL-L06-SED18-24-51	CL-L01-SED19-24-51
					Depths	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24
					Date	04/07/2022	04/08/2022	04/08/2022	04/06/2022	04/08/2022	04/08/2022	04/07/2022	04/06/2022
					Type	FS	FS	FS	FS	FS	FD	FS	FS
PCB Aroclor Congeners Group 2 by CLP SOW HRSM02.1 (continued)													
PCB-79	41464-48-6	mg/kg	0.0000069	NP	--	0.00002 U	**0.000014 LJ**	**0.000017 LJ**	**0.00034**	**0.00091**	**0.00087**	0.00002 U	**0.0031**
PCB-8	34883-43-7	mg/kg	0.000036	NP	--	0.00002 U	**0.000036**	**0.0000064 LJ**	**0.0085**	**0.0099**	**0.0061**	**0.00018**	**0.0096**
PCB-80	33284-52-5	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U	0.00002 U	0.0001 U
PCB-82	52663-62-4	mg/kg	0.0000174	NP	--	0.00002 U	**0.000086**	**0.00011**	**0.0011**	**0.0094**	**0.0071**	**0.00001 LJ**	**0.0097**
PCB-83/112	60145-20-2/74472-36-9	mg/kg	0.0000108	NP	--	0.000039 U	**0.000035 LJ**	**0.000057**	**0.00094**	**0.0037**	**0.0028**	0.00004 U	**0.011**
PCB-84/92	52663-60-2/52663-61-3	mg/kg	0.000123	NP	--	**0.0000062 LJ**	**0.00035**	**0.00057**	**0.0098**	**0.038**	**0.028**	**0.000036 LJ**	**0.12**
PCB-85/116	65510-45-4/18259-05-7	mg/kg	0.0000252	NP	--	0.000039 U	**0.00018**	**0.00034**	**0.0032**	**0.012**	**0.0084**	**0.000013 LJ**	**0.031**
PCB-86	55312-69-1	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U	0.00002 U	0.0001 U
PCB-87/117/125	38380-02-8/68194-11-6/74472-39-2	mg/kg	0.000048	NP	--	0.000059 U	**0.00037**	**0.0005**	**0.0087**	**0.035**	**0.026**	**0.00003 LJ**	**0.11**
PCB-88/91	55215-17-3/68194-05-8	mg/kg	0.000087	NP	--	0.000039 U	**0.00011**	**0.0002**	**0.0035**	**0.0073**	**0.0067**	**0.000018 LJ**	**0.025**
PCB-89	73575-57-2	mg/kg	0.000002	NP	--	0.00002 U	**0.0000061 LJ**	**0.0000095 LJ**	**0.00026**	**0.0006**	**0.00043**	0.00002 U	**0.0018**
PCB-9	34883-39-1	mg/kg	0.000006	NP	--	0.00002 U	0.00002 U	0.00002 U	**0.00077**	**0.001**	**0.00078**	**0.000015 LJ**	**0.00075**
PCB-90/101	68194-07-0/37680-73-2	mg/kg	0.00033	NP	--	**0.000015 LJ**	**0.0009**	**0.0013**	**0.025**	**0.094**	**0.07**	**0.000082**	**0.38**
PCB-93	73575-56-1	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.0001 U	0.0001 U	0.00002 U	0.0001 U
PCB-94	73575-55-0	mg/kg	0.000002	NP	--	0.00002 U	0.00002 U	**0.0000061 LJ**	**0.00018**	**0.00028**	**0.00028**	0.00002 U	**0.00091**
PCB-95	38379-99-6	mg/kg	0.000231	NP	--	**0.0000098 LJ**	**0.00065**	**0.001**	**0.022**	**0.058**	**0.05**	**0.000072**	**0.26**
PCB-96	73575-54-9	mg/kg	0.000002	NP	--	0.00002 U	**0.0000047 LJ**	**0.0000053 LJ**	**0.00023**	**0.00031**	**0.00029**	0.00002 U	**0.00092**
PCB-97	41464-51-1	mg/kg	0.00009	NP	--	0.00002 U	**0.00027**	**0.0004**	**0.0078**	**0.03**	**0.023**	**0.00003**	**0.089**
PCB-98/102	60233-25-2/68194-06-9	mg/kg	0.00009	NP	--	0.000039 U	0.00004 U	0.00004 U	0.00004 U	0.0002 U	0.0002 U	0.00004 U	0.0002 U
PCB-99	38380-01-7	mg/kg	0.000234	NP	--	**0.0000034 LJ**	**0.00036**	**0.00064**	**0.0088**	**0.033**	**0.025**	**0.000031**	**0.1**
TEQ (Bird)	2222-22-3	mg/kg	0.00000219	NP	--	**0**	**0.0000077**	**0.0000061**	**0.00026**	**0.00053**	**0.00048**	**0.0000007**	**0.0016**
TEQ (Fish)	2222-22-4	mg/kg	2.52E-08	NP	--	**0**	**0.00000014**	**0.00000013**	**0.0000023**	**0.0000071**	**0.0000068**	**0.0000000017**	**0.000025**
TEQ (Mammal)	2222-22-2	mg/kg	0.00000039	NP	--	**0**	**0.0000024**	**0.0000021**	**0.000034**	**0.00012**	**0.00011**	**0.0000000031**	**0.00041**
Total DiCB	25512-42-9	mg/kg	0.000084	NP	--		**0.00016 J**	**0.000034 J**	**0.025 J**	**0.025 J**	**0.016 J**	**0.00051 J**	**0.03 J**
Total HpCB	28655-71-2	mg/kg	0.00093	NP	--	**0.00014 J**	**0.0093 J**	**0.021 J**	**0.11 J**	**0.13 J**	**0.084 J**	**0.00029 J**	**1.8 J**
Total HxCB	26601-64-9	mg/kg	0.00192	NP	--	**0.00018 J**	**0.012 J**	**0.03 J**	**0.15 J**	**0.4 J**	**0.29 J**	**0.00037 J**	**2.3 J**
Total MoCB	27323-18-8	mg/kg	0.0000126	NP	--		**0.000021 J**		**0.001 J**	**0.0094 J**	**0.0059 J**	**0.000096 J**	**0.0014 J**
Total NoCB	53742-07-7	mg/kg	0.000093	NP	--		**0.001 J**	**0.017 J**	**0.0027 J**	**0.019 J**	**0.013 J**	**0.000013 LJ**	**0.023 J**
Total OcCB	55722-26-4	mg/kg	0.000237	NP	--	**0.000037 J**	**0.0033 J**	**0.012 J**	**0.017 J**	**0.044 J**	**0.034 J**	**0.000058 J**	**0.28 J**
TOTAL PCBs	1111-11-1	mg/kg	0.0063	NP	--	**0.0004 J**	**0.035 J**	**0.13 J**	**0.87 J**	**1.4 J**	**1.1 J**	**0.0039 J**	**6.8 J**
Total PeCB	25429-29-2	mg/kg	0.00192	NP	--	**0.000046 J**	**0.0064 J**	**0.011 J**	**0.16 J**	**0.53 J**	**0.42 J**	**0.00057 J**	**1.8 J**
Total TeCB	26914-33-0	mg/kg	0.00081	NP	--		**0.0018 J**	**0.0015 J**	**0.21 J**	**0.16 J**	**0.14 J**	**0.00087 J**	**0.37 J**
Total TrCB	25323-68-6	mg/kg	0.000243	NP	--		**0.00045 J**	**0.00012 J**	**0.19 J**	**0.11 J**	**0.079 J**	**0.0011 J**	**0.18 J**
CLP Organics by CLP SOW SFAM01.1/3151.0													
1,2,4,5-Tetrachlorobenzene	95-94-3	mg/kg	0.26	0.23	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
1,4-Dioxane	123-91-1	mg/kg	0.1	5.3	--	0.044 U	0.041 U	0.043 U	0.057 U	0.055 U	0.055 U	0.05 U	0.083 U
1-Methylnaphthalene	90-12-0	mg/kg	0.26	18	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
2,3,4,6-Tetrachlorophenol	58-90-2	mg/kg	0.26	190	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
Metals by CLP SOW SFAM01.1													
Aluminum	7429-90-5	mg/kg	102000	7700	--	**17000**	**26000**	**20000**	**22000**	**23000**	**22000**	**20000**	**26000**
Antimony	7440-36-0	mg/kg	2.6	3.1	--	1.2 U	0.86 U	**0.47 LJ**	**3.7**	**1.1 LJ**	**1.2 LJ**	0.86 U	**49**
Arsenic	7440-38-2	mg/kg	28.8	0.68	--	**4.2 J**	**10 J**	**9.1 J**	**22**	**13 J**	**11 J**	**4.7**	**49**
Barium	7440-39-3	mg/kg	690	1500	--	**130 J**	**220 J**	**160 J**	**310**	**1200 J**	**1200 J**	**150**	**490**
Beryllium	7440-41-7	mg/kg	3.3	16	--	**0.59 LJ**	**0.58**	**0.76**	**0.68 LJ**	**0.65 LJ**	**0.68 LJ**	**0.59**	**0.79**
Cadmium	7440-43-9	mg/kg	2.67	0.71	--	**0.32 LJ**	**0.037 LJ**	**0.91**	**1.8**	**2.6**	**2.4**	0.43 U	**4.5**

Table 4-8 (continued)
Summary of Sediment Sample Results, Drainage Paths, 12-24 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 12 - 24 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L04	L04	L04	L01	L05	L05	L06	L01
					Station	SED13	SED14	SED15	SED16	SED17	SED17	SED18	SED19
					Sample ID	CL-L04-SED13-24-51	CL-L04-SED14-24-51	CL-L04-SED15-24-51	CL-L01-SED16-24-51	CL-L05-SED17-24-51	CL-L05-SED17-24-52	CL-L06-SED18-24-51	CL-L01-SED19-24-51
					Depths	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24
					Date	04/07/2022	04/08/2022	04/08/2022	04/06/2022	04/08/2022	04/08/2022	04/07/2022	04/06/2022
					Type	FS	FS	FS	FS	FS	FD	FS	FS
Metals by CLP SOW SFAM01.1 (continued)													
Calcium	7440-70-2	mg/kg	15600	NP	--	**1700**	**3800**	**6300**	**5000**	**45000**	**44000**	**2000**	**3900**
Chromium	7440-47-3	mg/kg	48	NP	--	**11**	**16**	**16**	**27 J**	**43**	**36**	**8.3 J**	**25 J**
Cobalt	7440-48-4	mg/kg	22.5	2.3	--	**3.8 J**	**7.3 J**	**3.5 J**	**6.4 J**	**5.1 J**	**5.8**	**3.5 J**	**6.3 J**
Copper	7440-50-8	mg/kg	75	310	--	**14 J**	**20 J**	**23 J**	**80**	**100 J**	**84 J**	**18**	**76**
Iron	7439-89-6	mg/kg	90000	5500	--	**18000**	**28000**	**24000**	**23000**	**31000**	**29000**	**20000**	**28000**
Lead	7439-92-1	mg/kg	261	400	--	**18**	**24**	**86**	**380**	**330**	**290**	**36**	**370**
Magnesium	7439-95-4	mg/kg	18300	NP	--	**2300**	**3100**	**2200**	**2600**	**3200**	**3400**	**2200**	**3100**
Manganese	7439-96-5	mg/kg	1590	180	--	**480 J**	**480 J**	**350 J**	**590**	**800 J**	**990 J**	**680**	**500**
Mercury	7439-97-6	mg/kg	0.69	1.1	--	**0.039 LJ**	**0.04 LJ**	**0.08 LJ**	**0.47**	**0.29**	**0.22**	**0.11**	**26**
Nickel	7440-02-0	mg/kg	72	150	--	**8.5 J**	**11 J**	**8.5 J**	**14 J**	**19 J**	**19**	**7.6 J**	**16 J**
Potassium	7440-09-7	mg/kg	12600	NP	--	**1400**	**2000**	**1400**	**1600**	**2200**	**2100**	**1400**	**1900**
Selenium	7782-49-2	mg/kg	3.6	39	--	**0.55 LJ**	**0.76 LJ**	**0.56 LJ**	**0.65 LJ**	**0.72 LJ**	**0.71 LJ**	**0.55 LJ**	**0.91 LJ**
Silver	7440-22-4	mg/kg	1.05	39	--	**0.056 LJ**	0.43 U	**0.089 LJ**	**2.8**	**50**	**34**	**0.093 LJ**	**2.9**
Sodium	7440-23-5	mg/kg	690	NP	--	**68 LJ**	**81 LJ**	**72 LJ**	**120 LJ**	**410 LJ**	**410 LJ**	**75 LJ**	**360 LJ**
Thallium	7440-28-0	mg/kg	1.3	0.078	--	0.61 U	0.43 U	0.61 U	0.76 U	0.67 U	0.81 U	0.43 U	0.76 U
Vanadium	7440-62-2	mg/kg	51	39	--	**6.6 J**	**9.3 J**	**7.4 J**	**10 J**	**8.5 J**	**12**	**5.4 J**	**12 J**
Zinc	7440-66-6	mg/kg	330	2300	--	**50 J**	**50 J**	**150 J**	**210 J**	**880 J**	**720 J**	**25 J**	**310 J**
Pesticides by CLP SOW SFAM01.1													
4,4'-DDD	72-54-8	mg/kg	0.03	0.19	--	0.0044 U	0.0041 U	0.0042 U	0.0056 U	**0.22**	**4.3**	0.005 U	0.0083 U
4,4'-DDE	72-55-9	mg/kg	0.045	2	--	0.0044 U	0.0041 U	0.0042 U	**0.058**	**0.18 JK**	**0.55**	0.005 U	0.0083 U
4,4'-DDT	50-29-3	mg/kg	0.042	1.9	--	0.0044 U	0.0041 U	0.0042 U	**0.022 J**	**0.041**	**0.17**	0.005 U	0.0083 U
Aldrin	309-00-2	mg/kg	0.0201	0.039	--	0.0023 U	0.0021 U	0.0022 U	0.0029 U	**0.0034 JK**	**0.012**	0.0026 U	0.0043 U
alpha-BHC	319-84-6	mg/kg	0.0156	0.086	--	0.0023 U	0.0021 U	0.0022 U	**0.0044 J**	0.0028 U	0.0028 U	0.0026 U	0.0043 U
beta-BHC	319-85-7	mg/kg	0.0052	0.3	--	0.0023 U	0.0021 U	0.0022 U	0.0029 U	0.0028 U	**0.0069**	0.0026 U	0.0043 U
cis-Chlordane	5103-71-9	mg/kg	0.0168	3.6	--	0.0023 U	0.0021 U	0.0022 U	0.0029 U	**0.017 JK**	**0.013**	0.0026 U	0.0043 U
delta-BHC	319-86-8	mg/kg	0.0052	NP	--	0.0023 U	0.0021 U	0.0022 U	0.0029 U	**0.0021 JQK**	**0.01 JK**	0.0026 U	0.0043 U
Dieldrin	60-57-1	mg/kg	0.01	0.034	--	0.0044 U	0.0041 U	0.0042 U	**0.0043 LJ**	**0.004 JQK**	**0.0084 JK**	0.005 U	0.0083 U
Endosulfan I	959-98-8	mg/kg	0.0156	NP	--	0.0023 U	0.0021 U	0.0022 U	0.0029 U	0.0028 U	0.0028 U	0.0026 U	0.0043 U
Endosulfan II	33213-65-9	mg/kg	0.01	NP	--	0.0044 U	0.0041 U	0.0042 U	0.0056 U	0.0054 U	**0.0047 JQK**	0.005 U	0.0083 U
Endosulfan sulfate	1031-07-8	mg/kg	0.01	38	--	0.0044 U	0.0041 U	0.0042 U	**0.0051 LJ**	0.0054 U	0.0055 U	0.005 U	0.0083 U
Endrin	72-20-8	mg/kg	0.01	1.9	--	0.0044 U	0.0041 U	0.0042 U	**0.0054 LJ**	0.0054 U	**0.0036 JQK**	0.005 U	0.0083 U
Endrin aldehyde	7421-93-4	mg/kg	0.01	NP	--	**0.0088**	**0.0075**	**0.0094**	**0.01**	0.0054 U	**0.008 JK**	0.005 U	0.0083 U
Endrin ketone	53494-70-5	mg/kg	0.01	NP	--	0.0044 U	0.0041 U	0.0042 U	0.0056 U	0.0054 U	0.0055 U	0.005 U	0.0083 U
gamma-BHC (Lindane)	58-89-9	mg/kg	0.0156	0.071	--	0.0023 U	0.0021 U	0.0022 U	0.0029 U	0.0028 U	0.0028 U	0.0026 U	0.0043 U
Heptachlor	76-44-8	mg/kg	0.0198	0.13	--	0.0023 U	0.0021 U	0.0022 U	0.0029 U	0.0028 U	0.0028 U	0.0026 U	0.0043 U
Heptachlor epoxide	1024-57-3	mg/kg	0.0156	0.07	--	0.0023 U	0.0021 U	0.0022 U	**0.0092 J**	0.0028 U	0.0028 U	0.0026 U	0.0043 U
Methoxychlor	72-43-5	mg/kg	1.44	32	--	0.023 U	**0.022**	**0.024**	**0.11 J**	0.028 U	0.028 U	**0.095**	**0.078 J**
Toxaphene	8001-35-2	mg/kg	0.52	0.49	--	0.23 U	0.21 U	0.22 U	0.29 U	0.28 U	0.28 U	0.26 U	0.43 U
trans-Chlordane	5103-74-2	mg/kg	0.0052	3.6	--	0.0023 U	0.0021 U	0.0022 U	0.0029 U	**0.068 JK**	**0.11 JK**	0.0026 U	0.0043 U
SVOCs by CLP SOW SFAM01.1/3151.0													
1,1'-Biphenyl	92-52-4	mg/kg	0.26	4.7	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
2,2'-Oxybis(1-chloropropane)	108-60-1	mg/kg	0.52	310	--	0.22 UJK	0.21 UJK	0.22 UJK	0.29 U	0.28 UJK	0.28 UJK	0.26 U	0.42 U
2,4,5-Trichlorophenol	95-95-4	mg/kg	0.26	630	--	0.11 UJK	0.1 UJK	0.11 UJK	0.14 U	0.14 UJK	0.14 UJK	0.13 U	0.21 U
2,4,6-Trichlorophenol	88-06-2	mg/kg	0.26	6.3	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
2,4-Dichlorophenol	120-83-2	mg/kg	0.26	19	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U

Table 4-8 (continued)
Summary of Sediment Sample Results, Drainage Paths, 12-24 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 12 - 24 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1									
					Lake	L04	L04	L04	L01	L05	L05	L06	L01
					Station	SED13	SED14	SED15	SED16	SED17	SED17	SED18	SED19
					Sample ID	CL-L04-SED13-24-51	CL-L04-SED14-24-51	CL-L04-SED15-24-51	CL-L01-SED16-24-51	CL-L05-SED17-24-51	CL-L05-SED17-24-52	CL-L06-SED18-24-51	CL-L01-SED19-24-51
					Depths	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24
					Date	04/07/2022	04/08/2022	04/08/2022	04/06/2022	04/08/2022	04/08/2022	04/07/2022	04/06/2022
					Type	FS	FS	FS	FS	FS	FD	FS	FS
SVOCs by CLP SOW SFAM01.1/3151.0 (continued)													
2,4-Dimethylphenol	105-67-9	mg/kg	0.26	130	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
2,4-Dinitrophenol	51-28-5	mg/kg	0.52	13	--	0.22 U	0.21 U	0.22 U	0.29 U	0.28 U	0.28 U	0.26 U	0.42 U
2,4-Dinitrotoluene	121-14-2	mg/kg	0.26	1.7	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
2,6-Dinitrotoluene	606-20-2	mg/kg	0.26	0.36	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
2-Chloronaphthalene	91-58-7	mg/kg	0.26	480	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
2-Chlorophenol	95-57-8	mg/kg	0.26	39	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
2-Methylnaphthalene	91-57-6	mg/kg	0.26	24	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
2-Methylphenol	95-48-7	mg/kg	0.52	320	--	0.22 U	0.21 U	0.22 U	0.29 U	0.28 U	0.28 U	0.26 U	0.42 U
2-Nitroaniline	88-74-4	mg/kg	0.26	63	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
2-Nitrophenol	88-75-5	mg/kg	0.26	NP	--	0.11 UJK	0.1 UJK	0.11 UJK	0.14 U	0.14 UJK	0.14 UJK	0.13 U	0.21 U
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.52	1.2	--	0.22 U	0.21 U	0.22 U	0.29 U	0.28 U	0.28 U	0.26 U	0.42 U
3-Nitroaniline	99-09-2	mg/kg	0.52	NP	--	0.22 U	0.21 U	0.22 U	0.29 U	0.28 U	0.28 U	0.26 U	0.42 U
4,6-Dinitro-2-methylphenol	534-52-1	mg/kg	0.52	0.51	--	0.22 U	0.21 U	0.22 U	0.29 U	0.28 U	0.28 U	0.26 U	0.42 U
4-Bromophenyl-phenylether	101-55-3	mg/kg	0.26	NP	--	0.11 UJK	0.1 UJK	0.11 UJK	0.14 U	0.14 UJK	0.14 UJK	0.13 U	0.21 UJ
4-Chloro-3-methylphenol	59-50-7	mg/kg	0.26	630	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
4-Chloroaniline	106-47-8	mg/kg	0.52	2.7	--	0.22 U	0.21 U	0.22 U	0.29 U	0.28 U	0.28 U	0.26 U	0.42 U
4-Chlorophenyl-phenyl ether	7005-72-3	mg/kg	0.26	NP	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
4-Methylphenol	106-44-5	mg/kg	0.52	130	--	0.22 U	0.21 U	0.22 U	0.29 U	0.28 U	0.28 U	0.26 U	0.42 U
4-Nitroaniline	100-01-6	mg/kg	0.52	25	--	0.22 U	0.21 U	0.22 U	0.29 U	0.28 U	0.28 U	0.26 U	0.42 U
4-Nitrophenol	100-02-7	mg/kg	0.52	NP	--	0.22 U	0.21 U	0.22 U	0.29 U	0.28 U	0.28 U	0.26 U	0.42 U
Acenaphthene	83-32-9	mg/kg	0.26	360	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
Acenaphthylene	208-96-8	mg/kg	0.26	NP	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
Acetophenone	98-86-2	mg/kg	0.52	780	--	0.22 U	0.21 U	0.22 U	0.29 U	0.28 U	0.28 U	0.26 U	0.42 U
Anthracene	120-12-7	mg/kg	0.26	1800	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	**0.35**
Atrazine	1912-24-9	mg/kg	0.52	2.4	--	0.22 U	0.21 U	0.22 U	0.29 U	0.28 U	0.28 U	0.26 U	0.42 U
Benzaldehyde	100-52-7	mg/kg	0.52	170	--	0.22 U	0.21 U	0.22 U	0.29 U	0.28 U	0.28 U	0.26 U	0.42 U
Benzo(a)anthracene	56-55-3	mg/kg	0.78	1.1	--	0.11 U	0.1 U	0.11 U	**0.24**	**0.22**	**0.35**	**0.82**	**1**
Benzo(a)pyrene	50-32-8	mg/kg	0.78	0.11	--	0.11 U	0.1 U	0.11 U	**0.26**	**0.22**	**0.37**	**0.87 J+**	**0.91**
Benzo(b)fluoranthene	205-99-2	mg/kg	0.87	1.1	--	0.11 UJK	0.1 UJK	0.11 UJK	**0.36 J**	**0.37 JK**	**0.63 JK**	**1.1 J+**	**1.6 J**
Benzo(g,h,i)perylene	191-24-2	mg/kg	0.78	NP	--	0.11 UJK	0.1 UJK	0.11 UJK	**0.23**	0.14 UJK	0.14 UJK	**0.35 J+**	**0.75**
Benzo(k)fluoranthene	207-08-9	mg/kg	0.26	11	--	0.11 UJK	0.1 UJK	0.11 UJK	0.14 U	**0.12 JQK**	**0.21 JK**	**0.4 J+**	**0.47 J**
Bis(2-chloroethoxy)methane	111-91-1	mg/kg	0.26	19	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 UJK	0.14 UJK	0.13 U	0.21 U
Bis(2-chloroethyl)ether	111-44-4	mg/kg	0.52	0.23	--	0.22 U	0.21 U	0.22 U	0.29 U	0.28 UJK	0.28 UJK	0.26 U	0.42 U
Bis(2-ethylhexyl)phthalate	117-81-7	mg/kg	0.26	39	--	0.11 U	0.1 U	0.11 U	**1.5**	**0.74**	**1.2**	0.13 U	**6.5**
Butylbenzylphthalate	85-68-7	mg/kg	0.26	290	--	0.11 U	0.1 U	0.11 U	**0.21**	0.14 U	0.14 U	0.13 U	**0.28**
Caprolactam	105-60-2	mg/kg	0.52	3100	--	0.22 U	0.21 U	0.22 U	0.29 U	0.28 U	0.28 U	0.26 U	0.42 U
Carbazole	86-74-8	mg/kg	0.52	NP	--	0.22 U	0.21 U	0.22 U	0.29 U	0.28 U	0.28 U	0.26 U	0.42 U
Chrysene	218-01-9	mg/kg	0.78	110	--	0.11 U	0.1 U	0.11 U	**0.22**	**0.2**	**0.32**	**0.74**	**1.4**
Dibenzo(a,h)anthracene	53-70-3	mg/kg	0.26	0.11	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	**0.17 J+**	**0.22**
Dibenzofuran	132-64-9	mg/kg	0.26	7.8	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
Diethylphthalate	84-66-2	mg/kg	0.78	5100	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
Dimethylphthalate	131-11-3	mg/kg	0.26	NP	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
Di-n-butylphthalate	84-74-2	mg/kg	0.26	630	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
Di-n-octylphthalate	117-84-0	mg/kg	0.52	63	--	0.22 U	0.21 U	0.22 U	0.29 U	0.28 U	0.28 U	0.26 U	**0.79**
Fluoranthene	206-44-0	mg/kg	0.78	240	--	0.11 U	0.1 U	0.11 U	**0.44**	**0.5**	**0.77**	**0.87**	**2.2**

Table 4-8 (continued)
Summary of Sediment Sample Results, Drainage Paths, 12-24 Inches Below Surface
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	Background 12 - 24 inches	May 2022 RSL Res Summary Resident Soil TR=1E-06 or THQ=0.1	Lake	L04	L04	L04	L01	L05	L05	L06	L01
					Station	SED13	SED14	SED15	SED16	SED17	SED17	SED18	SED19
					Sample ID	CL-L04-SED13-24-51	CL-L04-SED14-24-51	CL-L04-SED15-24-51	CL-L01-SED16-24-51	CL-L05-SED17-24-51	CL-L05-SED17-24-52	CL-L06-SED18-24-51	CL-L01-SED19-24-51
					Depths	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24	12 - 24
					Date	04/07/2022	04/08/2022	04/08/2022	04/06/2022	04/08/2022	04/08/2022	04/07/2022	04/06/2022
					Type	FS	FS	FS	FS	FS	FD	FS	FS
SVOCs by CLP SOW SFAM01.1/3151.0 (continued)													
Fluorene	86-73-7	mg/kg	0.26	240	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
Hexachlorobenzene	118-74-1	mg/kg	0.26	0.078	--	0.11 UJK	0.1 UJK	0.11 UJK	0.14 U	0.14 UJK	0.14 UJK	0.13 U	0.21 UJ
Hexachlorobutadiene	87-68-3	mg/kg	0.26	1.2	--	0.11 UJK	0.1 UJK	0.11 UJK	0.14 U	0.14 UJK	0.14 UJK	0.13 U	0.21 UJ
Hexachlorocyclo-pentadiene	77-47-4	mg/kg	1.56	0.18	--	0.22 U	0.21 U	0.22 U	0.29 U	0.28 U	0.28 U	0.26 U	0.42 U
Hexachloroethane	67-72-1	mg/kg	0.26	1.8	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	0.78	1.1	--	0.11 UJK	0.1 UJK	0.11 UJK	**0.24**	0.14 UJK	0.14 UJK	**0.51 J+**	**0.78**
Isophorone	78-59-1	mg/kg	0.26	570	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
Naphthalene	91-20-3	mg/kg	0.26	2	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
Nitrobenzene	98-95-3	mg/kg	0.26	5.1	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
N-Nitroso-di-n propylamine	621-64-7	mg/kg	0.26	0.078	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
N-Nitrosodiphenylamine	86-30-6	mg/kg	0.26	110	--	0.11 U	0.1 U	0.11 U	0.14 U	0.14 U	0.14 U	0.13 U	0.21 U
Pentachlorophenol	87-86-5	mg/kg	0.0011	1	--	0.22 U	0.21 U	0.22 U	0.29 U	0.28 U	0.28 U	0.26 U	0.42 U
Phenanthrene	85-01-8	mg/kg	0.26	NP	--	0.11 U	0.1 U	0.11 U	**0.24**	**0.35**	**0.56**	**0.13**	**1.2**
Phenol	108-95-2	mg/kg	0.52	1900	--	0.22 U	0.21 U	0.22 U	0.29 U	0.28 U	0.28 U	0.26 U	0.42 U
Pyrene	129-00-0	mg/kg	0.78	180	--	0.11 U	0.1 U	0.11 U	**0.48**	**0.45**	**0.63**	**0.84**	**2**

Notes
mg/kg - milligrams/kilogram
U - Not detected at reported quantitation limit.
J - estimated value.
+ - High biased. Actual concentration may be lower than the concentration reported.
R - Unusable, rejected should not be used.
L - Reported concentration is below the Contract Required Quantitation Limit (CRQL).
K - Unknown bias.
NP - Not published.
FS - Field Sample.
FD - Field Duplicate.
RSL - Regional Screening level, May 2022.
TR - Targeted Risk for cancer.
THQ - Target Hazard Quotient.
Yellow Highlight - exceeds background
Orange highlight - does not exceed background, but exceeds RSL

Table 4-9
Summary of Fish Tissue Analytical Data - Top Feeders
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	SCDM minimum of Non-Cancer and Cancer Risk	SCDM Cancer Risk	SCDM Non-Cancer Risk	Lake	L01	L01	L01	L01	L01	L01	L01	L01
						Common Name	Sunfish	Sunfish	Sunfish	Sunfish	Sunfish	Sunfish	Sunfish	Sunfish
						Sample ID	CL-L01-SF01-20220405-81	CL-L01-SF02-20220405-81	CL-L01-SF03-20220406-81	CL-L01-SF04-20220406-81	CL-L01-SF05-20220406-81	CL-L01-SF06-20220406-81	CL-L01-SF06-20220406-82	CL-L01-SF07-20220406-81
						Date	04/05/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022	04/06/2022	04/06/2022	04/06/2022
						Type	FS	FS	FS	FS	FS	FS	FD	FS
Herbicides by SW846 Method 8151														
2,4,5-T	93-76-5	mg/kg	15.4	NP	15.4	--	0.011 UR	0.011 UR	0.011 UR	0.01 UR	0.011 UR	0.011 UR	0.011 UR	0.01 UR
2,4-D	94-75-7	mg/kg	NP	NP	NP	--	0.059 UR	0.059 UR	0.059 UR	0.058 UR	0.059 UR	0.059 UR	0.059 UR	0.058 UR
2,4-DB	94-82-6	mg/kg	NP	NP	NP	--	0.061 UR	0.061 UR	0.061 UR	0.06 UR	0.061 UR	0.061 UR	0.061 UR	0.06 UR
Dalapon	75-99-0	mg/kg	NP	NP	NP	--	0.045 UR	0.045 UR	0.045 UR	0.044 UR	0.045 UR	0.045 UR	0.045 UR	0.044 UR
Dicamba	1918-00-9	mg/kg	NP	NP	NP	--	0.018 UR	0.018 UR	0.018 UR	0.017 UR	0.018 UR	0.018 UR	0.018 UR	0.017 UR
Dichlorprop	120-36-5	mg/kg	NP	NP	NP	--	0.045 UR	0.045 UR	0.045 UR	0.044 UR	0.045 UR	0.045 UR	0.045 UR	0.044 UR
Dinoseb	88-85-7	mg/kg	NP	NP	NP	--	0.072 UR	0.072 UR	0.072 UR	0.072 UR	0.072 UR	0.072 UR	0.072 UR	0.072 UR
MCPA	94-74-6	mg/kg	0.772	NP	0.772	--	4.4 UR	4.4 UR	4.4 UR	4.3 UR	4.4 UR	4.4 UR	4.4 UR	4.3 UR
MCPP	93-65-2	mg/kg	1.54	NP	1.54	--	3.4 UR	3.4 UR	3.4 UR	3.4 UR	3.4 UR	3.4 UR	3.4 UR	3.4 UR
Pentachlorophenol	87-86-5	mg/kg	0.0104	0.0104	7.72	--	0.0093 UR	0.0093 UR	0.0093 UR	0.0092 UR	0.0093 UR	0.0093 UR	0.0093 UR	0.0092 UR
Silvex (2,4,5-TP)	93-72-1	mg/kg	NP	NP	NP	--	0.011 UR	0.011 UR	0.011 UR	0.011 UR	0.011 UR	0.011 UR	0.011 UR	0.011 UR
PCB Aroclors by SW846 Method 8082														
Aroclor-1016	12674-11-2	mg/kg	NP	NP	NP	--	0.011 UR	0.01 UR	0.01 UR	0.01 UR	0.01 UR	0.011 UR	0.011 UR	0.01 UR
Aroclor-1221	11104-28-2	mg/kg	NP	NP	NP	--	0.011 UR	0.01 UR	0.01 UR	0.01 UR	0.01 UR	0.011 UR	0.011 UR	0.01 UR
Aroclor-1232	11141-16-5	mg/kg	NP	NP	NP	--	0.011 UR	0.01 UR	0.01 UR	0.01 UR	0.01 UR	0.011 UR	0.011 UR	0.01 UR
Aroclor-1242	53469-21-9	mg/kg	NP	NP	NP	--	**0.025 JQK**	**0.029 JQK**	**0.042 JK**	**0.037 JK**	**0.03 JQK**	**0.058 JK**	**0.062 JK**	**0.044 JK**
Aroclor-1248	12672-29-6	mg/kg	NP	NP	NP	--	0.011 UR	0.01 UR	0.01 UR	0.01 UR	0.01 UR	0.011 UR	0.011 UR	0.01 UR
Aroclor-1254	11097-69-1	mg/kg	NP	NP	NP	--	**0.03 JQK**	**0.047 JK**	**0.08 JK**	**0.047 JK**	**0.053 JK**	**0.098 JK**	**0.098 JK**	**0.051 JK**
Aroclor-1260	11096-82-5	mg/kg	NP	NP	NP	--	**0.029 JQK**	**0.045 JK**	**0.096 JK**	**0.058 JK**	**0.062 JK**	**0.12 JK**	**0.12 JK**	**0.06 JK**
Polychlorinated biphenyls, Total	1336-36-3	mg/kg	0.00208	0.00208	0.0309	--	**0.084 JQK**	**0.12 JK**	**0.22 JK**	**0.14 JK**	**0.15 JK**	**0.28 JK**	**0.28 JK**	**0.16 JK**
PCB Aroclors Congeners Group 1 by EPA Method 1668														
PCB-105	32598-14-4	mg/kg	NP	NP	NP	--	**0.000083 JK**	**0.00034 JK**	**0.00067 JK**	**0.00029 JK**	**0.00046 JK**	**0.00081 JK**	**0.00038 JK**	**0.00035 JK**
PCB-114	74472-37-0	mg/kg	NP	NP	NP	--	**0.000006 JQK**	**0.000028 JQK**	**0.00005 JK**	**0.000024 JQK**	**0.000034 JK**	**0.000064 JK**	**0.000033 JK**	**0.000027 JQK**
PCB-118	31508-00-6	mg/kg	NP	NP	NP	--	**0.00024 JK**	**0.0011 JK**	**0.002 JK**	**0.00091 JK**	**0.0014 JK**	**0.0026 JK**	**0.0012 JK**	**0.0011 JK**
PCB-123	65510-44-3	mg/kg	NP	NP	NP	--	**0.0000061 JQK**	**0.000025 JQK**	**0.000048 JK**	**0.000024 JQK**	**0.000035 JK**	**0.000063 JK**	**0.000027 JQK**	**0.000026 JQK**
PCB-126	57465-28-8	mg/kg	NP	NP	NP	--	**0.0000052 JQK**	**0.000017 JQK**	**0.0000085 JQK**	0.0000039 UJK	**0.00001 JQK**	**0.00001 JQK**	0.000004 UJK	0.0000039 UJK
PCB-156/157	STL01792	mg/kg	NP	NP	NP	--	**0.000045 JQK**	**0.00019 JK**	**0.0004 JK**	**0.00018 JK**	**0.00027 JK**	**0.00051 JK**	**0.00025 JK**	**0.00021 JK**
PCB-167	52663-72-6	mg/kg	NP	NP	NP	--	**0.000026 JQK**	**0.00012 JK**	**0.00025 JK**	**0.00011 JK**	**0.00015 JK**	**0.00032 JK**	**0.00015 JK**	**0.00012 JK**
PCB-169	32774-16-6	mg/kg	NP	NP	NP	--	0.0000039 UJK	0.0000039 UJK	0.0000039 UJK	0.0000039 UJK	**0.0000046 JQK**	**0.0000093 JQK**	**0.000004 JQK**	0.0000039 UJK
PCB-189	39635-31-9	mg/kg	NP	NP	NP	--	**0.0000067 JQK**	**0.00003 JQK**	**0.000064 JK**	**0.00003 JQK**	**0.000042 JK**	**0.000086 JK**	**0.000038 JK**	**0.000034 JK**
PCB-77	32598-13-3	mg/kg	NP	NP	NP	--	**0.000013 JQK**	**0.000032 JK**	**0.000056 JK**	**0.000024 JQK**	**0.000058 JK**	**0.000059 JK**	**0.000026 JQK**	**0.000031 JQK**
PCB-81	70362-50-4	mg/kg	NP	NP	NP	--	0.0000039 UJK	0.0000039 UJK	0.0000039 UJK	0.0000039 UJK	0.0000038 UJK	0.0000039 UJK	0.000004 UJK	0.0000039 UJK
Metals by SW846 Method 6020 and 7470/7471														
Aluminum	7429-90-5	mg/kg	1540	NP	1540	--	7.5 UJK	7.8 UJK	7.3 UJK	7.4 UJK	6.2 UJK	6.8 UJK	6.3 UJK	7.9 UJK
Antimony	7440-36-0	mg/kg	0.618	NP	0.618	--	1.6 U	1.7 U	1.5 U	1.6 U	1.3 U	1.4 U	1.3 U	1.7 U
Arsenic	7440-38-2	mg/kg	0.00277	0.00277	0.463	--	1.3 UJK	**1.6 JQK**	1.3 UJK	1.3 UJK	1.1 UJK	1.2 UJK	**1.1 JQK**	1.4 UJK
Barium	7440-39-3	mg/kg	309	NP	309	--	**0.19 JQK**	**0.4 JQK**	**0.23 JQK**	**0.66 JK**	**0.4 JK**	**0.94 JK**	**0.49 JK**	**0.56 JK**
Beryllium	7440-41-7	mg/kg	3.09	NP	3.09	--	0.093 UJK	0.098 UJK	0.091 UJK	0.093 UJK	0.078 UJK	0.085 UJK	0.079 UJK	0.099 UJK
Cadmium	7440-43-9	mg/kg	0.154	NP	0.154	--	0.093 UJK	0.098 UJK	0.091 UJK	0.093 UJK	0.078 UJK	0.085 UJK	0.079 UJK	0.099 UJK
Calcium	7440-70-2	mg/kg	NP	NP	NP	--	**880 JK**	**2300 JK**	**1200 JK**	**4300 JK**	**3100 JK**	**6400 JK**	**3400 JK**	**3300 JK**
Chromium	7440-47-3	mg/kg	0.00832	0.00832	4.63	--	0.33 UJK	0.34 UJK	0.32 UJK	0.32 UJK	0.27 UJK	0.3 UJK	**0.28 JQK**	0.35 UJK
Cobalt	7440-48-4	mg/kg	0.463	NP	0.463	--	0.14 UJK	0.14 UJK	0.13 UJK	0.14 UJK	0.11 UJK	0.12 UJK	0.12 UJK	0.14 UJK
Copper	7440-50-8	mg/kg	61.8	NP	61.8	--	0.72 UJK	0.75 UJK	0.7 UJK	0.71 UJK	0.6 UJK	**0.68 JQK**	0.61 UJK	0.76 UJK
Iron	7439-89-6	mg/kg	1080	NP	1080	--	**6 JQK**	**11 JQK**	**5.6 JQK**	**6.2 JQK**	**5.1 JQK**	**5.6 JQK**	**7.1 JQK**	**8.8 JQK**
Lead	7439-92-1	mg/kg	NP	NP	NP	--	0.56 UJK	0.59 UJK	0.55 UJK	0.56 UJK	0.47 UJK	0.51 UJK	0.48 UJK	0.59 UJK

Table 4-9 (Continued)
Summary of Fish Tissue Analytical Data - Top Feeders
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	SCDM minimum of Non-Cancer and Cancer Risk	SCDM Cancer Risk	SCDM Non-Cancer Risk	Lake	L01	L01	L01	L01	L01	L01	L01	L01
						Common Name	Sunfish	Sunfish	Sunfish	Sunfish	Sunfish	Sunfish	Sunfish	Sunfish
						Sample ID	CL-L01-SF01-20220405-81	CL-L01-SF02-20220405-81	CL-L01-SF03-20220406-81	CL-L01-SF04-20220406-81	CL-L01-SF05-20220406-81	CL-L01-SF06-20220406-81	CL-L01-SF06-20220406-82	CL-L01-SF07-20220406-81
						Date	04/05/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022	04/06/2022	04/06/2022	04/06/2022
						Type	FS	FS	FS	FS	FS	FS	FD	FS
Metals by SW846 Method 6020 and 7470/7471 (continued)														
Magnesium	7439-95-4	mg/kg	NP	NP	NP	--	**320**	**320**	**300**	**350**	**380**	**400**	**340**	**360**
Manganese	7439-96-5	mg/kg	216	NP	216	--	**0.71 JQK**	**1.8 JK**	**0.63 JQK**	**4.3 JK**	**2.1 JK**	**4.1 JK**	**2.6 JK**	**3.1 JK**
Mercury	7439-97-6	mg/kg	0.247	NP	0.247	--	**0.048 JQK**	0.038 UR	**0.079 JQK**	0.038 UR	0.039 UR	**0.042 JQK**	0.038 UR	0.039 UR
Nickel	7440-02-0	mg/kg	30.9	NP	30.9	--	0.24 UJK	0.25 UJK	0.24 UJK	0.24 UJK	0.2 UJK	0.22 UJK	0.21 UJK	0.26 UJK
Potassium	7440-09-7	mg/kg	NP	NP	NP	--	**4000**	**3500**	**3500**	**3300**	**3800**	**3700**	**3700**	**3800**
Selenium	7782-49-2	mg/kg	7.72	NP	7.72	--	1.4 UJK	**1.9 JQK**	1.4 UJK	1.4 UJK	1.2 UJK	1.3 UJK	**1.4 JQK**	1.5 UJK
Silver	7440-22-4	mg/kg	7.72	NP	7.72	--	0.37 UJK	0.39 UJK	0.36 UJK	0.37 UJK	0.31 UJK	0.34 UJK	0.32 UJK	0.4 UJK
Sodium	7440-23-5	mg/kg	NP	NP	NP	--	**370**	**600**	**580**	**670**	**710**	**760**	**750**	**740**
Thallium	7440-28-0	mg/kg	0.0154	NP	0.0154	--	1.2 UJK	1.3 UJK	1.2 UJK	1.2 UJK	1 UJK	1.1 UJK	1 UJK	1.3 UJK
Vanadium	7440-62-2	mg/kg	7.79	NP	7.79	--	0.4 UJK	0.42 UJK	0.39 UJK	0.4 UJK	0.33 UJK	0.36 UJK	0.34 UJK	0.43 UJK
Zinc	7440-66-6	mg/kg	463	NP	463	--	**7.9 JK**	**20 JK**	**14 JK**	**19 JK**	**23 JK**	**19 JK**	**16 JK**	**17 JK**
Pesticides by SW846 Method 8081														
4,4'-DDT	50-29-3	mg/kg	0.0122	0.0122	0.772	--	0.0077 UR	**0.023 JK**	**0.023 JK**	**0.0087 JQK**	0.0078 UR	**0.011 JQK**	**0.012 JQK**	**0.018 JK**
4,4'-DDD	72-54-8	mg/kg	0.0173	0.0173	0.0463	--	**0.014 JQK**	**0.032 JK**	**0.014 JQK**	**0.012 JQK**	**0.019 JK**	**0.02 JK**	**0.019 JK**	**0.014 JQK**
4,4'-DDE	72-55-9	mg/kg	0.0122	0.0122	0.463	--	**0.018 JK**	**0.051 JK**	**0.022 JK**	**0.024 JK**	**0.022 JK**	**0.041 JK**	**0.038 JK**	**0.023 JK**
Aldrin	309-00-2	mg/kg	0.000245	0.000245	0.0463	--	0.0017 UR	0.0017 UR	0.0017 UR	0.0017 UR	0.0017 UR	0.0017 UR	0.0017 UR	0.0016 UR
alpha-BHC	319-84-6	mg/kg	0.00066	0.00066	12.4	--	0.0017 UR	0.0017 UR	0.0017 UR	0.0017 UR	0.0017 UR	0.0017 UR	0.0017 UR	0.0016 UR
beta-BHC	319-85-7	mg/kg	0.00231	0.00231	0.927	--	0.0043 UR	0.0044 UR	0.0043 UR	0.0043 UR	0.0044 UR	0.0044 UR	0.0043 UR	0.0043 UR
cis-Chlordane	5103-71-9	mg/kg	0.0119	0.0119	0.772	--	0.0017 UR	**0.0028 JQK**	0.0017 UR	0.0017 UR	**0.0022 JQK**	**0.0025 JQK**	**0.0022 JQK**	**0.0025 JQK**
delta-BHC	319-86-8	mg/kg	NP	NP	NP	--	0.0044 UR	0.0045 UR	0.0044 UR	0.0044 UR	0.0045 UR	0.0045 UR	0.0044 UR	0.0044 UR
Dieldrin	60-57-1	mg/kg	0.00026	0.00026	0.0772	--	**0.0036 JQK**	**0.006 JQK**	**0.0033 JQK**	0.0032 UR	**0.0062 JQK**	**0.0051 JQK**	**0.005 JQK**	**0.0043 JQK**
Endosulfan I	959-98-8	mg/kg	9.27	NP	9.27	--	0.0021 UR	0.0022 UR	0.0022 UR	0.0021 UR	0.0022 UR	0.0022 UR	0.0021 UR	0.0021 UR
Endosulfan II	33213-65-9	mg/kg	9.27	9.27	NP	--	0.011 UR	0.011 UR	0.011 UR	0.011 UR	0.011 UR	0.011 UR	0.011 UR	0.011 UR
Endosulfan sulfate	1031-07-8	mg/kg	NP	NP	NP	--	0.0038 UR	0.0039 UR	0.0039 UR	0.0038 UR	0.0039 UR	0.0039 UR	0.0038 UR	0.0038 UR
Endrin	72-20-8	mg/kg	0.463	NP	0.463	--	0.0066 UR	0.0068 UR	0.0067 UR	0.0066 UR	0.0068 UR	0.0068 UR	0.0066 UR	0.0066 UR
Endrin aldehyde	7421-93-4	mg/kg	NP	NP	NP	--	0.0037 UR	0.0038 UR	0.0038 UR	0.0037 UR	0.0038 UR	0.0038 UR	0.0037 UR	0.0037 UR
Endrin ketone	53494-70-5	mg/kg	NP	NP	NP	--	0.0058 UR	0.006 UR	0.0059 UR	0.0058 UR	0.006 UR	0.006 UR	0.0058 UR	0.0058 UR
gamma-BHC (Lindane)	58-89-9	mg/kg	0.00378	0.00378	0.0154	--	0.002 UR	0.0021 UR	0.0021 UR	0.002 UR	0.0021 UR	0.0021 UR	0.002 UR	0.002 UR
Heptachlor	76-44-8	mg/kg	0.000924	0.000924	0.154	--	0.003 UR	0.0031 UR	0.0031 UR	0.003 UR	0.0031 UR	0.0031 UR	0.003 UR	0.003 UR
Heptachlor epoxide	1024-57-3	mg/kg	0.000457	0.000457	0.0201	--	0.0017 UR	0.0017 UR	0.0017 UR	0.0017 UR	0.0017 UR	0.0017 UR	0.0017 UR	0.0016 UR
Methoxychlor	72-43-5	mg/kg	7.72	NP	7.72	--	0.025 UR	0.025 UR	0.025 UR	0.025 UR	0.025 UR	0.026 UR	0.025 UR	0.025 UR
Toxaphene	8001-35-2	mg/kg	0.00378	0.00378	0.139	--	0.14 UR	0.14 UR	0.14 UR	0.14 UR	0.14 UR	0.14 UR	0.14 UR	0.14 UR
trans-Chlordane	5103-74-2	mg/kg	0.0119	0.0119	0.772	--	0.0024 UR	0.0025 UR	0.0025 UR	0.0024 UR	0.0025 UR	0.0025 UR	0.0024 UR	0.0024 UR
SVOCs by SW846 Method 8270														
1,1'-Biphenyl	92-52-4	mg/kg	NP	NP	NP	--	0.66 UR	0.65 UR	0.65 UR	0.66 UR	0.66 UR	0.66 UR	0.66 UR	0.65 UR
2,2'-oxybis[1-chloropropane]	108-60-1	mg/kg	NP	NP	NP	--	0.79 UR	0.77 UR	0.78 UR	0.79 UR	0.79 UR	0.79 UR	0.79 UR	0.78 UR
2,4,5-Trichlorophenol	95-95-4	mg/kg	NP	NP	NP	--	0.66 UR	0.65 UR	0.65 UR	0.66 UR	0.66 UR	0.66 UR	0.66 UR	0.65 UR
2,4,6-Trichlorophenol	88-06-2	mg/kg	0.378	0.378	1.54	--	0.66 UR	0.65 UR	0.65 UR	0.66 UR	0.66 UR	0.66 UR	0.66 UR	0.65 UR
2,4-Dichlorophenol	120-83-2	mg/kg	4.63	NP	4.63	--	0.79 UR	0.77 UR	0.78 UR	0.79 UR	0.79 UR	0.79 UR	0.79 UR	0.78 UR
2,4-Dimethylphenol	105-67-9	mg/kg	30.9	NP	30.9	--	0.66 UR	0.65 UR	0.65 UR	0.66 UR	0.66 UR	0.66 UR	0.66 UR	0.65 UR
2,4-Dinitrophenol	51-28-5	mg/kg	NP	NP	NP	--	6.6 UR	6.5 UR	6.5 UR	6.6 UR	6.6 UR	6.6 UR	6.6 UR	6.5 UR
2,4-Dinitrotoluene	121-14-2	mg/kg	NP	NP	NP	--	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR
2,6-Dinitrotoluene	606-20-2	mg/kg	NP	NP	NP	--	0.66 UR	0.65 UR	0.65 UR	0.66 UR	0.66 UR	0.66 UR	0.66 UR	0.65 UR
2-Chloronaphthalene	91-58-7	mg/kg	NP	NP	NP	--	0.53 UR	0.52 UR	0.52 UR	0.53 UR	0.53 UR	0.53 UR	0.53 UR	0.52 UR
2-Chlorophenol	95-57-8	mg/kg	NP	NP	NP	--	0.66 UR	0.65 UR	0.65 UR	0.66 UR	0.66 UR	0.66 UR	0.66 UR	0.65 UR

Table 4-9 (Continued)
Summary of Fish Tissue Analytical Data - Top Feeders
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	SCDM minimum of Non-Cancer and Cancer Risk	SCDM Cancer Risk	SCDM Non-Cancer Risk	Lake	L01	L01	L01	L01	L01	L01	L01	L01
						Common Name	Sunfish	Sunfish	Sunfish	Sunfish	Sunfish	Sunfish	Sunfish	Sunfish
						Sample ID	CL-L01-SF01-20220405-81	CL-L01-SF02-20220405-81	CL-L01-SF03-20220406-81	CL-L01-SF04-20220406-81	CL-L01-SF05-20220406-81	CL-L01-SF06-20220406-81	CL-L01-SF06-20220406-82	CL-L01-SF07-20220406-81
						Date	04/05/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022	04/06/2022	04/06/2022	04/06/2022
						Type	FS	FS	FS	FS	FS	FS	FD	FS
SVOCs by SW846 Method 8270 (continued)														
2-Methylnaphthalene	91-57-6	mg/kg	6.18	NP	6.18	--	0.2 UR	0.19 UR	0.2 UR	0.2 UR	0.2 UR	0.2 UR	0.2 UR	0.19 UR
2-Methylphenol	95-48-7	mg/kg	NP	NP	NP	--	0.79 UR	0.77 UR	0.78 UR	0.79 UR	0.79 UR	0.79 UR	0.79 UR	0.78 UR
2-Nitroaniline	88-74-4	mg/kg	NP	NP	NP	--	0.66 UR	0.65 UR	0.65 UR	0.66 UR	0.66 UR	0.66 UR	0.66 UR	0.65 UR
2-Nitrophenol	88-75-5	mg/kg	NP	NP	NP	--	0.79 UR	0.77 UR	0.78 UR	0.79 UR	0.79 UR	0.79 UR	0.79 UR	0.78 UR
3,3'-Dichlorobenzidine	91-94-1	mg/kg	NP	NP	NP	--	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR
3-Nitroaniline	99-09-2	mg/kg	NP	NP	NP	--	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR
4,6-Dinitro-2-methylphenol	534-52-1	mg/kg	NP	NP	NP	--	6.6 UR	6.5 UR	6.5 UR	6.6 UR	6.6 UR	6.6 UR	6.6 UR	6.5 UR
4-Bromophenyl phenyl ether	101-55-3	mg/kg	NP	NP	NP	--	0.66 UR	0.65 UR	0.65 UR	0.66 UR	0.66 UR	0.66 UR	0.66 UR	0.65 UR
4-Chloro-3-methylphenol	59-50-7	mg/kg	NP	NP	NP	--	0.79 UR	0.77 UR	0.78 UR	0.79 UR	0.79 UR	0.79 UR	0.79 UR	0.78 UR
4-Chloroaniline	106-47-8	mg/kg	NP	NP	NP	--	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR
4-Chlorophenyl phenyl ether	7005-72-3	mg/kg	NP	NP	NP	--	0.66 UR	0.65 UR	0.65 UR	0.66 UR	0.66 UR	0.66 UR	0.66 UR	0.65 UR
4-Methylphenol	106-44-5	mg/kg	30.9	NP	30.9	--	0.66 UR	0.65 UR	0.65 UR	0.66 UR	0.66 UR	0.66 UR	0.66 UR	0.65 UR
4-Nitroaniline	100-01-6	mg/kg	NP	NP	NP	--	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR
4-Nitrophenol	100-02-7	mg/kg	NP	NP	NP	--	6.6 UR	6.5 UR	6.5 UR	6.6 UR	6.6 UR	6.6 UR	6.6 UR	6.5 UR
Acenaphthene	83-32-9	mg/kg	92.7	NP	92.7	--	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR
Acenaphthylene	208-96-8	mg/kg	NP	NP	NP	--	0.16 UR	0.15 UR	0.16 UR	0.16 UR	0.16 UR	0.16 UR	0.16 UR	0.16 UR
Acetophenone	98-86-2	mg/kg	NP	NP	NP	--	0.66 UR	0.65 UR	0.65 UR	0.66 UR	0.66 UR	0.66 UR	0.66 UR	0.65 UR
Anthracene	120-12-7	mg/kg	463	NP	463	--	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR
Atrazine	1912-24-9	mg/kg	0.0181	0.0181	4.63	--	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR
Benzaldehyde	100-52-7	mg/kg	NP	NP	NP	--	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR
Benzo(a)anthracene	56-55-3	mg/kg	0.0416	0.0416	NP	--	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR
Benzo(a)pyrene	50-32-8	mg/kg	0.00416	0.00416	0.463	--	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR
Benzo[b]fluoranthene	205-99-2	mg/kg	NP	NP	NP	--	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR
Benzo[g,h,i]perylene	191-24-2	mg/kg	NP	NP	NP	--	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR
Benzo[k]fluoranthene	207-08-9	mg/kg	0.416	0.416	NP	--	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR
Bis(2-chloroethoxy)methane	111-91-1	mg/kg	NP	NP	NP	--	0.66 UR	0.65 UR	0.65 UR	0.66 UR	0.66 UR	0.66 UR	0.66 UR	0.65 UR
Bis(2-chloroethyl)ether	111-44-4	mg/kg	NP	NP	NP	--	0.66 UR	0.65 UR	0.65 UR	0.66 UR	0.66 UR	0.66 UR	0.66 UR	0.65 UR
Butylbenzylphthalate	85-68-7	mg/kg	2.19	2.19	309	--	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR
Caprolactam	105-60-2	mg/kg	NP	NP	NP	--	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR
Carbazole	86-74-8	mg/kg	NP	NP	NP	--	0.66 UR	0.65 UR	0.65 UR	0.66 UR	0.66 UR	0.66 UR	0.66 UR	0.65 UR
Chrysene	218-01-9	mg/kg	4.16	4.16	NP	--	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR
Croplas EH	117-81-7	mg/kg	0.297	0.297	30.9	--	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR
Dibenzo(a,h)anthracene	53-70-3	mg/kg	0.00416	0.00416	NP	--	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR
Dibenzofuran	132-64-9	mg/kg	1.54	NP	1.54	--	0.66 UR	0.65 UR	0.65 UR	0.66 UR	0.66 UR	0.66 UR	0.66 UR	0.65 UR
Diethylphthalate	84-66-2	mg/kg	1240	NP	1240	--	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR
Dimethyl phthalate	131-11-3	mg/kg	NP	NP	NP	--	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR
Di-n-butylphthalate	84-74-2	mg/kg	154	NP	154	--	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR
Di-n-octyl phthalate	117-84-0	mg/kg	15.4	NP	15.4	--	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR
Fluoranthene	206-44-0	mg/kg	61.8	NP	61.8	--	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR
Fluorene	86-73-7	mg/kg	61.8	NP	61.8	--	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR
Hexachlorobenzene	118-74-1	mg/kg	0.0026	0.0026	0.0154	--	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR
Hexachlorobutadiene	87-68-3	mg/kg	0.0533	0.0533	1.54	--	0.79 UR	0.77 UR	0.78 UR	0.79 UR	0.79 UR	0.79 UR	0.79 UR	0.78 UR
Hexachlorocyclo-pentadiene	77-47-4	mg/kg	NP	NP	NP	--	6.6 UR	6.5 UR	6.5 UR	6.6 UR	6.6 UR	6.6 UR	6.6 UR	6.5 UR
Hexachloroethane	67-72-1	mg/kg	0.104	0.104	1.08	--	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR
Indeno[1,2,3-cd]pyrene	193-39-5	mg/kg	0.0416	0.0416	NP	--	0.16 UR	0.15 UR	0.16 UR	0.16 UR	0.16 UR	0.16 UR	0.16 UR	0.16 UR

Table 4-9 (Continued)
Summary of Fish Tissue Analytical Data - Top Feeders
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	SCDM minimum of Non-Cancer and Cancer Risk	SCDM Cancer Risk	SCDM Non-Cancer Risk	Lake	L01	L01	L01	L01	L01	L01	L01	L01
						Common Name	Sunfish	Sunfish	Sunfish	Sunfish	Sunfish	Sunfish	Sunfish	Sunfish
						Sample ID	CL-L01-SF01-20220405-81	CL-L01-SF02-20220405-81	CL-L01-SF03-20220406-81	CL-L01-SF04-20220406-81	CL-L01-SF05-20220406-81	CL-L01-SF06-20220406-81	CL-L01-SF06-20220406-82	CL-L01-SF07-20220406-81
						Date	04/05/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022	04/06/2022	04/06/2022	04/06/2022
						Type	FS	FS	FS	FS	FS	FS	FD	FS
SVOCs by SW846 Method 8270 (continued)														
Isophorone	78-59-1	mg/kg	NP	NP	NP	--	0.66 UR	0.65 UR	0.65 UR	0.66 UR	0.66 UR	0.66 UR	0.66 UR	0.65 UR
Naphthalene	91-20-3	mg/kg	0.0347	0.0347	30.9	--	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR
Nitrobenzene	98-95-3	mg/kg	3.09	NP	3.09	--	0.66 UR	0.65 UR	0.65 UR	0.66 UR	0.66 UR	0.66 UR	0.66 UR	0.65 UR
N-Nitroso-di-n propylamine	621-64-7	mg/kg	NP	NP	NP	--	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR
N-Nitrosodiphenylamine	86-30-6	mg/kg	0.849	0.849	NP	--	0.66 UR	0.65 UR	0.65 UR	0.66 UR	0.66 UR	0.66 UR	0.66 UR	0.65 UR
Pentachlorophenol	87-86-5	mg/kg	0.0104	0.0104	7.72	--	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR
Phenanthrene	85-01-8	mg/kg	NP	NP	NP	--	0.16 UR	0.15 UR	0.16 UR	0.16 UR	0.16 UR	0.16 UR	0.16 UR	0.16 UR
Phenol	108-95-2	mg/kg	463	NP	463	--	0.66 UR	0.65 UR	0.65 UR	0.66 UR	0.66 UR	0.66 UR	0.66 UR	0.65 UR
Pyrene	129-00-0	mg/kg	46.3	NP	46.3	--	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR

Notes

mg/kg - milligrams/kilogram

U - Not detected at reported quantitation limit.

J - estimated value.

R - Unusable, rejected should not be used.

K - Unknown bias.

Q - The reported concentration is less than the sample quantitation limit for the specific analyte in the sample.

FS - Field Sample.

FD - Field Duplicate.

RSL - Regional Screening level.

NP - Not Published

SCDM - Superfund Chemical Data Matrix - July 2022

Yellow Highlight - exceeds SCDM minimum of Non-Cancer and Cancer Risk

Table 4-10
Summary of Fish Tissue Analytical Data - Bottom Feeders
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	SCDM minimum of Non-Cancer and Cancer Risk	SCDM Cancer Risk	SCDM Non-Cancer Risk	Lake	L01	L01	L01	L01	L01	L01	L01	L01	L01
						Common Name	Buffalo	Buffalo	Yellow Catfish	Yellow Catfish	Yellow Catfish	Yellow Catfish	Yellow Catfish	Yellow Catfish	Yellow Catfish
						Sample ID	CL-L01-BU01-20220406-81	CL-L01-BU01-20220406-82	CL-L01-YC01-20220405-81	CL-L01-YC02-20220406-81	CL-L01-YC03-20220406-81	CL-L01-YC04-20220406-81	CL-L01-YC05-20220407-81	CL-L01-YC06-20220407-81	CL-L01-YC07-20220407-81
						Date	04/06/2022	04/06/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022	04/07/2022	04/07/2022	04/07/2022
						Type	FS	FD	FS	FS	FS	FS	FS	FS	FS
Herbicides by SW846 Method 8151															
2,4,5-T	93-76-5	mg/kg	15.4	NP	15.4	--	0.011 UR	0.011 UR	0.011 UR	0.011 UR	0.011 UR	0.01 UR	0.01 UR	0.011 UR	0.01 UR
2,4-D	94-75-7	mg/kg	NP	NP	NP	--	0.059 UR	0.059 UR	0.059 UR	0.059 UR	0.059 UR	0.058 UR	0.058 UR	0.059 UR	0.058 UR
2,4-DB	94-82-6	mg/kg	NP	NP	NP	--	0.061 UR	0.061 UR	0.061 UR	0.061 UR	0.061 UR	0.06 UR	0.06 UR	0.061 UR	0.06 UR
Dalapon	75-99-0	mg/kg	NP	NP	NP	--	0.045 UR	0.045 UR	0.045 UR	0.045 UR	0.045 UR	0.044 UR	0.044 UR	0.045 UR	0.044 UR
Dicamba	1918-00-9	mg/kg	NP	NP	NP	--	0.018 UR	0.018 UR	0.018 UR	0.018 UR	0.018 UR	0.017 UR	0.017 UR	0.018 UR	0.017 UR
Dichlorprop	120-36-5	mg/kg	NP	NP	NP	--	0.045 UR	0.045 UR	0.045 UR	0.045 UR	0.045 UR	0.044 UR	0.044 UR	0.045 UR	0.044 UR
Dinoseb	88-85-7	mg/kg	NP	NP	NP	--	0.072 UR	0.072 UR	0.072 UR	0.072 UR	0.072 UR	0.072 UR	0.072 UR	0.072 UR	0.072 UR
MCPA	94-74-6	mg/kg	0.772	NP	0.772	--	4.4 UR	4.4 UR	4.4 UR	4.4 UR	4.4 UR	4.3 UR	4.3 UR	4.4 UR	4.3 UR
MCPP	93-65-2	mg/kg	1.54	NP	1.54	--	3.4 UR	3.4 UR	3.4 UR	3.4 UR	3.4 UR	3.4 UR	3.4 UR	3.4 UR	3.4 UR
Pentachlorophenol	87-86-5	mg/kg	0.0104	0.0104	7.72	--	0.0093 UR	0.0093 UR	0.0093 UR	0.0093 UR	0.0093 UR	0.0092 UR	0.0092 UR	0.0093 UR	0.0092 UR
Silvex (2,4,5-TP)	93-72-1	mg/kg	NP	NP	NP	--	0.011 UR	0.011 UR	0.011 UR	0.011 UR	0.011 UR	0.011 UR	0.011 UR	0.011 UR	0.011 UR
PCB Aroclors by SW846 Method 8082															
Aroclor-1016	12674-11-2	mg/kg	NP	NP	NP	--	0.053 UR	0.052 UR	0.011 UR	0.052 UR	0.01 UR	0.01 UR	0.01 UR	0.011 UR	0.01 UR
Aroclor-1221	11104-28-2	mg/kg	NP	NP	NP	--	0.053 UR	0.052 UR	0.011 UR	0.052 UR	0.01 UR	0.01 UR	0.01 UR	0.011 UR	0.01 UR
Aroclor-1232	11141-16-5	mg/kg	NP	NP	NP	--	0.053 UR	0.052 UR	0.011 UR	0.052 UR	0.01 UR	0.01 UR	0.01 UR	0.011 UR	0.01 UR
Aroclor-1242	53469-21-9	mg/kg	NP	NP	NP	--	**0.82 JK**	**0.6 JK**	**0.045 JK**	**0.12 JQK**	**0.064 JK**	**0.037 JK**	**0.046 JK**	**0.038 JK**	**0.065 JK**
Aroclor-1248	12672-29-6	mg/kg	NP	NP	NP	--	0.053 UR	0.052 UR	0.011 UR	0.052 UR	0.01 UR	0.01 UR	0.01 UR	0.011 UR	0.01 UR
Aroclor-1254	11097-69-1	mg/kg	NP	NP	NP	--	**0.66 JK**	**0.48 JK**	**0.065 JK**	**0.28 JK**	**0.15 JK**	**0.094 JK**	**0.088 JK**	**0.17 JK**	**0.17 JK**
Aroclor-1260	11096-82-5	mg/kg	NP	NP	NP	--	**0.37 JK**	**0.35 JK**	**0.083 JK**	**0.84 JK**	**0.23 JK**	**0.14 JK**	**0.1 JK**	**0.077 JK**	**0.15 JK**
Polychlorinated biphenyls, Total	1336-36-3	mg/kg	0.00208	0.00208	0.0309	--	**1.9 JK**	**1.4 JK**	**0.19 JK**	**1.2 JK**	**0.44 JK**	**0.27 JK**	**0.23 JK**	**0.29 JK**	**0.39 JK**
PCB Aroclors Congeners Group 1 by EPA Method 1668															
PCB-105	32598-14-4	mg/kg	NP	NP	NP	--	**0.0058 JK**	**0.0046 JK**	**0.00078 JK**	**0.005 JK**	**0.002 JK**	**0.00051 JK**	**0.00065 JK**	**0.00038 JK**	**0.0016 JK**
PCB-114	74472-37-0	mg/kg	NP	NP	NP	--	**0.00042 JK**	**0.00035 JK**	**0.000064 JK**	**0.00038 JK**	**0.00015 JK**	**0.000041 JK**	**0.000047 JK**	**0.000028 JQK**	**0.00012 JK**
PCB-118	31508-00-6	mg/kg	NP	NP	NP	--	**0.016 JK**	**0.012 JK**	**0.0026 JK**	**0.014 JK**	**0.0063 JK**	**0.0017 JK**	**0.002 JK**	**0.0011 JK**	**0.0049 JK**
PCB-123	65510-44-3	mg/kg	NP	NP	NP	--	**0.00042 JK**	**0.00033 JK**	**0.000055 JK**	**0.00037 JK**	**0.00014 JK**	**0.000039 JK**	**0.000046 JK**	**0.000028 JQK**	**0.0001 JK**
PCB-126	57465-28-8	mg/kg	NP	NP	NP	--	**0.00016 JK**	**0.0001 JK**	**0.000014 JQK**	**0.0001 JK**	**0.000038 JK**	**0.0000092 JQK**	**0.000014 JQK**	**0.0000066 JQK**	**0.000033 JK**
PCB-156/157	STL01792	mg/kg	NP	NP	NP	--	**0.0024 JK**	**0.002 JK**	**0.0005 JK**	**0.0033 JK**	**0.0012 JK**	**0.00033 JK**	**0.00036 JK**	**0.00019 JK**	**0.00096 JK**
PCB-167	52663-72-6	mg/kg	NP	NP	NP	--	**0.0014 JK**	**0.0012 JK**	**0.00028 JK**	**0.002 JK**	**0.00077 JK**	**0.00021 JK**	**0.00021 JK**	**0.00011 JK**	**0.00059 JK**
PCB-169	32774-16-6	mg/kg	NP	NP	NP	--	0.000004 UJK	**0.000042 JK**	**0.0000082 JQK**	**0.000051 JK**	**0.000022 JQK**	**0.0000059 JQK**	**0.0000052 JQK**	0.0000038 UJK	**0.000015 JQK**
PCB-189	39635-31-9	mg/kg	NP	NP	NP	--	**0.0003 JK**	**0.00026 JK**	**0.000082 JK**	**0.00055 JK**	**0.00021 JK**	**0.000057 JK**	**0.000053 JK**	**0.000027 JQK**	**0.00016 JK**
PCB-77	32598-13-3	mg/kg	NP	NP	NP	--	**0.0011 JK**	**0.00086 JK**	**0.000024 JQK**	**0.000044 JK**	**0.000041 JK**	**0.0000095 JQK**	**0.0000076 JK**	0.0000038 UJK	**0.000014 JQK**
PCB-81	70362-50-4	mg/kg	NP	NP	NP	--	**0.00006 JK**	**0.000057 JK**	0.000004 UJK	**0.00002 JQK**	0.000004 UJK	0.0000039 UJK	0.0000039 UJK	0.0000038 UJK	**0.0000077 JQK**
Metals by SW846 Method 6020 and 7470/7471															
Aluminum	7429-90-5	mg/kg	1540	NP	1540	--	6.9 UJK	7.4 UJK	7.8 UJK	7 UJK	6.2 UJK	6.8 UJK	5.9 UJK	7.9 UJK	7.4 UJK
Antimony	7440-36-0	mg/kg	0.618	NP	0.618	--	1.5 U	1.6 U	1.7 U	1.5 U	1.3 U	1.5 U	1.3 U	1.7 U	1.6 U
Arsenic	7440-38-2	mg/kg	0.00277	0.00277	0.463	--	1.2 UJK	1.3 UJK	1.4 UJK	1.2 UJK	**1.1 JQK**	1.2 UJK	1 UJK	1.4 UJK	1.3 UJK
Barium	7440-39-3	mg/kg	309	NP	309	--	0.13 UJK	0.14 UJK	**0.38 JQK**	0.34 UJK	**0.43 JK**	**0.4 JQK**	**0.27 JQK**	**0.32 JQK**	**0.31 JQK**
Beryllium	7440-41-7	mg/kg	3.09	NP	3.09	--	0.086 UJK	0.093 UJK	0.098 UJK	0.087 UJK	0.078 UJK	0.085 UJK	0.074 UJK	0.099 UJK	0.093 UJK
Cadmium	7440-43-9	mg/kg	0.154	NP	0.154	--	0.086 UJK	0.093 UJK	0.098 UJK	**0.087 JK**	0.078 UJK	0.085 UJK	0.074 UJK	0.099 UJK	0.093 UJK
Calcium	7440-70-2	mg/kg	NP	NP	NP	--	**130 JK**	**81 JK**	**400 JK**	270 UJK	**1000 JK**	**670 JK**	**180 JK**	**190 JK**	**560 JK**
Chromium	7440-47-3	mg/kg	0.00832	0.00832	4.63	--	0.3 UJK	**1.1 JQK**	0.34 UJK	0.3 UJK	**0.8 JQK**	**0.32 JQK**	**4.2 JK**	0.35 UJK	**0.34 JQK**
Cobalt	7440-48-4	mg/kg	0.463	NP	0.463	--	0.13 UJK	0.14 UJK	0.14 UJK	0.13 UJK	0.11 UJK	0.12 UJK	0.11 UJK	0.14 UJK	0.14 UJK
Copper	7440-50-8	mg/kg	61.8	NP	61.8	--	0.66 UJK	0.71 UJK	0.75 UJK	0.67 UJK	0.6 UJK	0.66 UJK	0.57 UJK	0.76 UJK	0.71 UJK
Iron	7439-89-6	mg/kg	1080	NP	1080	--	5.3 UJK	**8.7 JQK**	**8.8 JQK**	5.4 UJK	**8.9 JQK**	**15 JQK**	**20 JK**	**7.4 JQK**	**5.9 JQK**
Lead	7439-92-1	mg/kg	NP	NP	NP	--	0.52 UJK	0.56 UJK	0.59 UJK	0.52 UJK	0.47 UJK	0.51 UJK	0.44 UJK	0.59 UJK	0.56 UJK

Table 4-10 (Continued)
Summary of Fish Tissue Analytical Data - Bottom Feeders
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	SCDM minimum of Non-Cancer and Cancer Risk	SCDM Cancer Risk	SCDM Non-Cancer Risk	Lake	L01	L01	L01	L01	L01	L01	L01	L01	L01
						Common Name	Buffalo	Buffalo	Yellow Catfish	Yellow Catfish	Yellow Catfish	Yellow Catfish	Yellow Catfish	Yellow Catfish	Yellow Catfish
						Sample ID	CL-L01-BU01-20220406-81	CL-L01-BU01-20220406-82	CL-L01-YC01-20220405-81	CL-L01-YC02-20220406-81	CL-L01-YC03-20220406-81	CL-L01-YC04-20220406-81	CL-L01-YC05-20220407-81	CL-L01-YC06-20220407-81	CL-L01-YC07-20220407-81
						Date	04/06/2022	04/06/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022	04/07/2022	04/07/2022	04/07/2022
						Type	FS	FD	FS	FS	FS	FS	FS	FS	FS
Metals by SW846 Method 6020 and 7470/7471 (continued)															
Magnesium	7439-95-4	mg/kg	NP	NP	NP	--	**250**	**270**	**280**	**210**	**320**	**220**	**270**	**240**	**250**
Manganese	7439-96-5	mg/kg	216	NP	216	--	0.34 UJK	0.37 UJK	**0.94 JQK**	0.35 UJK	**0.98 JK**	**1.5 JK**	**0.49 JQK**	0.4 UJK	**0.49 JQK**
Mercury	7439-97-6	mg/kg	0.247	NP	0.247	--	0.04 UR	0.04 UR	0.038 UR	**0.26 JL**	0.04 UR	0.039 UR	0.039 UR	**0.039 JQK**	**0.04 JQK**
Nickel	7440-02-0	mg/kg	30.9	NP	30.9	--	0.22 UJK	0.24 UJK	0.25 UJK	0.23 UJK	0.2 UJK	0.22 UJK	**1.7 JH**	0.26 UJK	0.24 UJK
Potassium	7440-09-7	mg/kg	NP	NP	NP	--	**3500**	**3700**	**4000**	**3400**	**4100**	**3400**	**4100**	**3800**	**3800**
Selenium	7782-49-2	mg/kg	7.72	NP	7.72	--	1.3 UJK	1.4 UJK	**1.8 JQK**	1.3 UJK	**1.2 JQK**	1.3 UJK	**1.2 JQK**	1.5 UJK	**1.4 JQK**
Silver	7440-22-4	mg/kg	7.72	NP	7.72	--	0.34 UJK	0.37 UJK	0.39 UJK	0.35 UJK	0.31 UJK	0.34 UJK	0.3 UJK	0.4 UJK	0.37 UJK
Sodium	7440-23-5	mg/kg	NP	NP	NP	--	**370**	**410**	**630**	**630**	**640**	**6100**	**770**	**660**	**720**
Thallium	7440-28-0	mg/kg	0.0154	NP	0.0154	--	1.1 UJK	1.2 UJK	1.3 UJK	1.1 UJK	1 UJK	1.1 UJK	0.96 UJK	1.3 UJK	1.2 UJK
Vanadium	7440-62-2	mg/kg	7.79	NP	7.79	--	0.37 UJK	0.4 UJK	0.42 UJK	0.37 UJK	0.33 UJK	0.37 UJK	0.32 UJK	0.43 UJK	0.4 UJK
Zinc	7440-66-6	mg/kg	463	NP	463	--	**3.3 JK**	**3.4 JK**	**10 JK**	**9 JK**	**11 JK**	**9.7 JK**	**9.4 JK**	**9 JK**	**10 JK**
Pesticides by SW846 Method 8081															
4,4'-DDT	50-29-3	mg/kg	0.0122	0.0122	0.772	--	**0.14 JK**	**0.13 JK**	**0.031 JK**	**0.14 JK**	**0.035 JK**	**0.022 JK**	**0.011 JQK**	**0.049 JK**	**0.084 JK**
4,4'-DDD	72-54-8	mg/kg	0.0173	0.0173	0.0463	--	**0.3 JK**	**0.28 JK**	**0.033 JK**	**0.13 JK**	**0.022 JK**	**0.013 JQK**	**0.051 JK**	**0.2 JK**	**0.37 JK**
4,4'-DDE	72-55-9	mg/kg	0.0122	0.0122	0.463	--	**0.17 JK**	**0.15 JK**	**0.047 JK**	**0.2 JK**	**0.039 JK**	**0.019 JK**	**0.058 JK**	**0.16 JK**	**0.27 JK**
Aldrin	309-00-2	mg/kg	0.000245	0.000245	0.0463	--	0.0067 UR	0.0067 UR	0.0017 UR	0.0033 UR	0.0017 UR	0.0017 UR	0.0017 UR	0.0034 UR	0.0067 UR
alpha-BHC	319-84-6	mg/kg	0.00066	0.00066	12.4	--	0.0067 UR	0.0067 UR	0.0017 UR	0.0033 UR	0.0017 UR	0.0017 UR	0.0017 UR	0.0034 UR	0.0067 UR
beta-BHC	319-85-7	mg/kg	0.00231	0.00231	0.927	--	0.017 UR	0.017 UR	0.0044 UR	0.0086 UR	0.0044 UR	0.0043 UR	0.0043 UR	0.0087 UR	0.017 UR
cis-Chlordane	5103-71-9	mg/kg	0.0119	0.0119	0.772	--	**0.072 JK**	**0.064 JK**	**0.01 JK**	**0.03 JK**	**0.0052 JQK**	**0.0025 JQK**	**0.0093 JK**	**0.013 JQK**	**0.021 JQK**
delta-BHC	319-86-8	mg/kg	NP	NP	NP	--	0.018 UR	0.018 UR	0.0045 UR	0.0088 UR	0.0045 UR	0.0044 UR	0.0044 UR	0.0089 UR	0.018 UR
Dieldrin	60-57-1	mg/kg	0.00026	0.00026	0.0772	--	**0.085 JK**	**0.075 JK**	**0.0059 JQK**	**0.0073 JQK**	0.0033 UR	0.0032 UR	0.0032 UR	0.0065 UR	0.013 UR
Endosulfan I	959-98-8	mg/kg	9.27	NP	9.27	--	0.0087 UR	0.0086 UR	0.0022 UR	0.0043 UR	0.0022 UR	0.0021 UR	0.0022 UR	0.0043 UR	0.0086 UR
Endosulfan II	33213-65-9	mg/kg	9.27	9.27	NP	--	0.043 UR	0.043 UR	0.011 UR	0.022 UR	0.011 UR	0.011 UR	0.011 UR	0.022 UR	0.043 UR
Endosulfan sulfate	1031-07-8	mg/kg	NP	NP	NP	--	0.016 UR	0.015 UR	0.0039 UR	0.0077 UR	0.0039 UR	0.0038 UR	0.0039 UR	0.0078 UR	0.015 UR
Endrin	72-20-8	mg/kg	0.463	NP	0.463	--	0.027 UR	0.027 UR	0.0068 UR	0.013 UR	0.0068 UR	0.0066 UR	0.0067 UR	0.013 UR	0.027 UR
Endrin aldehyde	7421-93-4	mg/kg	NP	NP	NP	--	0.015 UR	0.015 UR	0.0038 UR	0.0075 UR	0.0038 UR	0.0037 UR	0.0038 UR	0.0076 UR	0.015 UR
Endrin ketone	53494-70-5	mg/kg	NP	NP	NP	--	0.024 UR	0.024 UR	0.006 UR	0.012 UR	0.006 UR	0.0058 UR	0.0059 UR	0.012 UR	0.024 UR
gamma-BHC (Lindane)	58-89-9	mg/kg	0.00378	0.00378	0.0154	--	0.0083 UR	0.0082 UR	0.0021 UR	0.0041 UR	0.0021 UR	0.002 UR	0.0021 UR	0.0041 UR	0.0082 UR
Heptachlor	76-44-8	mg/kg	0.000924	0.000924	0.154	--	0.012 UR	0.012 UR	0.0031 UR	0.0061 UR	0.0031 UR	0.003 UR	0.003 UR	0.0061 UR	0.012 UR
Heptachlor epoxide	1024-57-3	mg/kg	0.000457	0.000457	0.0201	--	**0.0091 JQK**	0.0067 UR	0.0017 UR	0.0033 UR	0.0017 UR	0.0017 UR	0.0017 UR	0.0034 UR	0.0067 UR
Methoxychlor	72-43-5	mg/kg	7.72	NP	7.72	--	0.1 UR	0.1 UR	0.025 UR	0.05 UR	0.025 UR	0.025 UR	0.025 UR	0.051 UR	0.1 UR
Toxaphene	8001-35-2	mg/kg	0.00378	0.00378	0.139	--	0.55 UR	0.55 UR	0.14 UR	0.27 UR	0.14 UR	0.14 UR	0.14 UR	0.28 UR	0.55 UR
trans-Chlordane	5103-74-2	mg/kg	0.0119	0.0119	0.772	--	**0.061 JK**	**0.054 JK**	**0.0077 JQK**	**0.016 JQK**	**0.0039 JQK**	0.0024 UR	**0.0064 JQK**	**0.013 JQK**	**0.021 JQK**
SVOCs by SW846 Method 8270															
1,1'-Biphenyl	92-52-4	mg/kg	NP	NP	NP	--	0.65 UR	0.65 UR	0.65 UR	0.65 UR	0.66 UR	0.65 UR	0.65 UR	0.65 UR	0.89 UR
2,2'-oxybis[1-chloropropane]	108-60-1	mg/kg	NP	NP	NP	--	0.78 UR	0.78 UR	0.77 UR	0.77 UR	0.79 UR	0.78 UR	0.78 UR	0.78 UR	1.1 UR
2,4,5-Trichlorophenol	95-95-4	mg/kg	NP	NP	NP	--	0.65 UR	0.65 UR	0.65 UR	0.65 UR	0.66 UR	0.65 UR	0.65 UR	0.65 UR	0.89 UR
2,4,6-Trichlorophenol	88-06-2	mg/kg	0.378	0.378	1.54	--	0.65 UR	0.65 UR	0.65 UR	0.65 UR	0.66 UR	0.65 UR	0.65 UR	0.65 UR	0.89 UR
2,4-Dichlorophenol	120-83-2	mg/kg	4.63	NP	4.63	--	0.78 UR	0.78 UR	0.77 UR	0.77 UR	0.79 UR	0.78 UR	0.78 UR	0.78 UR	1.1 UR
2,4-Dimethylphenol	105-67-9	mg/kg	30.9	NP	30.9	--	0.65 UR	0.65 UR	0.65 UR	0.65 UR	0.66 UR	0.65 UR	0.65 UR	0.65 UR	0.89 UR
2,4-Dinitrophenol	51-28-5	mg/kg	NP	NP	NP	--	6.5 UR	6.5 UR	6.5 UR	6.5 UR	6.6 UR	6.5 UR	6.5 UR	6.5 UR	8.9 UR
2,4-Dinitrotoluene	121-14-2	mg/kg	NP	NP	NP	--	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.8 UR
2,6-Dinitrotoluene	606-20-2	mg/kg	NP	NP	NP	--	0.65 UR	0.65 UR	0.65 UR	0.65 UR	0.66 UR	0.65 UR	0.65 UR	0.65 UR	0.89 UR
2-Chloronaphthalene	91-58-7	mg/kg	NP	NP	NP	--	0.52 UR	0.52 UR	0.52 UR	0.52 UR	0.53 UR	0.52 UR	0.52 UR	0.52 UR	0.71 UR
2-Chlorophenol	95-57-8	mg/kg	NP	NP	NP	--	0.65 UR	0.65 UR	0.65 UR	0.65 UR	0.66 UR	0.65 UR	0.65 UR	0.65 UR	0.89 UR

Table 4-10 (Continued)
Summary of Fish Tissue Analytical Data - Bottom Feeders
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	SCDM minimum of Non-Cancer and Cancer Risk	SCDM Cancer Risk	SCDM Non-Cancer Risk	Lake	L01	L01	L01	L01	L01	L01	L01	L01	L01
						Common Name	Buffalo	Buffalo	Yellow Catfish	Yellow Catfish	Yellow Catfish	Yellow Catfish	Yellow Catfish	Yellow Catfish	Yellow Catfish
						Sample ID	CL-L01-BU01-20220406-81	CL-L01-BU01-20220406-82	CL-L01-YC01-20220405-81	CL-L01-YC02-20220406-81	CL-L01-YC03-20220406-81	CL-L01-YC04-20220406-81	CL-L01-YC05-20220407-81	CL-L01-YC06-20220407-81	CL-L01-YC07-20220407-81
						Date	04/06/2022	04/06/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022	04/07/2022	04/07/2022	04/07/2022
						Type	FS	FD	FS	FS	FS	FS	FS	FS	FS
SVOCs by SW846 Method 8270 (continued)															
2-Methylnaphthalene	91-57-6	mg/kg	6.18	NP	6.18	--	0.2 UR	0.19 UR	0.19 UR	0.19 UR	0.2 UR	0.2 UR	0.2 UR	0.19 UR	0.27 UR
2-Methylphenol	95-48-7	mg/kg	NP	NP	NP	--	0.78 UR	0.78 UR	0.77 UR	0.77 UR	0.79 UR	0.78 UR	0.78 UR	0.78 UR	1.1 UR
2-Nitroaniline	88-74-4	mg/kg	NP	NP	NP	--	0.65 UR	0.65 UR	0.65 UR	0.65 UR	0.66 UR	0.65 UR	0.65 UR	0.65 UR	0.89 UR
2-Nitrophenol	88-75-5	mg/kg	NP	NP	NP	--	0.78 UR	0.78 UR	0.77 UR	0.77 UR	0.79 UR	0.78 UR	0.78 UR	0.78 UR	1.1 UR
3,3'-Dichlorobenzidine	91-94-1	mg/kg	NP	NP	NP	--	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.8 UR
3-Nitroaniline	99-09-2	mg/kg	NP	NP	NP	--	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.8 UR
4,6-Dinitro-2-methylphenol	534-52-1	mg/kg	NP	NP	NP	--	6.5 UR	6.5 UR	6.5 UR	6.5 UR	6.6 UR	6.5 UR	6.5 UR	6.5 UR	8.9 UR
4-Bromophenyl phenyl ether	101-55-3	mg/kg	NP	NP	NP	--	0.65 UR	0.65 UR	0.65 UR	0.65 UR	0.66 UR	0.65 UR	0.65 UR	0.65 UR	0.89 UR
4-Chloro-3-methylphenol	59-50-7	mg/kg	NP	NP	NP	--	0.78 UR	0.78 UR	0.77 UR	0.77 UR	0.79 UR	0.78 UR	0.78 UR	0.78 UR	1.1 UR
4-Chloroaniline	106-47-8	mg/kg	NP	NP	NP	--	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.8 UR
4-Chlorophenyl phenyl ether	7005-72-3	mg/kg	NP	NP	NP	--	0.65 UR	0.65 UR	0.65 UR	0.65 UR	0.66 UR	0.65 UR	0.65 UR	0.65 UR	0.89 UR
4-Methylphenol	106-44-5	mg/kg	30.9	NP	30.9	--	0.65 UR	0.65 UR	0.65 UR	0.65 UR	0.66 UR	0.65 UR	0.65 UR	0.65 UR	0.89 UR
4-Nitroaniline	100-01-6	mg/kg	NP	NP	NP	--	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.8 UR
4-Nitrophenol	100-02-7	mg/kg	NP	NP	NP	--	6.5 UR	6.5 UR	6.5 UR	6.5 UR	6.6 UR	6.5 UR	6.5 UR	6.5 UR	8.9 UR
Acenaphthene	83-32-9	mg/kg	92.7	NP	92.7	--	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.18 UR
Acenaphthylene	208-96-8	mg/kg	NP	NP	NP	--	0.16 UR	0.16 UR	0.15 UR	0.15 UR	0.16 UR	0.16 UR	0.16 UR	0.16 UR	0.21 UR
Acetophenone	98-86-2	mg/kg	NP	NP	NP	--	0.65 UR	0.65 UR	0.65 UR	0.65 UR	0.66 UR	0.65 UR	0.65 UR	0.65 UR	0.89 UR
Anthracene	120-12-7	mg/kg	463	NP	463	--	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.18 UR
Atrazine	1912-24-9	mg/kg	0.0181	0.0181	4.63	--	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	3.5 UR
Benzaldehyde	100-52-7	mg/kg	NP	NP	NP	--	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.8 UR
Benzo(a)anthracene	56-55-3	mg/kg	0.0416	0.0416	NP	--	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.18 UR
Benzo(a)pyrene	50-32-8	mg/kg	0.00416	0.00416	0.463	--	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.18 UR
Benzo[b]fluoranthene	205-99-2	mg/kg	NP	NP	NP	--	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.18 UR
Benzo[g,h,i]perylene	191-24-2	mg/kg	NP	NP	NP	--	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.18 UR
Benzo[k]fluoranthene	207-08-9	mg/kg	0.416	0.416	NP	--	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.18 UR
Bis(2-chloroethoxy)methane	111-91-1	mg/kg	NP	NP	NP	--	0.65 UR	0.65 UR	0.65 UR	0.65 UR	0.66 UR	0.65 UR	0.65 UR	0.65 UR	0.89 UR
Bis(2-chloroethyl)ether	111-44-4	mg/kg	NP	NP	NP	--	0.65 UR	0.65 UR	0.65 UR	0.65 UR	0.66 UR	0.65 UR	0.65 UR	0.65 UR	0.89 UR
Butylbenzylphthalate	85-68-7	mg/kg	2.19	2.19	309	--	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	3.5 UR
Caprolactam	105-60-2	mg/kg	NP	NP	NP	--	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.8 UR
Carbazole	86-74-8	mg/kg	NP	NP	NP	--	0.65 UR	0.65 UR	0.65 UR	0.65 UR	0.66 UR	0.65 UR	0.65 UR	0.65 UR	0.89 UR
Chrysene	218-01-9	mg/kg	4.16	4.16	NP	--	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.18 UR
Croplas EH	117-81-7	mg/kg	0.297	0.297	30.9	--	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	3.5 UR
Dibenzo(a,h)anthracene	53-70-3	mg/kg	0.00416	0.00416	NP	--	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.35 UR
Dibenzofuran	132-64-9	mg/kg	1.54	NP	1.54	--	0.65 UR	0.65 UR	0.65 UR	0.65 UR	0.66 UR	0.65 UR	0.65 UR	0.65 UR	0.89 UR
Diethylphthalate	84-66-2	mg/kg	1240	NP	1240	--	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	3.5 UR
Dimethyl phthalate	131-11-3	mg/kg	NP	NP	NP	--	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	3.5 UR
Di-n-butylphthalate	84-74-2	mg/kg	154	NP	154	--	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	3.5 UR
Di-n-octyl phthalate	117-84-0	mg/kg	15.4	NP	15.4	--	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	3.5 UR
Fluoranthene	206-44-0	mg/kg	61.8	NP	61.8	--	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.18 UR
Fluorene	86-73-7	mg/kg	61.8	NP	61.8	--	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.18 UR
Hexachlorobenzene	118-74-1	mg/kg	0.0026	0.0026	0.0154	--	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.35 UR
Hexachlorobutadiene	87-68-3	mg/kg	0.0533	0.0533	1.54	--	0.78 UR	0.78 UR	0.77 UR	0.77 UR	0.79 UR	0.78 UR	0.78 UR	0.78 UR	1.1 UR
Hexachlorocyclo-pentadiene	77-47-4	mg/kg	NP	NP	NP	--	6.5 UR	6.5 UR	6.5 UR	6.5 UR	6.6 UR	6.5 UR	6.5 UR	6.5 UR	8.9 UR
Hexachloroethane	67-72-1	mg/kg	0.104	0.104	1.08	--	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.8 UR
Indeno[1,2,3-cd]pyrene	193-39-5	mg/kg	0.0416	0.0416	NP	--	0.16 UR	0.16 UR	0.15 UR	0.15 UR	0.16 UR	0.16 UR	0.16 UR	0.16 UR	0.21 UR

Table 4-10 (Continued)
Summary of Fish Tissue Analytical Data - Bottom Feeders
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, LA

Analyte	CAS.NO	Units	SCDM minimum of Non-Cancer and Cancer Risk	SCDM Cancer Risk	SCDM Non-Cancer Risk	Lake	L01	L01	L01	L01	L01	L01	L01	L01	L01
						Common Name	Buffalo	Buffalo	Yellow Catfish	Yellow Catfish	Yellow Catfish	Yellow Catfish	Yellow Catfish	Yellow Catfish	Yellow Catfish
						Sample ID	CL-L01-BU01-20220406-81	CL-L01-BU01-20220406-82	CL-L01-YC01-20220405-81	CL-L01-YC02-20220406-81	CL-L01-YC03-20220406-81	CL-L01-YC04-20220406-81	CL-L01-YC05-20220407-81	CL-L01-YC06-20220407-81	CL-L01-YC07-20220407-81
						Date	04/06/2022	04/06/2022	04/05/2022	04/06/2022	04/06/2022	04/06/2022	04/07/2022	04/07/2022	04/07/2022
						Type	FS	FD	FS	FS	FS	FS	FS	FS	FS
SVOCs by SW846 Method 8270 (continued)															
Isophorone	78-59-1	mg/kg	NP	NP	NP	--	0.65 UR	0.65 UR	0.65 UR	0.65 UR	0.66 UR	0.65 UR	0.65 UR	0.65 UR	0.89 UR
Naphthalene	91-20-3	mg/kg	0.0347	0.0347	30.9	--	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.35 UR
Nitrobenzene	98-95-3	mg/kg	3.09	NP	3.09	--	0.65 UR	0.65 UR	0.65 UR	0.65 UR	0.66 UR	0.65 UR	0.65 UR	0.65 UR	0.89 UR
N-Nitroso-di-n propylamine	621-64-7	mg/kg	NP	NP	NP	--	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.3 UR	1.8 UR
N-Nitrosodiphenylamine	86-30-6	mg/kg	0.849	0.849	NP	--	0.65 UR	0.65 UR	0.65 UR	0.65 UR	0.66 UR	0.65 UR	0.65 UR	0.65 UR	0.89 UR
Pentachlorophenol	87-86-5	mg/kg	0.0104	0.0104	7.72	--	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	2.6 UR	3.5 UR
Phenanthrene	85-01-8	mg/kg	NP	NP	NP	--	0.16 UR	0.16 UR	0.15 UR	0.15 UR	0.16 UR	0.16 UR	0.16 UR	0.16 UR	0.21 UR
Phenol	108-95-2	mg/kg	463	NP	463	--	0.65 UR	0.65 UR	0.65 UR	0.65 UR	0.66 UR	0.65 UR	0.65 UR	0.65 UR	0.89 UR
Pyrene	129-00-0	mg/kg	46.3	NP	46.3	--	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.13 UR	0.18 UR

Notes

mg/kg - milligrams/kilogram

U - Not detected at reported quantitation limit.

J - estimated value.

R - Unusable, rejected should not be used.

K - Unknown bias.

Q - The reported concentration is less than the sample quantitation limit for the specific analyte in the sample.

FS - Field Sample.

FD - Field Duplicate.

RSL - Regional Screening level.

NP - Not Published

SCDM - Superfund Chemical Data Matrix

Yellow Highlight - exceeds SCDM minimum of Non-Cancer and Cancer Risk

Appendix A

Digital Photographs

Capitol Lakes Site Reassessment Photo Report



Incident Name: Capitol Lakes Site Reassessment
Event Name: Capitol Lakes Site Reassessment
Photo Type: Overview
Direction: N
Photo Name: 20220330_111102.jpg
Date and Time: 3/30/2022 11:11:00 AM
Latitude: 30.458888
Longitude: -91.185000
Photographer: Sherman, Robert
Witness: Delgado-Brown, Michelle
Caption: Two men fishing in North Lake



Incident Name: Capitol Lakes Site Reassessment
Event Name: Capitol Lakes Site Reassessment
Photo Type: Overview
Direction: NW
Photo Name: {DBC306B4-22FA-4203-BF23-DA6EAF
Date and Time: 4/4/2022 9:00:00 AM
Latitude: 30.408336
Longitude: -91.164283
Photographer: Sherman, Robert
Witness: Studebaker, Nic
Caption: Sediment core sample processing at the background area (University Lake).

Capitol Lakes Site Reassessment Photo Report



Incident Name: Capitol Lakes Site Reassessment
Event Name: Capitol Lakes Site Reassessment
Photo Type: Overview
Direction: W
Photo Name: {A78B7FB0-0114-4ABE-8BB6-598BF6
Date and Time: 4/4/2022 2:25:00 PM
Latitude: 30.465988
Longitude: -91.185102
Photographer: Hadwin, Erik
Witness: Bordelon, David
Caption: Sediment sample Location 01.

Capitol Lakes Site Reassessment Photo Report



Incident Name: Capitol Lakes Site Reassessment
Event Name: Capitol Lakes Site Reassessment
Photo Type: Overview
Direction: SW
Photo Name: {8B357A30-B940-4661-BE0E-317F81
Date and Time: 4/4/2022 2:35:00 PM
Latitude: 30.464694
Longitude: -91.185233
Photographer: Hadwin, Erik
Witness: Bordelon, David
Caption: Collecting sediment core from Location 02.



Incident Name: Capitol Lakes Site Reassessment
Event Name: Capitol Lakes Site Reassessment
Photo Type: Overview
Direction: SW
Photo Name: 20220405_151147.jpg
Date and Time: 4/5/2022 3:11:00 PM
Latitude: 30.461554
Longitude: -91.186264
Photographer: Sherman, Robert
Witness: Studebaker, Nic
Caption: Opening sediment core to log the sediment layers and collect samples



Incident Name: Capitol Lakes Site Reassessment
Event Name: Capitol Lakes Site Reassessment
Photo Type: Overview
Direction: S
Photo Name: 20220405_153255.jpg
Date and Time: 4/5/2022 3:32:00 PM
Latitude: 30.461038
Longitude: -91.186267
Photographer: Sherman, Robert
Witness: Bordelon, David
Caption: US Fish & Wildlife boat used to collect fish samples. Louisiana State Capitol building in the background.



Incident Name: Capitol Lakes Site Reassessment
Event Name: Capitol Lakes Site Reassessment
Photo Type: Overview
Direction: SW
Photo Name: 20220405_153841.jpg
Date and Time: 4/5/2022 3:38:00 PM
Latitude: 30.457322
Longitude: -91.187441
Photographer: Sherman, Robert
Witness: Bordelon, David
Caption: US Fish & Wildlife boat used to collect fish samples. Pumping station that drains the lakes is in the background.



Incident Name: Capitol Lakes Site Reassessment
Event Name: Capitol Lakes Site Reassessment
Photo Type: Overview
Direction: SW
Photo Name: 20220405_154909.jpg
Date and Time: 4/5/2022 3:49:00 PM
Latitude: 30.461553
Longitude: -91.186265
Photographer: Sherman, Robert
Witness: Dunford, Ally
Caption: Collecting fish tissue sample from a Yellow Bullhead Catfish.



Incident Name: Capitol Lakes Site Reassessment
Event Name: Capitol Lakes Site Reassessment
Photo Type: Overview
Direction: S
Photo Name: 20220405_163253.jpg
Date and Time: 4/5/2022 4:32:00 PM
Latitude: 30.461584
Longitude: -91.186270
Photographer: Sherman, Robert
Witness: Dunford, Ally
Caption: Fish fillets from several fish, composited to obtain sufficient meat for a fish tissue sample.



Incident Name: Capitol Lakes Site Reassessment
Event Name: Capitol Lakes Site Reassessment
Photo Type: Overview
Direction: NE
Photo Name: {DB126D0B-B533-4BEC-9C36-CEA730
Date and Time: 4/6/2022 8:26:00 AM
Latitude: 30.458936
Longitude: -91.182488
Photographer: Hadwin, Erik
Witness: Bordelon, David
Caption: Collecting sediment core from Location 07.



Incident Name: Capitol Lakes Site Reassessment
Event Name: Capitol Lakes Site Reassessment
Photo Type: Overview
Direction: SW
Photo Name: 20220406_100218.jpg
Date and Time: 4/6/2022 10:02:00 AM
Latitude: 30.461468
Longitude: -91.186451
Photographer: Sherman, Robert
Witness: Dunford, Ally
Caption: Collecting fish tissue sample from a Smallmouth Buffalo fish.



Incident Name: Capitol Lakes Site Reassessment
Event Name: Capitol Lakes Site Reassessment
Photo Type: Overview
Direction: SE
Photo Name: {3EF50B75-21ED-42EB-8049-920F77
Date and Time: 4/6/2022 10:49:00 AM
Latitude: 30.461558
Longitude: -91.186254
Photographer: Sherman, Robert
Witness: Dunford, Ally
Caption: Collecting fish tissue sample from a Yellow Bullhead Catfish.



Incident Name: Capitol Lakes Site Reassessment
Event Name: Capitol Lakes Site Reassessment
Photo Type: Overview
Direction: SE
Photo Name: {34F60E02-5EA8-4235-AAD5-903E8A
Date and Time: 4/6/2022 4:04:00 PM
Latitude: 30.461560
Longitude: -91.186290
Photographer: Sherman, Robert
Witness: Dunford, Ally
Caption: Collecting fish tissue sample from a Sunfish.



Incident Name: Capitol Lakes Site Reassessment
Event Name: Capitol Lakes Site Reassessment
Photo Type: Overview
Direction: SE
Photo Name: {47DD52AE-2FAA-4016-B4E8-9670BD
Date and Time: 4/7/2022 9:48:00 AM
Latitude: 30.457572
Longitude: -91.182044
Photographer: Sherman, Robert
Witness: Dunford, Ally
Caption: Collecting sediment core from Location 08.



Incident Name: Capitol Lakes Site Reassessment
Event Name: Capitol Lakes Site Reassessment
Photo Type: Overview
Direction: N
Photo Name: {7FFFDCB2-9017-44AA-A68A-4E0BBF
Date and Time: 4/7/2022 1:07:00 PM
Latitude: 30.461569
Longitude: -91.186288
Photographer: Studebaker, Nic
Witness: Hadwin, Erik
Caption: Compositing sediment core layers for sediment samples



Incident Name: Capitol Lakes Site Reassessment
Event Name: Capitol Lakes Site Reassessment
Photo Type: Overview
Direction: E
Photo Name: {8F479CC6-9B77-473B-8FC2-779A33
Date and Time: 4/7/2022 3:12:00 PM
Latitude: 30.469469
Longitude: -91.174558
Photographer: Hadwin, Erik
Witness: Studebaker, Nic
Caption: Collecting sediment core from Location 15.

Capitol Lakes Site Reassessment Photo Report



Incident Name: Capitol Lakes Site Reassessment
Event Name: Capitol Lakes Site Reassessment
Photo Type: Overview
Direction: SW
Photo Name: {F00594E4-9A35-4B69-9744-8A201E
Date and Time: 4/8/2022 10:35:00 AM
Latitude: 30.461544
Longitude: -91.178816
Photographer: Hadwin, Erik
Witness: Bordelon, David
Caption: Sediment sample Location 17.



Incident Name: Capitol Lakes Site Reassessment
Event Name: Capitol Lakes Site Reassessment
Photo Type: Overview
Direction: NE
Photo Name: {7C35DC47-55B3-4C3F-984A-534313
Date and Time: 4/8/2022 11:55:00 AM
Latitude: 30.407102
Longitude: -91.025430
Photographer: Hadwin, Erik
Witness: Studebaker, Nic
Caption: Sediment cores, used to log the sediment layers and collect samples

Capitol Lakes Site Reassessment Photo Report



Incident Name: Capitol Lakes Site Reassessment
Event Name: Capitol Lakes Site Reassessment
Photo Type: Overview
Direction: W
Photo Name: 1.jpg
Date and Time: 8/5/2022 12:14:00 PM
Latitude: 30.465436
Longitude: -91.185606
Photographer: Hadwin, Erik
Witness: Bordelon, David
Caption: Drum area on the bank, north end of Capitol Lake



Incident Name: Capitol Lakes Site Reassessment
Event Name: Capitol Lakes Site Reassessment
Photo Type: Overview
Direction: NW
Photo Name: 2.jpg
Date and Time: 8/5/2022 12:14:00 PM
Latitude: 30.465436
Longitude: -91.185606
Photographer: Hadwin, Erik
Witness: Bordelon, David
Caption: Drum area on the bank, north end of Capitol Lake



Incident Name: Capitol Lakes Site Reassessment
Event Name: Capitol Lakes Site Reassessment
Photo Type: Overview
Direction: W
Photo Name: 3.jpg
Date and Time: 8/5/2022 12:15:00 PM
Latitude: 30.465436
Longitude: -91.185606
Photographer: Hadwin, Erik
Witness: Bordelon, David
Caption: Drum area on the bank, north end of Capitol Lake



Incident Name: Capitol Lakes Site Reassessment
Event Name: Capitol Lakes Site Reassessment
Photo Type: Overview
Direction: S
Photo Name: 4.jpg
Date and Time: 8/5/2022 12:15:00 PM
Latitude: 30.465436
Longitude: -91.185606
Photographer: Hadwin, Erik
Witness: Bordelon, David
Caption: Drum area on the bank, north end of Capitol Lake



Incident Name: Capitol Lakes Site Reassessment
Event Name: Capitol Lakes Site Reassessment
Photo Type: Overview
Direction: N
Photo Name: 5.jpg
Date and Time: 8/5/2022 12:15:00 PM
Latitude: 30.465436
Longitude: -91.185606
Photographer: Hadwin, Erik
Witness: Bordelon, David
Caption: Drum area on the bank, north end of Capitol Lake

Capitol Lakes Site Reassessment Photo Report



Incident Name: Capitol Lakes Site Reassessment
Event Name: Capitol Lakes Site Reassessment
Photo Type: Overview
Direction: SE
Photo Name: 6.jpg
Date and Time: 8/5/2022 12:15:00 PM
Latitude: 30.465436
Longitude: -91.185606
Photographer: Hadwin, Erik
Witness: Bordelon, David
Caption: Drum area on the bank, north end of Capitol Lake



Incident Name: Capitol Lakes Site Reassessment
Event Name: Capitol Lakes Site Reassessment
Photo Type: Overview
Direction: W
Photo Name: 7.jpg
Date and Time: 8/5/2022 12:15:00 PM
Latitude: 30.465436
Longitude: -91.185606
Photographer: Hadwin, Erik
Witness: Bordelon, David
Caption: Drum area on the bank, north end of Capitol Lake



Incident Name: Capitol Lakes Site Reassessment
Event Name: Capitol Lakes Site Reassessment
Photo Type: Overview
Direction: NE
Photo Name: 20220813_085750.jpg
Date and Time: 8/13/2022 8:57:00 AM
Latitude: 30.460298
Longitude: -91.181342
Photographer: Sherman, Robert
Witness: Delgado-Brown, Michelle
Caption: Health Advisory signage at Capitol Lakes.

Appendix B

START Site Logbooks

DCN: 551702-1409



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JOURNAL
№ 391FX

CAPITOL LAKES
SITE REASSESSMENT

APRIL 4, 2022 –
APRIL 8, 2022

APRIL 4, 2022 MONDAY 0001/21/409

0730 ARRIVING AT BATON ROUGE SITE. UNIVERSITY LAKE. LAUNCHING BOATS WILL BE FROM BATON ROUGE BEACH.

0740 START ROBERT SHOEMAKER, ERIK MADWIN, DAVID BORDELON, TOM WALKER. WALKER WILL DRILLERS BILLY AND JACOB. USEA KEITH HANN IS STATE REPRESENTATIVE.

0800 SAFETY MEETING. TOPICS INCLUDE BOAT SAFETY. PINCH POINTS, HEAT, SUN. BACKGROUND SAMPLE SO NO PARTICULAR CONTAMINANTS EXPECTED HERE. WEATHER 60°F, HIGH INTO 80's.

0840 HAVE SET UP A WORK AND SAMPLE PROCESSING AREA ON SHORE. BOATS GOING TO SAMPLE LOCATION 12.

0900 HAVE CORE FROM LOCATION 12.

0915 WILL BE COLLECTING ANOTHER CORE FROM LOCATION 12 TO GET ENOUGH MATERIAL TO FILL JARS

0930 HAVE BROUGHT 2ND CORE TO SHORE THE CORE LOOKS LIKE SILTY MATERIAL. NO CLAY AT THE BOTTOM.

0946 HAVE COLLECTED 2 CORES FROM LOCATION 11. THESE SAMPLES ARE BEING COLLECTED TO USE AS A BACKGROUND FOR CAPITOL LAKE

1000 INFORMATION ON THE CORES AND THE SAMPLES ARE BEING LOGGED INTO APP ON THE IPAD. IN ~~FIELD~~ FIELD MAPS AND SURVEY 123

1105 BEGIN COLLECTION OF SAMPLES FROM LOCATION 12, 0-12" AND 24-36"

1130 STAFF ALICE DUNFORD + NICK SNEED ARRIVE ON SITE. HER FLIGHT WAS DELAYED.

1130 COLLECTING SAMPLE LOCATION 12, 12-24".

1150 START BEGIN PROCESSING CORES FROM LOCATION 11. DETAILS ARE BEING ENTERED INTO THE FIELD MAPS/SURVEY 123 APP.

1200 COLLECTING SAMPLE LOCATION 11, 0-12"

1205 COLLECTING SAMPLE LOCATION 11, 12-24"

1230 COLLECTING SAMPLE LOCATION 11, 24-36"

1320 DEPARTING UNIVERSITY LAKE

1400 AT CAPITOL LAKES, SETTING UP

1430 BOATS GOING TO GET CORES FROM LOCATIONS 1 AND 2

1445 EPA MICHELLE DELGADO BROWN ON SITE

1430's CORES 1 AND 1 AT 1425 + 1430

CORES AT 2 AT 1440 AND 1445

1600 START PROCESSING SAMPLE CORES, BAGGING AND TAGGING JARS

Rite in the Rain

4 MONDAY APRIL 4, 2022 0001/21-409

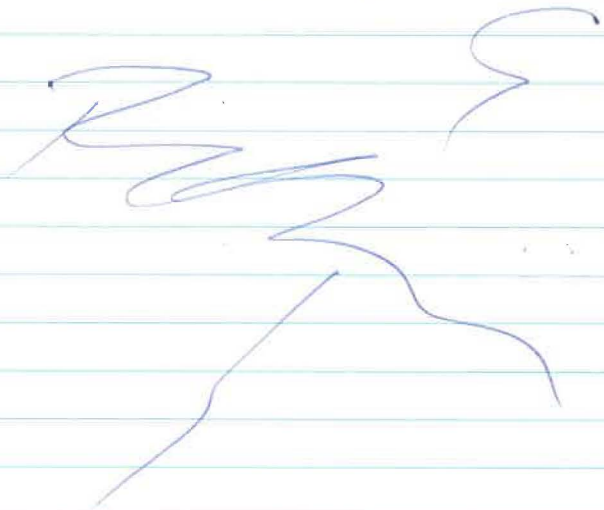
1800 STILL PROCESSING CORE 02. BEGINNING TO CONSOLIDATE EQUIPMENT END OF THE DAY.

1838 DEPARTING SITE FOR THE DAY, BOATS ARE TIED UP AT SHORE AT GOVERNOR'S MANSION

NOTE: SAMPLES 01 AND 02 LOCATIONS ARE IN SLOUGH NORTH OF NORTH LAKE, FEEDS INTO LAKE. SAMPLES COLLECTED TO TRY TO DETERMINE IF PCBs FLOWED INTO LAKE FROM NORTH.

LOCATION 01 SAMPLE - 12" COLLECTED AT 1710, 24" AT 1715, 36" AT 1600 HRS. LOCATION 02 SAMPLE - 12" COLLECTED AT 1805, 24 AT 1810, 36" AT 1800 HRS.

SAMPLES WILL BE STORED OVERNIGHT IN COOLERS WITH CUSTODY SEALS, LOCKED IN GARAGE.



0001/21/409 TUESDAY APRIL 5, 2022 5

0800 STARTS ROBERT SHOEMAKER, ERIK MADWIN, DANA GONDEKAR, TOM WATSON, NICK STUDEBAKER, AND ALICE DUNFORD MEETING AT WESTON OFFICE

THUNDERSTORMS APPROACHING, WILL WORK IN THE AFTERNOON WEATHER PERMITTING. NOW PREPPING SAMPLES FOR SHIPMENT.

1250 SAMPLES GETTING READY TO SHIP. WILL BE HEADING TO THE SITE TO WORK. RAIN IS OVER FOR THE DAY.

1330 STARTS ARRIVING AT CAPE COD LAKE. WH IS THERE, USF&W ON THE WAY.

1430 WATERCOLOR HILL INTO WATER TO COLLECT CORES FROM LOCATIONS 3 + 4. USF&W BEGINNING TO SHOCK FISH.

1450 HAVE COLLECTED CORES FROM 3+4. WILL BEGIN PROCESSING SOON.

1520 USF&W BACK WITH FIRST BATCH OF FISH

1540 START PROCESSING FISH

1550 USF&W BOAT IS OVERHEATING, DONE FOR THE DAY.

1605 HAVE COMPLETED PROCESSING LOCATION 3 CORE

1610 STARTING PROCESSING CORE LOCATION 4

Rite in the Rain.

TUESDAY APRIL 5, 2022 0001/21-409

1710 COMPLETED FISH PROCESSING, 2 SURFACE FEEDERS AND 1 BOTTOM FEEDER.

COMPLETED COLLECTING SAMPLES FROM CORE LOCATION 4.

Location 3 - 12"@1549, 24"@1557, 36"@1552

Location 4 - 12"@1705, 24"@1653, 36"@1651

DETAILS ABOUT THE CORE SAMPLES AND THE FISH SAMPLES ARE IN FIELD MAPS/SURVEY123 APPLICATION.

NOTE EPA MICHELLE DELGADO BROWN HAS APPROVED GROUPING ALL SUNFISH TOGETHER FOR DATA PURPOSES. ALSO, USF&W UNABLE TO GET FISH FROM SYDA LAKE DUE TO SHALLOW WATER. HOWEVER, WATER FLOWS FREELY BETWEEN NORTH LAKE + SOUTH LAKE. EPA DELGADO-BROWN HAS APPROVED COLLECTING ALL FISH FROM NORTH LAKE, SINCE SAME BODY OF WATER

1740 BRINGING BOATS TO DOCK AT SHORE ALONG THE GOVERNOR'S MANSION

1745 START, EPA DEPARTING SITE. SAMPLES WILL BE STORED IN COOLERS WITH CUSTODY SEALS IN LOCKED GARAGE

0001/21-409 APRIL 6, 2022 WEDNESDAY

0730 START MEMBERS ROBERT SHOEMAKER, DAVID BORDELON, CHIK MADWIN, TOM WALTER, NICK STUMBAUGH, AND ALICE DUNFORD ON SITE. EPA MICHELLE DELGADO-BROWN ON SITE. WALKER-HILL WILLIE AND JACOB ON SITE.

0735 SAFETY MEETING. HOT DAY, 75-85°F, CHANCE OF RAIN IN AFTERNOON. WORK TODAY COLLECTING CORES FROM BOATS, BRING TO SHORE TO PROCESS THERE. USF&W SHOCKING FISH, BRING TO SHORE TO PROCESS.

0800 WH + USF&W IN BOATS GOING TO COLLECT CORES AND FISH

0840 CORE FROM LOCATION 07 BACK ON SHORE

0850 DISCUSSION FISH TISSUE SAMPLE NUMBERS WITH EPA MICHELLE DELGADO-BROWN. WILL CHANGE SAMPLE NUMBERS, INSTEAD OF RUNNING TOTAL, WILL RESTART COUNT TOP FEEDERS 01-06 AND BOTTOM FEEDERS 01-09

0920 CORES FROM LOCATIONS 05 + 06 ON SHORE

0933 USF&W ON SHORE WITH FIRST BATCH OF FISH FOR THE DAY.

1000 WH IN WATER TO COLLECT LOCATION 19, WHICH HAS BEEN MOVED FROM SOUTH DRAINAGE (NO ACCESS) TO NEAR OLD DRUMS ON BANK OF NORTH DRAINAGE PATH

Rite in the Rain

WEDNESDAY APRIL 6, 2022 0001/21-409

1750 CORE FROM LOCATION 19 ON LAND

1100 BEGINNING TO PROCESS CORE FROM LOCATION 19. LDEQ WILL BE TAKING A SPLIT.

1200 CONTINUING TO PROCESS CORES - WORKING ON 19. ALSO PROCESSING FISH. DETAILS ON ALL SAMPLES IN FIELD MAPS / SURVEY 123

1300 HAVE COLLECTED LOCATION 16, WALKON MILL DEPARTING FOR THE DAY.

1400 USFWS STOPPING FOR DAY DUE TO MOTOR PROBLEMS. STAFF

1500 START PROCESSING FISH, PROCESSING CORES, AND PACKAGING JARS FOR SHIPMENT

1600 BONDED COURIER SAMPLE JARS TO UPS FOR SHIPMENT. STAFF CONTINUE PROCESSING CORES AND FISH

1801 HAVE COMPLETED PROCESSING CORES FROM LOCATIONS 5, 6, 7, 16, AND 19. PROCESSED 11 FISH INCLUDING 2 DUPLICATES. DETAILS ON THE FIELD MAPS / SURVEY 123 APP.

1815 PICKING UP AND PACKING EQUIPMENT MOVING BOATS TO SHORE ALONG GOVERNOR'S MANSION.

0001/21-409 APRIL 6, 2022 WEDNESDAY

1830 DEPARTING SITE FOR THE DAY.

THE SAMPLES ARE ON ICE, WILL BE KEPT IN A LOCKED GARAGE OVERNIGHT. FISH TISSUE SAMPLES ARE KEPT IN A FREEZER IN THE LOCKED GARAGE.

TODAY COLLECTED AND PROCESSED 3 SAMPLES FROM NORTH LAKE, AND 2 SAMPLES FROM DRAINAGE. ALL DATA BEING KEPT IN THE FIELD MAPS / SURVEY 123 APP.

COLLECTED 5 TOP FEEDER TISSUE PLUS ONE DUPLICATE, AND 4 BOTTOM FEEDER TISSUE PLUS ONE DUPLICATE. DATA KEPT IN THE FIELD MAPS / SURVEY 123 APP.

Rite in the Rain

THURSDAY APRIL 7, 2022 0001/21-409

0730 START BRIEFING SHANNON, ERIK MADWIN, TOM WALTER, NICK STOBOBAKER, ELLIE DUNFORD ON SITE. EPA MICHELLE DARGAN BROWN ON SITE, WALKER HILL CREW ON SITE. USF&W IS ALREADY IN THE WATER.

0745 DAVID BARLOW ON SITE. SAFETY MEETING WORK TODAY: GET CORES FROM SOUTH LAKE, GET FISH FROM USF&W, PROCESS FISH AND CORES. WEATHER SUNNY 55 → 70. WINDY IN AFTERNOON.

0750 STARTS SETTING UP WORK AREA.

0810 USF&W BEGINNING FIRST BATCH OF FISH. ONLY BOTTOM FEEDERS FROM NORTH LAKE.

0830 MADWIN + WH GOING TO COLLECT CORES FROM SOUTH LAKE. DUARDO STARTING TO PROCESS FISH

1420 USF&W PULLING THEIR BOAT OUT THE WATER, ENOUGH FISH HAVE BEEN OBTAINED

1500 CORES FROM LOCATIONS 9 & 10 HAVE BEEN COLLECTED. BEGIN PROCESSING

1510 HAVE COMPLETED COLLECTING THE FISH TISSUE SAMPLES, COLLECTED 7 TOP FEEDERS PLUS ONE DUPLICATE, AND 8 BOTTOM FEEDERS PLUS ONE DUPLICATE. COLLECTED ONE MORE TF THAN PLANNED DUE TO DIFFICULTY IN GETTING BOTTOM FEEDERS

0001/21-409 APRIL 7, 2022 THURSDAY

1020 USF&W OFFSITE

1203 HAVE COLLECTED CORES FROM LOCATIONS 8, 9, 10, AND 18.

1240 PROCESSING CORES INTO SAMPLE JARS

1350 CONTINUING TO PROCESS JARS, LABEL, ETC.

1500 HAVE COLLECTED CORES FROM LOCATION 14 + 13.

1530 HAVE COLLECTED CORE FROM LOCATION 15 STARTS PROCESSING CORES, PREPARING JARS + FISH TISSUE FOR SHIPMENT

1700 AFTER PROCESSING SAMPLES, LOCATION 14 ONLY 0-12" COLLECTED, WILL TRY TO GET 12-24 TOMORROW. INSUFFICIENT RECOVERY ON 15, WILL TRY TO COLLECT TOMORROW.

1730 HAVE BEEN PACKAGING SAMPLES FOR SHIPMENT. WILL BE SHIPPING SEDIMENT SAMPLES AND FISH TISSUE SAMPLES TODAY.

1740 PACKING UP EQUIPMENT FOR THE DAY.

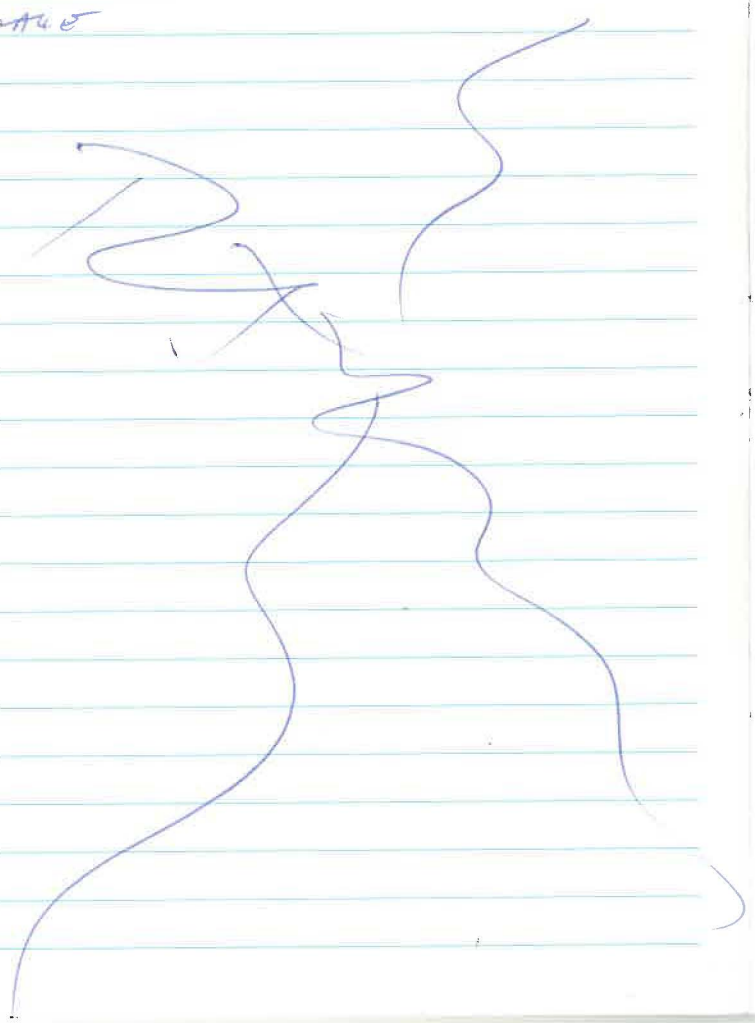
1800 STARTS DEPARTING SITE

Rite in the Rain.

THURSDAY April 7, 2022 0001/21-409

NOTE: DETAILS ON SAMPLES COLLECTED (SEDIMENT + FISH TISSUE) ARE IN THE FIELD MAPS / SURVEY 123 APP.

SAMPLES ARE BEING STORED IN COOLERS WITH CUSTODY SEALS, IN A LOCKED GARAGE



0001/21-409 APRIL 7, 2022 FRIDAY

0730 ROBERT SHERMAN AT WESTON OFFICE. TODAY WILL BE PROCESSING SAMPLES FROM THE OFFICE.

0900 EPA MICHELE DERGHO-BROWN AT THE OFFICE. DAVID BORDERON, ERIC HASWIN, NICK STUDEBAKER AT SITE COLLECTING SAMPLES FROM LOCATIONS 14, 15, AND 17.

ALLY DUNFORD AND TOM WALZER AT OFFICE PREPPING SAMPLES FOR SHIPMENT (COLLECTED YESTERDAY).

1140 BORDERON, HASWIN, STUDEBAKER ARRIVING AT OFFICE WITH SAMPLES. COOLS DOWN, PROCESSED AT THE OFFICE.

1330 HAVE COLLECTED SAMPLES FROM 14, 15 + 17, DETAILS IN FIELDMAPS / SURVEY 123. STARTS PACKAGING FOR SHIPMENT.

1410 DUNFORD + STUDEBAKER DEPARTING FOR AIRPORT.

1530 SAMPLES BEING DELIVERED TO UPS FOR SHIPMENT. SAMPLES IN COOLERS ON ICE, WITH CUSTODY SEALS

Rite in the Rain.

QUALITY ASSURANCE SAMPLING PLAN

FOR

CAPITOL LAKES SITE INSPECTION REASSESSMENT
CAPITOL LAKE DRIVE
BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA

Prepared for

U.S. Environmental Protection Agency, Region 6
1201 Elm Street, Suite 500
Dallas, Texas 75270-2102

Contract No. EP-S5-17-02
Technical Direction Document No. 0001/21-409
WESTON Work Order No. 20600.012.001.1409
NRC No. N/A
SEMS ID LAD980869440
FPN N/A
SSID A6UD
EPA SAM Michelle Delgado-Brown

Prepared by

Weston Solutions, Inc.
2600 Dallas Parkway, Suite 280
Frisco, Texas 75034

March 2022

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***Appendices are provided as separate portable document format (pdf) files.**

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1 INTRODUCTION

The U.S. Environmental Protection Agency (EPA) Region 6 Superfund and Emergency Management Division (SED), Site Assessment and Support Section tasked Weston Solutions, Inc. (WESTON®), the Superfund Technical Assessment and Response Team (START) contractor, under Contract No. EP-S5-17-02 and Technical Direction Document (TDD) No. 0001/21-409, to provide technical support for the Site Inspection (SI) Reassessment and associated environmental sampling at the Capitol Lakes site (Site) located in Baton Rouge, East Baton Rouge Parish, Louisiana. START has been tasked to collect fish tissue and sediment samples to complete a reassessment of historical contamination with the Capital Lakes system that includes North Lake, East Lake and South Lake. A Site Location Map is provided as Figure 1-1 and a Site Area Map is provided as Figure 1-2. The Superfund Enterprise Management System (SEMS) Identification (ID) assigned to the Site is LAD980869440. The Global Positioning System (GPS) Site coordinates are Latitude 30.459931° North and Longitude 91.185106° West. Site coordinates were taken from the center of North Lake. START has prepared this Quality Assurance Sampling Plan (QASP) to describe the technical scope of work and activities to be completed as part of TDD No. 0001/21-409.

1.1 PROJECT OBJECTIVE

START is providing technical assistance to EPA Region 6 and the Louisiana Department of Environmental Quality (LDEQ) by performing a SI Reassessment to collect the data necessary to support a determination by EPA that the Site presents a threat to public health or welfare of the United States or the environment in accordance with *40 Code of Federal Regulations (CFR) 300.415*.

The primary objective of this SI Reassessment is to collect data that most accurately determines the potential threat to the surface water pathway posed by two of the three lakes, designated as the North Lake and South Lake that make up the Site. A third lake, referred to as East Lake is also part of the Capitol Lakes system, however, it will not be investigated as part of the SI Reassessment. To achieve this objective, sediment and fish tissue samples will be collected from

the North Lake and the South Lake. Neither fish tissue nor sediment samples will be collected from the East Lake due to shallow (1 foot) depth. The analytical results will be evaluated and compared to background concentrations, the Superfund Chemical Data Matrix (SCDM) benchmark concentrations, and the Louisiana Department of Environmental Quality (LDEQ)/ Louisiana Department of Health (LDH) screening levels for PCB congeners.

1.2 PROJECT TEAM

The organizations that will be involved with this SI Reassessment include EPA, U.S. Fish and Wildlife Service (USFWS), LDEQ, and START. Should the USFWS be unavailable, arrangements will be made with LDEQ to use the Louisiana Department of Wildlife and Fisheries (LDWF). The START Project Team will consist of a Scope of Work (SOW) Leader; a Project Team Leader/Field Team Lead (PTL/FTL); a Field Safety Officer (FSO); and three additional START personnel to assist with fish and sediment sampling activities. The PTL/FTL will be responsible for the technical quality of work performed in the field and will serve as the EPA Team liaison to EPA Region 6 and LDEQ personnel in the field during the SI Reassessment activities. The PTL/FTL, with the concurrence of the EPA Site Assessment Manager (SAM) and the representative from LDEQ, will determine the precise locations for sediment sample collection in the field, will collect samples as necessary, will record the activities at each sample location in the field logbook, and will verify the sample documentation. Information collected in the field during the sampling event will be entered into the Scribe Environmental Sampling Data Management System (Scribe). Scribe will be used for producing accurate chain-of-custody documentation for the samples during the assessment, and will be used for entering daily operations and sample collection data into the Regional Response Center–Enterprise Data Management System (RRC-EDMS) Response Manager software. The PTL will oversee the packaging and shipping of samples to an EPA-approved subcontracted laboratory. The PTL will also be responsible for providing overall Site health and safety support during the field activities.

1.3 QASP FORMAT

This QASP has been organized in a format that is intended to facilitate and effectively meet the objective of the sampling action. The QASP is organized as follows:

- Section 1 – Introduction
- Section 2 – Site Background
- Section 3 – Sampling Approach and Procedures
- Section 4 – Analytical Methodology and Data Validation
- Section 5 – Quality Assurance

Appendices are attached with the following information:

Appendix A – Phase I Remedial Investigation Report

Appendix B – Specific Data Quality Objectives: Sediment and Edible Fish Tissue

Appendix C – Standard Operating Procedures

Appendix D – Covid-19 Best Safety Practice Procedures

2 SITE BACKGROUND

Information regarding the Site location, description, and Site history are included in the following subsections.

2.1 SITE LOCATION AND DESCRIPTION

The Site is located in Baton Rouge, East Baton Rouge Parish, Louisiana. The Site is composed of three lakes: North Lake, South Lake, and East Lake, and comprises approximately 65 acres adjacent to the State Capitol Building and the Governor's Mansion in downtown Baton Rouge. A Site Layout Map is provided as Figure 2-1 and depicts the locations of historical and current site features. Currently, the Capitol Lakes system is in a drainage basin classified by the United States Geological Survey's (USGS) Hydrologic Unit Codes (HUC) 14 and HUC 16 micro-watersheds, as depicted in Figure 2-2. HUC 14 is an area within which water drains to a particular receiving surface water body, also known as a sub-watershed. In addition, the Capitol Lakes system is also part of the USGS's HUC 16 micro-watershed, which represents the 16-digit hydrologic unit boundaries. HUC 16 micro-watersheds are smaller units created to support specific project work at the local level. The Capitol Lakes were originally part of a natural drainage system called Grassie Bayou, which in the late 1890s, was significantly larger and more extensive in size then what is observed today. Grassie Bayou drained into the Mississippi River until the late 1890s, when it was dammed creating the lake system. The lakes have been modified since the late 1890s with sections filled in to facilitate building the Governor's Mansion and the U.S. Interstate Highway System. An area in the northern portion of North Lake was also filled in. The lakes are now considered manmade public waterways. An extensive underground stormwater drainage system delivers stormwater directly to the lake system, which is a sump with no natural outfall. Currently, the lake system collects and retains untreated stormwater runoff from the surrounding areas. The drainage basin that contributes to the lake system is approximately 4.5 square miles in area. In terms of land usage, 63% is residential, 28% is commercial and light industrial, and 9% is government and miscellaneous. Previous investigations have determined that stormwater runoff from urban and industrial areas has transported contaminants to the Site. The Site is known to be impacted with hazardous wastes, hazardous waste constituents, and/or hazardous substances, which will

be discussed in detail in other sections of this QASP.

North Lake

The North Lake is the largest and deepest of the Capitol Lakes, covering approximately 53 acres and is shaped in an inverted "T". The North Lake is located north and adjacent to the State Capitol Building and west of the Governor's Mansion. GPS coordinates, as taken from the center point of North Lake are Latitude 30.459931° North and Longitude 91.185106° West. Stormwater runoff drains into North Lake from immediately adjacent acreage and drains from the north via the channel, or Drainage Pathway North (DPN) south of Choctaw Drive. A pumping station located on the southwestern shore of North Lake is used to drain water from the lake system in order to control the water levels in the lakes. The water from North Lake is pumped from the pumping station into the Mississippi River. The depth of North Lake averages 6.5 feet in the southern portion and shoals to 4 feet toward the northern section of the lake tributary. The most recent sediments in North Lake, as described during the LDEQ Phase I Remedial Investigation (RI) conducted in 1997, are thicker along the eastern side of the lake (approximately 3 feet) and are thinner along the western side near the pumping station (less than 2 feet). The sediments have been classified as green to black mucks and dark-colored organic-rich clays. The northern section of North Lake becomes swampy and the water depth, approximately 0.5 feet, dramatically reduces such that the lake sediments are often above the normal lake water level. Total sediment thickness in the middle and southern sections of North Lake ranges from 4 to 5.5 feet. Sediments were dredged from the northern and middle sections of North Lake in 1958. Some of the dredged sediments were deposited on land between North Lake and the Mississippi River levee. No dredging was conducted in the southern section of North Lake. EPA/START will collect sediment and fish tissue samples from North Lake as part of the scope of work (SOW) for this TDD.

South Lake

South Lake is the second largest of the three lakes, covering approximately 9 acres. South Lake is located east of the State Capitol Building and at the bend of U.S. Interstate Highway 110. GPS coordinates, as taken from the center point of the South Lake are Latitude 30.457156° North and Longitude 91.181953° West. The South Lake is interconnected with the North Lake at the Capitol

Access Road bridge. Stormwater runoff drains into South Lake from the U.S. Interstate Highway system from immediately adjacent areas, and from the drainage area that extends both north and east of the U.S. Interstate Highway system and enters the southeast corner from an extensive underground stormwater runoff system, designated as the Drainage Pathway South. The water depth in South Lake averages approximately 3 to 4 feet. Sediments are thicker in the eastern side of the lake (approximately 4 feet) and thinner in the western portion (approximately 2 feet). Sediments were dredged from the South Lake in 1958. EPA/START will collect sediment and fish tissue samples from South Lake as part of the SOW for this TDD.

East Lake

East Lake is the smallest of the three lakes, covering approximately 5 acres. East Lake is located north and east of the Governor's Mansion. GPS coordinates, as taken from the center point of the East Lake are Latitude 30.460281° North and Longitude 91.179669° West. A residential community is located on the west side of the East Lake. Stormwater drainage in the East Lake is controlled by an outlet weir in the southwest corner of the lake. Stormwater drainage from East Lake flows to the southwest section of the lake and appears to enter the Drainage Pathway East (DPE). Water from East Lake flows into the DPE in a westerly direction until it enters the southeast section of North Lake. The average water depth of East Lake is approximately 1 foot. Sediments in the East Lake have been characterized as mucks and organic-rich clays, with sediment thickness ranging from 4.5 feet in the south to 6.5 feet in the north. No dredging has been conducted in the East Lake. EPA/START will not collect sediment or fish tissue samples from East Lake as part of the SOW for this TDD.

2.2 SITE HISTORY/PREVIOUS INVESTIGATIONS

During the first half of the twentieth century, the Site received sediment-laden waters and uncontrolled discharges of stormwater, and untreated or poorly treated domestic and industrial wastewaters. The lake water quality was poor, and flooding was a major problem along sections of Boyd Avenue (now called Spanish Town Avenue). In 1958, with the construction of Interstate Highway 110, approximately 400,000 cubic yards (CY) of "silt, weeds, junk, and slime" were removed from the North Lake in a major dredging project. Approximately 160,000 CY of spoils

were deposited into the Mississippi River, the remaining 240,000 CY were deposited on property west of the North Lake.

The first available documentation of pollutant impacts was described in a 1972 study by the Louisiana Department of Natural Resources (LDNR), when elevated concentration levels of oil and chlorinated pesticides were found in the lake sediments. Polychlorinated biphenyls (PCBs) were documented in lake waters, sediment, and fish tissues samples in 1983, resulting in the Louisiana Department of Human Health (LDHH) (now the Louisiana Department of Health [LDH] posting a fishing ban on the Capitol Lakes. At the time of the RI in 1997, the fishing ban was still in effect. Numerous studies have been performed on the fish and sediments of the North and the South Lake since then.

1983

In May 1983, an oily discharge was reported leaking into the northern channel of North Lake originating from a Westinghouse Electric Corporation (Westinghouse) facility. The oils were found to be contaminated with PCBs. Water, lake sediments, and fish tissue were sampled over the following months. In August 1983, the Site was closed to fishing because the PCB concentrations in edible portions of the fish were above acceptable levels. In addition, the LDNR reported that the lake bottom was "heavily contaminated with oil and disturbances of the bottom produces an oil slick of varying size and thickness…and LDNR is investigating the source of the contamination… and has asked EPA for funds to clean the lake."

Various activities were conducted throughout 1983, including a Toxic Substances Control Act (TSCA) inspection by EPA Region 6 at the former Westinghouse facility. During this inspection, oil seepage was observed from the canal bank adjacent to the former Westinghouse facility. This led to a compliance agreement with Westinghouse to identify the extent of contamination and to clean up the Westinghouse facility site. The first hazardous waste site identification of the Capitol Lakes was made on December 30, 1983, by the LDNR (now referred to as LDEQ).

Additional studies have been conducted on the Capitol Lakes since 1983 and are summarized below.

1984

In 1984, LDNR reported that no threat to the environment or to public health existed, as long as the public continued to cooperate by refraining from consuming fish from the Capitol Lakes. LDNR also reported that information to date indicated that there was a potential for contaminating other adjacent areas or the groundwater.

1985

On February 1, 1985, the LDEQ began evaluating cleanup alternatives.

On May 1, 1985, Louisiana State University (LSU) scientists stated to the LDEQ that their work on sediment deposition age dating in the lake indicated that lead, selenium, antimony, and arsenic appeared to represent very high levels of contamination and that these needed to be addressed in remediation efforts. Between 1983 and January 1986, LDEQ and its predecessors issued six compliance orders to facilities operating in the lake's drainage basin as investigations of possible sources of contamination continued.

1988

In March 1988, the Site was referred to the LDEQ Inactive and Abandoned Sites Division (IASD). The IASD undertook activities to develop remedial approaches, investigated sources of remedial funding, determined landowner identification, and continued to pursue historical information regarding discharge activities.

The Institute of Environmental Studies (IES) at LSU was contracted by the LDEQ-Inactive and Abandoned Sites Division (IASD) to conduct a historical investigation of activities that may have contributed to the release of organic and inorganic toxic materials into the Capitol Lakes. The identification of potentially responsible parties (PRPs) was based on LDEQ documentation, the Westinghouse facility's potential for a release(s), aerial photographs, and a windshield survey of the Capitol Lakes drainage basin.

On September 19, 1988, EPA's Superfund Site Assessment Section reviewed the Capitol Lakes SI report prepared by LDEQ's Water Pollution Control Division (WPCD) and requested additional

information. The SI report identified contaminated fish, water, and sediments; contamination of the food chain, surface water, and soil; damage to the flora/fauna and property due to impacted biota; and contamination of some of the lakes' embankments as human health hazards.

1989

Prior to 1989, state regulatory actions had consisted of compliance orders issued to six companies and a consent agreement with one company, Westinghouse. On September 28, 1989, the LDEQ-IASD was tasked with investigating issues related to the remediation of the Capitol Lakes.
Fish tissue sampling was conducted by the LDEQ-Office of Water Resources. Chemical analysis of the collected samples recorded an average total PCB concentration of 2,396 parts per billion (ppb).

1990

Throughout the 1990s, EPA Region 6 was involved in determining whether the Capitol Lakes warranted inclusion on the National Priorities List (NPL). A Listing Site Inspection (LSI) Work Plan was prepared and implemented by the EPA Field Investigation Team (FIT) in 1990. The Site was not listed on the NPL.

The EPA Region 6 Emergency Response Branch (ERB) was asked to determine whether the Site posed an imminent or substantial endangerment to human health such that a removal action was necessary. The ERB memorandum stated that the primary route of human exposure was via fish consumption and direct contact; potable water from nearby wells was not impacted. The LDEQ and LDHH had already posted signage at the Site to prevent fishing and dermal contact activities.

1991

The EPA FIT collected samples for chemical analyses to support the LSI Work Plan. The follow-up report, however, was not issued according to a November 1994 EPA document.

1994

Additional fish tissue sampling was conducted by LDEQ-Office of Water Resources.

Concentrations in all target species' edible tissues indicated a slight decrease in PCB levels in 1994 from the 1989 levels. The average total concentration of PCBs in the edible portions of green sunfish was 225 ppb in 1994 and 297 ppb in 1989. Analysis of the upper 6 inches of sediment indicated a lack of measurable quantities of PCBs, which was attributed to continued sedimentation, thus burying any PCBs in the older sediments. The 1994 studies did not include analyses for other constituents.

1997 and 1998

Phase I Remedial Investigation

Based upon the presence of hazardous constituents identified in surface water, sediment, and fish tissue samples collected from the Site, the LDEQ-IASD issued Contract No. 523177 to Walk Haydel, an environmental contractor and part of Dames and Moore Group Company, to conduct a Phase I Remedial Investigation (RI) for the Site The Phase I RI was conducted in accordance with the *U.S. EPA Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA (OSWER Directive 9355.3-01)* in response to Act 1337 of the 1997 Louisiana Regular Legislative Session. The Act directs LDEQ to perform an RI to characterize the water, sediment depths, and aquatic species and to identify and delineate contaminant concentrations in the various media and biota of the Site. The Phase I RI was conducted to develop information regarding the present conditions of the Site and to identify potential public health concerns. The Phase I RI consisted of the following general tasks:

- A hydrographic survey of the North Lake, the South Lake, and the East Lake.
- An assessment of species composition and fish tissue.
- Sampling and analyses of lake waters.
- Sampling and analyses of lake sediments.

RI activities commenced in late April 1997 for Phase I with scoping meetings between LDEQ, representatives of the Legislature, the Louisiana Department of Transportation and Development (LDOTD) and various environmental professionals contracted to assist the LDEQ. Several activities were conducted in support of the RI. These included the preparation of a sampling and analysis plan (SAP), identifying data management procedures, and planning for health and safety

needs. A *Remedial Investigation at Capitol Lakes Work Plan and a Health and Safety Plan (HASP)* were prepared by the LDEQ and finalized in June 1997. Field activities were conducted in June 1987, in September 1997, and in June 1998. All data pertaining to the Phase I RI can be located in Appendix A. The following is a summary of the Phase I RI activities, results, and conclusions.

Hydrographic Survey of the Capitol Lakes System

The hydrographic survey of the North Lake, the South Lake, and the East Lake is presented in Section 2.1.

Summary of Species Composition Assessment/Tissue Sampling Program

A fish species composition assessment was performed for the North Lake and the South Lake, East Lake was not investigated due to its shallow water depths. The fish species composition assessment indicated that approximately 18 percent (%) of the fish in the two lakes are typically considered edible by the general population. These are called target species and consist of carp, buffalo fish, green sunfish, bluegill, and yellow and black bullheads (catfish). A fish tissue sampling program was conducted in these two lakes on the identified target species. Fish samples were analyzed for PCBs, pesticides, and mercury. Historically, edible fish species in these lakes have shown concentrations of PCBs and pesticides above U.S. Food and Drug Administration (USFDA) recommended levels. A fishing ban has been in effect since 1983, having been issued jointly by the LDNR and LDHH. The results of the current analytical testing of target species edible tissues have shown that the average total PCB concentrations are less than 0.5 parts per million (ppm).

Surface Water Analyses

Surface water samples were collected from each lake on February 4, 1998, representing a composite of spatially discrete locations within the lake, and were analyzed for semivolatile organic compounds (SVOCs), pesticides, PCBs, and total metals. Analytical results indicated that the surface waters of the lake system did not have detectable concentrations of PCBs, pesticides, or SVOVs. Detected total metals concentrations were higher in the East Lake than the North Lake and the South Lake. Representatives from Walk Haydel concluded that the lack of detectable

PCBs and SVOC concentrations in the lake system surface waters reflect an improvement in water quality from the 1983 sampling efforts when PCBs, oil and grease were detected. In 1983, PCB concentrations were at 1.2 ppm.

Lake Sediment Analyses: Organic Constituents

The sediment samples collected from the three lakes were analyzed for SVOCs, pesticides, PCBs, and metals. According to Walk Haydel, "the analytical sampling results appear to reflect the history of the three lakes, their proximity to potential sources of contaminants released into the drainage system, and thus the lakes, and the changes in chemical usage over time, (i.e., the banning of PCBs, certain pesticides, and leaded gasoline). The northern section of North Lake had the highest detected concentrations of PCBs, specifically Arochlor-1242 and Arochlor-1260. The concentrations of PCBs were generally higher in sediments deeper than 1.5 feet and lower in the shallower sediments. The highest detected concentration was for Arochlor-1260, which was detected at 5.1 ppm. The northern section of the North Lake also had the highest concentrations and a majority of the detected SVOCs. The SVOCs were generally found at the highest concentrations in the shallowest sediments and then decreased in concentration with depth. Benzo(a)pyrene, a human carcinogenic SVOC, was detected as high as 14 ppm in the northern section of the North Lake.

PCBs were not detected in the sediment samples collected from the East Lake; however, East Lake sediments had the highest detected concentrations of pesticides when compared to the other two lakes. East Lake had elevated concentrations of 4-4'-dichlorodiphenyldichloroethane (DDD) at 168 ppm, and 4-4'-dichlorodiphenyldichloroethylene (DDE) and 4-4'-dichlorodiphenyltrichloroethane (DDT) in excess of 1 ppm, whereas the other two lakes had typical concentrations of these compounds at 0.1 ppm. Elevated concentrations of Aldrin, delta-BHC (Lindane), chlordane, and Endrin were also detected in the East Lake. In general, the concentrations of the various pesticides tended to decrease with depth and were the highest, generally in the sediments below 0.5 feet. The East Lake sediment interval from 0 to 0.5 feet was found to typically have less pesticides than the intervals deeper than 0.5 feet.

Lake Sediment Analyses: Inorganic Constituents

Lake sediment samples were collected from the three lakes and submitted for total metal analyses, which included heavy metals and metals that are common in sediments and rocks, (i.e., aluminum, calcium, iron, sodium) Of particular interest were the heavy metals antimony, arsenic, cadmium, lead, silver, mercury, and selenium, which had been shown in previous studies to be at elevated concentrations in the lake system sediments.

Antimony was detected in sediment samples from all three lakes, with the northernmost portion of the North Lake and the East Lake having the highest concentrations, and the North Lake and the South Lake being generally comparable in concentrations. The range of detectable concentrations was from below the detection limit to 350 ppm and the antimony concentrations generally increased with depth in the vertical sediment column.

Arsenic was detected in sediment samples from all three lakes, with concentrations ranging from 3.2 to 86 ppm. The highest concentrations were observed in the northern end of the North Lake and in the East Lake. Generally, the higher arsenic concentrations were found at depth, except for one location in the northern end of the North Lake. Cadmium was also detected in sediment samples from all three lakes and follows a comparable pattern to that of arsenic, with highest concentrations found in the northern section of the North Lake and in the East Lake. Cadmium concentrations ranged from below detection limits to 36 ppm.

Lead was detected in sediment samples from all three lakes, with the highest detected concentrations in the sediments of the East Lake. A sample location at 5 to 6 feet in depth had a concentration of 5,519 ppm. Lead concentrations tended to increase with depth to approximately 1.5 to 3.0 feet, decreasing in deeper sediments.

Silver was detected in sediment samples from all three lakes but was detected with the greatest frequency in the sediments of the South Lake and the East Lake. The highest detected silver concentration was 293 ppm, which was detected at a depth of 5.0 to 5.7 feet at a location in the East Lake.

Mercury was detected in sediment samples from the northern end of the North Lake and in the

South Lake. Mercury was not detected in East Lake. Mercury concentrations were often highest in the intervals from 0.5 to 1.5 feet or 0.5 to 3.0 feet in the South Lake. Mercury concentrations tended to be less than 0.5 ppm. The highest detected concentration of mercury, 10 ppm, was detected in sediment samples collected from the northern end of the North Lake.

Selenium was detected in sediment samples from the northern end of North Lake and in South Lake. The detected selenium concentrations ranged from less than 1.0 ppm to a high of 91 ppm. South Lake contained the highest detected concentration of selenium. The shallowest sediments of South Lake appeared to be the impacted the most by selenium, while in the northern end of North Lake, the highest selenium concentrations were detected in sediments greater than 2.0 feet in deep.

RI Baseline Health Risk Assessment

A baseline health risk assessment was conducted, as part of the Phase I RI, to assess the potential for adverse health effects associated with recreational exposure to chemicals present in the sediment in the Capitol Lakes and with the ingestion of chemicals in fish obtained from the Capitol Lakes. The health risk assessment was conducted for the LDEQ IASD and was peer-reviewed by the LDH, Office of Public Health Section of Environmental Epidemiology and Toxicology.

The chemicals of concern (COCs) for recreational exposure to sediment include PCBs, polycyclic aromatic hydrocarbons (PAHs), pesticides, and metals. The COCs for the ingestion of fish include PCBs and pesticides. A maximum exposure scenario was evaluated for:

- Recreational receptors include swimming or wading in the Capitol Lakes (exposure pathways examined include incidental ingestion of chemicals in sediment and dermal contact with chemicals in the sediment); and
- Recreational receptors include ingesting chemicals in edible fish tissue obtained from Capitol Lakes. The fish species evaluated included carp, buffalo fish, green sunfish, bluegill, and yellow and black bullheads (catfish). .

The results of the risk characterization indicate that:

- Recreational exposure to chemicals in sediments (dermal contact with sediments) in Area 2 of Capitol Lakes may be associated with potential noncarcinogenic health effects and

potential cancer risks that exceed the unacceptable risk range; and

- The ingestion of chemicals in carp, buffalo fish, and yellow and black bullheads (catfish) obtained from the Capitol Lakes may be associated with potential cancer risks that exceed the acceptable risk range.

Currently, The LDEQ and LDH (formerly Louisiana Department of Health & Hospitals [LDHH]) conduct annual fish tissue sampling in support of the Fish Advisory that has been in effect on the Capitol Lakes since 1983. Fish tissue results from samples collected in July and September 2017 indicated the presence of two PCB congeners, PCB 126, and PCB 169, in concentrations that exceeded the LDEQ/LDH screening levels for those specific PCB congeners. The reported concentration of PCB 126 was detected in sunfish and yellow bullhead catfish and the reported concentration of PCB 169 was detected in sunfish. Based on these fish tissue analytical results, the LDH recommended that the "no consumption" advisory for the Capitol Lakes system remain in place.

2.3 POTENTIAL SOURCES OF HAZARDOUS MATERIALS

Information concerning the known or potential hazardous substance source areas at the Site and the COCs thought to be associated with each source is presented in the following section.

The primary potential source of the waste material appears to have been the former Westinghouse facility. The former Westinghouse facility was located on the north side of Choctaw Drive, across the street from the swamp at the north end of the North Lake. According to LDEQ documentation, in the 1970s, PCB-containing waste material from Westinghouse was reportedly released into a drainage ditch located on the east side of the facility. The unnamed drainage ditch flowed in a southerly direction under Choctaw Drive and entered the northern section of North Lake. The actual number of years of waste deposition from Westinghouse into North Lake is unknown. Other PRPs include Industrial Tractor Equipment, Inc., Comet Distribution Services, Inc., Jayco Sales and Service, and Tractor Company, Inc. located on Choctaw Drive; Kansas City Southern Railroad, U.S. Government Surplus Property Yard, Louisiana National Guard Armory, and the Louisiana Division of Administration Surplus Property Yard, located east of the Capitol Lakes. Drainage pathways leading from these facilities could ultimately discharge into the North Lake, the South Lake, and the East Lake. Other potential sources of PCB-containing waste material

include Burger Power, K-Way Equipment Corporation, and City of Baton Rouge and Parish of East Baton Rouge Maintenance Yard located along Chippawa Street/Business US Highway 190 north of Choctaw Drive. Allement Roberson Machine Works located southeast of I-110 and outside the drainage basin boundary for Capitol Lakes, and American Asphalt Products Corporation and Furlow Laughlin Equipment, Inc. located southwest of the Capitol Lakes. Waste materials from these six facilities do not appear to have entered into the Capitol Lakes. Potential sources of PCBs, as investigated by the LDEQ can be found in Figure 2-2 – Drainage Basin and Possible Sources of PCBs Map Located along the west, east, and south banks of North Lake and in the southwest section of South Lake are non-point source outfalls that discharge collected water runoff from the State Capitol grounds into the North Lake and the South Lake.

For SI Reassessment purposes, the Capitol Lakes will be evaluated as Hazard Ranking System (HRS) source type "contaminated sediment plume," as LDEQ has documented the presence of PCB-contaminated sediments within both North and South Lakes.

2.4 SITE CONCERNS

Site concerns regarding public health and the environment were determined based on the following Site conditions.

- Based on previous on-site LDEQ investigations, sediment and fish tissues collected from the North Lake and the South lake and analyzed for chemical constituents were determined to contain elevated concentrations of SVOCs, pesticides, herbicides, PCBs, PCB congeners, and Target Analyte List (TAL) metals, including mercury that exceeded the LDEQ/LDH risk-based screening levels.
- Chance exposure to COCs by ingestion, skin absorption, and inhalation was determined to be a site concern. A Fish Consumption Advisory issued by the LDEQ/LDH has been in place since 1998.

The COCs for the Site are SVOCs, pesticides, herbicides, PCBs, PCB congeners, TAL metals (including antimony, arsenic, cadmium, lead, silver, and selenium), and mercury.

3 SAMPLING APPROACH AND PROCEDURES

The purpose of this reassessment is to collect sediment and fish tissue data to determine if COCs, including PCBs, PCB congeners (fish tissue only), herbicides, pesticides, SVOCs, and TAL metals, are still in concentrations exceeding the Superfund Chemical Data Matrices (SCDMs), , and the LDEQ/LDH screening levels within the Capitol Lakes. The data can also be used to estimate the potential human health risks associated with this site and determine if the LDEQ/LDH Fish Consumption Advisory should remain in place or be lifted. To meet this objective, samples located within the Capitol Lakes system will be collected and submitted to an EPA Contract Laboratory Program (CLP) certified laboratory and a Louisiana Environmental Laboratory Accreditation Program (LELAP)-accredited laboratory for analytical analysis.

The specific field investigation activities that will be conducted around the Site are described in the following subsections. Specifically, sampling procedures, locations, quality assurance (QA), and the analytical approach that will be used during the SI reassessment are discussed. Relevant Standard Operating Procedures (SOPs) for field sampling methods are included as Appendix C.

3.1 OVERVIEW OF SAMPLING ACTIVITIES

The EPA Team developed a sampling strategy intended to collect data necessary to evaluate and meet the objective of the SI Reassessment. The Data Quality Objectives (DQOs) for sediment and fish tissue as well as an overview of the health and safety and field activities required to complete these tasks, are presented in the following subsections.

The EPA Team will collect a maximum of 72 samples (55 sediment samples and 17 fish tissue samples) from the North Lake and the South Lake. The locations of the proposed sediment samples are depicted in Figure 3-1. The locations of the proposed sediment background samples are depicted in Figure 3-2.

3.1.1 Data Quality Objectives

The objectives of the sampling activities are to collect sediment and fish tissue analytical data that most accurately determines the locations, concentrations, and potential transport pathway(s) of

the COCs associated with the Site. The DQOs for these data were developed using the seven-step process, set out in *EPA Guidance on Systematic Planning Using the Data Quality Objectives Process: EPA QA/G-4*. To accomplish this, DQOs for determining the extent of Site-related contamination in groundwater, sediment, and surface water have been established and are included as Appendix B.

Table 3-1 summarizes the Site Reassessment sample locations and the rationale for their collection.

3.1.2 Health and Safety Plan Implementation

START has developed a HASP specific to the sampling activities that will take place at the Capitol Lakes. Health and safety considerations are essential to the success of the sampling activities, and all personnel working on-site will strictly adhere to the HASP. The SI Reassessment field activities will be conducted in accordance with the Site-specific HASP. The FSO will be responsible for implementing the HASP during field investigation activities. The START field team will be required to conduct work according to the guidelines and requirements of the HASP. In accordance with the WESTON general health and safety operating procedures, the START field team will also drive the route to the hospital specified in the HASP prior to initiating sampling activities. The sediment drilling subcontractor will be required to complete and submit a HASP before the initiation of the sediment sampling activities.

Signed access agreements will be obtained for the properties prior to the commencement of sampling activities.

3.1.3 Field Activities Review Meeting

The START PTL/FTL will conduct a meeting with the entire field team to familiarize them with the project SOW, to discuss the planned field activities and roles and responsibilities, and to review the project HASP and other relevant operating procedures. This meeting will be conducted prior to any Site sampling activities.

3.1.4 Community Relations

Community relations may require additional EPA involvement due to the general nature of the

Site. Community relations issues will be directed to the EPA SAM. If the EPA SAM is not present, the LDEQ site representative will manage community relations in the field as directed by the EPA SAM. START will assist the EPA SAM and/or LDEQ representative with community relation issues encountered during the field activities. If a community relations plan and an implementation program become necessary, START will establish each if requested by the EPA SAM.

3.2 SAMPLING PLAN DESIGN AND METHODS

Sediment and edible fish tissue sampling will be conducted in general accordance with the EPA Compendium of Emergency Response Team (ERT) SOPs and WESTON SOPs (Appendix C). The specific sampling, decontamination, and sample handling procedures, including disposition of investigation-derived waste (IDW), is described in the following subsections. The EPA SAM will be notified, and concurrence will be obtained if significant deviations from the planned sampling activities are proposed. Details regarding deviations of the QASP will be documented in the START Site logbook.

3.2.1 Sediment

The EPA SAM and START developed a sampling strategy that focuses on locations identified based on-Site history and operations, along with drainage into the North Lake and the South Lake. In addition, sediment samples will be collected from the Drainage Pathway North, Drainage Pathway East, east of the Governor's Mansion, and the Drainage Pathway South that enters South Lake to determine if other possible sources of contamination are or have entered the two Capitol Lakes. Figure 3-1 illustrates the proposed sample locations. In addition, collection of background sediment samples, as required part of the HRS evaluation, will be collected from University Lake, which is located approximately 2.54 miles southeast of Capitol Lakes. Figure 3-2 illustrates the proposed background sediment sample locations.

Lake Sediment Core Collection

To document the presence of an observed release to the Surface Water Migration Pathway, and whether the HRS source type "contaminant sediment plume" can be used in the HRS evaluation, the EPA/START team proposes to collect 12 sediment cores: seven from the North Lake, three

from the South Lake, and two from University Lake. The sediment cores to be collected from University Lake will be designated as background sediment samples. A drilling method, such as Vibrocore sampling, will be used to collect the sediment cores. The Vibrocore drill will be mounted on a boat and the boat will travel to pre-designated sediment sample locations within each lake. The associated sample tube will be advanced at each location approximately 3 to 4 feet below the sediment/water interface (bswi) in order to collect the sediment samples. To obtain the required amount of sediment matrix for sample analyses or for the collection of Quality Control (QC) C samples (e.g., duplicate and matrix/matrix spike duplicate [MS/MSD] samples, one to two sediment cores will be collected at each designated sediment core location. Upon retrieval of the sediment sampling device, the collected sediment cores will be labeled with the sediment sample location and will be transferred to a designated location on shore to open the sediment sampling devices. Upon opening the sediment sampling device, a five-gas meter will be used to screen for potential volatile organic compound (VOC) vapors emanating from the sediment core. All VOC readings will be documented in the site logbook. Visual observation will then be made of the sediment core to determine which section of the sediment will be used for sampling. The lithology of the collected sediment cores will be visually determined and recorded into sediment core lithology logs. The sediment lithology will also be added to the START field logbook.

Sediment samples from each sediment core will be collected based on visual observation of different sediment layers and will be screened for VOCs with a five-gas meter. It is anticipated that START will encounter possibly three different sediment layers; a top layer consisting of black, organic muck approximately 0 to 2 feet thick; a middle layer consisting of silty clay ranging between 0.5 foot to 1 foot thick; and a bottom layer consisting of green, organic clay ranging between 0.5 feet to 3 feet thick. A sediment sample will be collected from each identified sediment layer. It's possible that more than three sediment layers will be encountered. Should this scenario be encountered, the START FTL will confer with the EPA SAM as to whether extra sediment samples will be collected or if the extra sediment volume will be added to the last sediment layer encountered. START is estimating that approximately 40 sediment samples (including four duplicate samples) will be collected from the 12 collected sediment cores. The sediment lithology, approximate thickness of the sediment layers, and five-gas meter results will be recorded by the START geologist into individual sediment drilling logs and the site logbook.

Drainage Pathway North, East, and South Sediment Sample Collection

To document the presence of or lack of chemical contamination in the Drainage Pathway North (DPN), the Drainage Pathway East (DPE), and Drainage Pathway South (DPS), START will use one of two sediment collection methods. For DPN, three sediment sample locations have been designated; for the DPE, two sediment sample locations have been designated; and for the DPS, two sediment sample locations have been designated. Thus, 15 sediment samples (including two duplicate samples) have been proposed to be collected from the DPN, DPE, and the DPS associated with the Capitol Lakes. Two sediment samples will be collected from each drainage pathway. Depending on the water level in the DPN and the DPE, a dedicated sampling trowel will collect the designated sediment samples from 0-inch to 12-inch bswi at each designated location. A hand augur, posthole diggers, or shovels will be used to collect the sediment sample from the 12-inch to 24-inch bswi depth. Whether collected with a trowel or hand auger (posthole digger or shovel), the collected sediment from each sample depth will be placed into separate mixing bowls, homogenized, and transferred to the appropriate sample container(s).

Sediment collection in the DPS will be collected using dedicated of a hollow aluminum or PVC tubes with a vacuum cap. The sediment sampling device will be manually pushed into the ditch or stream sediments until refusal is met. The vacuum cap will be placed onto the sediment sampling device to create a vacuum on the material inside the hollow sampling device and retrieved. The cap will then be taken off the device, and the collected sediment will pour or flow into dedicated mixing bowls, where it will be homogenized and transferred to the appropriate sample containers. This sampling technique will not allow for the collection of sediment samples at specific depths.

In addition to the sediment samples listed above, one MS/MSD Quality Assurance/Quality Control sample per matrix will be collected during sampling activities at a frequency of one per 20 normal samples at locations selected by the EPA Team. All sediment samples will be collected and transferred to the appropriately labeled sample containers, preserved as necessary, placed in a cooler with ice, and shipped to the designated laboratories for chemical analyses. All sediment samples will be analyzed for PCBs, PCB Congeners, Total Analyte List Metals (including Mercury), SVOCs, Pesticides and Herbicides.

3.2.2 Edible Fish Tissue Sampling

To document the presence of chemical contamination in the fish tissue and to determine; if the detected chemicals exceed the Superfund Chemical Data Matrix (SCDM) Food Chain threat health-based benchmarks; and if the detected chemical contamination exceeds the LDEQ/LDH risk-based risk levels associated with the Fish Consumption Advisory, the EPA/START team proposes to collect 17 edible fish tissue samples (including two duplicate samples) from two main categories of fish species: bottom feeders and top feeders located and identified in North and South Lakes. Fish tissue samples will not be collected from East Lake or University Lake. Both top and bottom feeding fish species will be collected as part of the SI reassessment field activities. Top feeding species will possibly include green sunfish and bluegill. Bottom feeding species will possibly include yellow and black bullheads (catfish), carp, and buffalo fish. In the North Lake, it is being proposed that six bottom feeding fish tissue samples and four top feeding fish tissue samples be collected and submitted for chemical analyses. In the South Lake, it is being proposed that three bottom feeding species and two top feeding species be collected. In addition to the fish tissue samples listed above, one MS/MSD Quality Assurance/Quality Control sample per matrix will be collected during sampling activities at a frequency of one per 20 normal tissue samples. All fish tissue samples will be submitted for chemical analysis, including PCBs, PCB Congeners, Total Analyte List Metals (including Mercury), SVOCs, Pesticides and Herbicides.

At the direction of EPA SAM and LDEQ representatives, USFW will collect fish in the most productive locations for North and South Lakes. Generally, areas where fish would congregate the most would be in shallow water near the reservoir shoreline and in areas of high aquatic vegetation. USFWS will use electro-shocking equipment to collect the fish species. USFWS personnel will collect the electroshocked fish and relinquish them to START for speciation, measurements, and collection for edible fillet tissue. The minimum size for each top feeding fish will be 5 inches in length and 8 inches in length for bottom feeding fish. Fish tissue samples submitted for laboratory analysis will consist of fillet tissue for classified bottom feeders and whole-body tissue for the top feeders. For each fish species, the number and size of each fish collected will be determined and recorded in the START field logbook and Survey123 software/database. The fish sampling will be conducted in accordance with EPA ERT SOP No.

2039 Fish Handling and Processing (Appendix C). As noted above, the most productive areas will be targeted but sample areas are subject to change based on field conditions and abundance of fish.

3.2.3 Investigation-Derived Wastes

Disposal of IDW, such as personal protective equipment (PPE) and dead fish and fish parts, will be the responsibility of the sampling team. The IDW will be managed according to EPA's *Management of Investigation-Derived Wastes during Site Inspections (EPA/540/G-9/009)* and other applicable state requirements and regulations. Disposable sampling equipment and PPE will be double bagged and disposed of properly as municipal waste. It is anticipated that minimal amounts of IDW will be generated during this activity.

3.2.4 Sample Handling Procedures

Samples will be collected using equipment and procedures appropriate to the matrix, parameters, and sampling objectives. The volume of the sample collected must be sufficient to perform the analysis requested. Samples must be stored in the proper types of containers and preserved in a manner for the analysis to be performed (SOP 1001.01, 1001.10).

Clean, decontaminated sampling equipment and sample containers will be maintained in a clean, segregated area. Samples will be collected with clean decontaminated equipment (SOP 1201.01). Each sample collected for laboratory analysis will be placed directly into pre-cleaned, unused containers. Sampling personnel will change gloves between each sample collection/handling. Samples will be assembled and catalogued prior to shipping (SOPs 1101.01 and 1102.01) to the designated laboratory.

3.2.5 Quality Assurance/Quality Control Samples

The EPA Team will collect field duplicate samples and submit MS/MSD and equipment rinsate blank samples as needed during the sampling activities. QA/QC samples will be collected according to the following protocol:

- Blind field duplicate samples will be collected during sampling activities at a frequency

of one per 10 normal samples at locations selected by the EPA Team. The data obtained from this sample will be used to assist in the QA of the sampling procedures and laboratory analytical data by allowing an evaluation of reproducibility of results. Efforts will be made to collect duplicate samples in locations where there is visual evidence of contamination or where contamination is suspected.

- Equipment rinsate blanks will be prepared by pouring laboratory-grade deionized water over non-disposable sampling equipment after it has been decontaminated and collecting the rinse water in sample containers for analyses. These samples will be prepared to demonstrate that the equipment decontamination procedures for the sampling equipment were performed effectively. The equipment rinsate blanks will be prepared each day that non-disposable sampling equipment is used.
- Temperature blanks will be prepared in the field and will consist of one 40-milliliter (mL) glass sample container with Teflon®-lined septum cap. The temperature blank will be packaged along with the field samples in the shipping cooler and will represent the temperature of the incoming cooler upon receipt at the laboratory. Use of these samples within a shipping container enables the laboratory to assess the temperature of the shipment without disturbing any of the field samples.
- One MS/MSD sample per matrix will be collected during sampling activities at a frequency of one per 20 normal samples at locations selected by the EPA Team. The data obtained from this sample will be used to assist in the QA of the laboratory analytical procedure. Matrix spiking ensures that the laboratory is able to extract an acceptable percentage of a spiked constituent. The matrix spiking analysis often duplicates the spiking procedure on a separate sample volume. Therefore, a complete matrix analysis requires triple sample volume.

3.3 SAMPLE MANAGEMENT

Specific nomenclature that will be used by START will provide a consistent means of facilitating the sampling and overall data management for the project (WESTON SOP 0110.05). The START PTL/FTL must approve any deviations from the sample nomenclature proposed below.

As stated in WESTON SOP 0110.05, sample nomenclature will follow a general format regardless of the type or location of the sample collected. The general nomenclature consists of the following components:

- Geographic location
- Collection type (composite, grab, etc.)

- QA/QC type (normal, duplicate, etc.)
- Sequence and/or Depth - An additional parameter used to further differentiate samples

SAMPLE NOMENCLATURE – SEDIMENT AND FISH TISSUE

Site Initials – Location – Matrix and Sample # + Depth + QC Type

Where:

- **Site Initials:** CL (Capitol Lakes)
- **Location:**

L01	North Lake
L02	South Lake
L03	University Lake
L04	Drainage Pathway North
L05	Drainage Pathway East
L06	Drainage Pathway South

- **Matrix and Sample #:** SED = Sediment; FT = Fish Tissue, Sample #01 to 19

- **Depth (sediment only) or Fish Species:** a two-digit or letter code used to designate sediment sample depth or fish species.

12	0 to 12 inches
24	12 to 24 inches
36	24 to 36 inches
BF	Bottom Feeder
TF	Top Feeder
BC	Black Catfish (bullhead)
BG	Blue Gill
BU	Buffalo
CP	Carp
GS	Green Sunfish
YC	Yellow Catfish (bullhead)

- **Matrix:** A one-digit code used to designate the sample matrix:

1	Surface Water
2	Ground Water
3	Leachate
4	Field QC/Water Sample
5	Soil/Sediment

6	Oil
7	Waste
8	Other
9	Drinking Water

- **QC Type:** A one-digit code used to designate the QC type of the sample:

1	Normal
2	Duplicate
3	Rinsate Blank
4	Trip Blank
5	Field Blank
6	Confirmation

Examples:

CL-L01-SED04-12-51: Sediment sample collected from North Lake at Sediment Sample Location #4, depth: 0 to 12 inches bswi (top layer), normal sample.

CL-L02-SED10-36-52: Sediment sample collected from South Lake at Sediment Sample Location #10; depth 24 to 36 inches bswi (bottom layer), duplicate sample of CL-L02-SED10-36-51.

CL-L01-SED08-36-43: Equipment rinsate sample collected after the last sediment sample collected for that day.

CL-L04-SED11-12-51: Sediment sample collected from the DPN at Sediment Sample Location #11, depth 0 to 12 inches bswi (top layer), normal sample.

CL-L01-FT01-TF (GS or BG)-81: Top Feeder, either green sunfish or bluegill, fish tissue sample collected from the North Lake, normal sample.

CL-L02-FT12-BF (BU, BC, CP, or YC)-81: Bottom feeder (either a buffalo fish, black catfish, carp or yellow catfish)

Sample data management will be completed utilizing Scribe, including Chain-of-Custody (CoC) and sample documentation needs.

3.4 DECONTAMINATION

Decontamination of sampling equipment will be conducted as prescribed in SOP 2006: *Sampling Equipment Decontamination* in Appendix C to assure the quality of samples collected. Disposable equipment intended for one-time use will not be decontaminated but will be packaged for appropriate disposal. Decontamination will occur prior to and after each use of a piece of non-dedicated sampling equipment.

3.5 SAMPLE PRESERVATION, CONTAINERS, AND HOLD TIMES

Once collected, sediment samples will be stored in coolers and kept at approximately 4 degrees Celsius (ºC) while at the site and until they are submitted for analysis. Fish tissue samples will be frozen with dry ice to a temperature of -10 °C after sample processing and will be shipped in an approved DOT/IATA container with dry ice for transportation to the designated laboratory. Samples that have been analyzed will be disposed of by the designated laboratory in accordance with the laboratory SOPs.

COC forms will be completed for each sample shipment and sent with the samples to the following laboratories:

- a designated Contract Laboratory Program (CLP) laboratory or laboratories (sediment and QC water samples - PCBs, PCB Congeners, TAL Metals and Mercury, SVOCs and Pesticides analysis)

- a National Environmental Laboratory Accreditation Program (NELAP)-certified subcontracted commercial laboratory (sediment and QC water samples – Herbicides only; fish tissue samples - PCBs, PCB Congeners, Percent Lipids, Percent Moisture, TAL Metals and Mercury, SVOCs, Pesticides and Herbicides)

All collected sediment and fish tissue samples will be shipped to the designated laboratories by overnight carrier.

Sample preservation containers and holding times used during the SI Reassessment will be consistent with the analytical methods as provided in Table 3-2. The EPA SAM will receive analytical results based on a standard turnaround time (TAT). This TAT is initiated when the

samples are received by the laboratory and continues until the analytical results are made available to the EPA Task Manager either verbally or by providing facsimile or email copies of the results for review.

Table 3-1
Sample Locations and Rationale
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, Louisiana

Sample Name	Sample Matrix	GPS Coordinates (Refer to Figure 3-1), Sample Depth	Rationale
CL-L01-SED01-12-51	Sediment	Location: North Lake at 30.465936°N, 91.185094°W, Depth: 0 to 12 inches bswi	Collected to document observed release to surface water pathway and establish source type "contaminated sediment plume" in upper sediment layer in northern section of the North Lake.
CL-L01-SED01-24-51	Sediment	Location: North Lake at 30.465936°N, 91.185094°W, Depth: 12 to 24 inches bswi	Collected to document observed release to the Surface Water Pathway and establish source type "contaminated sediment plume" in middle sediment layer in northern section of the North Lake.
CL-L01-SED01-36-51	Sediment	Location: North Lake at 30.465936°N, 91.185094°W, Depth: 24 to 36 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in bottom sediment layer in northern section of the North Lake.
CL-L01-SED02-12-51	Sediment	Location: North Lake at 30.464558°N, 91.185364°W Depth: 0 to 12 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in upper sediment layer in northern section of the North Lake.
CL-L01-SED02-24-51	Sediment	Location: North Lake at 30.464558°N, 91.185364°W Depth: 12 to 24 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in middle sediment layer in northern section of the North Lake.
CL-L01-SED02-36-51	Sediment	Location: North Lake at 30.464558°N, 91.185364°W Depth: 24 to 36 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in bottom sediment layer in northern section of the North Lake.
CL-L01-SED03-12-51	Sediment	Location: North Lake at 30.462464°N, 91.185031°W Depth: 0 to 12 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in upper sediment layer in middle section of the North Lake.

Sample Name	Sample Matrix	GPS Coordinates (Refer to Figure 3-1), Sample Depth	Rationale
CL-L01-SED03-24-51	Sediment	Location: North Lake at 30.462464°N, 91.185031°W Depth: 12 to 24 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in middle sediment layer of middle section of the North Lake. Proposed MS/MSD Sample
CL-L01-SED03-36-51	Sediment	Location: North Lake at 30.462464°N, 91.185031°W Depth: 24 to 36 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in bottom sediment layer of middle section of the North Lake.
CL-L01-SED04-12-51	Sediment	Location: North Lake at 30.460533°N, 91.185072°W Depth: 0 to 12 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in upper sediment layer of the middle section of the North Lake.
CL-L01-SED04-12-52	Sediment	Location: North Lake at 30.460533°N, 91.185072°W Depth: 0 to 12 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in upper sediment layer of the middle section of the North Lake. Proposed Duplicate sample.
CL-L01-SED04-24-51	Sediment	Location: North Lake at 30.460533°N, 91.185072°W Depth: 12 to 24 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in middle sediment layer of the middle section of the North Lake.
CL-L01-SED04-36-51	Sediment	Location: North Lake at 30.460533°N, 91.185072°W Depth: 24 to 36 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in bottom sediment layer of the middle section of the North Lake.
CL-L01-SED05-12-51	Sediment	Location: North Lake at 30.458639°N, 91.187311°W Depth: 0 to 12 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in upper sediment layer of the southwest section of the North Lake.
CL-L01-SED05-24-51	Sediment	Location: North Lake at 30.458639°N, 91.187311°W Depth: 12 to 24 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in middle sediment layer of the southwest section of the North Lake.

Sample Name	Sample Matrix	GPS Coordinates (Refer to Figure 3-1), Sample Depth	Rationale
CL-L01-SED05-36-51	Sediment	Location: North Lake at 30.458639°N, 91.187311°W Depth: 24 to 36 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in bottom sediment layer of the southwest section of the North Lake.
CL-L01-SED06-12-51	Sediment	Location: North Lake at 30.459069°N, 91.184939°W Depth: 0 to 12 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in upper sediment layer of the southern section of the North Lake.
CL-L01-SED06-24-51	Sediment	Location: North Lake at 30.459069°N, 91.184939°W Depth: 12 to 24 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in middle sediment layer of the southern section of the North Lake.
CL-L01-SED06-36-51	Sediment	Location: North Lake at 30.459069°N, 91.184939°W Depth: 24 to 36 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in bottom sediment layer of the southern section of the North Lake.
CL-L01-SED07-12-51	Sediment	Location: North Lake at 30.458956°N, 91.182456°W Depth: 0 to 12 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in upper sediment layer of the southeast section of the North Lake.
CL-L01-SED07-24-51	Sediment	Location: North Lake at 30.458956°N, 91.182456°W Depth: 12 to 24 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in middle sediment layer of the southeast section of the North Lake.
CL-L01-SED07-24-52	Sediment	Location: North Lake at 30.458956°N, 91.182456°W Depth: 12 to 24 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in middle sediment layer of the southeast section of the North Lake. Proposed Duplicate sample.
CL-L01-SED07-36-51	Sediment	Location: North Lake at 30.458956°N, 91.182456°W Depth: 24 to 36 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in bottom sediment layer of the southeast section of the North Lake.

Sample Name	Sample Matrix	GPS Coordinates (Refer to Figure 3-1), Sample Depth	Rationale
CL-L02-SED08-12-51	Sediment	Location: South Lake at 30.45755°N, 91.182064°W Depth: 0 to 12 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in upper sediment layer of the northern section of the South Lake.
CL-L02-SED08-24-51	Sediment	Location: South Lake at 30.45755°N, 91.182064°W Depth: 12 to 24 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in middle sediment layer of the northern section of the South Lake.
CL-L02-SED08-36-51	Sediment	Location: South Lake at 30.45755°N, 91.182064°W Depth: 24 to 36 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in bottom sediment layer of the northern section of the South Lake.
CL-L02-SED09-12-51	Sediment	Location: South Lake at 30.457164°N, 91.182950°W Depth: 0 to 12 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in the upper sediment layer of the western section of the South Lake.
CL-L02-SED09-24-51	Sediment	Location: South Lake at 30.457164°N, 91.182950°W Depth: 12 to 24 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in the middle sediment layer of the western section of the South Lake.
CL-L02-SED09-36-51	Sediment	Location: South Lake at 30.457164°N, 91.182950°W Depth: 24 to 36 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in the bottom sediment layer of the western section of the South Lake.
CL-L02-SED10-12-51	Sediment	Location: South Lake at 30.456994°N, 91.180922°W Depth: 0 to 12 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in upper sediment layer of the eastern section of the South Lake.
CL-L02-SED10-24-51	Sediment	Location: South Lake at 30.456994°N, 91.180922°W Depth: 12 to 24 inches bswi	Collected to document observed release to Surface Water Pathway and determine observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in middle sediment layer of the eastern section of the South Lake.

Sample Name	Sample Matrix	GPS Coordinates (Refer to Figure 3-1), Sample Depth	Rationale
CL-L02-SED10-36-51	Sediment	Location: South Lake at 30.456994°N, 91.180922°W Depth: 24 to 36 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in bottom sediment layer of the eastern section of the South Lake.
CL-L02-SED10-36-52	Sediment	Location: South Lake at 30.456994°N, 91.180922°W Depth: 24 to 36 inches bswi	Collected to document observed release to Surface Water Pathway and establish source type "contaminated sediment plume" in bottom sediment layer of the eastern section of the South Lake. Proposed Duplicate Sample.
CL-L03-SED11-12-51	Sediment	Location: University Lake at 30.414813°N, 91.165964°W Depth: 0 to 12 inches bswi	Collected as background sediment sample location #1 from University Lake, 0 to 12 inches bswi.
CL-L03-SED11-24-51	Sediment	Location: University Lake at 30.414813°N, 91.165964°W Depth: 12 to 24 inches bswi	Collected as background sediment sample location #1 from University Lake, 12 to 24 inches bswi. Proposed MS/MSD sample.
CL-L03-SED11-36-51	Sediment	Location: University Lake at 30.414183°N, 91.165964°W Depth:24 to 36 inches bswi	Collected as background sediment sample location #1 from University Lake, 24 to 36 inches bswi.
CL-L03-SED12-12-51	Sediment	Location: University Lake at 30.408367°N, 91.165681°W Depth: 0 to 12 inches bswi	Collected as background sediment sample location #2 from University Lake, 0 to 12 inches bswi.
CL-L03-SED12-24-51	Sediment	Location: University Lake at 30.408367°N, 91.165681°W Depth: 12 to 24 inches bswi	Collected as background sediment sample location #2 from University Lake, 12 to 24 inches bswi.
CL-L03-SED12-24-52	Sediment	Location: University Lake at 30.408367°N, 91.165681°W Depth: 12 to 24 inches bswi	Collected as background sediment sample location #2 from University Lake, 12 to 24 inches bswi. Proposed Duplicate Sample
CL-L03-SED12-36-51	Sediment	Location: University Lake at 30.408367°N, 91.165681°W Depth: 24 to 36 inches bswi	Collected as background sediment sample location #2 from University Lake, 24 to 36 inches bswi.

Sample Name	Sample Matrix	GPS Coordinates (Refer to Figure 3-1), Sample Depth	Rationale
CL-L04-SED13-12-51	Sediment	Location: Drainage Pathway North at 30.468931°N, 91.185542°W Depth: 0 to 12 inches bgs	Collected to determine attribution of contaminated sediment from off-site sources flowing into the Drainage Pathway North and ultimately into North Lake, 0 to 12 inches bgs. Proposed MS/MSD sample.
CL-L04-SED13-24-51	Sediment	Location: Drainage Pathway North at 30.468931°N, 91.185542°W Depth: 12 to 24 inches bgs	Collected to determine attribution of contaminated sediment from off-site source (PRP) flowing into the Drainage Pathway North and ultimately into North Lake, 12 to 24 inches bgs
CL-L04-SED14-12-51	Sediment	Location: Drainage Pathway North at 30.469036°, 91.182278°W Depth: 0 to 12 inches bgs	Collected to determine attribution of contaminated sediment from off-site source (railroad road) flowing into the Drainage Pathway North and ultimately into North Lake , 0 to 12 inches bgs
CL-L04-SED14-24-51	Sediment	Location: Drainage Pathway North at 30.469036°, 91.182278°W Depth: 12 to 24 inches bgs	Collected to determine attribution of contaminated sediment from off-site source (railroad road) flowing into the Drainage Pathway North and ultimately into North Lake, 12 to 24 inches bgs
CL-L04-SED15-12-51	Sediment	Location: Drainage Pathway North at 30.469333°N, 91.174522°W Depth: 0 to 12 inches bgs	Collected to determine attribution of contaminated sediment from off-site sources flowing into the Drainage Pathway North and ultimately into North Lake, 0 to 12 inches bgs
CL-L04-SED15-24-51	Sediment	Location: Drainage Pathway North at 30.469333°N, 91.174522°W Depth: 12 to 24 inches bgs	Collected to determine attribution of contaminated sediment from off-site sources flowing into the Drainage Pathway North and ultimately into North Lake, 12 to 24 inches bgs
CL-L05-SED16-12-51	Sediment	Location: Drainage Pathway East at 30.459300°N, 91.181431°W Depth: 0 to 12 inches bgs	Collected to determine attribution of contaminated sediment from off-site sources and the East Lake that ultimately flows into the North Lake, 0 to 12 inches bgs
CL-L05-SED16-12-52	Sediment	Location: Drainage Pathway East at 30.459300°N, 1.181431°W Depth: 0 to 12 inches bgs	Collected to determine attribution of contaminated sediment from off-site sources and the East Lake that ultimately flows into the North Lake, 12 to 24 inches bgs. Proposed Duplicate sample.

Sample Name	Sample Matrix	GPS Coordinates (Refer to Figure 3-1), Sample Depth	Rationale
CL-L05-SED16-24-51	Sediment	Location: Drainage Pathway East, at 30.4593°N, 1.181431°W Depth: 12 to 24 inches bgs	Collected to determine attribution of contaminated sediment from off-site sources and the East Lake that ultimately flows into the North Lake, 12 to 24 inches bgs.
CL-L05-SED17-12-51	Sediment	Location: Drainage Pathway East at 30.461381°N, 91.178981°W Depth: 0 to 12 inches bgs	Collected to determine attribution of contaminated sediment from off-site sources flowing into the East Lake, and ultimately into the North Lake, 0 to 12 inches bgs
CL-L05-SED17-24-51	Sediment	Location: Drainage Pathway East at 30.461381°N, 91.178981°W Depth: Depth: 12 to 24 inches bgs	Collected to determine attribution of contaminated sediment from off-site sources flowing into the East Lake and ultimately into the North Lake, 12 to 24 inches bgs
CL-L06-SED18-12-51	Sediment	Location: Drainage Pathway South at 30.456342°N, 91.179456°W Depth: 0 to 12 inches bgs	Collected to determine attribution of contaminated sediment from off-site sources flowing into the southeast section of the South Lake, via the Drainage Pathway South, 0 to 12 inches bgs
CL-L06-SED18-24-51	Sediment	Location: Drainage Pathway South at 30.456342°N, 91.179456°W Depth: 12 to 24 inches bgs	Collected to determine attribution of contaminated sediment from off-site sources flowing into the southeast section of the South Lake, via the Drainage Pathway South, 12 to 24 inches bgs
CL-L06-SED19-12-51	Sediment	Location: Drainage Pathway South at 30.455911°N, 91.174814°W Depth: 0 to 12 inches bgs	Collected to determine attribution of contaminated sediment from off-site sources flowing into the southeast section of the South Lake, via the Drainage Pathway South, 0 to 12 inches bgs
CL-L06-SED19-24-51	Sediment	Location: Drainage Pathway South at 30.455911°N, 91.174814°W Depth: 12 to 24 inches bgs	Collected to determine attribution of contaminated sediment from off-site sources flowing into the southeast section of the South Lake, via the Drainage Pathway South, 12 to 24 inches bgs.
CL-L01-SED04-12-43 (TBD)	Water (Equipment rinsate)	Location: North Lake	Collected as an equipment rinsate sample associated with sediment sample collection/processing.
CL-L01-SED07-36-43 (TBD)	Water (Equipment rinsate)	Location: North Lake (if needed)	Collected as an equipment rinsate sample associated with sediment sample collection/processing.

Sample Name	Sample Matrix	GPS Coordinates (Refer to Figure 3-1), Sample Depth	Rationale
CL-L02-SED12--36-43 (TBD)	Water (Equipment rinsate)	Location: North Lake (if needed)	Collected as an equipment rinsate sample associated with sediment sample collection/processing.
CL-L03-SED14-36-43 (TBD)	Water (Equipment rinsate)	Location: North Lake (if needed)	Collected as an equipment rinsate sample associated with sediment sample collection/processing.
CL-L01-FT01-TF*-81	Fish Tissue (whole body)	Location: North Lake, top feeder (e.g., bluegill, green sunfish)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat. Potential MS/MSD sample.
CL-L01-FT02-BF**-81	Fish Tissue (fillet)	Location: North Lake, bottom feeder (e.g., catfish, carp, buffalo)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L01-FT02-BF**-82	Fish Tissue (fillet)	Location: North Lake, bottom feeder (e.g., catfish, carp, buffalo)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat. Potential Duplicate sample
CL-L01-FT03-TF*-81	Fish Tissue (whole body)	Location: North Lake, top feeder (e.g., bluegill, green sunfish)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L01-FT04-BF**-81	Fish Tissue (fillet)	Location: North Lake, bottom feeder (e.g., catfish, carp, buffalo)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L01-FT05-TF*-81	Fish Tissue (whole body)	Location: North Lake, top feeder (e.g., bluegill, green sunfish)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L01-FT06-BF**-81	Fish Tissue (fillet)	Location: North Lake, bottom feeder (e.g., catfish, carp, buffalo)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L01-FT07-TF*-81	Fish Tissue (whole body)	Location: North Lake, top bottom feeder (e.g., bluegill, green sunfish)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.

Sample Name	Sample Matrix	GPS Coordinates (Refer to Figure 3-1), Sample Depth	Rationale
CL-L01-FT08-BF**-81	Fish Tissue (fillet)	Location: North Lake, bottom feeder (e.g., catfish, carp, buffalo)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L01-FT09-BF**-81	Fish Tissue (fillet)	Location: North Lake, bottom feeder (e.g., catfish, carp, buffalo)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L01-FT10-BF**-81	Fish Tissue (fillet)	Location: North Lake, bottom feeder (e.g., catfish, carp, buffalo)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L02-FT11-TF*-81	Fish Tissue (whole body)	Location: South Lake, top feeder (e.g., bluegill, green sunfish)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L02-FT12-BF*-81	Fish Tissue (fillet)	Location: South Lake, bottom feeder (e.g., catfish, carp, buffalo)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L02-FT13-TF*-81	Fish Tissue (whole body)	Location: South Lake, top feeder (e.g., bluegill, green sunfish)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L02-FT13-TF*-82	Fish Tissue (whole body)	Location: South Lake, top feeder (e.g., bluegill, green sunfish)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat. Potential Duplicate sample
CL-L02-FT14-BF**-81	Fish Tissue (fillet)	Location: South Lake, bottom feeder (e.g., catfish, carp, buffalo)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L02-FT15-BF**-81	Fish Tissue (fillet)	Location: South Lake, bottom feeder (e.g., catfish, carp, buffalo)	Collected to document Level I or Level II SCDM health-based benchmark concentrations associated with the Surface Water Pathway, Human Food Chain Threat.
CL-L01-FT04-BF-43	Water (Equipment rinsate)	Location: North Lake	Collected as an equipment rinsate sample associated with fish tissue sample collection/processing.

Sample Name	Sample Matrix	GPS Coordinates (Refer to Figure 3-1), Sample Depth	Rationale
CL-L02-FT02-BF-43	Water (Equipment rinsate)	Location: North or South Lake	Collected as an equipment rinsate sample associated with fish tissue sample collection/processing.

NOTES: BF = bottom feeder (carp, buffalo, catfish); bswi = below sediment-water interface**;** CL = Capitol Lakes; FT = Fish Tissue; L01 = North Lake; L02 = South Lake; L03 = University Lake; L04 = Drainage Pathway North; L05 = Drainage Pathway East (Governor's Mansion); L06 = Drainage Pathway South (south and east of I-110); SED = sediment; TF = Top Feeder; * = Will be substituted by GS for green sunfish or BG for bluegill depending on type of species caught; ** = will be substituted for BU = buffalo, CP = carp, YC = yellow catfish; BC = black catfish depending on type of species caught.

Table 3-2
Requirements for Containers, Preservation Techniques, Sample Volumes, and Holding
Capitol Lakes Site Reassessment
Baton Rouge, East Baton Rouge Parish, Louisiana

Name	Analytical Methods	Container	Preservation	Maximum Holding Time
SVOCs (sediments, fish tissue, and water)	SW846 8270E	1 x 8-oz, glass-sediment 1 fish fillet, (approx. 20 grams) two 1-liter amber jars (water)	<6 °C (sediments and water) < -10 °C (fish tissue)	14 days until extraction; 40 days after extraction to analysis (sediments and fish tissue) 7 days until extraction; 40 days after extraction to analysis (water)
Pesticides (sediments, fish tissue, and water)	SW846 8081B	1 x 8 oz, glass (sediments) 1 fish fillet (approx. 20 grams) two 1-liter amber jars (water)	<6 °C (sediments and water) < -10 °C (fish tissue)	14 days until extraction; 40 days after extraction to analysis (sediments and fish tissue) 7 days until extraction; 40 days after extraction to analysis (water)
Herbicides (sediments, fish tissue, and water)	SW846 8151A	1 x 8oz glass (sediments) 1 fish fillet (approx. 20 grams) one 1-liter amber jar (water)	<6 °C (sediments and water) < -10 °C (fish tissue)	14 days until extraction; 40 days after extraction to analysis (sediments and fish tissue) 7 days until extraction; 40 days after extraction to analysis (water)

Name	Analytical Methods	Container	Preservation	Maximum Holding Time
PCBs (sediments, fish tissue, and water)	SW846 8082A	1 x 8-oz, glass- (sediments) 1 fish fillet (approx. 20 grams) 2-liter amber jars (water)	<6° C (sediments and water) < -10 °C (fish tissue)	14 days until extraction; 40 days after extraction to analysis (sediments and fish tissue) 7 days until extraction; 40 days after extraction to analysis; (water)
PCB Congeners (sediments. fish tissue and water)	EPA Method 1668B	1 fish fillet (approx. 20 grams) 1 x 8-oz, glass- (sediments) one 1-Liter amber (water)	<6° C (sediments and water) < -10 °C (fish tissue)	Up to 365 days (sediments and fish tissue) Up to 365 days (water)
TAL Metals + mercury (sediments, fish tissue, and water)	SW846 6010D/6020B/ 7471B	1 X 8-oz, glass- sediments 1 fish fillet (approx. 20 grams) one 1-liter Poly (water)	< 6° C (sediment < -10 °C (fish tissue) < 2.0 pH and < 6 °C (water)	TAL Metals - 180 days Mercury – 28 Days

4 ANALYTICAL METHODOLOGY AND DATA VALIDATION

Sediment samples collected by START will be analyzed a CLP-certified laboratory using EPA publication SW-846, *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*. The following methods of analysis will be conducted on all sediment samples submitted to a designated CLP laboratory.

- SVOCs (EPA SW846 Method 8270E)
- Pesticides (EPA SW846 Method 8081B)
- PCBs (EPA SW846 Method 8082A)
- PCB Congeners (EPA Method 1668B)
- TAL Metals + mercury (EPA SW846 Methods 6020B/7471B)

In addition, a fraction of each sediment sample will be containerized, shipped, and analyzed for herbicides (EPA SW846, Method 8151A) at a NELAP-certified subcontracted commercial laboratory, as neither the EPA Houston Laboratory nor CLP laboratories analyze environmental samples for herbicides.

Data deliverables from the designated CLP laboratory(s) will consist of a final data deliverable package including a Level IV data package with QC and raw data in pdf format and a final Electronic Data Deliverable (EDD) in excel format.

Fish tissue samples collected by START will be analyzed by a NELAP-certified subcontracted commercial laboratory, utilizing EPA publication SW-846, *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*. The following methods of analysis will be conducted on all fish tissue samples submitted.

- SVOCs (EPA SW846 Method 8270E)
- Pesticides (EPA SW846 Method 8081B)
- PCBs (EPA SW846 Method 8082A)
- PCB Congeners (EPA Method 1668B)
- Herbicides (EPA Method 8151A)

- TAL Metals + mercury (EPA SW846 Methods 6010D/7471B)

Data deliverables from a NELAP-certified, subcontracted commercial laboratory will consist of a final data deliverable package including a full CLP-like data package (Level IV data package with QC and raw data) in PDF format and a final EDD in excel format.

Table 4-1 below illustrates the sample description and rationale.

Table 4-1
Sample Description and Rationale
Capitol Lakes Reassessment,
Baton Rouge, East Baton Rouge Parish, Louisiana

Sample Matrix	Sample Collection Method	Estimated Sample Depth bswi (in inches)	Number of Samples[1]	Rationale	EPA Analytical Methods
Sediment	Boat-mounted drill rig. Hollow polyvinyl chloride (PVC) or aluminum piping; towels, hand augur	0 to 12; 12 to 24; and 24 to 36	55	Document observed contamination and attribution	SVOCs: EPA Method 8270D; Pesticides: EPA Method 8081B; Herbicides: EPA Method 8151A PCBs: EPA Method 8082A; TAL Metals + Hg: 6020B/7471B
Fish Tissue	Electro-shocking	Not Applicable	17	Determine if they have HRS Level I or Level II concentrations	SVOCs: EPA Method 8270D; Pesticides: EPA Method 8081B; Herbicides: EPA Method 8151A; PCBs: EPA Method 8082A; PCB congeners: EPA Method 1668B; TAL Metals + Hg: 6010D/7471B

Notes: [1] = Includes duplicate samples

Data validation by START will not occur on the EPA Houston Laboratory sediment analytical results/data packages. Data validation on the CLP sediment analytical results/data packages will be conducted by the EPA Environmental Services Assistance Team (ESAT) contractor; therefore, START will conduct a "spot check" on the ESAT-validated CLP analytical results/data

packages. Data validation from fish tissue samples and the sediment fraction analyzed for herbicides, sent to the NELAP-certified subcontracted commercial laboratory, will be conducted by START. START will provide an evaluation of QA/QC samples for reporting purposes. Data validation will be conducted in accordance with the EPA's Superfund Analytical Services and Contract Laboratory Program *National Functional Guidelines for Organic Superfund Methods Data Review, November 2020 (EPA 540-R-20-005))*, and the EPA's Superfund Analytical Services and Contract Laboratory Program *National Functional Guidelines for Inorganic Superfund Methods Data Review, November 2020 (EPA 542-R-20-006)*. Laboratory data packages will be verified and validated using a Stage 2B validation, as described in the EPA *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use* (January 2009), unless otherwise directed by EPA. A summary of the data validation findings will be presented in Data Validation Summary Reports as part of the final report. The following will be evaluated to verify that the analytical data is within acceptable QA/QC tolerances:

- The completeness of the laboratory reports, verifying that required components of the report are present and that the samples indicated on the accompanying CoC are addressed in the report.
- The calibration and tuning records for the laboratory instruments used for the sample analyses.
- The results of internal standards analyses.
- The results of laboratory blank analyses.
- The results of laboratory control sample (LCS) analyses.
- The results of MS/MSD analyses.
- The results of surrogate recovery analyses.
- Compound identification and quantification accuracy.
- Laboratory precision, by reviewing the results for blind field duplicates.
- Variances from the QA/QC objectives will be addressed as part of the Data Validation Summary Reports.

A summary of the data validation findings will be presented in Data Validation Summary Reports as part of the final report.

5 QUALITY ASSURANCE

Quality assurance will be conducted in accordance with the WESTON Corporate Quality Management Manual, the WESTON Programmatic Quality Assurance Project Plan (QAPP), and the WESTON Quality Management Plan. Following receipt of the TDD from EPA, a QC officer will be assigned and will monitor work conducted throughout the project, including reviewing interim report deliverables and field audits. The START Team PTL will be responsible for QA/QC for the field investigation activities. The designated laboratory used during the investigation will be responsible for QA/QC related to the analytical work. The START Team will also collect samples to verify that laboratory QA/QC is consistent with the required standards and to validate the laboratory data received.

5.1 SAMPLE CUSTODY PROCEDURES

Because of the evidentiary nature of sample collection, the possession of samples must be traceable from the time the samples are collected until they are introduced as evidence in legal proceedings. After sample collection and identification, samples will be maintained under CoC procedures. If the sample collected is to be split (laboratory QC), the sample will be allocated into similar sample containers. Sample labels completed with the same information as that on the original sample container will be attached to each of the split samples. All personnel required to package and ship coolers containing potentially hazardous material will be trained accordingly.

START personnel will prepare and complete CoC forms using the Scribe for all samples sent to an off-site laboratory. The Chain-of-Custody procedures are documented and will be made available to all personnel involved with the sampling. A typical CoC record will be completed each time a sample or group of samples is prepared for shipment to the laboratory. The record will repeat the information on each sample label and will serve as documentation of handling during shipment. A copy of this record will remain with the shipped samples at all times, and another copy will be retained by the member of the sampling team who originally relinquished the samples.

Samples relinquished to the participating laboratories will be subject to the following procedures for transfer of custody and shipment:

- Samples will be accompanied by the CoC record. When transferring possession of samples, the individuals relinquishing and receiving the samples will sign, date, and note the time of the sample transfer on the record. This custody records document transfer of sample custody from the sampler to another person or to the laboratory.
- Samples will be properly packed for shipment and dispatched to the appropriate laboratory for analysis with separate, signed custody records enclosed in each sample box or cooler. Sample shipping containers will be custody-sealed for shipment to the laboratory. The preferred procedure includes use of a custody seal wrapped across filament tape that is wrapped around the package at least twice. The custody seal will then be folded over and stuck to seal to ensure that the only access to the package is by cutting the filament tape or breaking the seal to unwrap the tape.
- If sent by common carrier, a bill of lading or air bill will be used. Bill of lading and airball receipts will be retained in the project file as part of the permanent documentation of sample shipping and transfer.

WESTON SOPs 1101.01 and 1102.01 describe these procedures in more detail (Appendix C).

5.2 PROJECT DOCUMENTATION

All documents will be completed legibly in ink and entered into field logbooks and Scribe. Response Manager will be used at the direction of the EPA SAM. SCRIBE Enterprise is designed to give SCRIBE users the ability to synchronize the SCRIBE field data to the RRC-EDMS Web Hub. This allows analytical data managers and data validators access to data to perform reviews from anywhere with an Internet connection. SCRIBE Enterprise is designed to take the analytical data management functionality of the EPA SCRIBE software and make it available for multiple users to access on one site.

5.3 FIELD DOCUMENTATION

The following field documentation will be maintained as described below.

5.3.1 Field Logbook

The field logbook is a descriptive notebook detailing site activities and observations so an accurate, factual account of field procedures may be reconstructed (SOP 1501.01). All entries will be signed by the individuals making them. Entries should include, at a minimum, the following:

- Site name and project number
- Names of personnel on site
- Dates and times of all entries
- Description of all site activities, including site entry and exit times
- Noteworthy events and discussions
- Daily weather conditions
- Site observations.
- Identification and description of samples, including locations, sample ID, sample date and time, sample depth, sample preservation, collection type, analyses requested, and CoC information
- Subcontractor information and names of on-site personnel
- Records of photographs in an Excel spreadsheet
- Site sketches
- Field Instrument Calibration results, as necessary

5.3.2 Sample Labels

Sample labels will be securely affixed to the sample container. The labels will clearly identify the sample and include the following information:

- Sample ID
- Site name and project number
- Date and time the sample was collected
- Sample preservation method
- Analysis requested

- Sampling location

5.3.3 Chain-of-Custody Record

A CoC will be maintained from the time of sample collection until final deposition. Every transfer of custody will be noted and signed for and a copy of the record will be kept by everyone who has signed it.

5.3.4 Custody Seal

Custody seals demonstrate that a sample container has not been tampered with or opened. The individual who has custody of the samples will sign and date the seal and affix it to the container in such a manner that it cannot be opened without breaking the seal.

5.3.5 Photographic Documentation

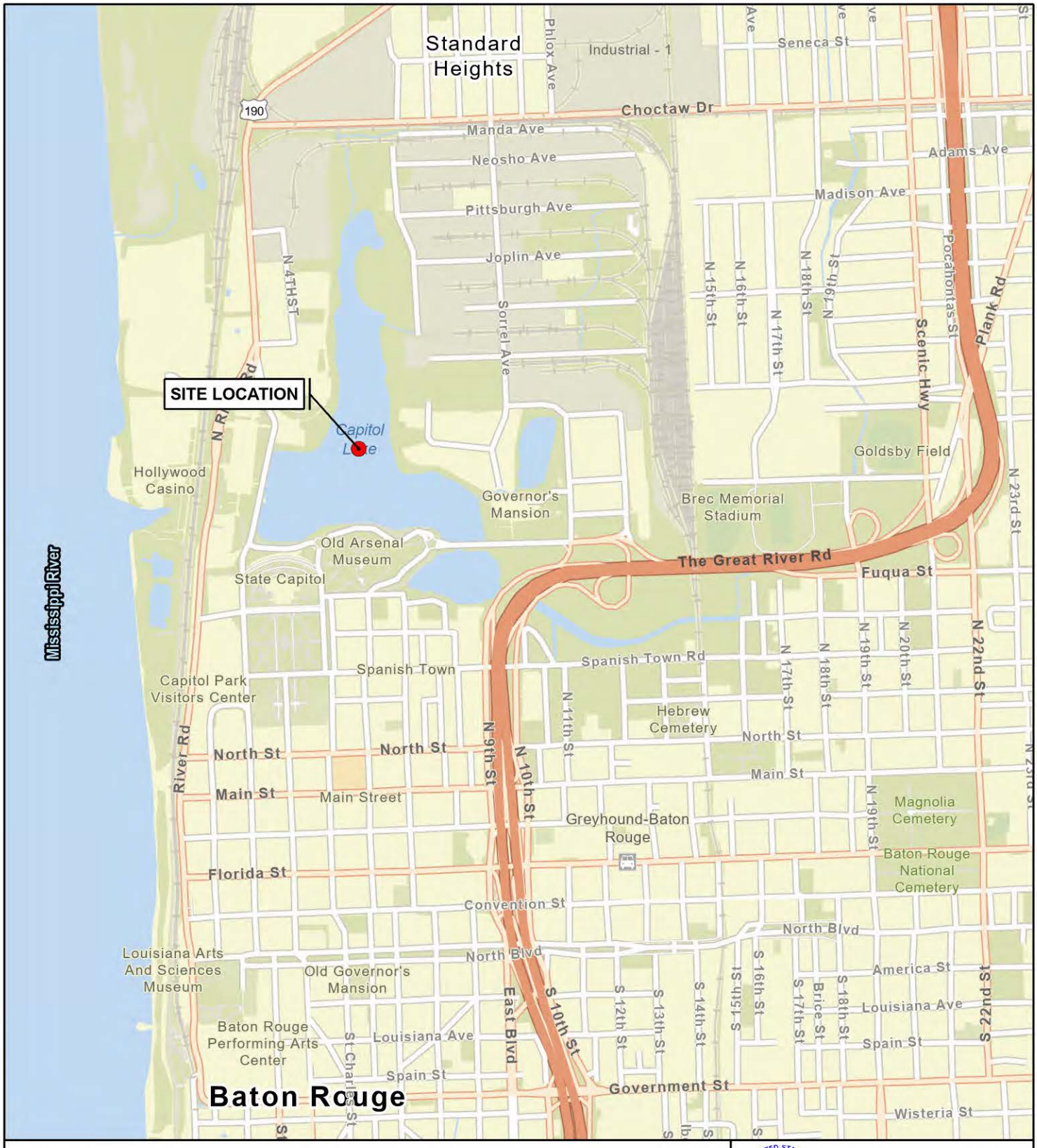
The START Team will take photographs to document site conditions and activities as site work progresses. Initial conditions will be well documented by photographing features that define the site-related contamination or special working conditions. Representative photographs will be taken of each type of site activity. The photographs will show typical operations and operating conditions as well as special situations and conditions that may arise during site activities. Site final conditions will also be documented as a record of how the site appears at completion of the work.

Photographs will be taken with a digital camera capable of recording the date on the image. Each photograph will be recorded in an excel spreadsheet with the location of the photographer, direction the photograph was taken, and the subject of the photograph and its significance (i.e., why the picture was taken). Where appropriate, the photograph location, direction, and subject will also be shown on a site sketch.

5.4 REPORT PREPARATION

At the completion of the project, the START Team will review and evaluate the laboratory data and prepare a draft report of field activities, figures, and analytical results for EPA SAM review. Draft deliverable documents will be uploaded to the EPA TeamLink website for EPA SAM review

and comment. The START Team will address the comments and prepare the final report. The final report will be uploaded to the EPA TeamLink website.



LEGEND

- SITE LOCATION



0 1,300 2,600

SCALE IN FEET

SOURCE: WORLD STREET MAPS; ESRI
TDD: 0001/21-409
SEMS: LAD980869440
SSID: A6UD

US EPA REGION 6

FIGURE 1-1

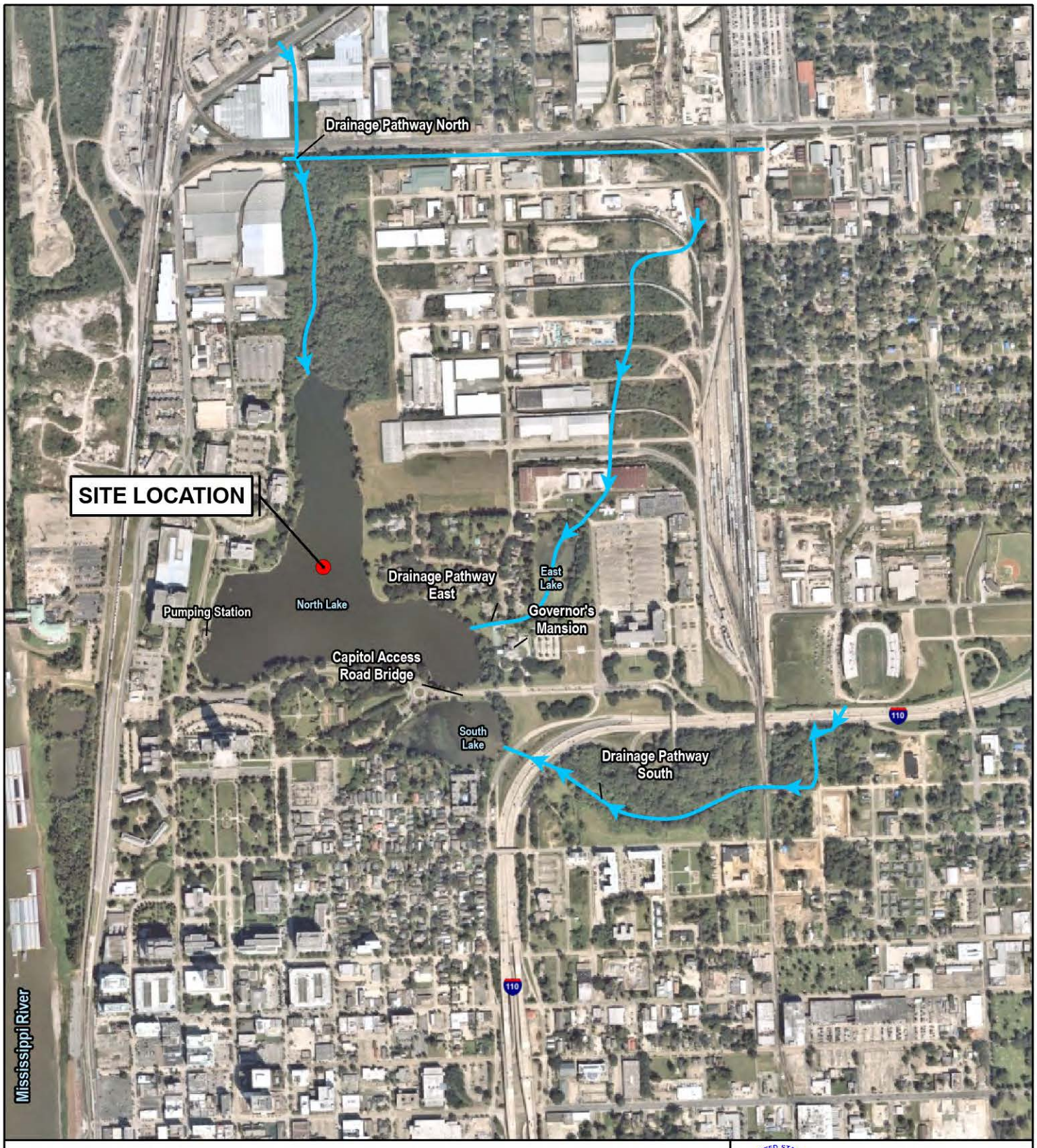
SITE LOCATION MAP

CAPITOL LAKES SITE REASSESSMENT

BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA

DATE	PROJECT NO	SCALE
MARCH 2022	20600.012.001.1409.01	AS SHOWN

FILE: \\nasatxgis1\ATX_GIS_Data\EPA\Region 6 START IV\Superfund\Capitol Lake Site Reassessment\pro\Capitol Lake Site Reassessment\Capitol Lake Site Reassessment\Capitol Lake Site Reassessment.aprx 11:24 AM 3/3/2022 covasj



LEGEND

- SITE LOCATION



0 1,000 2,000

SCALE IN FEET

SOURCE: ©NEARMAP IMAGERY, 2021
TDD: 0001/21-409
SEMS: LAD980869440
SSID: A6UD

US EPA REGION 6

FIGURE 1-2

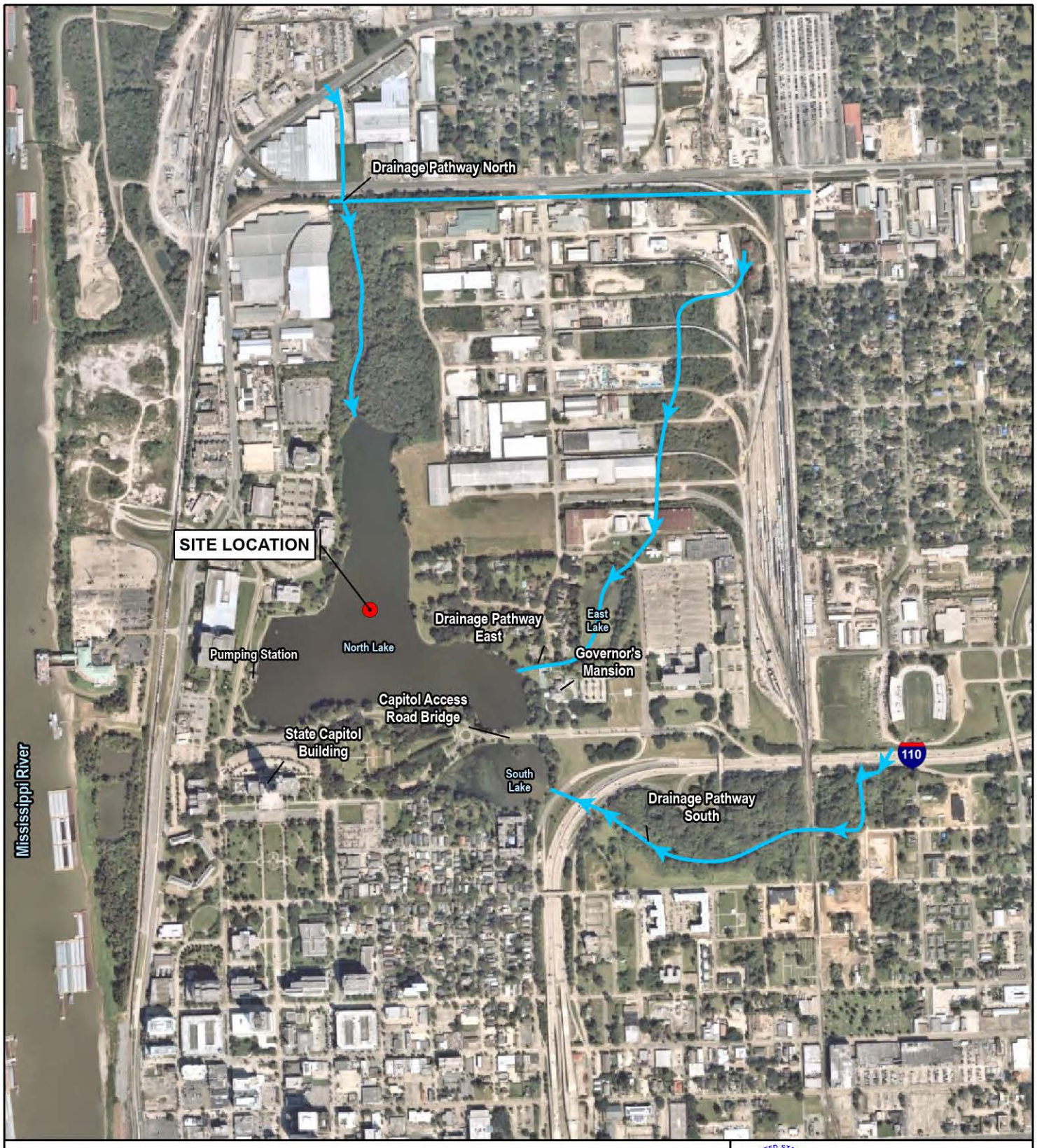
SITE AREA MAP

CAPITOL LAKES SITE REASSESSMENT

BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA

DATE	PROJECT NO	SCALE
MARCH 2022	20600.012.001.1409.01	AS SHOWN

FILE: \\nasatxgis1\ATX_GIS_Data\EPA\Region 6 START IV\Superfund\Capitol Lake Site Reassessment\pro\Capitol Lake Site Reassessment\Capitol Lake Site Reassessment\Capitol Lake Site Reassessment.aprx 11:23 AM 3/3/2022 covasj



LEGEND

- SITE LOCATION



0 1,000 2,000

SCALE IN FEET

SOURCE: ©NEARMAP IMAGERY, 2021
TDD: 0001/21-409
SEMS: LAD980869440
SSID: A6UD

US EPA REGION 6

FIGURE 2-1

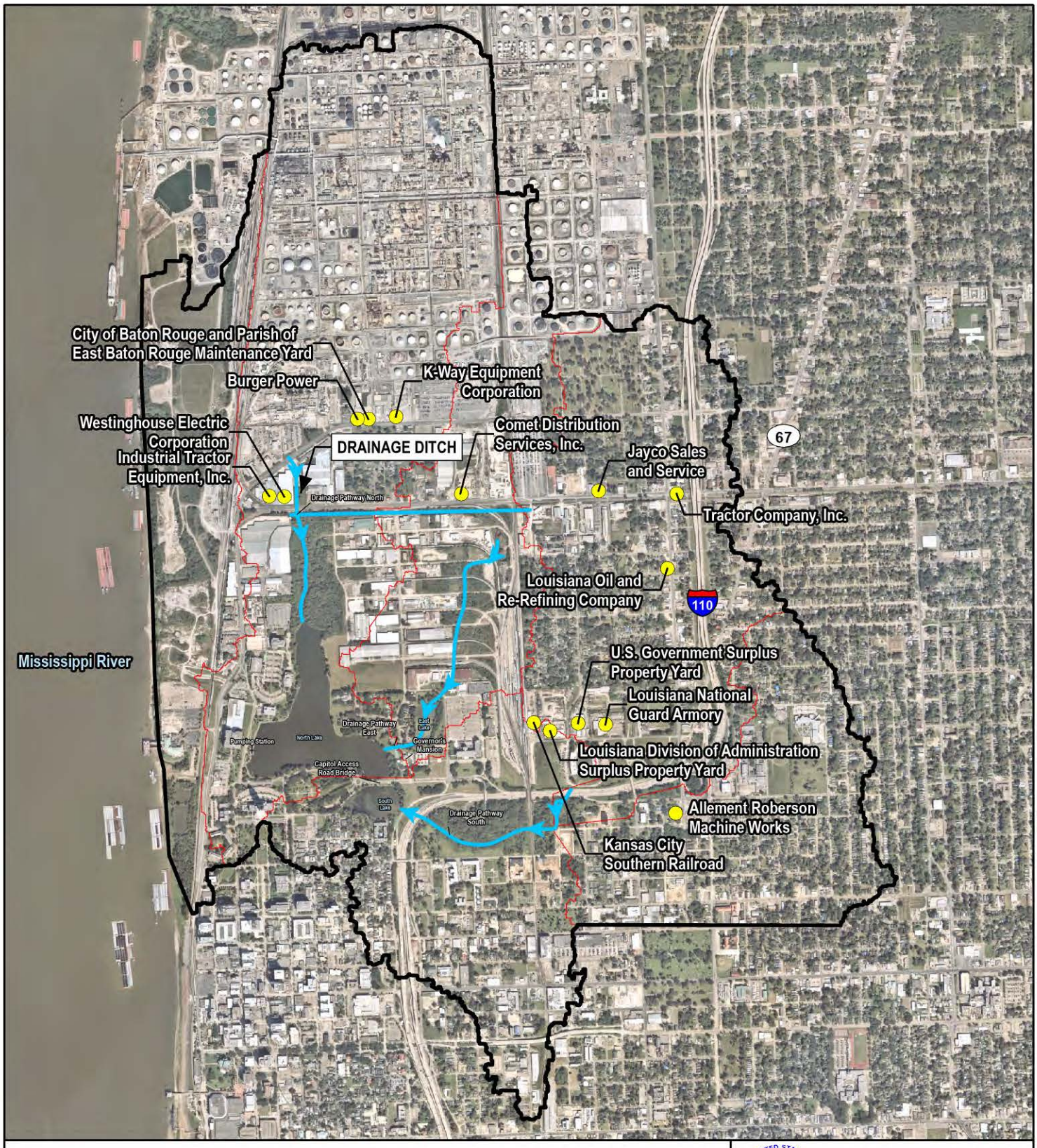
SITE LAYOUT MAP

CAPITOL LAKES SITE REASSESSMENT

BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA

DATE	PROJECT NO	SCALE
MARCH 2022	20600.012.001.1409.01	AS SHOWN

FILE: \\nasatxgis1\ATX_GIS_Data\EPA\Region 6 START IV\Superfund\Capitol Lake Site Reassessment\pro\Capitol Lake Site Reassessment\Capitol Lake Site Reassessment\Capitol Lake Site Reassessment.aprx 11:28 AM 3/3/2022 covasj



LEGEND

- Facilities Potentially Contributing to Contamination
- HUC 14 Microwatershed (Capitol Lakes)
- HUC 16 Microwatershed
- Drainage Pathway

Note: HUC - Hydrologic Unit Level
SOURCE: © Nearmap Imagery, 2021. World Street Map; ESRI.
PCB source locations from Louisiana Department of Environmental Quality (LDEQ).
https://data-ebrgis.opendata.arcgis.com/
TDD: 0001/21-409
SEMS: LAD980869440
SSID: A6UD



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SCALE IN FEET

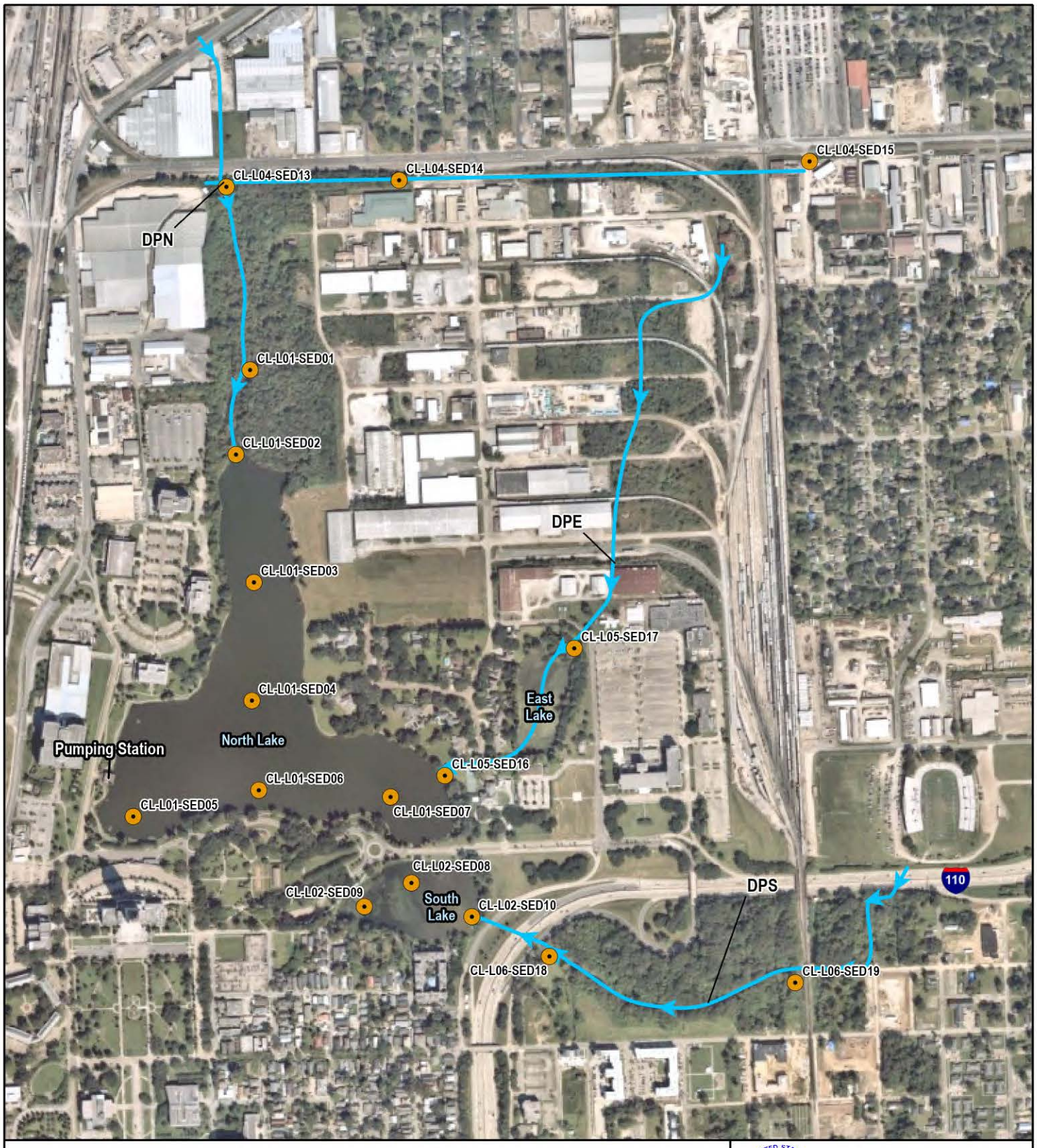
US EPA REGION 6

FIGURE 2-2

DRAINAGE BASIN AND AREA FACILITIES MAP
CAPITOL LAKES SITE REASSESSMENT
BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA

DATE	PROJECT NO	SCALE
MARCH 2022	20600.012.001.1409.01	AS SHOWN

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LEGEND

- PROPOSED SEDIMENT SAMPLE LOCATION
- DRAINAGE PATHWAY NORTH (DPN)
- DRAINAGE PATHWAY EAST (DPE)
- DRAINAGE PATHWAY SOUTH (DPS)



0 650 1,300

SCALE IN FEET

SOURCE: ©NEARMAP IMAGERY, 2021
TDD: 0001/21-409
SEMS: LAD980869440
SSID: A6UD

US EPA REGION 6

FIGURE 3-1

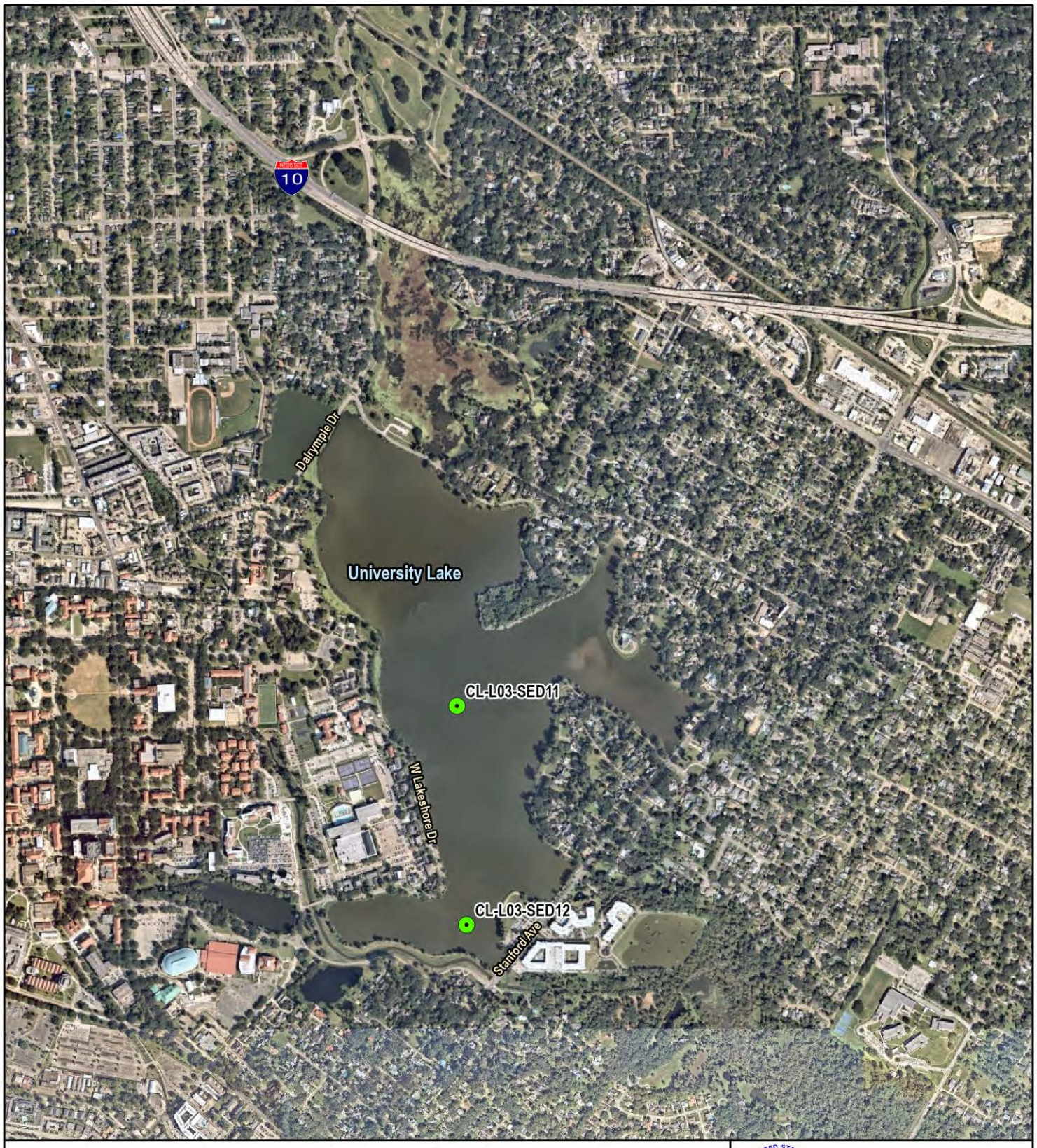
PROPOSED SEDIMENT SAMPLE LOCATION MAP

CAPITOL LAKES SITE REASSESSMENT

BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA

DATE	PROJECT NO	SCALE
MARCH 2022	20600.012.001.1409.01	AS SHOWN

FILE: \\nasatxgis1\ATX_GIS_Data\EPA\Region 6 START IV\Superfund\Capitol Lake Site Reassessment\pro\Capitol Lake Site Reassessment\Capitol Lake Site Reassessment\Capitol Lake Site Reassessment.aprx 11:30 AM 3/3/2022 covasj



LEGEND

PROPOSED BACKGROUND SEDIMENT SAMPLE LOCATION



0 1,300 2,600

SCALE IN FEET

SOURCE: ©NEARMAP IMAGERY, 2021
TDD: 0001/21-409
SEMS: LAD980869440
SSID: A6UD

US EPA REGION 6

FIGURE 3-2

PROPOSED BACKGROUND SEDIMENT SAMPLE LOCATION MAP
CAPITOL LAKES SITE REASSESSMENT
BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA

DATE	PROJECT NO	SCALE
MARCH 2022	20600.012.001.1409.01	AS SHOWN

FILE: \\nasatxgis1\ATX_GIS_Data\EPA\Region 6 START IV\Superfund\Capitol Lake Site Reassessment\pro\Capitol Lake Site Reassessment\Capitol Lake Site Reassessment\Capitol Lake Site Reassessment.aprx 11:29 AM 3/3/2022 covasj

Appendix A

Phase I Remedial Investigation Report

Phase I Remedial Investigation Report

for

Capitol Lakes Site

East Baton Rouge Parish

Baton Rouge, Louisiana

for

Louisiana Department of Environmental Quality

Inactive & Abandoned Sites Division

Baton Rouge, Louisiana

▲ ▲ ▲

Walk Haydel Job No. 33828-003

November 1998

WALK HAYDEL
A DAMES & MOORE GROUP COMPANY

EDMS # 2002625

EDMS # FOR ENTIRE DOC DRAFT IS:
2487296

PHASE I REMEDIAL INVESTIGATION REPORT

FOR

CAPITOL LAKES SITE
EAST BATON ROUGE PARISH
BATON ROUGE, LOUISIANA

FOR

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
INACTIVE & ABANDONED SITES DIVISION
BATON ROUGE, LOUISIANA

WH JOB NO. 33828-003

NOVEMBER 1998

DCM GROUP WALK HAYDEL
A DAMES & MOORE GROUP COMPANY

ACKNOWLEDGEMENTS

This Remedial Investigation (RI) Report of the Capitol Lakes Site was prepared by Walk Haydel and reviewed by the Louisiana Department of Environmental Quality (LDEQ). The following individuals and organizations participated in the key aspects of the remedial investigation activities:

American Analytical & Technical Services, Inc. performed laboratory testing of water, sediment and fish tissue samples.

Integrate, Inc. (Integrate) validated the laboratory analytical data. The Data Validation Reports are included as Appendix E. Summary tables of the validated analytical data were also provided by Integrate and are included as Tables 9.1 - 9.4, 10.1 - 10.4, and 11.1- 11.4.

John J. Avery & Associates, Inc. (Avery) was subcontracted by Walk Haydel to perform the hydrographic survey of the Capitol Lakes Site. Walk Haydel provided oversight and review of the hydrographic survey activities. The Hydrographic Survey Map is included as Appendix G.

LDEQ staff performed field activities for the surface water sampling, fish species composition assessment and fish tissue sampling. LDEQ staff also processed the lake sediment samples for laboratory analytical testing. Laboratory analytical testing activities of samples from the Capitol Lakes Site were directed and coordinated by LDEQ personnel. Summaries of these activities, as presented to Walk Haydel by the LDEQ, are included in applicable sections of the report. LDEQ was responsible for contracting the services and directing the activities of all subcontractors, except Avery.

The Capitol Regional Office Laboratory of the LDEQ Office of Water Resources was utilized for processing of the fish composition assessment catch and fish tissue samples. The laboratory also performed mercury analyses of selected fish tissue

samples. Summary tables of the fish composition assessment and mercury fish tissue laboratory analytical results were provided by the LDEQ and are included as Tables 1, 2, 4 and 5.

Dr. June L. Sutherlin performed the baseline risk assessment. The baseline risk assessment is summarized in Section 5.0 and included in its entirety as Appendix H. Walk Haydel has incorporated these sections into the RI report unedited.

Woodward-Clyde International-Americas (WC) performed lake sediment field sampling activities. WC's *Sediment Sampling, Capitol Lakes Subsurface Investigation Report* is included in Appendix D.

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Background Information

The Capitol Lakes Site is composed of three lakes: North Lake, South Lake, and East Lake. North Lake is located north and adjacent to the State Capitol Building and west of the Governor's Mansion. South Lake is located due east of the State Capitol Building and in the bend of U.S. Interstate Highway 110. East Lake is located north and east of the Governor's Mansion. East Lake has a residential community on its western side.

The Capitol Lakes were originally part of a natural drainage system called Grassie Bayou, which in the late 1890s, was significantly larger and more extensive in size than observed today. Grassie Bayou drained into the Mississippi River until the late 1800s when it was dammed creating the lake system. The lakes have been modified since then with sections filled in to facilitate building the Governor's Mansion and U.S. Interstate Highway system. An area in the northern portion of North Lake was also filled in. The lakes are now considered man-made public waterways. The lake system collects and retains untreated stormwater runoff from the surrounding areas. There is no natural drainage outlet for the lake system. A pumping station located on the southwestern shore of North Lake is used to drain water from the lake system and control the water level of the lakes.

Stormwater runoff to the Capitol Lakes drains into North Lake from immediately adjacent acreage and from the north via the channel, i.e., tributary, south of Choctaw Drive. Runoff drains into South Lake from the U.S. Interstate Highway system, immediately adjacent areas, and from the drainage area that extends both north and east of the U.S. Interstate Highway system. The drainage basin that contributes to Capitol Lakes is approximately 4.5 square miles in area and is 63 percent residential in terms of land usage, 28 percent commercial and light industrial usage, and 9 percent government and miscellaneous usage. The stormwater runoff from urban and industrial

areas is capable of, and based on previous investigations, has transported contaminants to the lake system.

Previous investigations of the Capitol Lakes have indicated the presence of polychlorinated biphenyls (PCBs), pesticides, and oils in lake system sediments and edible fish tissues. This Phase I Remedial Investigation (RI) was conducted to develop information regarding the present conditions of the Capitol Lakes and to identify potential public health risks. The Phase I RI consisted of the following general tasks:

1) A hydrographic survey of North, South and East Capitol Lakes;

2) A species composition assessment and fish tissue sampling of the lakes;

3) Sampling and analyses of lake waters; and

4) Sampling and analyses of lake sediments.

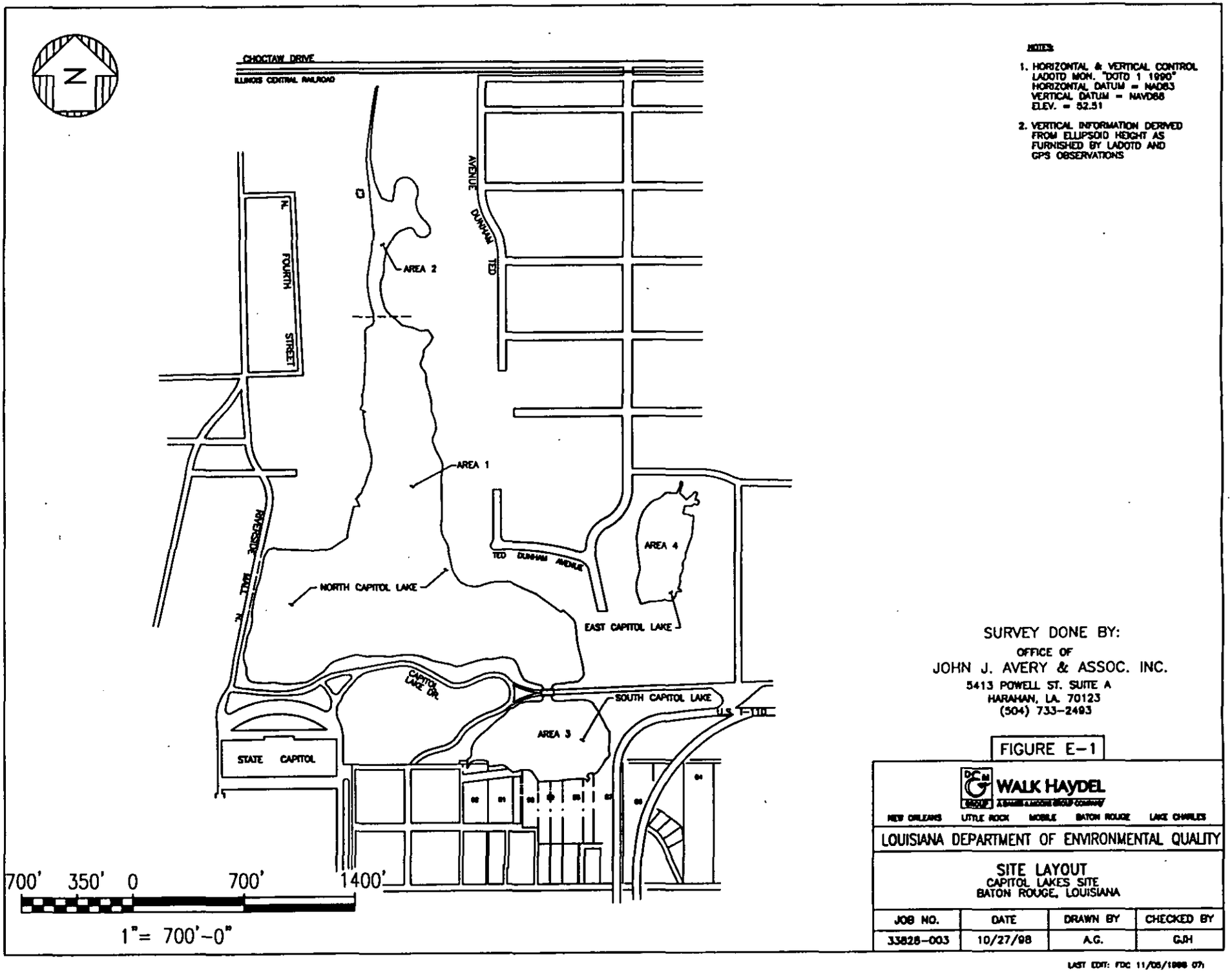
For the RI, the Capitol Lakes system has been divided into four areas as follows and is shown on Figure E-1, attached:

Area 1 - North Lake;

Area 2 - Northern end of North Lake;

Area 3 - South Lake; and

Area 4 - East Lake.



NOTES:

1. HORIZONTAL & VERTICAL CONTROL LADOTD MON. "DOTD 1 1990"
   HORIZONTAL DATUM = NAD83
   VERTICAL DATUM = NAVD88
   ELEV. = 52.51
2. VERTICAL INFORMATION DERIVED FROM ELLIPSOID HEIGHT AS FURNISHED BY LADOTD AND GPS OBSERVATIONS

SURVEY DONE BY:
OFFICE OF
JOHN J. AVERY & ASSOC. INC.
5413 POWELL ST. SUITE A
HARAHAN, LA. 70123
(504) 733-2493

FIGURE E-1

DCM GROUP WALK HAYDEL
NEW ORLEANS LITTLE ROCK MOBILE BATON ROUGE LAKE CHARLES

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

SITE LAYOUT
CAPITOL LAKES SITE
BATON ROUGE, LOUISIANA

JOB NO.	DATE	DRAWN BY	CHECKED BY
33828-003	10/27/98	A.G.	GJH

LAST EDIT: FDC 11/05/1998 07:

LDEQ-EDMS Document 2469808, Page 8 of 717

Hydrographic Survey/Lake Sediment Profiles

North Lake is the largest and deepest of the Capitol Lakes, covering approximately 53 acres. The depth of North Lake averages 6.5 feet in the southern portion and shoals to 4 feet towards the northern tributary. The most recent sediments in North Lake (defined for this project as green to black mucks and dark-colored organic-rich clays) are thicker along the eastern portion of the lake (approximately 3.0 feet) and thinner along the western side near the pumping station (less than 2.0 feet). The northern end of North Lake becomes swampy and the water depth, approximately 0.5 feet, dramatically lessens such that lake sediments are often above the normal lake water level. Total penetrated sediment thickness in this northernmost area ranged from 4.0 to 5.5 feet.

South Lake is the second largest of the three lakes, covering approximately 9 acres. The water depth in South Lake averages approximately 3 to 4 feet. Recent sediments are thicker in the eastern side of the lake (approximately 4.0 feet) and thinner in the western portion (approximately 2 feet). Total penetrated sediment thickness ranged from 5.5 feet in the northeast corner of South Lake to approximately 3 to 4 feet in the southwest and southeast corners of the lake. Stormwater runoff enters South Lake at its southeast corner from an extensive underground stormwater runoff system.

East Lake is the smallest of the Capitol Lakes, covering approximately 5 acres. The average water depth of East Lake is approximately 1 foot. There is an outlet weir in the southwest corner of East Lake, which controls the water level in the lake and allows for excess stormwater runoff to drain into South Lake. Drainage from East Lake enters at the northeast corner of South Lake. Total penetrated sediment thickness in East Lake ranges from 4.5 feet in the south to 6.5 feet in the north. These sediments all appear to be characterized as mucks and organic-rich clays.

North and South Lakes were dredged in 1958. Approximately 400,000 cubic yards of material was removed, some of which was deposited on land between North Lake and

the Mississippi River levee. No dredging was done in the northern end of North Lake or in East Lake.

Fish Species Composition Assessment / Tissue Sampling Program

A fish species composition assessment was performed for North and South Lakes. East Lake was not investigated due to its shallow water depths. The fish species composition assessment indicated that approximately 18 percent of the fish in the lakes are typically considered edible by the general population. These are called target species and for these lakes are Carp, Buffalofish, Green Sunfish, Bluegill, and Yellow and Black Bullheads. A fish tissue sampling program was conducted in these lakes on the target species. Fish tissues were analyzed for PCBs, pesticides and mercury. Historically, edible fish species in these lakes have shown concentrations of PCBs and pesticides above U.S. Food and Drug Administration recommended levels. A fishing ban has been in effect since 1983, having been issued jointly by the LDEQ and LDHH. The results of the current analytical testing of target species edible tissues have shown that the average total PCB concentrations are less than 0.5 parts per million.

Surface Water Analyses

Surface water samples were collected from each lake, representing a composite of spacially discrete locations within the lakes. Surface water samples were analyzed for PCBs, pesticides, semi-volatile organic compounds, and total metals. Analytical results show that the surface waters of the lake system do not have detectable concentrations of PCBs, pesticides or semi-volatile organic compounds. While total metal concentrations were higher in East Lake than the other lakes. The lack of detectable PCBs and semi-volatile organic compound concentrations in the surface waters reflect an improvement in water quality from the 1983 sampling efforts when PCBs and oil and grease were detected. In 1983, PCBs were present at a concentration of 1.2 parts per million.

Lake Sediment Analyses: Organic Constituents

The sediments in the three lakes were tested for PCBs, pesticides, semi-volatile organic compounds, and metals. The analytical sampling results appear to reflect the histories of the three lakes, their proximity to potential sources of contaminants released into the drainage system and thus the lakes, and the changes in chemical usage over time, i.e., the banning of PCBs, certain pesticides, and leaded gasoline.

North and South Lakes generally have the lowest concentrations of all constituents tested for in this investigation, except for oil and grease. South Lake sediments have the highest oil and grease content of tested samples, at 5,530 parts per million.

The northern portion of North Lake has the highest detected concentrations of PCBs, specifically Arochlor-1242 and Arochlor-1260. The concentrations of PCBs are generally higher in sediments deeper than 1.5 feet and lower in the shallower sediments. The highest concentration detected was for Arochlor-1260, which was detected at 5.1 parts per million. The northern portion of North Lake also has the highest concentrations of the majority of the semi-volatile organic compounds. The semi-volatile organic compounds are generally found at the highest concentrations in the shallowest sediments and then decrease in concentration with depth. Benzo(a)pyrene, a human carcinogenic SVOC, was detected as high as 14 parts per million in the northern portion of North Lake.

East Lake has the greatest thickness of sediments of the three lakes. While East Lake has no PCBs in its sediments, it does have the highest detected concentrations of pesticides compared to the other lakes. In particular, East Lake has elevated concentrations of 4-4'-DDD at 168 parts per million, and 4-4'-DDE and 4-4'-DDT in excess of 1.0 part per million, whereas the other lakes have typical concentrations of these compounds at 0.1 part per million. East Lake also had elevated concentrations of the pesticides Aldrin, delta-BHC (Lindane), Chlordane, and Endrin. The concentrations of the various pesticides tend to decrease with depth and are highest generally in the

sediments below 0.5 feet. The most recent East Lake sediments, the interval from 0 to 0.5 foot, were found to typically have less pesticides than the intervals deeper than 0.5 feet.

Lake Sediment Analyses: Inorganic Constituents

Lake sediments were submitted for analyses for 23 metals, including heavy metals and those that are common in sediments and rocks, i.e., aluminum, calcium, iron, sodium, etc. Of particular interest are the heavy metals—antimony, arsenic, cadmium, lead, silver, mercury and selenium. In previous studies, these metals have been shown to be at elevated concentrations in the lake sediments.

Antimony is present in sediments from all three lakes, with the northernmost portion of North Lake and East Lake having the highest concentrations, and North Lake and South Lake being generally comparable in concentrations. Antimony concentrations generally increase with depth in the sediment column. The range of detectable concentrations was from below detection limit to 350 parts per million.

Arsenic was detected in the sediments of all the lakes. Arsenic concentrations range from 3.2 to 86 parts per million. The highest concentrations were observed in the northern end of North Lake and in East Lake. Generally, the higher concentrations are found at depth, except for one location in the northern end of North Lake. Cadmium concentrations follow a comparable pattern to that of arsenic, being highest in the northern end of North Lake and in East Lake. Cadmium concentrations range from below detection limits to 36 parts per million.

Lead was detected at its highest concentration in the sediments of East Lake. A sample location at 5 to 6 feet in depth had a concentration of 5,519 parts per million. Lead concentrations tend to increase with depth to approximately 1.5 to 3.0 feet and then to decrease in deeper sediments.

Silver was detected with the greatest frequency in the sediments of South and East Lakes. There were fewer detections in the sediments of North Lake or its northern extension. The highest detected silver concentration was 293 parts per million, which was detected at a depth of 5.0 to 5.7 feet at a location in East Lake.

Mercury was detected with greatest frequency in sediments from the northern end of North Lake (Area 2). Mercury was not detected in the sediments of North Lake (Area 1) or East Lake. Concentrations of mercury were often highest in the intervals from 0.5 to 1.5 feet, or to 0.5 to 3.0 feet In South Lake, mercury concentrations tend to be less than 0.5 part per million. At one location in the northern end of North Lake, a mercury concentration of 10 parts per million was detected.

Selenium was detected in six sediment samples, two from the northern end of North Lake and four from South Lake. The concentrations range from less than 1.0 part per million to a high of 91 parts per million. South Lake had the highest detected concentration of selenium. The shallowest sediments of South Lake appear to be the most impacted, while in the northern end of North Lake, the highest concentrations of selenium were detected in sediments greater than 2.0 feet deep.

Baseline Risk Assessment

A baseline health risk assessment was conducted to assess the potential for adverse health effects associated with recreational exposure to chemicals present in the sediment in Capitol Lakes and with the ingestion of chemicals in fish obtained from Capitol Lakes. The baseline health risk assessment was conducted in accordance with the *Risk Evaluation/Corrective Action Program* (RECAP), Louisiana Department of Environmental Quality (LDEQ), 1998; *Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana,* Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife

and Fisheries, 1997; and Environmental Protection Agency (EPA) risk assessment guidelines. This health risk assessment was conducted for the LDEQ Inactive and Abandoned Sites Division and has been peer-reviewed by the Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology.

The chemicals of concern for recreational exposure to sediment include PCBs, polycyclic aromatic hydrocarbons (PAHs), pesticides, and metals. The chemicals of concern for the ingestion of fish include PCBs and pesticides. A reasonable maximum exposure scenario was evaluated for: 1) recreational receptors swimming or wading in Capitol Lakes (exposure pathways examined include incidental ingestion of chemicals in sediment and dermal contact with chemicals in the sediment); and 2) recreational receptors ingesting chemicals in edible fish obtained from Capitol Lakes. The species of fish evaluated include Carp, Bigmouth Buffalo, Green Sunfish, Bluegill, and Black and Yellow Bullhead.

The results of the risk characterization indicate that: 1) recreational exposure to chemicals present in sediments (dermal contact with sediments) in Area 2 of Capitol Lakes may be associated with potential noncarcinogenic health effects and potential cancer risks that exceed the unacceptable risk range; and 2) the ingestion of chemicals present in Carp, Bigmouth Buffalo, Black Bullhead and Yellow Bullhead obtained from Capitol Lakes may be associated with potential cancer risks that exceed the acceptable risk range.

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

INACTIVE & ABANDONED SITES DIVISION

WH JOB NO. 33828-003

PHASE I REMEDIAL INVESTIGATION REPORT FOR CAPITOL LAKES SITE EAST BATON ROUGE PARISH BATON ROUGE, LOUISIANA

NOVEMBER 1998

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ABBREVIATIONS & ACRONYMS

Ag	Silver
Al	Aluminum
As	Arsenic
Avery	John J. Avery & Associates, Inc.
Ba	Barium
Be	Beryllium
Cd	Cadmium
Co	Cobalt
Cr	Chromium
Cu	Copper
CY	Cubic Yards
EPA	U.S. Environmental Protection Agency
Fe	Iron
HASP	Health and Safety Plan
Hg	Mercury
HPLC	High Performance Liquid Chromatography
IASD	Inactive & Abandoned Sites Division – LDEQ
IES	Institute for Environmental Studies at LSU
Integrate	Integrate, Inc.
K	Potassium
LDEQ	Louisiana Department of Environmental Quality
LDHH	Louisiana Department of Health & Hospitals
LDNR	Louisiana Department of Natural Resources
LDOTD	Louisiana Department of Transportation & Development
LSU	Louisiana State University
Mg	Magnesium
Mg/Kg	Milligram per Kilogram (Part per Million)
Mg/L	Milligram per Liter (Part per Million)
Mn	Manganese
MS	Matrix Spike
MSD	Matrix Spike Duplicate
MSL	Mean Sea Level
Na	Sodium
Ni	Nickel
NPL	National Priorities List
O&G	Oil and Grease
OVM	Organic Vapor Meter
PAH	Polycyclic Aromatic Hydrocarbons
Pb	Lead
PCBs	Polychlorinated Biphenyls
PPB	Part per Billion
PPM	Part per Million
PRPs	Potentially Responsible Parties

QA/QC	Quality Assurance/Quality Control
RI	Remedial Investigation
Sb	Antimony
Se	Selenium
SI	Site Investigation
SVOCs	Semi-volatile Organic Compounds
Tl	Thallium
TOC	Total Organic Carbon
TSCA	Toxic Substance Control Act
µg/l	Microgram per Liter (Part per Billion)
µg/kg	Microgram per Kilograms (Part per Billion)
Va	Vanadium
WC	Woodward-Clyde International–Americas
WPCD	Water Pollution Control Division - LDEQ
Westinghouse	Westinghouse Electric Corporation
WH	Walk Haydel
Zn	Zinc

1.0 INTRODUCTION

1.0 INTRODUCTION

This *Phase I Remedial Investigation Report for the Capitol Lakes Site* has been prepared by Walk Haydel, a Dames & Moore Group Company, in conjunction with the Louisiana Department of Environmental Quality (LDEQ) – Inactive and Abandoned Sites Division (IASD) under LDEQ Contract No. 523177. The investigation has been performed, as appropriate, in accordance with the U.S. Environmental Protection Agency (EPA) *Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA* (OSWER Directive 9355.3-01, October 1988) in response to Act 1337 of the 1997 Louisiana Regular Legislative Session. The Act directs LDEQ to perform a remedial investigation to characterize the water, sediment depths and aquatic species and to identify and delineate contaminant concentrations in the various media and biota of the Capitol Lake system.

Remedial investigation (RI) activities commenced in late April 1997 for Phase I with scoping meetings between LDEQ and representatives of the Legislature, the Louisiana Department of Transportation and Development (LDOTD) and various environmental professionals that were contracted to assist the LDEQ. A variety of activities were conducted to support the RI. These included preparing a sampling and analysis plan, identifying data management procedures, and planning for health and safety needs. A *Remedial Investigation at Capitol Lakes Work Plan* (Work Plan) and a *Health and Safety Plan* (HASP) were prepared by the LDEQ and finalized in June 1997. Walk Haydel reviewed these LDEQ-prepared reports in support of the RI activities. Field activities were conducted in June and September 1997, and June 1998.

Walk Haydel subcontracted the surveying portions of the project to John J. Avery & Associates, Inc. (Avery). The geotechnical and analytical portions of the project were subcontracted by the LDEQ to Woodward-Clyde International-Americas (WC), and to American Analytical & Technical Services, Inc., respectively. Data validation was performed by Integrate, Inc. (Integrate), under contract to the LDEQ. The baseline risk assessment portion of the RI was subcontracted by the LDEQ to Dr. June L. Sutherlin.

The risk assessment was reviewed by Louisiana Department of Health and Hospitals (LDHH) personnel and is included in the RI report without modification.

1.1 Site Background

The Capitol Lakes Site is a three-lake system comprising approximately 65 acres adjacent to the State Capitol Building and Governor's Mansion in downtown Baton Rouge, Louisiana. Refer to Figure 1 in Appendix A. The lakes are referred to as North Lake, South Lake and East Lake. The lake system receives stormwater drainage from approximately a 4.5 square mile area of Baton Rouge, north and east of the state capitol building. The drainage area is comprised of industrial, commercial and residential land usage. Commercial and industrial land usage accounts for 28 percent of the drainage basin, residential usage accounts for 63 percent, and government and miscellaneous land usage accounts for 9 percent. U.S. Interstate Highway 110 was built through the drainage basin. An extensive underground stormwater drainage system delivers stormwater directly to the lake system. The lake system is a sump with no natural outfall.

The Capitol Lakes Site is known to be impacted with hazardous wastes, hazardous waste constituents, and/or hazardous substances. The first documentation of pollutant impacts was described in a 1972 study by the LDEQ Water Pollution Control Division (WPCD), when high concentration levels of oil and chlorinated pesticides were found in the lake sediments. Polychlorinated biphenyls (PCBs) were documented in lake waters, sediments and fish tissues in 1983, resulting in LDHH and the LDEQ jointly posting a fishing ban on Capitol Lake. The ban is still in effect. Numerous studies have been performed on the fish and sediments of the North and South Lakes since then. These studies are described in Section 2.1.2. of this report. No studies have been performed on East Lake.

The North and South Capitol Lakes were dredged in 1958. Approximately 400,000 cubic yards (CY) of sediments were removed. The water quality of the lakes was

considered significantly improved; there has been no dredging of the lakes since that time. Sedimentation deposition rates, however, are high, especially in South Lake (DeLaune, et. al., 1989), prompting the LDOTD to consider dredging the lakes as a potential solution to flooding of the adjacent U.S. Interstate Highway 110.

1.2 Project Objectives

The Phase I remedial investigation was conducted to provide information on the following two key issues:

I. What is the environmental condition of the lake system? And,

II. What is the public health risk that the lake system poses to the surrounding residents or anyone exposed to its sediments, or to anyone who eats fish caught from these lakes?

To provide information on these key issues, the following tasks were set as Phase I project objectives:

1) To determine the water depth and sediment thickness for North, South and East Capitol Lakes.

2) To determine the number and types of aquatic fish species present in North, South and East Capitol Lakes.

3) To identify and delineate contaminant concentrations present in the sediments and selected biota of North, South and East Capitol Lakes.

4) To determine the risk to public health and the environment from contaminants that may be present in the Capitol Lake System sediments and edible fish tissues if the lake system remains undisturbed.

5) To determine the risk to public health and the environment from contaminants that may be present in the Capitol Lake System sediments and edible fish tissues if the lake system remains undisturbed. To provide the necessary information to LDHH so that they and the LDEQ are able to review the health advisory for Capitol Lakes issued jointly in 1983 and to determine whether there is a need for future advisories.

1.3 Report Organization

This Remedial Investigation Report is organized as follows: Section 2.0 – Physical Characteristics of the Site, describes aspects of the site setting, including summaries of the known investigatory information on the Capitol Lakes System. Section 3.0 – Site Investigation, presents the methodology of how the various tasks were completed to address the RI tasks. Section 4.0 – Presentation and Discussion of Results, presents the findings of the current investigation. Section 5.0 – Baseline Risk Assessment, presents a summary of the sediment, surface water and fish tissue public health risk data. Section 6.0 – Summary, presents the summary of findings at the Capitol Lake Site.

2.0 PHYSICAL CHARACTERISTICS OF THE SITE

2.0 PHYSICAL CHARACTERISTICS OF THE SITE

2.1 Site Description

2.1.1 Location

The Capitol Lakes are located in downtown Baton Rouge near the State Capitol and the Governor's Mansion. The lakes are bounded on the north by Choctaw Drive, on the west by Riverside Mall North, on the south by Capitol Lake, and on the east by 11th Street and U.S. Interstate Highway 110. The approximate geographic coordinates are 30° 27'43" north latitude and 91° 11'02" west longitude.

The Capitol Lakes were formed in the late 1880s to early 1900s by the damming of Grassie Bayou. Originally called Grassie Bayou Lake, the North Lake was known as University Lake when the Louisiana State University (LSU) was located hereby. With the relocation of LSU and the construction of the new State Capitol Building, the current North Lake was renamed from University Lake to Capitol Lake. Today, the three lakes are all referred to as the Capitol Lakes, and the individual lakes are called North Lake, South Lake and East Lake.

The area and shape of the lakes have changed considerably since the early 1900s, with sections filled-in to facilitate building of the Governor's Mansion and the U.S. Interstate Highway. These lakes have no natural drainage. Water which flows into the lakes must be pumped out. A pumping station is located on the southwestern shore of North Lake. South Lake drains to North Lake through a channel at the southeast corner of North Lake. East Lake drains underground to South Lake; a weir structure is located in the southwest corner of East Lake. The water depths of the three lakes vary from less than one foot to greater than six feet.

2.1.2 Historical Overview

During the first half century that Capitol Lake existed, the lake received sediment-laden waters and uncontrolled discharges of stormwater runoff and untreated or poorly treated domestic and industrial wastewaters. The lake water quality was poor and flooding was a major problem along sections of Boyd Avenue (now called Spanishtown Avenue). In 1958, with the construction of U. S. Interstate Highway 110, a major dredging project was begun which saw the removal of approximately 400,000 cubic yards of "silt, weeds, junk and slime" from North Lake. While some 160,000 cubic yards of spoils were deposited into the Mississippi River, the remaining 240,000 cubic yards were deposited on property west of North Lake.

The first documentation of pollution problems of Capitol Lakes was a 1972 study by the LDEQ Water Pollution Control Division (WPCD), responding to citizen concerns at seeing oily sheens on the water surface. High concentrations of oils and chlorinated pesticides DDT, Dieldrin and Eldrin, were found in the lake sediments.

In May 1983, an oily discharge was reported leaking into the northern channel to North Lake originating from a Westinghouse Electric Corporation facility (Westinghouse). The oils were found to be contaminated with PCBs. Water samples, fish tissue samples and lake sediments were sampled over the following months. In August 1983, Capitol Lake was closed to fishing because the PCB concentrations in the edible portions of the fish were above acceptable levels. Further, the Louisiana Department of Natural Resources (LDNR) reported that the lake bottom was "heavily contaminated with oil and disturbance of the bottom produces an oil slick of varying size and thickness...DNR is investigating the source of the contamination...and has asked EPA for funds to clean the lake" (Howes, 1983).

Various activities were conducted throughout 1983, including a Toxic Substance Control Act (TSCA) inspection by EPA Region VI at the Westinghouse facility. It was during this inspection that oil seepage from the canal bank adjacent to Westinghouse was

observed which led to a compliance agreement with Westinghouse to identify the extent of contamination and clean up the Westinghouse facility site. The first hazardous waste site identification of Capitol Lakes was made December 30, 1983.

Additional studies have been conducted on the Capitol Lakes since 1983. These are summarized below from an Ecology & Environment, Inc. *Memorandum – Site Inspection Work Plan for Capitol Lake,* dated April 16, 1991 to EPA Region VI:

In April 1984, LDNR reported that no threat to the environment or public health existed at that time, as long as the public continued to cooperate by refraining from consuming fish from Capitol Lake. LDNR also stated that information to date indicated that there was a potential for contaminating other adjacent areas or the groundwater. February 1, 1985, the LDEQ evaluated cleanup alternatives.

On May 1, 1985, LSU scientists stated to the LDEQ that their work on sediment deposition age dating in the lake indicated that lead, selenium, antimony and arsenic levels appeared to represent very high levels of contamination and that these needed to be addressed in remediation efforts. Between 1983 and January 1986, LDEQ issued six compliance orders to facilities operating in the lake's drainage basin as investigations of possible sources of contamination continued.

In March 1988, the Capitol Lakes site was referred to the LDEQ Inactive and Abandoned Sites Division (IASD). The IASD undertook activities to develop remedial approaches, investigated sources of remedial funding, determined land owner identification, and continued to pursue historical information regarding discharge activities.

The Institute for Environmental Studies (IES) at LSU was contracted by the LDEQ-IASD to conduct a historical investigation of activities which may have contributed to the release of organic and inorganic toxic materials into Capitol Lake. The identification of potentially responsible parties (PRPs) was based on file information at LDEQ, facility

potential for a release(s), aerial photographs and a windshield survey of the drainage basin.

EPA's Superfund Site Assessment Section reviewed the Capitol Lake Site Investigation (SI) report prepared by LDEQ's WPCD and requested additional information on September 19, 1988. The SI report identified contaminated fish, water and sediments as human health hazards; contamination of the food chain, surface water and soil; damage to flora/fauna and property due to impacted biota; and contamination of some of the lakes' banks.

Prior to 1989, state regulatory actions had consisted to date of compliance orders issued to six companies and a consent agreement with one company. On September 28, 1989, the IASD was tasked with investigating issues related to the remediation of Capitol Lake.

Throughout 1990, the U.S. EPA was involved in determining whether the Capitol Lakes warranted listing on the National Priorities List (NPL). A Listing Site Inspection (LSI) Work Plan was performed by an EPA Field Investigation Team in 1990. The EPA's Emergency Response Branch (ERB) was asked to determine whether the site posed an imminent or substantial endangerment to human health such that a removal action was necessary. The ERB memorandum stated that the primary route of human exposure was via fish consumption and direct contact; potable water from nearby wells was not impacted. The LDEQ and LDHH had already posted the lake to prevent fishing and body contact sports. The site was not listed on the NPL. Samples were collected and analyzed in 1991 to support the LSI Work Plan. The follow-up report however was not issued according to a November 1994 EPA document.

Additional fish tissue sampling was conducted in 1989 and 1994 by the LDEQ Office of Water Resources. Concentrations in all target species' edible tissues showed a slight decrease in PCB levels in 1994 from 1989 levels. Average total concentrations of PCBs in the edible portions of Green Sunfish in 1994 were 225 parts per billion (ppb); 1989

average total concentrations were 297 ppb. In 1988, the average total PCBs was 2,396 ppb. Analysis of the upper six inches of sediment showed a lack of measurable quantities of PCBs, which has been attributed to continued sedimentation and thus removal of the source of the PCBs. The 1994 studies did not include analyses for other constituents.

2.1.3 Physiography

The Capitol Lakes site is located in the Gulf Coastal Plain Province on the edge of the Mississippi River flood plain. The site was a topographically low-lying area which drained to the west to the Mississippi River prior to the damming of the original water body in the late 1800s. The area now has no natural discharge and requires pumping to control freeboard.

2.1.4 Topography

The topography of the Capitol Lakes site is shown on the U.S.G.S. quadrangle map presented as Figure 1 in Appendix A. The area northwards of North Lake and eastwards of South Lake appear as natural drainage lows to the lake system. The elevation of the land adjacent to North Lake rises to approximately 55 feet above mean sea level (MSL). The drainage area of the lake is approximately 4.5 square miles and extends north to a line parallel to Winburne Avenue, east to a line parallel to 30th Street, south to a line parallel to Florida Boulevard, and west to a line parallel to Riverside Mall. Drainage reaches North Lake through two unnamed tributaries: the southern tributary, which carries the greater volume of water, drains runoff surrounding U.S. I-110 and residential areas east of U.S. I-110; the northern tributary contributes runoff from the industrial and commercial areas north of North Lake. Flow into North Lake is channeled through underground stormwater lines which extend within a few hundred feet of the lake before becoming an open canal. Runoff into South Lake collects in an open channel approximately ¾ of a mile east of South Lake.

East Lake receives runoff from the immediate surrounding residential area and from the commercial warehouse district along Sorrel Street. East Lake sits approximately 7 feet higher topographically than North and South Lake.

2.2 Geologic and Hydrogeologic Setting

2.2.1 Geology

The Mississippi River, modern and ancestral, has been the dominant agent in the deposition of sediments in the area of the Capitol Lakes. The shallow sediments in the area are characterized by Holocene- and Pleistocene-age deposits of fluvial and marine origin that grade from clay and silt within the upper 50 to 100 feet of the land surface to sand and coarser grained deposits at depths of 100 to 200 feet. Underlying the Holocene sediments are over 500 feet of Pleistocene Prairie Formation sediments, composed of light gray to light brown clay, silt, sand and gravel.

The lake bottom is reported to be composed of Holocene natural levee deposits of the Mississippi River. These sediments are gray and brown silts, silty clays and very fine grained sands which extend to a depth of approximately 60 feet below land surface. Groundwater flow in this section of the sedimentary column is reported to be influenced by the Mississippi River's stage.

Underlying approximately 500 feet of Pleistocene-age sediments are 1600 feet of Pliocene sediments. Miocene sediments extend below the Pliocene section.

2.2.2 Hydrogeology

Groundwater in the vicinity of Capitol Lakes was reported in the October 1988 SI report to occur at approximately 25 feet below land surface and to flow towards the southwest. The sedimentary section is described as having a high clay content and a low permeability (0.1 to 0.001 cm/sec.).

Fresh water aquifers in this area are the "200-foot" and "400-foot" sands. Recovery rates in the "200-foot" sand are low; the aquifer is only used as a potable water source outside of Baton Rouge. The "400-foot" sand is used locally by industry as a source of water; it has a higher yield than the "200-foot" sand.

The Pliocene section is found between 575 feet and 2,200 feet below land surface. This section contains the "600-" and "800-foot" aquifers, which are used for industrial purposes. The "2,000-foot" and "2,800-foot" aquifers are the principal sources of drinking water for the City of Baton Rouge. Within the underlying Miocene-age section is the base of fresh water at a depth of 3,200 feet below land surface.

A review of water supply wells in the vicinity of Capitol Lakes in 1994 for the EPA SI Phase II report stated that there were three nearby public supply water wells. These wells produce from the "2,000-foot" and "2,400-foot" sands. There is no indication that any releases have been observed in any of the municipal supply wells. Baton Rouge obtains drinking water from 52 public supply wells. Two city wells are located 150 feet west of North Lake. There is a U.S.G.S. observation well 0.25 mile southeast of the lake.

3.0 SITE INVESTIGATION

3.0 SITE INVESTIGATION

3.1 Overview

This investigation was conducted to provide information to LDEQ, LDOTD, LDHH, the Louisiana State Legislature, and the general public regarding the present conditions and risks to human health and the environment at the Capitol Lakes Site. To that end, the RI consists of the following four components:

1) A hydrographic survey of the Capitol Lakes was performed that describes the lake system in terms of water bottom contours;

2) A survey was conducted to determine the number and types of aquatic species present in the Capitol Lakes; fish tissue analyses were performed on the edible tissue portions of the fish populations in the lake system to determine contaminant types and concentrations and quantify public health risk;

3) Analyses of surface water samples collected from North, South and East Lakes were performed to determine contaminant type and concentrations to quantify public health risk from the water in the lake system; and

4) Coring of lake sediments and analyses of lake sediment samples, collected from North, South and East Capitol Lakes, was performed to characterize the sediments. The chemical analyses were performed to characterize contaminant types and concentrations. These activities were performed to facilitate quantification of public health risk for the lake system.

The lake system is divided into four areas for investigation and reporting purposes. North Lake is composed of two areas – Area 1 (North Lake) and Area 2 (the northernmost portion of North Lake). Area 3 is South Lake, and Area 4 is East Lake. See Figure 2 in Appendix A.

3.2 Hydrographic Survey

The hydrographic survey of the lakes was performed to provide information on the water bottom contours, and the current lake water lines and associated water elevations. This information may be used in the future to determine the stormwater storage capacity of the lake system and whether selective dredging or massive dredging of the lake system could alleviate possible flooding problems in the area. Dredging may be considered to enhance the stormwater holding capacity of the lake system. The hydrographic survey was performed by John J. Avery & Associates, Inc. of New Orleans. The survey field work was performed June 27 through 30, 1997. The hydrographic survey map of the Capitol Lakes is presented in Appendix G. Note, coring locations were later added to the map after completion of the Lake Sediment Sampling Program.

The hydrographic survey of the Capitol Lakes system shows that the water levels in the lakes vary from less than two feet to greater than six feet in depth. North Lake is the largest lake, East Lake is the smallest lake. East Lake is the shallowest of the three lakes with an average depth of approximately two feet. The depth of South Lake varies from 3 to 4 feet deep. South Lake is deepest near the inflow pipe on the southeast edge of the lake and is shallowest in the north-northeast corner. North Lake averages approximately 6.5 feet deep over the southern portion of the lake and shoals to less than 4 feet towards the northern tributary. At its northern end, North Lake becomes swampy such that significant portions of the lake bottom are above the normal lake water level. Water depths at the most northern portion of North Lake are less than 0.5 feet. East Lake is topographically higher than North and South Lakes by approximately seven feet.

3.3 Fish Sampling Survey

On June 10, 1997, the LDEQ Water Pollution Control Division (WPCD) staff conducted the following activities at the Capitol Lakes system: a species composition assessment

was performed; and fish tissue sampling was conducted. Additional fish tissue sampling was also conducted again on September 22, 1997. These activities are described below.

The fish tissue sampling and species composition assessment was conducted by WPCD staff in North and South Lakes. See photographs in Appendix C. The shallow water depth in East Lake restricted entry and operation of the launch boat. Therefore, neither an aquatic survey, nor fish tissue samples, were collected from East Lake.

3.3.1 Fish Tissue Sampling

For fish tissue sampling, target species fish, collected during electro-shock fishing, were collected by scoop net and placed in a live well before being transferred by hand to an ice-bathed hexane-rinsed stainless steel bucket. All specimens were taken to the Capitol Regional Office Laboratory of the Office of Water Resources of the LDEQ, and target species (edible size only) were weighed and measured for total length. Each specimen was assigned a sample number, weighed (in pounds) and measured for total length (in millimeters) and recorded. Species collected included Green Sunfish (*Lepomis cyanellus*), Orange Spotted Sunfish (*Lepomis humilis*), Bluegill (*Lepomis macrochirus*), Longear Sunfish (*Lepomis megalotis*), Yellow Bullhead (*Ictalurus natails*), Black Bullhead (*Ictalurus melas*) Bigmouth Buffalo (*Ictiobus cyprinellus*), and Carp (*Cyprinus carpio*).

Large specimens were filleted while smaller species were delivered to the laboratory as "cleaned body", i.e., head removed and body cavity emptied. In samples of *Ictaluridae*, the catfishes, the skin was removed. For samples in the *Centrarchidae* family, the Sunfish and Bluegills, the scales were removed but the skin remained part of the sample. Carp and Bigmouth Buffalo were analyzed as individual samples. The Carp and Bigmouth Buffalo were sampled by carving a section from the left mid-dorsal region of the fish. Edible portions rendered and composites were place in hexane-rinsed aluminum foil. Each sample was placed in a labeled sealed plastic bag and frozen. A

Chain-of-Custody form was completed and the samples were relinquished to the designated laboratory's courier for transport to the laboratory. American Analytical & Technical Services, Inc. of Baton Rouge analyzed the samples for pesticides and PCBs. Integrate validated the data packages. Mercury analyses of selected samples were performed by the LDEQ's Capitol Regional Office laboratory.

3.3.2 Species Composition Assessment

The species composition assessment was also performed in North and South Lakes by electro-shock fishing. The initial electro-shock fishing included a five minute (300 seconds) per lake sample collection event. The composition assessment was conducted to characterize the finfish community in the Capitol Lakes system. The electro-shocking began in the southwest corner of South Lake and proceeded along the south shoreline of South Lake. North Lake was sampled in a similar manner, along the south shoreline of North Lake. All specimens collected during each 300 second electro-shocking event were counted and measured for total length and recorded. The target species of fish, i.e., those species which are considered edible by the general population, collected during the species composition assessment, were retained and also included in the fish tissue analysis. The target species for Capitol Lakes are Carp, Bigmouth Buffalo, Green Sunfish, Bluegill, and Yellow and Black Bullhead.

3.4 Surface Water Sampling Program

Four surface water samples were collected on February 4, 1998, by Office of Water Resource staff. Two samples were collected from North Lake (plus one duplicate sample) and one sample each was collected from South and East Lakes. The surface water samples are composited samples of three aliquots each from three spacially discrete locations in each lake. Six locations were sampled for aliquots in North Lake. The water samples were collected by lowering a clean stainless steel water column sampler to the lake bottom. A polyethylene container was used to collect the water samples for inorganic metal analyses.

Surface water samples were analyzed for PCBs (Method 8080), semi-volatile organic compounds (SVOCs - Method 8270), pesticides (Method 8080), and metals (Method 6010). The samples collected for metals analyses were unfiltered samples that were preserved in the field with nitric acid. Turbidity measurements of the water samples were not made. American Analytical & Testing Services, Inc. analyzed the water samples for the specified constituents. Integrate validated the data packages. See Appendix E for Data Validation Summary Tables.

3.5 Lake Sediment Sampling Program

Sediment coring activities were performed from May 26-28, 1998. Woodward-Clyde (WC) was contracted by the LDEQ to perform the sediment coring activities. Walk Haydel provided oversight of the coring and sample collecting activities and developed boring logs of the core sediments. See Appendix D. A work zone was established along the eastern shore of North Lake near the Governor's Mansion for processing and logging of sediment cores, collection of analytical samples, and equipment decontamination. See photographs of site work in Appendix C.

IASD personnel selected the lake sediment coring locations prior to the commencement of field coring activities. The coring locations were selected through the development of a grid system, which divided each of the three lakes into approximately equal-sized areas. The grid areas were numbered, a random number table was developed and numbers drawn that reflected the numbered areas of the lakes. A total of 20 locations within the selected areas were indicated for sediment coring. Eleven locations were selected for coring in North Lake, five locations in South Lake, and four locations in East Lake.

WC utilized a vibracore sampling technique for the collection of the sediments from the lake bottoms. At each coring location, the water depth was measured from the top of the water surface to the top of the sediment prior to coring. A 3-inch diameter, thin-

walled aluminum pipe, marked in 1-foot intervals, was lowered into the sediment. A gas-powered vibracore unit was then attached to the aluminum pipe and vibrated into the underlying substrate. At all locations, the pipe was advanced until significant resistance was encountered. (In the northern end of North Lake, at locations C-9, C-10 and C-11, the aluminum pipe was hand driven into the sediments.) When the pipe reached maximum penetrated depth, the total depth was recorded and the pipe containing the sediment core was retrieved. The location of the core was staked, flagged, and marked for surveying at a later date. Cores were labeled C-01 through C-20. See Figure 2 in Appendix A, and the survey map in Appendix G.

The pipe with the core was brought to the work zone where the pipe was split with electric shears to expose the sediment core. The core was visually examined by Walk Haydel; a field boring log was developed describing the geologic properties of the core. An organic vapor meter (OVM) was utilized to screen for organic vapors by passing the OVM over the sediment core. (A photograph of this activity is included in Appendix C.) Field OVM measurements did not detect organic vapors above the sediment core or in the breathing zone.

After the core was described, LDEQ personnel identified sample intervals for laboratory analytical testing. Generally, the first six inches of the core was sampled, with samples then taken every foot to 3.5 feet. If a core was longer than 3.5 feet in length, the sediments from 3.5 feet to total depth were often composited. Occasionally, due to core lithologies, the sampling intervals varied. Sediment samples were placed in a large stainless steel bowl for compositing. The sediments were then transferred to laboratory supplied containers. All samples were submitted for analysis for pesticides, PCBs, metals, and semi-volatile organic compounds (SVOCs). Based on the discretion of LDEQ personnel, some sediments were also collected for the conventional parameters of oil and grease (O&G), total organic carbon (TOC), and percent moisture. (Note: all sediment samples were analyzed for percent moisture to allow calculation of dry-weight basis laboratory results if required in the future.)

All samples were assigned a unique identification number which included the LDEQ project number (A15), the date (052698) and a sample number (1 through 87). For example, A150526985 designates the fifth sample collected for this project. All quality assurance/quality control (QA/QC) samples were given separate sample identification numbers.

All aluminum piping was steam cleaned prior to arrival at the site. All sampling equipment (stainless steel spoons, bowls, etc.) was decontaminated prior to use. Decontamination procedures included an initial wash with Alconox soap and a rinse with deionized water. The sampling tools were then allowed to air dry.

Rinsate blanks were collected by pouring high performance liquid chromatography grade (HPLC) water over the sampling tools and then pouring the water into the laboratory supplied containers. The HPLC water was procured from an LSU supplier. After approximately 20 samples, a rinsate blank was collected. Three rinsate samples were collected. Two field blanks were collected for this project. Field blanks were collected by pouring HPLC grade water directly into laboratory supplied containers.

In order to collect enough sediment for QA/QC samples, i.e., duplicates, matrix spike (MS), and matrix spike duplicates (MSD), two cores often had to be collected. These were advanced next to each other. The cores were opened and compared to each other. For descriptive purposes, the cores were logged as one core. One duplicate, MS and MSD, was collected for approximately every 20 soil samples.

All samples were recorded on Chain-of-Custody Records. The samples were delivered by LDEQ personnel to American Analytical Testing & Services personnel. Copies of the Chain-of-Custodies are included in the data validation reports. See Appendix E for Data Validation Summary Tables.

3.6 Lake Sediment Location Survey

Coring locations were surveyed by Avery with Walk Haydel oversight on May 29, 1998, the day following completion of coring activities. Walk Haydel identified the coring locations and provided identification numbers for the core locations to Avery personnel. The sediment coring locations were plotted on the Capitol Lakes Site hydrographic survey map that had been previously prepared by Avery. The up-dated survey map is provided in Appendix G.

4.0 PRESENTATION AND DISCUSSION OF RESULTS

4.0 PRESENTATION AND DISCUSSION OF RESULTS

4.1 Overview

The results of the site investigation activities and the constituents identified in the surface waters, lake sediments and edible fish tissues at the Capitol Lakes Site are discussed below. The data on which these conclusions are based were validated by Integrate. Summary tables of validated data were provided by Integrate and are included in Appendix B as Table 7, Table 8, Tables 9.1 – 9.4, Tables 10.1 – 10.4 and Tables 11.1 – 11.4, for conventional parameters, PCBs/Pesticides, SVOCs, and metals analyses, respectively. Summary tables of validated analytical results on fish tissues, surface water, and lake sediments are presented in Appendix E. The complete data validation reports and actual laboratory analytical data reports are not included in this report document. These reports may be viewed at the LDEQ offices in Baton Rouge.

4.2 Fish Species Composition Assessment and Fish Tissue Sampling Results

A species composition assessment was performed for North and South Lakes. The results are presented on Table 1 in Appendix B. Orange Spotted Sunfish represent approximately 59 percent of the fish population in North and South Lakes. The Green Sunfish is the next most prominent species at approximately 16 percent, followed by the Longear Sunfish (12 percent), the Gizzard Shad (9 percent), Sailfin Molly (2 percent), Bluegill (2 percent), and Golden Shiner and Yellow Bullhead at approximately 0.5 percent each. The family *Centrachidae* represents approximately 88 percent of the fish population in the lakes. This family includes the Orange Spotted Sunfish, the Green Sunfish, the Longear Sunfish, and the Bluegill.

The target species for Capitol Lakes are Carp, Bigmouth Buffalo, Green Sunfish, Bluegill, and Yellow and Black Bullhead. Target species are the species fished for edible purposes in this lake system. Target species represent approximately 18 percent of the fish in North and South Lakes. No species composition assessment was

conducted in East Lake because the shallowness of the lake, at less than two feet, prevented launching and operating the survey boat.

Fish tissue samples from target species fish were analyzed for PCBs and pesticides by EPA SW-846 Method 8080 and mercury by Method 6010. Table 2 in Appendix B describes the fish tissue samples. The larger fish specimens were fillets and the smaller species were "cleaned body" samples. For *Ictaluridae*, the catfish, the skin was removed. For samples of *Centrarchidae*, the Sunfish and Bluegills, the scales were removed while the skin remained on the sample. Carp and Bigmouth Buffalo specimens were analyzed individually. The results of the analyses are presented on Tables 4 and 5 in Appendix B.

Fish tissue samples from target species exhibited detectable levels of PCBs in 80 percent of the specimens. The PCB compounds reported present in fish tissue samples are Arochlor-1248 and -1260. Detectable total PCB concentrations range from 87 µg/kg to 680 µg/kg, with the highest total PCB levels exhibited in the bottom feeders, i.e., catfish, carp, and buffalo fish. Nine out of ten specimens considered bottom feeders exhibited detectable levels of PCBs ranging from 250 µg/kg to 680 µg/kg. The average total PCB concentration is 277 µg/kg, or approximately 0.3 part per million.

Approximately 70 percent of the fish tissue samples from target species exhibited detectable levels of one or more of 21 possible pesticide compounds. The most frequently detected pesticides were 4,4'-DDE, 4,4'-DDD, and 4,4'-DDT. These compounds were detected in half of all the target species collected. Again, the bottom feeders exhibited the highest number of pesticide compounds per specimen. A single carp specimen and the buffalo fish exhibited detectable concentrations of 14 and 12 of the possible pesticide compounds, respectively. Of the ten specimens considered bottom feeders, nine exhibited five or more of the possible pesticide compounds analyzed.

Six fish tissue specimens were submitted for mercury analysis. All of the fish tissue samples had mercury concentrations detected at less than 0.2 part per million.

4.3 Surface Water Sampling Results

Four surface water composite samples were collected for analysis. Two samples were collected in North Lake, one sample was collected in South Lake and one sample was collected in East Lake. The water samples were analyzed for semi-volatile organic compounds (SVOCs), pesticides/PCBs, and total metals, including the heavy metals. Analytical results are presented on Table 6 in Appendix B.

Results indicate that no SVOCs were detected in lake surface waters. Similarly, no pesticides or PCBs were detected in surface water samples from any lake. Metals were detected in surface water samples at the concentration limits shown on Table 6. No antimony, beryllium, nickel, selenium, silver or thallium were detected in any surface water sample. The following metals were only detected in one sample: cadmium, cobalt, mercury, potassium and zinc. These metals were all present in the surface water of East Lake. Further, East Lake had the highest total metals concentrations of any lakes' waters.

4.4 Lake Sediment Sampling Results

4.4.1 Sediment Profile

In North Lake, cores C-01 through C-11 were advanced. See Figure 2 in Appendix A. Cores C-01 through C-06 were advanced in the southern end of the lake (Area 1), where typically, there was approximately six feet of water with approximately two to three feet of extremely soft muck encountered on the lake bottom. The muck consisted of undifferentiated lean clays and silts with significant amounts of decomposed organic matter. The muck was underlain by a soft clay with moderate organic content. Five cores were advanced in the northern end of North Lake (called Area 2). Cores C-07

and C-08 were advanced in three to four feet of water. One to two feet of muck was detected at these locations. The muck was underlain by approximately one foot of organic clay, which was then underlain by a soft clay with some organics. The most northerly core locations, C-09 through C-11, were collected in water of approximately 0.5 feet in depth. These coring locations typically contained some sandy gravel or gravely sand underlain by very little to no muck.

Five cores, C-12 through C-16, were advanced in South Lake. South Lake is designated as Area 3. These cores contained approximately one-half foot of muck or less. The muck was underlain by approximately 1.5 to 3.5 feet of organic-rich clay. Beneath the organic-rich clay, a stiffer silty clay was encountered. Water depths in South Lake were typically three feet.

Cores C-17 through C-20 were advanced in East Lake (Area 4). The water depth in East Lake is approximately one foot or less. The sediment cores typically contained two to three feet of muck. In the two southern core locations, a very soft clay with a low to moderate organic content was present beneath the muck; at the two northern core locations, approximately three to four feet of organic-rich clay was present underneath the muck.

A more complete description of the lakes' sediments cored during this investigation are provided in the boring logs that are included in Appendix D. A map of total penetrated sediment thickness is presented in Figure 3 in Appendix A. Figure 4 is a map of the lake sediments that are characterized as dark green or black muck and dark-colored organic-rich clays. The base of the mapped sediment interval of these mucks/organic-rich clays is chosen at the break with the underlying green clay or green silty clay. This interval is best defined in cores C-01 through C-06 in North Lake and in cores C-12 through C-16 in South Lake. The northern end of North Lake (Area 2) contains a distinctive muck interval in C-08 and C-09. The cores C-10 and C-11, however, contains several feet of soft green clay underlying thinner muck/organic-rich clays. Sediments described as a green silty clays were not encountered in the southern coring

locations in East Lake. Sediment thickness includes the sediments from the water-sediment interface to a sedimentary interval characterized as green clay to green silty clay. The sediments thus mapped in Figure 4 are described to be green muck, black organic muck, and dark gray to dark green organic-rich muck. No attempt is being made to correlate these sediments/interval with age or depositional time frames. Table 3 in Appendix B presents a correlation of sediment sample identification with coring location and depth below lake bed.

4.4.2 Conventional Parameters Analytical Results

For this project, the conventional parameters are total organic carbon (TOC), oil and grease (O&G) and percent moisture. These analyses were performed on 20 sediment samples from all four areas of the lakes. All sediment depth intervals were sampled. See Table 7 in Appendix B.

TOC values ranged from 2,077 to 38,860 mg/kg. Values of TOC were generally observed to be highest in the shallowest lake sediments, i.e., 0-0.5 feet or 0.5-1.0 feet, that are described as dark green to green muck or black organic-rich muck. TOC values generally decrease with depth.

O&G values range from 130 to 5,530 mg/kg and are highest in shallowest sediment samples. East Lake (Area 4) appears to have the least amounts of O&G in its sediments of all the lake areas, while South Lake (Area 3) had the highest detected O&G concentration levels.

Percent moisture analyses of lake sediments indicated that values ranged from a high of 70 percent to a low of 33 percent for the samples selected for analyses of conventional parameters. Moisture content was greatest in the surface sediments described as very soft muck and was observed to generally decrease with increasing depth to approximately 40 percent in the soft clays.

4.4.3 PCB Analytical Results

Table 8 in Appendix B presents a summary of sediment analytical results for PCBs. Tables 9.1 – 9.4 present specific sample and depth results on PCBs for Areas 1 through 4, including pesticide analytical data which is discussed in detail in Section 4.4.4. (Note that only detected compounds are shown.)

As shown on Table 8, East Lake sediments do not have detectable PCB concentrations for any arochlors. Arochlors-1242, -1248, and -1260 were detected in North and South Lakes, with the northern end of North Lake, Area 2, having the highest detected concentrations of Arochlor-1242 and Arochlor-1260. Concentrations generally were observed to increase with depth in all lakes.

Examining Tables 9.1 – 9.4 shows that PCB concentrations were highest in North Lake, Area 1, at C-04 in the interval 1.5 to 2.5 feet. Area 2, the northern end of North Lake, the highest PCB concentrations were detected in sediments above the 2.5 feet interval of C-09, C-10 and C-11. Generally, PCBs are confined to depths above 1.5 feet in the southern end of Area 2 and above 2.5 feet depths in the middle and northern portions of the area. South Lake generally had PCB concentrations comparable to North Lake for Arochlor-1260. For Arochlor-1242, South Lake sediments had higher concentrations.

4.4.4 Pesticide Analytical Results

Table 9 in Appendix B presents a summary of pesticide data by area. Tables 9.1 – 9.4 in Appendix B present the analytical data by sample location and depth. (Note that only detected compounds are shown.) As shown on Table 9, the range of concentration levels for the various pesticides are observed to be highest in the sediments of East Lake. In particular, 4-4'-DDD and 4-4'- DDE are present at concentrations as high as 167,720 and 1,324 µg/kg, respectively. Similarly, Dieldrin, Endrin and Aldrin are present at their highest observed concentrations in the sediments of East Lake. The sediment intervals most impacted are generally observed to be at depths of 0.5 feet or

greater and in many instances at depths greater than 1.5 feet. Location C-20 is significantly impacted at the interval 2 to 4 feet below the sediment-water interface.

Within North and South Lakes, the concentrations of pesticides are generally comparable; one pesticide may be slightly higher in one area, while another pesticide will be slightly higher in a different area. Generally, East Lake, Area 4, has the highest concentration levels of all pesticides detected.

4.4.5 Semi-Volatile Analytical Results

Semi-volatile organic compounds (SVOCs) were analyzed for in lake sediments. The range of concentrations for 13 of the most commonly identified compounds are presented in summary form in Table 10 in Appendix B. Tables 10.1 – 10.4 present the SVOC analytical data results by sample location and depth for Areas 1 through 4. (Note only detected compounds are shown.)

Approximately 20 SVOCs were routinely detected at varying concentrations in lake sediment samples, although several sample intervals had detections of significantly more than 20 SVOCs. (See specifically the analytical results for A1505279862 and A1505279863 (location C-16 in South Lake) and samples A1505289868 and A1505289875 (locations C-17 and C-18, respectively, in East Lake)). The most often detected SVOCs were the polycyclic aromatic hydrocarbons, specifically anthracene; benzo(a) anthracene, benzo(a)pyrene and other benzo-compounds; chrysene, fluoranthene, fluorene, naphthalene, phenathrene and pyrene.

Generally, the concentrations for the various detected SVOCs were observed to be relatively comparable across the three lakes, although North Lake (Area 1) tended to have an upper range that was lower than the highest values detected in South or East Lake. The northern end of North Lake, Area 2, had the highest concentration ranges for the majority of the compounds detected. The concentrations of SVOCs in all three lakes were generally highest in the shallowest sediments and then decreased with

depth, with surface sediment concentrations often two to four times higher than concentrations detected at depth. This observation does not hold for Area 2, the northern end of North Lake. In the northern end of North Lake, the concentrations in the surface sediments are sometimes an order of magnitude higher than those in the deeper intervals. Benzo(a)pyrene was detected in Area 2 sediments as high as 14,053 µg/kg, with chrysene detected at 37,882 µg/kg, fluoranthene and phenanthrene both detected as high as 73,320 µg/kg, and pyrene detected at 61,100 µg/kg. These high concentrations were detected at coring location C-09, the middle of the northern North Lake area.

4.4.6 Metals Analytical Results

Table 11 in Appendix B presents a summary of the concentration ranges of metals analyzed for in the lake sediments. Tables 11.1 – 11.4 present the analytical data results by sample and depth for Areas 1 through 4.

Twenty-three metals were analyzed for, including heavy metals and those metals that are common metals typically present in sediments and rocks, i.e., aluminum, calcium, iron, sodium, etc. Of particular interest, however, are the heavy metals— antimony, arsenic, cadmium, lead, silver, mercury, and selenium. These metals have been shown in previous studies of the lake system (refer to Section 2.1.2) to be elevated and to potentially require remediation.

The following paragraphs summarize specific metals results.

Antimony: Antimony is shown on Table 11 to range from below detection limits to 350 mg/kg, although this value is significantly higher than any other value. Typical high-end values are in the 25-98 mg/kg range. The lower end of the ranges is comparable for the four lake areas, while the upper range is lowest in South Lake at 24 mg/kg and higher in the northern end of North Lake at 71 mg/kg. The highest detected concentrations of

antimony, 350 mg/kg, was detected in East Lake at C-20 at 3.0 to 4.0 feet. Generally, antimony concentrations increase with depth.

Arsenic: This metal is shown on Table 11 to range from 3.2 to a high of 86 mg/kg. The lower end of the ranges is comparable for the four lake areas, while the upper ranges are highest in the northern end of North Lake and in East Lake. Generally, the higher concentrations are found at depth, not in the surface or near surface samples. Surface sediment concentrations are generally in the lower end of the range, except for one location in the northern end of North Lake at C-07 where a concentration of 30 mg/kg was detected. The highest detected concentration of arsenic, 86 mg/kg, was detected at C-09 at 2.0-2.5 feet

Cadmium: Cadmium is shown on Table 11 to range from below detection limits to 36 mg/kg in Capitol Lake sediments. The concentrations are relatively constant in the lower ranges of the four lake areas, but are highest in the northern end of North Lake and in East Lake. East Lake had the highest cadmium concentration level, 36 mg/kg, in C-20 at 3.0 to 4.0 feet

Lead: Low range lead concentrations are shown on Table 11 to vary from 11 mg/kg in sediments of the northern end of North Lake to the 50-100 mg/kg range in the other lake areas. The highest concentration detected for lead was 5,519 mg/kg, which was detected in East Lake at C-20 at 5.0 to 5.7 feet. Lead concentrations tend to increase with depth to approximately 1.5 feet (occasionally to 3.0 feet) and then to decrease in concentration.

Silver: Silver was detected with the greatest frequency in sediments of South and East Lakes. There were the fewest detects of silver in the sediments of North Lake, Areas 1 and 2. Table 11 shows the range of silver detects. Tables 11.1 - 11.4 show the correlation of metals concentrations with location and depth.

Silver is present in the highest concentration range in East Lake where it is present at each sampling location. Concentrations of silver in the shallowest sampling intervals tended to be lower than in the deeper sampling intervals. However, the deepest sampled intervals tended to exhibit lower silver concentrations, except at C-20 where 293 mg/kg was detected in the interval 5.0 to 5.7 feet.

Mercury: Mercury concentrations are shown on Table 11 in Appendix B. Mercury was not detected in the sediments of East Lake. Mercury was detected with the greatest frequency in the sediments of the North Lake, Areas 1 and 2. In South Lake, mercury concentrations generally tend to be less than 0.5 mg/kg. In the northern end of North Lake, three sample locations/depths had mercury concentrations greater than 1.0 mg/kg, and one location in the northern end of North Lake (C10) had a concentration of 10 mg/kg in sediments from 0.5 to 1.5 feet. Concentrations tend to increase with depth and are often highest in the interval 0.5 to 1.5 feet In South Lake, mercury was typically detected in the deeper sediment samples.

Selenium: There were six detectable concentrations of selenium in lake sediments. Two were recorded in sediments from the northern end of North Lake and four were detected in sediments in South Lake. Selenium was not detected in the sediments of North Lake (Area 1) or East Lake. Table 11 presents the range of concentrations detected for selenium. In South Lake, the values range from less than 1.0 mg/kg to a high of 91 mg/kg. In Area 2, selenium concentrations were 0.53 and 0.75 mg/kg. The selenium was detected in the shallow sediments at locations C-12 and C-14 in South Lake and in sediments equal to or greater in depth than 2.0 feet in the northern end of North Lake at C-09.

5.0 CAPITOL LAKES HEALTH RISK ASSESSMENT

5.0 CAPITOL LAKES HEALTH RISK ASSESSMENT

A baseline health risk assessment was conducted to assess the potential for adverse health effects associated with exposure to chemicals present in the Lake system during recreational use of the Lakes. The baseline health risk assessment was conducted in accordance with the *LDEQ Risk Evaluation/Corrective Action Program* (RECAP); *Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana*, Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife and Fisheries, 1997; and Environmental Protection Agency (EPA) risk assessment guidelines. The health risk assessment was peer-reviewed by the Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology. The Capitol lakes baseline health risk assessment is presented in Appendix H of this report.

Potential health risks associated with exposure to chemicals present in Capitol Lakes were assessed for receptors using the Lakes for recreational purposes. Specifically, health risks were evaluated for the incidental ingestion of chemicals present in the sediment while swimming or wading in Capitol Lakes; dermal contact with chemicals present in sediment while swimming or wading in Capitol Lakes; and the ingestion of chemicals present in fish obtained from Capitol Lakes.

5.1 Chemicals of Concern

The chemicals of concern for assessing potential health risks associated with recreational exposure to sediment in Capitol lakes included polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), pesticides, and metals. The chemicals of concern for assessing potential health risks associated with the ingestion fish obtained from Capitol Lakes include PCBs and pesticides. Refer to Section H2.0

of Appendix H for a discussion on the methods used to identify the chemicals of concern for the health risk assessment.

5.2 Exposure Assessment

For the assessment exposure to chemicals in sediment, health risks were estimated for each Area of the Lake System. For the assessment of exposure to chemicals in fish, health risks were estimated for each species of fish obtained from Capitol Lakes during the site investigation activities which included carp, bigmouth buffalo, green sunfish, bluegill, black bullhead, and yellow bullhead. The assessment of exposure was based on a reasonable maximum exposure scenario as defined by EPA. A reasonable maximum exposure scenario is defined as the highest exposure that is reasonably expected to occur at a site (*Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual, Part A*, EPA 1989). The methods and assumptions used in the estimation of chemical intake were obtained from EPA risk assessment guidance documents (*Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual, Part A*, EPA 1989; *Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"*, EPA 1991; *Soil Screening Guidance*, EPA 1996; *EPA Region IX Preliminary Remediation Goals*, 1998; *EPA Region III Risk-Based Concentration Table*, 1998; *Exposure Factors Handbook*, EPA 1997; and *Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana*, Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife and Fisheries, 1997. Refer to Section H3.0 and Table H3-1 through H3-6 of Appendix H for the methods and assumptions used in the estimation of exposure to chemicals present in Capitol Lakes.

5.3 Summary of the Results of the Capitol Lakes Health Risk Assessment

5.3.1 Recreational Exposure to Sediment

The noncarcinogenic and carcinogenic health risk estimates for recreational exposure to chemicals present in sediment in Areas 1, 3, and 4 were less than or equal to acceptable risk levels as defined by EPA (Total Hazard Index less than or equal to 1.0 and a cancer risk estimated less than or with the range of $1x10^{-6}$ to $1x10^{-4}$; *Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual, Part A*, EPA 1989; *Soil Screening Guidance*, EPA 1996; *Soil Screening Guidance*, EPA 1996; *Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions*, EPA 1991; *Memorandum Risk-Based Clean Closure*, EPA 1998; *Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana*, Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife and Fisheries, 1997). Therefore, potential noncarcinogenic health effects and unacceptable cancer risks are not expected for recreational receptors exposed to chemicals present in sediments while swimming or wading in Area 1, 3, or 4 of Capitol Lakes.

For Area 2, the noncarcinogenic and carcinogenic health risk estimates for recreational exposure to chemicals present in sediment exceeded the acceptable risk levels. For noncarcinogenic health effects, the Total Hazard Index for exposure to sediment in Area 2 (1.2) is slightly higher than the acceptable Total Hazard Index of 1.0. Based on this estimate, it can be concluded that potential noncarcinogenic health effects may occur in recreational receptors exposed to sediments while swimming or wading in Area 2 of Capitol Lakes. The total cancer risk estimate for exposure to chemicals in sediment in Area 2 (total cancer risk estimate of $2x10^{-4}$) was greater than the acceptable risk range of $1x\ 10^{-6}$ to $1x10^{-4}$. Therefore, it can be concluded that potential cancer risks may be unacceptable for recreational receptors exposed to chemicals present in sediment while

swimming or wading in Area 2 of Capitol Lakes. Refer to Section H5.0 in Appendix H for a discussion on risk characterization at Capitol Lakes and Tables H5-1, H5-2, H5-5, H5-6, H5-7, H5-8, H5-9, H5-10, H5-13, H5-14, H5-15, H5-16, H5-29, H5-30, H5-33, and H5-34 in Appendix H for the supporting health risk estimate calculations and summaries.

5.3.2 Ingestion of Fish

The noncarcinogenic health risk estimates for the ingestion of chemicals in fish species (carp, bigmouth buffalo, green sunfish, bluegill, black bullhead, and yellow bullhead) obtained from Capitol Lakes were less than or equal to an acceptable Total Hazard Index of 1.0 (*Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual, Part A,* EPA 1989; *Soil Screening Guidance*, EPA 1996; *Soil Screening Guidance*, EPA 1996; *Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana*, Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife and Fisheries, 1997). Therefore, potential noncarcinogenic health effects are not expected for recreational receptors ingesting fish (carp, bigmouth buffalo, green sunfish, bluegill, black bullhead, and yellow bullhead) obtained from Capitol Lakes.

The carcinogenic health risk estimates for the ingestion of chemicals in green sunfish (total cancer risk estimate of $1x10^{-4}$) and bluegill (total cancer risk estimate of $1x10^{-4}$) obtained from Capitol Lakes were within the acceptable risk range of $1x10^{-6}$ to $1x10^{-4}$. Based on these total cancer risk estimates, it can be concluded that unacceptable cancer risks are not expected for recreational receptors ingesting green sunfish and blue fish obtained from Capitol Lakes.

The total cancer risk estimates for the ingestion of chemicals present in carp, bigmouth buffalo, black bullhead, and yellow bullhead obtained from Capitol Lakes ranged from

$3x10^{-4}$ to $6x10^{-4}$. These cancer risk estimates exceed the acceptable risk range of $1x10^{-6}$ to $1x10^{-4}$. Therefore, it can be concluded that potential cancer risks may be unacceptable for recreational receptors exposed to chemicals via the ingestion of carp, bigmouth buffalo, black bullhead, and yellow bullhead obtained from Capitol Lakes. Refer to Section H5.0 of Appendix H for a discussion of the characterization of risk at Capitol Lakes and Tables H5-17 through H5-28, H5-31 through H5-34 in Appendix H for the supporting health risk calculations and summaries.

6.0 SUMMARY

6.0 SUMMARY

6.1 Fish Investigation

A species composition assessment and fish tissue sampling were performed for North and South Lakes. East Lake was not sampled because the water depth was too shallow to launch and operate the fish collecting boat.

The target species identified for North and South Lakes are those species fished for edible purposes. The target species for Capitol Lakes are Carp, Bigmouth Buffalo, Green Sunfish, Bluegill, and Yellow and Black Bullhead. The target species represent approximately 18 percent of the fish in North and South Lakes in mid-1997, when this survey was performed.

Fish tissue samples from target species fish were analyzed for PCBs, pesticides and mercury. Approximately 80 percent of the fish tissues analyzed had detectable concentrations of PCBs, specifically the Arolchlors-1248 and -1260. PCB concentrations were highest in the species considered bottom feeders, i.e., catfish, carp and buffalo fish. PCB concentrations ranged from 250 µg/kg to 680 µg/kg.

Approximately 70 percent of the fish tissue samples from target species exhibited detectable concentration levels of one or more of 21 possible pesticide compounds. The most frequently detected pesticides were 4-4'-DDD, 4-4'-DDE and 4-4'-DDT. These pesticides were detected in half of all target species collected, with the bottom feeders exhibiting the highest number of pesticide compounds per species. Concentrations ranged from 1.8 µg/kg to as high as 50 µg/kg.

Six fish tissue samples were analyzed for mercury content. All samples had detectable mercury concentrations less than 0.2 part per million.

6.2 Surface Water Investigation

Four surface water samples (composites) were collected from Capitol Lakes: two samples from North Lake, one sample from South Lake, and one sample from East Lake. The surface waters were analyzed for semi-volatile organic compounds, PCBs/pesticides and total metals (the water samples were unfiltered).

The sampling results indicate that the surface waters of the Capitol Lake system do not have detectable concentrations of semi-volatile organic compounds, PCBs, or pesticides. Metals concentrations varied, with East Lake having the highest total metals concentrations for each metal. No surface water sample had detectable concentrations of antimony, beryllium, nickel, selenium, silver or thallium.

6.3 Lake Sediments Investigation

6.3.1 North Lake (Area 1)

North Lake is the largest of the Capitol Lakes. It covers approximately 53 acres. Its water depth averages approximately 6.5 feet in the southern portion and shoals to less than 4 feet towards the northern tributary. Total penetrated sediment thickness varies from approximately 3.0 feet or less on the western side of North Lake to approximately 4.5 to 5.0 feet on the eastern side. A map of total penetrated sediment thickness is presented as Figure 3 in Appendix A. . Figure 4 presents a sediment thickness map of the most recent sediments, i.e., green and black mucks and organic-rich clays. In North Lake, there are typically 2 to 3 feet of these extremely soft mucks, which are undifferentiated lean clays and silts with significant amounts of decomposed organic matter. The most recent sediments follow the thickness pattern observed for total penetrated sediments.

For the four samples submitted for total organic carbon (TOC) analyses, values in North Lake ranged as high as 17,800 mg/kg as seen in C-04 in the 0 to 0.5 feet interval. Oil

and grease content in this interval is also the highest observed in North Lake, at 4,300 mg/kg.

Sediments in North Lake had PCB concentrations of Arochlors -1242, -1248 and -1260, with Arochlor-1260 having the greater frequency of detections. Concentrations were generally in the range of 0.1 to 0.4 parts per million, with the highest concentrations typically at depths greater than 1.5 feet

Pesticide concentrations, like those of the PCBs, generally increase with depth. Locations C-03 and C-04 had the highest detected pesticide concentrations at approximately 0.5 mg/kg at 1.5 to 2.5 feet at both locations.

Semi-volatile organic compounds (SVOCs) were detected at all sampled locations. Typically, the SVOC concentrations decreased with increasing depth. Benzo(a)pyrene concentrations in the surface sediments ranged from 428 µg/kg to 748 µg/kg and then generally decreased to approximately half these values in the deeper sediments. Pyrene, fluoranthene, benzo(b)fluoranthene, bis(2-ethylhexyl)phthalate, chrysene and Di-n-octylphthalate were all detected at levels greater than 1.0 mg/kg in one or more samples.

Metals concentration levels in North Lake appear comparable to or less than concentration levels detected in the other lakes' sediments. Lead levels in North Lake sediments tend to increase with depth, as do the concentrations of arsenic, antimony and mercury. The highest lead concentration in North Lake is 216 mg/kg, which was detected at C-04. Similar patterns of increasing concentrations with depth were observed for many of the other metals.

6.3.2 Northern North Lake (Area 2)

The northern end of North Lake has water depths that range from 3 to 4 feet to 0.5 feet or less, with much of the northern-most portion of the area swampy and the lake

sediments often above the normal lake water level. Sediments in Area 2 are typically characterized as having one to two feet of muck, which is underlain by approximately one foot of organic clay, which overlies a soft clay with some organic matter. Cores collected from locations C-09 through C-11 typically contained some sandy gravel or gravelly sand at the sediment-water interface with little to no muck present. Total penetrated sediment thickness in Area 2 is shown on Figure 3 in Appendix A as 4.0 to 5.0 feet; total recent sediment thickness is shown on Figure 4. In this area, C-09 has the thickest most recent sediments at 2.5 feet total.

Conventional parameters sampled in Area 2 were in the ranges typically seen with sediments in the other lakes. Sediments in Area 2 had the highest detected concentration levels of the PCBs Arochlor-1242 and -1260. Arochlor-1248 was not detected in Area 2 sediments. Arochlor-1242 was detected at a level as high as 2,475 µg/kg; Arochlor-1260 was detected in the range of 104 to 5,057 µg/kg. The highest PCB concentrations were detected below 2.0 and 1.5 feet at locations C-09 and C-11, respectively. Pesticide concentrations were generally higher in Area 2 than in Areas 1 or 3 by a factor of three or more to as high as ten. For example, Aldrin ranged from 1.9 to 152 µg/kg in Area 2, whereas in Areas 1 and 3, the ranges for Aldrin are 3 to 24 µg/kg and 4.8 to 44 µg/kg, respectively.

When SVOCs are examined, Area 2 sediments are shown to have the highest concentrations for the majority of the compounds detected. The concentrations are generally highest in the shallowest sediments and then decrease with depth. Benzo(a)pyrene was detected at location C-09 at 14,053 µg/kg in the interval 0 to 0.7 feet In the interval 0.7 to1.7 feet, the concentration level decreased to 683 µg/kg. A similar pattern is observed for the most of the other SVOCs. The interval 0 to 0.7 feet at coring location C-09 consistently had the highest concentrations of SVOCs. C-09 is located in the middle of Area 2.

Metals concentrations in Area 2 are elevated with respect to Areas 1 and 3, but are comparable or less than the concentrations observed in East Lake sediments (Area 4). The metals antimony, arsenic, lead and mercury are detected at the highest concentrations for Area 2 at C-09 in the interval 2.0-2.5 feet This interval also had detected concentrations of selenium and thallium. Heavy metals concentrations generally tend to increase with depth to approximately 1.5 feet to 2.5 feet and then decrease.

6.3.3 South Lake (Area 3)

South Lake receives stormwater runoff from the U.S. Interstate Highway, adjoining land area and from East Lake. Water from South Lake flows into North Lake and is pumped into the Mississippi River. South Lake is approximately nine acres in size and is the second largest of the three lakes. The water depth in South Lake varies from 1 to 4 feet. South Lake is deepest near the inflow pipe on the southeast edge of the lake and shallowest in the north-northeast corner. Total penetrated sediment thickness mirrors these observations, i.e., the sediments are thicker in the east side of South Lake and are thinner in the west. Sediment coring in South Lake demonstrated that there was generally one-half foot of muck or less and that the muck was underlain by 1.5 to 3.5 feet of organic-rich clay. Beneath the organic-rich clay, a stiff silty clay was encountered. Refer to Figures 3 and 4 in Appendix A.

The sediments of South Lake have TOC values that range from 2,077 to 22,560 mg/kg. Oil and grease concentrations ranged as high as 5,530 mg/kg in surface sediments. Oil and grease concentrations appear to decrease with depth.

PCB concentrations in the sediments of South Lake are higher than in North Lake (Area 1) for Arochlor-1242 but are comparable to North Lake sediments for Arochlor-1260. Arochlor-1242 concentrations range from 73 – 1,705 µg/kg. The highest concentrations tend to be located in the deeper sediments and were often a factor of two or three times higher than the concentrations observed in the surface sediments. Pesticide

concentrations in South Lake sediments appear to be slightly elevated with respect to those detected in North Lake (Area 1), but are generally less than those detected in the northern end of North Lake (Area 2), and in East Lake (Area 4).

SVOCs are present in the sediments of South Lake at concentrations comparable to or slightly elevated from those detected in North Lake (Area 1) and East Lake (Area 4). Benzo(a)pyrene values range from 204 to 1,436 µg/kg in South Lake. SVOCs concentrations tend to be highest in the shallowest sediments, or immediately underlying them, and then to decrease with depth. Generally the lowest concentrations are in the silty clay detected beneath the overlying organic-rich clay sediments.

Metals concentration levels in South Lake sediments generally are comparable to those in the other lakes. Only beryllium and selenium were detected in South Lake sediments at concentration levels higher than in the other lakes.

6.3.4 East Lake (Area 4)

East Lake is the smallest and shallowest of the Capitol Lakes. It is located approximately seven feet higher topographically than the other lakes. Water depths in East Lake average one foot or less. Four coring locations were advanced in East Lake. The sediment cores typically contained two to three feet of muck. In the two southern coring locations (C-17 and C-18), a very soft clay with a low to moderate organic content was present beneath the muck. At the two northern coring locations (C-19 and C-20), approximately three to four feet of organic-rich clay was present beneath the muck. The total penetrated sediment thickness in East Lake ranged from 4.3 feet to approximately 6.5 feet. Field observations made on cores advanced in East Lake suggest that the green clay interval, or green silty clay interval, observed in North Lake (Area 1) and South Lake, had not been penetrated in East Lake. Refer to Figures 3 and 4 for a total penetrated sediment thickness map and a recent sediments thickness map.

TOC values in East Lake are comparable to those of the other lakes. The oil and grease content of the sediment samples range from 130 to 770 mg/kg, showing that these sediments have less oil and grease than the sediments of the other lakes.

No PCBs were detected in the sediments of East Lake. Pesticide concentrations however range from less than the detection limits to 167,720 µg/kg for 4-4'-DDD. The concentrations for 4-4'-DDE and 4-4'-DDT are also elevated with respect to the concentrations detected in the sediments of the other lakes. In East Lake, 4-4'-DDE and 4-4'-DDT were detected over 1.0 part per million; in the other lakes, the highest detected concentration levels for these compounds was less than 0.1 part per million. East Lake also has elevated concentrations of Aldrin, delta-BHC (Lindane), Chlordanes, and Endrins compared to the other lakes. The concentrations of the various pesticides tend to decrease with depth beneath the sediment-water interface and are usually highest in the sediments greater than 0.5 feet in depth.

SVOCs were detected in the sediments of East Lake at concentrations comparable to South Lake, i.e., the SVOC concentrations were slightly elevated compared to the levels in North Lake (Area 1), but significantly less than the levels detected in the northern end of North Lake (Area 2). Benzo(a)pyrene was detected in East Lake at concentrations that range from below detection levels to as high as 1,817 µg/kg. Other polycyclic aromatic hydrocarbon compounds (PAHs) were also present in the 1.0 to 2.0 part per million range. Phenanthrene and pyrene were present at concentrations from approximately 0.1 parts per million to a high of 4.6 parts per million. PAH concentrations were generally highest in the surface sediments and decrease with increasing depth in the sediment column.

Metals concentrations for arsenic, antimony, cadmium, lead and silver are elevated in the sediments of East Lake. Lead concentrations ranged as high as 5,519 mg/kg, which was present at C-20 in the 5.0 to 6.0 feet interval. Coring locations C-19 and C-20 generally exhibited the highest detected concentrations of the metals. The higher

metals concentrations in these areas were often detected in the deeper sediments below 2.0 feet

6.4 Summary of the Capitol Lakes Health Risk Assessment Conclusions

6.4.1 Recreational Exposure to Sediment

The noncarcinogenic and carcinogenic health risk estimates for recreational exposure to chemicals present in sediment in Areas 1, 3, and 4 were less than or equal to acceptable risk levels as defined by EPA (Total Hazard Index less than or equal to 1.0 and a cancer risk estimated less than or with the range of 1×10^{-6} to 1×10^{-4}; *Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual, Part A*, EPA 1989; *Soil Screening Guidance*, EPA 1996; *Soil Screening Guidance*, EPA 1996; *Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions*, EPA 1991; *Memorandum Risk-Based Clean Closure*, EPA 1998; *Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana*, Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife and Fisheries, 1997). Therefore, potential noncarcinogenic health effects and unacceptable cancer risks are not expected for recreational receptors exposed to chemicals present in sediments while swimming or wading in Area 1, 3, or 4 of Capitol Lakes.

For Area 2, the noncarcinogenic and carcinogenic health risk estimates for recreational exposure to chemicals present in sediment exceeded the acceptable risk levels. For noncarcinogenic health effects, the Total Hazard Index for exposure to sediment in Area 2 (1.2) is slightly higher than the acceptable Total Hazard Index of 1.0. Based on this estimate, it can be concluded that potential noncarcinogenic health effects may occur in recreational receptors exposed to sediments while swimming or wading in Area 2 of Capitol Lakes. The total cancer risk estimate for exposure to chemicals in sediment in

Area 2 (total cancer risk estimate of $2x10^{-4}$) was greater than the acceptable risk range of $1x10^{-6}$ to $1x10^{-4}$. Therefore, it can be concluded that potential cancer risks may be unacceptable for recreational receptors exposed to chemicals present in sediment while swimming or wading in Area 2 of Capitol Lakes. Refer to Section H5.0 in Appendix H for a discussion on risk characterization at Capitol Lakes and Tables H5-1, H5-2, H5-5, H5-6, H5-7, H5-8, H5-9, H5-10, H5-13, H5-14, H5-15, H5-16, H5-29, H5-30, H5-33, and H5-34 in Appendix H for the supporting health risk estimate calculations and summaries.

6.4.2 Ingestion of Fish

The noncarcinogenic health risk estimates for the ingestion of chemicals in fish species (carp, bigmouth buffalo, green sunfish, bluegill, black bullhead, and yellow bullhead) obtained from Capitol Lakes were less than or equal to an acceptable Total Hazard Index of 1.0 (*Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual, Part A,* EPA 1989; *Soil Screening Guidance*, EPA 1996; *Soil Screening Guidance*, EPA 1996; *Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana*, Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife and Fisheries, 1997). Therefore, potential noncarcinogenic health effects are not expected for recreational receptors ingesting fish (carp, bigmouth buffalo, green sunfish, bluegill, black bullhead, and yellow bullhead) obtained from Capitol Lakes.

The carcinogenic health risk estimates for the ingestion of chemicals in green sunfish (total cancer risk estimate of $1x10^{-4}$) and bluegill (total cancer risk estimate of $1x10^{-4}$) obtained from Capitol Lakes were within the acceptable risk range of $1x10^{-6}$ to $1x10^{-4}$. Based on these total cancer risk estimates, it can be concluded that unacceptable cancer risks are not expected for recreational receptors ingesting green sunfish and blue fish obtained from Capitol Lakes.

The total cancer risk estimates for the ingestion of chemicals present in carp, bigmouth buffalo, black bullhead, and yellow bullhead obtained from Capitol Lakes ranged from $3x10^{-4}$ to $6x10^{-4}$. These cancer risk estimates exceed the acceptable risk range of $1x10^{-6}$ to $1x10^{-4}$. Therefore, it can be concluded that potential cancer risks may be unacceptable for recreational receptors exposed to chemicals via the ingestion of carp, bigmouth buffalo, black bullhead, and yellow bullhead obtained from Capitol Lakes. Refer to Section H5.0 of Appendix H for a discussion of the characterization of risk at Capitol Lakes and Tables H5-17 through H5-28, H5-31 through H5-34 in Appendix H for the supporting health risk calculations and summaries.

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SELECTED BIBLIOGRAPHY

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APPENDIX A

FIGURES

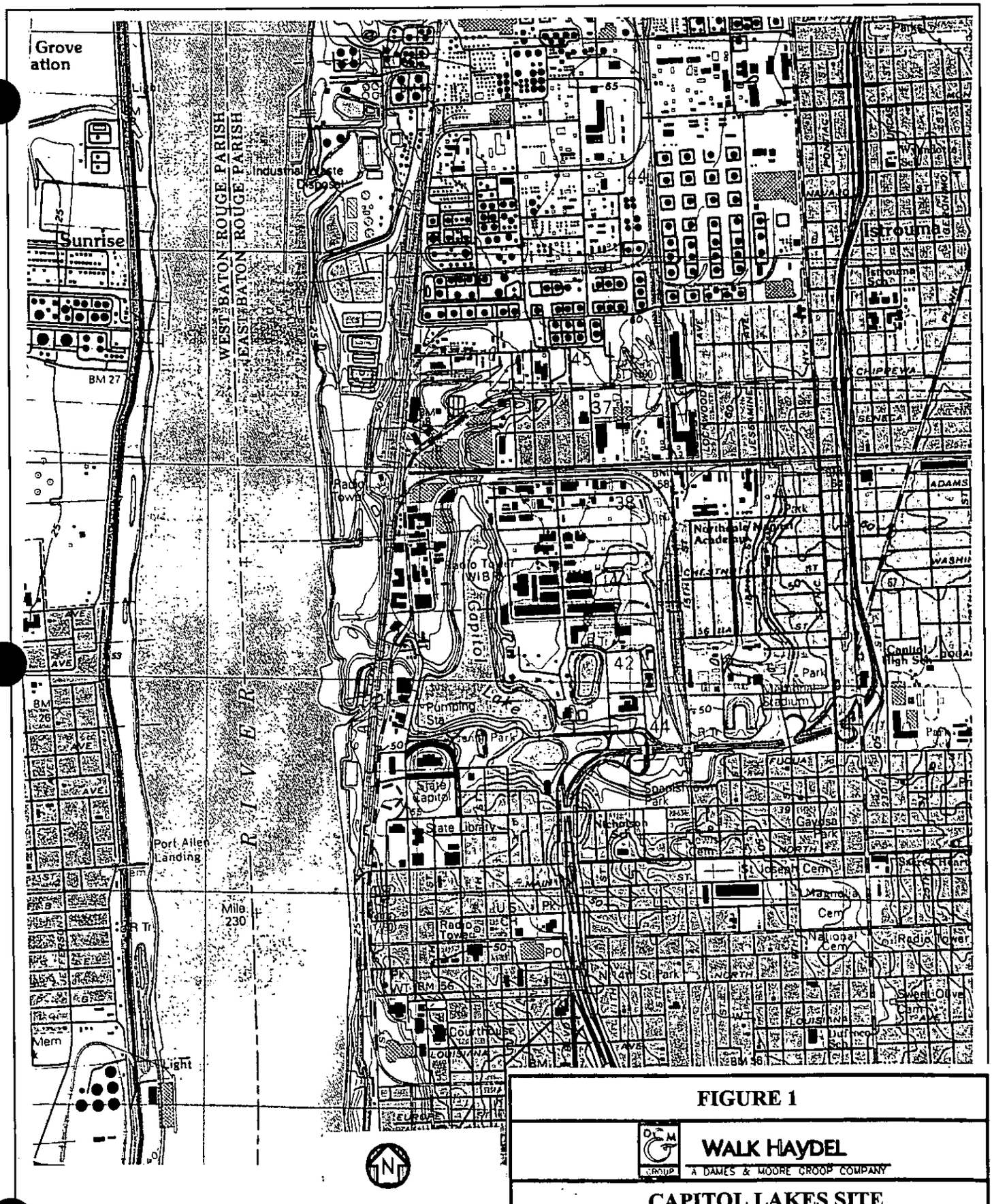
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Figure 3 Capitol Lakes Site - Total Penetrated Sediment Thickness Map

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SOURCE: USGS QUAD MAP – BATON ROUGE WEST, LA. (1992)

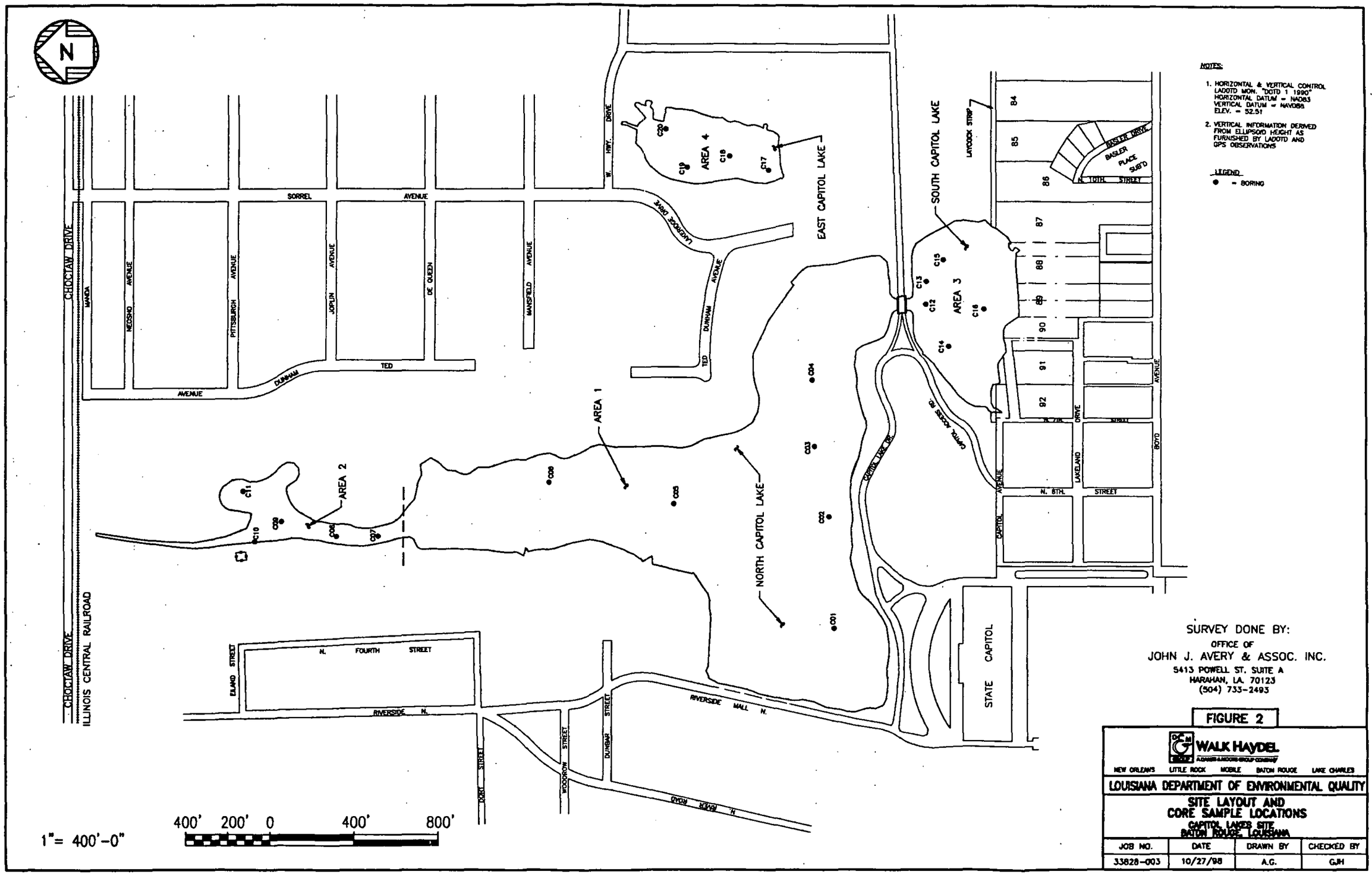
FIGURE 1

WALK HAYDEL
A DAMES & MOORE GROUP COMPANY

CAPITOL LAKES SITE

SITE MAP

WALK HAYDEL
A DAMES & MOORE GROUP COMPANY



NOTES:

1. HORIZONTAL & VERTICAL CONTROL LADOTD MON. "DOTD 1 1990"
   HORIZONTAL DATUM = NAD83
   VERTICAL DATUM = NAVD88
   ELEV. = 52.51
2. VERTICAL INFORMATION DERIVED FROM ELLIPSOID HEIGHT AS FURNISHED BY LADOTD AND GPS OBSERVATIONS

LEGEND

● = BORING

SURVEY DONE BY:
OFFICE OF
JOHN J. AVERY & ASSOC. INC.
5413 POWELL ST. SUITE A
HARAHAN, LA. 70123
(504) 733-2493

FIGURE 2

WALK HAYDEL
A DAVID A. HAYDEL GROUP COMPANY
NEW ORLEANS LITTLE ROCK MOBILE BATON ROUGE LAKE CHARLES

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

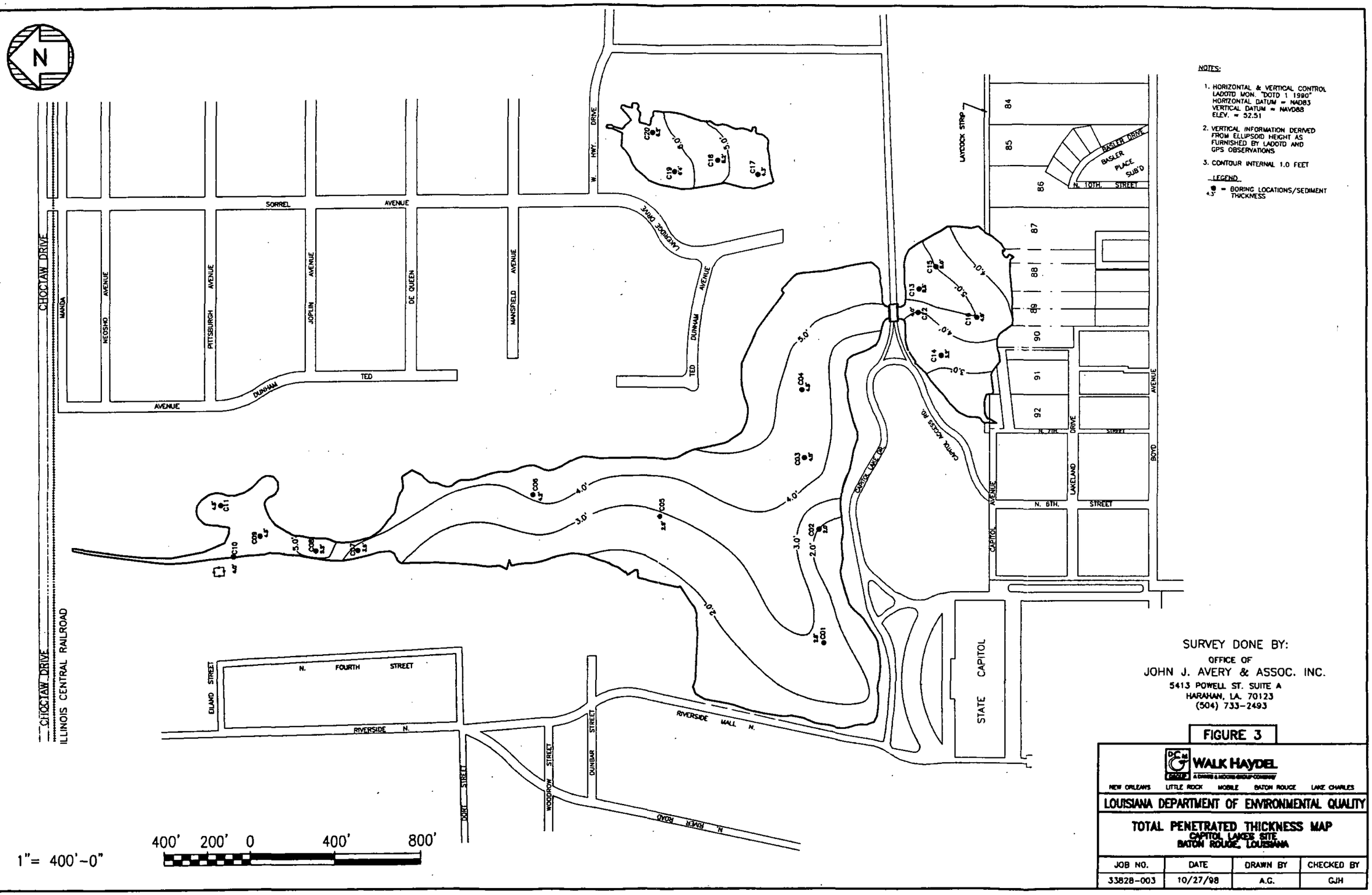
SITE LAYOUT AND CORE SAMPLE LOCATIONS
CAPITOL LAKES SITE
BATON ROUGE, LOUISIANA

JOB NO.	DATE	DRAWN BY	CHECKED BY
33828-003	10/27/98	A.G.	GJH

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NOTES:

1. HORIZONTAL & VERTICAL CONTROL LADOTD MON. "DOTD 1 1990" HORIZONTAL DATUM = NAD83 VERTICAL DATUM = NAVD88 ELEV. = 52.51
2. VERTICAL INFORMATION DERIVED FROM ELLIPSOID HEIGHT AS FURNISHED BY LADOTD AND GPS OBSERVATIONS
3. CONTOUR INTERNAL 1.0 FEET

LEGEND

4.3' = BORING LOCATIONS/SEDIMENT THICKNESS

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HARAHAN, LA. 70123
(504) 733-2493

FIGURE 3

WALK HAYDEL
NEW ORLEANS LITTLE ROCK MOBILE BATON ROUGE LAKE CHARLES

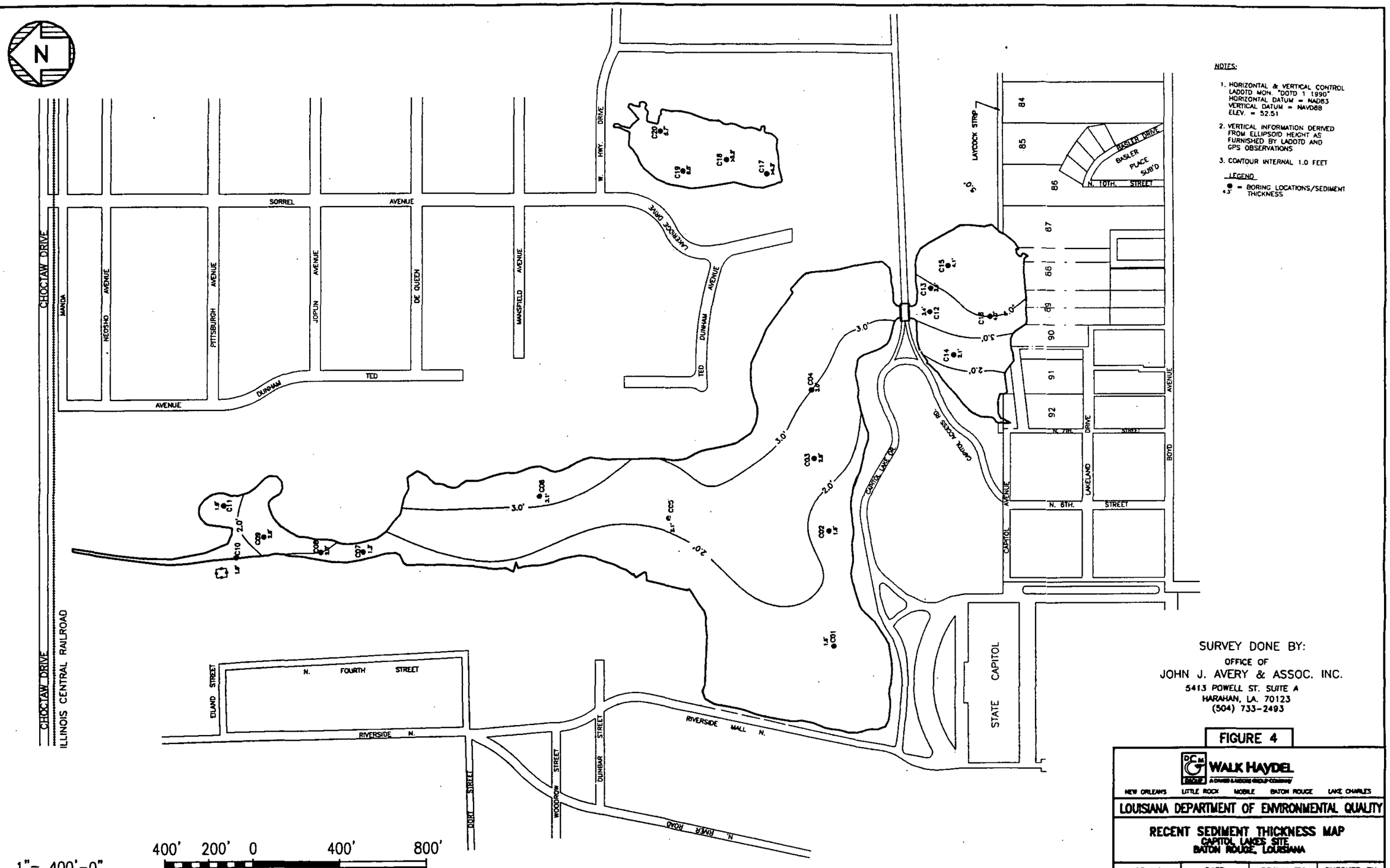
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

TOTAL PENETRATED THICKNESS MAP
CAPITOL LAKES SITE
BATON ROUGE, LOUISIANA

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NOTES:

1. HORIZONTAL & VERTICAL CONTROL LADOTD MON. "DOTD 1 1990" HORIZONTAL DATUM = NAD83 VERTICAL DATUM = NAVD88 ELEV. = 52.51
2. VERTICAL INFORMATION DERIVED FROM ELLIPSOID HEIGHT AS FURNISHED BY LADOTD AND GPS OBSERVATIONS
3. CONTOUR INTERNAL 1.0 FEET

LEGEND

● 4.3' = BORING LOCATIONS/SEDIMENT THICKNESS

SURVEY DONE BY:
OFFICE OF
JOHN J. AVERY & ASSOC. INC.
5413 POWELL ST. SUITE A
HARAHAN, LA. 70123
(504) 733-2493

FIGURE 4

WALK HAYDEL
A DAMES & MOORE GROUP COMPANY
NEW ORLEANS LITTLE ROCK MOBILE BATON ROUGE LAKE CHARLES

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

RECENT SEDIMENT THICKNESS MAP
CAPITOL LAKES SITE
BATON ROUGE, LOUISIANA

JOB NO.	DATE	DRAWN BY	CHECKED BY
33828-003	10/27/98	A.G.	GJH

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APPENDIX B

TABLES

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Data qualification codes may appear on Tables 9.1 – 9.4, Tables 10. 1 – 10.4, and Tables 11.1 – 11.4. The qualifiers are defined as follows:

U – Non-detected

J – Estimated

N – Presumably present

R – Unusable

B – (Lab qualifier) Found in associated method blank

D – (Lab qualifier) Reported from a dilution

TIC – Tentatively Identified Compound

TABLE 1
CAPITOL LAKES SITE - SPECIES COMPOSTION ASSESSMENT

Species	Count	Total Length Measurements (mm)																						
Orange Spotted Sunfish *Lepomis humilis*	220	72	78	70	70	70	66	72	82	81	80	73	75	71	72	53	75	73	80	84	73	65	72	71
		72	79	80	73	50	72	72	69	63	72	65	52	60	66	55	79	72	71	74	66	60	60	73
		76	70	55	76	70	68	70	77	61	63	75	66	72	68	71	77	60	52	75	67	67	80	64
		67	62	78	61	71	70	62	74	65	66	65	73	70	70	71	75	58	72	81	67	52	60	59
		70	80	75	70	80	60	50	75	79	85	79	83	80	80	75	80	70	75	70	76	78	80	77
		79	78	79	80	76	78	80	82	76	81	72	80	75	72	80	72	82	85	75	70	84	49	76
		75	90	75	73	74	83	72	77	68	76	82	79	70	80	79	79	79	71	81	82	45	70	79
		71	84	81	81	80	83	79	49	75	77	71	75	80	78	58	77	80	55	77	65	73	68	77
		76	60	59	80	69	56	70	82	55	57	62	76	78	75	67	68	58	82	58	73	79	73	76
		75	67	62	82	72	80	82	55	84	62	69	76	85										
Green Sunfish *Lepomis cyanellus*	58	176	80	85	83	96	80	75	102	83	75	72	70	70	37	67	85	127	108	91	66	80	71	83
		125	170	150	145	120	150	120	75	80	110	80	87	72	108	84	66	80	88	71	79	72	78	76
		75	72	105	79	88	72	83	89	87	95	88	83											
Longear Sunfish *Lepomis megalotis*	44	111	101	96	98	95	96	121	102	106	88	95	91	122	102	130	118	96	103	95	92	96	110	94
		106	78	83	102	101	102	81	98	78	100	90	90	105	129	120	105	125	86	75	84	82		
Gizzard Shad *Dorosoma cepedianum*	33	112	118	113	108	114	111	120	125	70	75	111	109	114	119	115	111	123	245	100	111	112	200	180
		214	285	244	210	217	205	202	230	270	117													
Sailfin Molly *Peocilia latipinna*	9	82	66	66	60	80	75	85	60	82														
Bluegill *Lepomis macrochirus*	6	160	99	95	120	106	113																	
Golden Shiner *Notemigonus crysoleucas*	2	81	34																					
Yellow Bullhead *Ictalurus natalis*	2	235	260																					

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TABLE 2
CAPITOL LAKES SITE - FISH TISSUE SAMPLES

Sample Number	Species	Weight	Length	Sample type
040-970610-01-D	Carp	12.2 lbs	685 mm	Single fish/fillet
040-970610-02-D	Carp	21.3 lbs	820 mm	Single fish/fillet
040-970610-03-D	Carp	17.1 lbs	770 mm	Single fish/fillet
040-970610-04-D	Bigmouth Buffalo	13.2 lbs	685 mm	Single fish/fillet
040-970610-05-D	Green Sunfish	***	135 mm	Four fish composite/cleaned body
		***	145 mm	
		***	150 mm	
		***	150 mm	
040-970610-06-D	Green Sunfish	5 oz	210 mm	Four fish composite/fillets
		7 oz	215 mm	
		7 oz	205 mm	
		11 oz	220 mm	
040-970610-07-D	Green Sunfish	***	175 mm	Three fish composite/cleaned body
		***	182 mm	
		***	175 mm	
040-970610-08-D	Green Sunfish	***	180 mm	Three fish composite/cleaned body
		***	168 mm	
		***	180 mm	
040-970610-09-D	Green Sunfish	***	172 mm	Three fish composite/cleaned body
		***	172 mm	
		***	178 mm	
040-970610-10-D	Bluegill	***	178 mm	Three fish composite/cleaned body
		***	185 mm	
		***	182 mm	
040-970610-11-D	Bluegill	***	180 mm	Three fish composite/cleaned body
		***	170 mm	
			170 mm	
040-970610-12-D	Bluegill	***	178 mm	Two fish composite/cleaned body
		***	170 mm	
040-970610-13-D	Bluegill	***	190 mm	Single fish/cleaned body
040-970610-14-D	Bluegill	***	150 mm	Three fish composite/cleaned body
		***	159 mm	
		***	158 mm	
040-970610-15-D	Black Bullhead	1.3 lbs	340 mm	Single fish/cleaned body
040-970610-16-D	Yellow Bullhead	***	185 mm	Two fish composite/cleaned body
		***	193 mm	
040-970610-17-D	Yellow Bullhead	4 oz	240 mm	Two fish composite/cleaned body
		4 oz	225 mm	
040-970610-18-D	Yellow Bullhead	6 oz	245 mm	Single fish/cleaned body
040-970610-19-D	Yellow Bullhead	8 oz	265 mm	Single fish/cleaned body
040-970610-20-D	Yellow Bullhead	10 oz	280 mm	Single fish/cleaned body

*** weight below range of scale

TABLE 3
CAPITOL LAKES SITE

SEDIMENT SAMPLE IDENTIFICATION AND CORRELATION WITH CORING LOCATION AND DEPTH

LOCATION	DEPTH	SAMPLE IDENTIFICATION NO.
C-01	0 - 0.5 ft.	A1505269804
	0.5 -1.5 ft.	A1505269805
	1.5 - 2.8 ft.	A1505269806
C-02	0 - 0.5 ft.	A1505269807
	0.5 - 1.5 ft.	A1505269808
	0.5 - 1.5 ft. dup	A1505269809
C-03	0 - 0.5 ft.	A1505269810
	0.5 - 1.5 ft.	A1505269811
	1.5 - 2.8 ft.	A1505269812
C-04	0 - 0.5 ft.	A1505269813
	0.5 - 1.5 ft.	A1505269814
	1.5 - 3.0 ft.	A1505269815
C-05	0 - 0.5 ft.	A1505269816
	0.5 - 2.1 ft.	A1505269817
C-06	0 - 0.5 ft.	A1505269818
	0.5 - 1.5 ft.	A1505269819
	1.5 - 2.3 ft.	A1505269820
	2.3 - 3.1 ft.	A1505269821
C-07	0 - 0.5 ft.	A1505269822
	0.5 - 1.3 ft.	A1505269823
C-08	0 - 0.5 ft.	A1505269824
	0.5 - 1.5 ft	A1505269825
	1.5 - 2.5 ft.	A1505269826
C-09	0 - 0.7 ft.	A1505279829
	0.7 - 1.7 ft.	A1505279830
	2.0 - 2.5 ft.	A1505279831
	2.5 - 3.5 ft.	A1505279832
C-10	0 - 0.6 ft.	A1505279833
	0.6- 1.6 ft.	A1505279834
	0.6 - 1.6 ft.dup	A1505279835
	1.6 - 2. 6 ft.	A1505279836
	2.6 - 3.8 ft.	A1505279837

TABLE 3 Continued
CAPITOL LAKES SITE

SEDIMENT SAMPLE IDENTIFICATION AND CORRELATION WITH CORING LOCATION AND DEPTH

LOCATION	DEPTH	SAMPLE IDENTIFICATION NO.
C-11	0 - 0.5 ft.	A1505279838
	0.5 - 1.5 ft.	A1505279839
	1.5 - 2.5 ft.	A1505279840
	2.5 - 3.5 ft.	A1505279841
C-12	0 - 0.5 ft.	A1505279842
	0.5 - 1.5 ft.	A1505279843
	1.5 - 2.5 ft.	A1505279844
	2.5 - 3.5 ft.	A1505279845
C-13	0 - 0.6 ft.	A1505279846
	0.6- 1.6 ft.	A1505279847
	1.6 - 2. 6 ft.	A1505279848
	2.6 - 3.6 ft.	A1505279849
	3.6 - 4.6 ft.	A1505279850
C-14	0 - 0.5 ft.	A1505279852
	0.5 - 1.5 ft.	A1505279853
	1.5 - 2.1 ft.	A1505279854
C-15	0 - 0.5 ft.	A1505279855
	0.5 - 1.5 ft.	A1505279856
	1.5 - 2.5 ft.	A1505279857
	2.5 - 3.5 ft.	A1505279858
	3.5 - 5.0 ft.	A1505279859
C-16	0 - 0.5 ft.	A1505279860
	0.5 - 1.5 ft.	A1505279861
	1.5 - 2.5 ft.	A1505279862
	2.5 - 3.5 ft.	A1505279863
	3.5 - 4.0 ft.	A1505279864
C-17	0 - 0.5 ft.	A1505289866
	0.5 - 1.7 ft.	A1505289867
	1.7 - 2.8 ft.	A1505289868
	1.7 - 2.8 ft. dup	A1505289869
	2.8 - 4.3 ft.	A1505289870
C-18	0 - 1.0 ft.	A1505289872
	1.0 -2.3 ft.	A1505289873
	2.3 - 3.8 ft.	A1505289874
	3.6 - 5.2 ft.	A1505289875

TABLE 3 Continued
CAPITOL LAKES SITE

SEDIMENT SAMPLE IDENTIFICATION AND CORRELATION WITH CORING LOCATION AND DEPTH

LOCATION	DEPTH	SAMPLE IDENTIFICATION NO.
C-19	0 - 0.7 ft.	A1505289876
	0.7 - 1.7 ft.	A1505289877
	1.7 - 3.3 ft.	A1505289878
	3.3 - 4.3 ft.	A1505289879
	4.3 - 5.1 ft.	A1505289880
C-20	0 - 1.0 ft.	A1505289881
	1.0 - 2.0 ft.	A1505289882
	2.0 - 3.0 ft.	A1505289883
	3.0 - 4.0 ft.	A1505289884
	4.0 - 5.0 ft.	A1505289885
	5.0 - 5.7 ft.	A1505289887

TABLE 4
CAPITOL LAKES SITE - FISH TISSUE ANALYTICAL RESULTS
PCBs AND PESTICIDE ANALYSES of DETECTED COMPOUNDS (ug/kg)

SAMPLE	Arochlors 1248	1260	Total PBCs	beta-BHC	delta-BHC	gamma-BHC	Heptachlor	Aldrin	Heptachlor Epoxide	Dieldrin	4-4'-DDE	Endrin	Endosulfan II	4-4'-DDD	4-4'-DDT	Endrin Aldehyde	alpha-Chlordane	gamma-Chlordane
CARP																		
040-97610-01D	220	340	560	3.1	3.6	ND	2.8	6.5	3.1	11.4	16.2	5.6	3.7	17.5	6.1	4.1	15	11.6
040-97610-02D	140	110	250	ND	ND	ND	ND	3.0	ND	4.7	7.6	ND	ND	5.6	ND	ND	6.6	4.7
040-97610-03D	150	280	430	1.9	1.9	ND	ND	3.8	ND	6.1	8.6	ND	ND	8	ND	ND	8.1	6.1
BUFFALO																		
040-97610-04D	480	ND	480	ND	2.8	1.9	ND	8.5	3.2	16.6	ND	9.6	9.9	29.3	45.0	10.5	24.9	10.4
GREEN SUNFISH																		
040-97610-06D	ND	170	170	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
040-97610-07D	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
040-97610-07?	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
063-970922-08A	200	260	460	ND	1.6	ND	ND	6.4	ND	7.1	22.7	ND	7.6	14.5	12.4	11.0	ND	ND
063-970922-09A	120	73	193	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.2	ND	ND	ND
BLUEGILL																		
040-97610-11D	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
040-97610-12D	87	ND	87	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
040-97610-13D	92	ND	92	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
063-970922-03A	150	73	223	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.7	ND	ND
063-970922-04A	130	140	270	ND	ND	ND	ND	ND	ND	6.0	6.1	ND	ND	7.2	6.8	ND	ND	ND
BLACK BULLHEAD																		
040-97610-15D	160	430	590	ND	ND	ND	ND	4.9	ND	11.3	50	20	12.8	42.6	27.6	10.3	25.6	25.7
YELLOW BULLHEAD																		
040-97610-16D	160	310	470	ND	ND	ND	ND	1.6	ND	6.4	37.0	9.3	5.8	33.2	11.8	12.7	15.7	8.4
040-97610-19D	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.6	ND	ND	ND
040-97610-20D	200	480	680	ND	ND	ND	ND	ND	ND	ND	16.0	ND	ND	17.6	ND	4.7	6.0	2.1
063-970922-13-A	130	150	280	ND	ND	ND	ND	ND	ND	4.5	10.4	ND	ND	9.9	9.6	10.5	ND	3.2
063-970922-14-A	ND	310	310	ND	ND	ND	ND	6.1	ND	ND	18.0	7.2	14.7	32.2	20.5	16.5	ND	6.1

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TABLE 5
CAPITOL LAKES SITE - FISH TISSUE ANALYTICAL RESULTS
MERCURY ANALYSES

Capitol Lake (1997 Sampling)						
Sample No.	Species	No. of Fish in Sample	Avg. Weight (lbs. & oz.)	Avg. Length (inches)		Concentration (ppm)
063-970610-02-B	Sediment					0.1084
063-970610-07-A	Common Carp	1	12 lbs., 2 oz.	27.0		0.1895
063-970610-08-A	Common Carp	1	21 lbs., 4 oz.	32.3		0.1922
063-970610-09-A	Common Carp	1	7 lbs., 1 oz.	30.3		0.1384
063-970610-10-A	Bigmouth Buffalo	1	13 lbs., 2 oz.	27.0		0.1666
063-970610-10-D	Bigmouth Buffalo	1	13 lbs., 2 oz.	27.0		0.1756
063-970610-11-A	Green Sunfish	4	7.5 oz.	8.4		0.1674
Site No. 0583						

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TABLE 6
CAPITOL LAKES SITE **SURFACE WATER SAMPLES ANALYTICAL RESULTS**
METALS * - ug/l or parts per billion

Constituent	SAMPLE NO. / LOCATION				
	40-980204-02 North Lake	40-980204-02 North Lake (Dup)	40-980204-04 North Lake	40-980204-06 South Lake	40-980204-08 East Lake
Aluminum	149	143	142	187	647
Arsenic	2.4	2.7	2.3	1.5	4.7
Barium	48	52	47	52	120
Calcium	25,000	27,000	27,700	30,800	50,700
Cadmium	ND	ND	ND	ND	0.55
Cobalt	ND	ND	ND	ND	1.2
Chromium	ND	ND	ND	1.7	2.2
Copper	2.3	2.4	1.9	2.6	6.4
Iron	332	335	272	354	1,560
Mercury	ND	ND	ND	ND	2.5
Lead	3.1	3.2	2.8	5.4	8.1
Magnesium	2,690	2,910	69	2,970	6,610
Manganese	73	77	ND	84	269
Sodium	10,300	11,200	ND	7,840	15,600
Potassium	ND	ND	ND	ND	3,660
Vanadium	1.5	1.4	ND	1.4	2.9
Zinc	ND	ND	ND	ND	62

* - No detections of antimony (Sb), beryllium (Be), Nickel (Ni), Selenium (Se), Silver (Ag) or Thallium (Th)

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TABLE 7
CAPITOL LAKES SITE - LAKE SEDIMENTS ANALYTICAL DATA
CONVENTIONAL PARAMETERS

SAMPLE	DEPTH	TOC (mg/kg)	Oil & Grease (mg/kg)	% Moisture
Area 1				
C-04	0-0.5 ft.	17,800	4,300	64
C-05	0.5-2.1 ft.	9, 120	1,640	70
C-06	0.5-1.5 ft	9,913	2,010	57
	1.5-2.3 ft.	10,258	990	55
Area 2				
C-08	1.5-2.5 ft.	10,120	260	56
C-09	2.0-2.5 ft.	Not analyzed for		
C-10	0.6-1.6 ft.	28,080	1,300	48
Area 3				
C-13	0.6-1.6 ft	38,860	730	49
	2.6-3.6 ft.	2,077	750	33
C-14	1.5-2.1 ft.	9,920	2,490	38
C-15	0-0.5 ft.	22,560	5,530	53
	2.5-3.5 ft.	17,690	779	39
	3.5-5.0 ft.	12,800	569	36
Area 4				
C-17	0-0.5 ft.	11,900	130	66
C-18	2.3-3.6 ft.	10,540	320	38
C-19	0.7-1.7 ft.	22,050	419	51
	4.3-5.1 ft.	15,600	769	48
C-20	3.0-4.0 ft.	8,700	770	40
	5.0-5.7 ft.	7,728	200	44

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TABLE 8
CAPITOL LAKES SITE - LAKE SEDIMENTS ANALYTICAL DATA
RANGE OF VALUES FOR PCB RESULTS (ug/kg)

AREA	AROCHLOR-1242	AROCHLOR-1248	AROCHLOR-1260
1 - North Lake	111 - 661	232 *	122 - 354
2 - N. North Lake	227 - 4,998	Non-detect	104 - 5,604
3 - South Lake	73 - 1,705	Non-detect	129 - 530
4 - East Lake	Non-detect	Non-detect	Non-detect

* Detected in only one (1) sample

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TABLE 9
CAPITOL LAKES SITE - LAKE SEDIMENTS ANALYTICAL DATA
RANGES OF VALUES FOR PESTICIDES (ug/kg)

Constituent	Area 1 North Lake	Area 2 N. North Lake	Area 3 South Lake	Area 4 East Lake
Aldrin	3 - 24	1.9 - 152	4.8 - 44	ND - 1,857
alpha-BHC	ND -2	ND -2	ND - 8.3	ND- 13
beta-BHC	ND - 3	ND -1.8	ND - 10	ND - 20
delta - BHC	ND - 29	ND - 5.4	ND - 22	ND - 587
gamma-BHC (Lindane)	ND - 6.6	ND - 35	ND - 19	ND - 11
alpha- chlordane	ND - 8.2	ND - 32	2 - 29	ND - 1,557
gamma-chlordane	ND - 16	ND- 22	4.6 - 43	ND -2,097
4-4' DDD	ND - 42	ND -26	8.1 - 38	ND - 167,720
4-4' DDE	ND - 72	ND- 98	ND - 94	ND - 1,324
4-4' DDT	ND - 22	ND- 794	11 - 52	ND - 1,012
Methoxychlor	ND	ND	ND - 25	62
Dieldrin	ND - 16	ND - 103	ND - 16	ND - 120
Endosulfan I	ND - 5.2	ND	ND - 12	ND-19
Endosulfan II	ND - 40	ND - 201	4.6 - 21	ND - 401
Endosulfan Sulfate	ND - 16	ND - 6.2	ND -25	ND - 83
Endrin	ND - 4.1	ND - 12	ND - 9.4	ND - 264
Endrin Ketone	ND	ND	ND - 34	ND - 22
Endrin aldehyde	ND - 99	ND - 266	7.2 - 61	ND - 114
Heptachlor Expoxide	ND -17	ND - 9.9	2.1 - 27	ND - 347
Heptachlor	ND	ND	ND - 25	ND - 4.3
Toxaphene	ND - 2.4	ND	ND	ND

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TABLE 9.1

CAPITOL LAKES SITE – LAKE SEDIMENTS ANALYTICAL DATA

NORTH LAKE (AREA 1) PESTICIDE / PCB DATA ug/kg (ppb)

Location	Depth	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	alpha-BHC	alpha-Chlordane	Aroclor-1242	Aroclor-1248	Aroclor-1260	beta-BHC	delta-BHC	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	gamma-BHC (Lindane)	gamma-Chlordan	Heptachlor epoxide	Toxaphene
C01	.0-.5	10	43	6.8	3.8					151		2	2.5		4.5			33		2.8	4	
	.5-1.5	12	43	11	9.6				232	173		2.4			7.6				2.4	2.1	7	2.4
	1.5-2.5																					
C02	.0-.5		33	7.1	3		2			141		2			7.9			35		3	3	
	.5-1.5	7.9	34	12	9			214		158					23			31		4.9	7.1	
C03	.0-.5	8.2		9.9			8.2	167		173	3		3		9.9		4.1	99		16	5.1	
	.5-1.5	7.8	48	11	15		7.8	328		183		7.8		4.1	28			30	4.8	10	12	
	1.5-2.5	42	72	22	23			448		314		29	16		40	4.9		49	4.9	4	16	
C04	.0-.5	6.1	16	18	6.1		6.1			231		2			10	18		61		13	3.9	
	.5-1.5	11	51	11	15	2	4.8	408		174		5.9		4.8	7			32	5.2	12	12	
	1.5-2.5	31	66	21	24		6.1	661		354		8	14	5.2	16	5.2		26	6.6	11	17	
C05	.0-.5	5.2	34	7.4	5.2					122		2.1		2.1	4.3			21		3.1	4.3	
	1.5-2.5	18	40	15	7.9		4.9	240		274		3	6.1		9.1			7	2.4	2	7	
C06	.0-.5	11	27	15	5.5			111		172					9.8		4	10			4.3	
	.5-1.5	8.2	33	17	9.9		5.2	224		284		2	4		12			18	2.4	2	6	
	1.5-2.3		18	8.9						134								4				
	2.3-3.1																					

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TABLE 9.2
CAPITOL LAKES SITE – LAKE SEDIMENT ANALYTICAL DATA
NORTHERN NORTH LAKE (AREA 2) PESTICIDE / PCB DATA ug/kg (ppb)

Location	Depth	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	alpha-BHC	alpha-Chlordane	Aroclor-1242	Aroclor-1248	Aroclor 1260	beta-BHC	delta-BHC	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	gamma-BHC (Lindane)	gamma-Chlor	Heptachlor epoxide	Tox aphene
C07	.0-.5	6.9	4.5	8.2						112								6.6				
	.5-1.3																					
C08	.0-.5	5.9	11	23	15		2	410		475			7.1		15			12	3.7	3.9		
	.5-1.5	21	59	55	1.9		9.9	265		985			16		119			27	2.7	2.6	6.7	
	1.5-2.5																					
C09	.0-.7	13	12	19	5.6	1.6	4.3			220	1.8	2.4	6.7		27		4.3	19	1.8	7.3	3.3	
	.7-1.7	11 J	33 J	40 J	23 J		9.9 J			869			7.5 J		30 J			35 J	3.7 J	16 J	9.3 J	
	2.0-2.5	26	98 D	794 D	93 D		32	2475 D		5604 D		4.7	103 D		201 D			234 D		8.9		
	2.5-3.5			9						152					3.6			6.2				
C10	.0-.6	13	14	24	7.7		3.5			433		2.7	3.7		22		2.9	59		7	6.3	
	.6-1.6		84 J	146 J	152 J		26 J	4498		1788					52 J			73 J	35 J	22 J		
	1.6-2.6		3.4	12			2.2			104					4			7		4.5		
	2.6-3.8																					
C11	.0-.5	6.6	12	17	5.4	2	3.2			252					13	6.2	4.1	14		6.6	3	
	.5-1.5	11	30	32	18		23	227		640		5.4	5.8		31		12	32		13	9.9	
	1.5-2.5	10	17	194	13		15			5057 J		2.1	4.1		127			268 J		7.7	7.2	
	2.5-4.2																					

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TABLE 9.3
CAPITOL LAKES SITE – LAKE SEDIMENT ANALYTICAL DATA
SOUTH LAKE (AREA 3) PESTICIDE / PCB DATA ug/kg (ppb)

Location	Depth	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	alpha-BHC	alpha-Chlordane	Aroclor-1242	Aroclor-1248	Aroclor 1260	beta-BHC	delta-BHC	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin Ketone	gamma-BHC (Lindane)	gamma-Chlor	Heptachlor epoxide	Heptachlor	Methoxychlor	Tox aphene
C12	.0-.5	13	36	24	31		2	1219		389		22	14	8.9	19		7	20	8.9	19	36	13			
	0.5-1.5	34	50	29	28		22	797		343		12	5.3	7.4	17		6.7	20	34	9.8	36	14			
	1.5-2.5	38	94 J	42	19	4.8	12	1302		326 J		16 J	7.2 J	9.1 J	21 J		7.2 J	61 J		16 J	27 J	27 J		25	
	2.5-3.5	17	30	17	9.9		5.2	239		179		5.8	3.5		9.9		3.8	20			9.3	6.6			
C13	0.0-0.6	18	19	16	11	3.2	29	280		335		4.2	12		13	25	5.9	20		4.2	30	6.4			
	0.6-1.6	13	24	16	11	4	27	339		246		17	7.7		11		7.7	7.2		3.8	32	9.2			
	1.6-2.6	15 J	37 J	20 J	14 J		26 J	1233		252 J	10	12 J	5.9 J	12 J	15		9.4 J	12		18	43 J	21 J	3		
	2.6-3.6	21	60	27	41		15	1409		403		13	5.8	6.7	20	5.4	6.1	34		13	26	15	25	23	
	3.6-4.6	8.9	15	12	5.6		2.7	149		143		3.3			4.6	8.9		9.5			4.6	4.2			
C14	0-0.5	8.1	6.9	13	4.8		9.7	73		129			6		7.7			7.7			16	2.1			
	0.5-1.5	8.8	32	24	21	4.1	17	572		246		7	6.6	8.8	16		5.3	16		4	28	15			
	1.5-2.1	10	38	17	19		10	616		222		6.8	5.5	4.1	13		3.4	18		6.8	17	9.2			
C15	0-0.5	9	13	11	7.1		13	190		261		2.8	11		15		5.7	20		2.3	24	6.2			
	0.5-1.5	11	39	17	30	7.2	22	958		259		12	6.2	12	16		7.2	13		15	37	20	1.9		
	1.5-2.5	8.9	39	16	12		15	1069		261		10	6.5	5.9	14		4.1	18		9.5	26	14			
	2.5-3.5	24	66	52	38		10	1705		530		12	6.1	6.7	18		3.7	54	7.9	12	20	18			
	3.5-4.9	21	31	16	11		5.9	375		165		7	3.5	2.5	10			22			8.3	6.4	2.2		
C16	0-0.5	14	18	17	8.8		24	212		332		4.1	12		13	23	7.4	15		3.4	28	9.2			
	0.5-1.5	13	35	22	12 J	8.3	17	828		237		12	9.3	12	15		7.8 J	10	9.3	6.8	37	19			
	1.5-2.5	11	56	19	44 J	1.9	26	1254		295		14	16	6.3	19		4.3 J	27	3.4	1.9	27	16		19	
	2.5-3.5	25	54	16	9.7 J		14	648		201		10	9.1		12		6.5 J	44			22	13		20	
	3.5-4.1	26		14	7.1 J		5.5	180		155		5.3	5.9		11		4.4 J	23			7.7	5.3		22	

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TABLE 9.4
CAPITOL LAKES SITE – LAKE SEDIMENT ANALYTICAL DATA
EAST LAKE (AREA 4) PESTICIDE / PCB DATA ug/kg (ppb)

Location	Depth	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	alpha-BHC	alpha-Chlordane	Aroclor -1242	Aroclor -1248	Aroclor 1260	beta-BHC	delta-BHC	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin Ketone	gamma-BHC (Lindane)	gamma-Chlor	Heptachlor epoxide	Heptachlor	Methoxychlor	Tox aphene
C17	0-0.5	177	279	27	2.7 J		14					9.9	3.7		8.8		5.4 J	4.8	5.4		27	6.5			
	0.5-1.7	982	1324	56	16 J	2.7	14				9.4	47			23		17 J	15		8.1	56	33			
	1.7-2.8	23	21	21	1.7 J							3.6						3.3	3.4		2				
	2.8-4.3	19	42	16								1.9						3.3			6.3	1.8	2 J		
C18	0-1.0	230	283	21	9.4 J		16					13	4.1	12	6.6		5.7 J	3.6		1.8	36	8.2			
	1.0-2.3	552	51	35	216 J	4	110				16	74	14			35	66 J	41			221	64			
	2.3-3.6	80	34	6.8	8 J		3.7					6.8	3.3		4.2			3.7			9.9	3.2			
	3.6-5.2	13	7.6	13	2.1 J							2.4			4										
C19	0-0.7	743	215	384	5 J	4.1	29				9.9	9.9	16				25 J	16			87	19			
	0.7-1.7	462	6.4	98	7.4 J	3	43					32	19		23		14 J	14		5.9	84	24			
	1.7-3.3																								
	3.3-4.3	67		11	7.3 J		3.1					6.7									9.7	2.3			
	4.3-5.1	99	52	374	6.7 J		13				4	10	11		57	83	57 J	114	22			6.2		62	
C20	0-1.0	2779 J	648 D	216	36	4.5	232 D					49	69				18	16		11	425 D	34			
	1.0-2.0	394 J	510 D	75 D		3.7	34					28	6.4	19	9.8		5	5.4	6.4	4.3	98 D	19			
	2.0-3.0	1180 J	1012 D	1012 D	264 D	5.6	247 D					185	28		32			35	9.6	6.2	731 D	62	4.3		
	3.0-4.0	167720 J	899 D	899 D	1857 D	13	1557 D					587 D	120		401 D	21	264	78	7.2		2097 D	347 D			
	4.0-5.0	930 J	36 D	81 D	58 D	5.1	64 D				20 J	23 D	23		58 J		50 D	42			64 D	16			
	5.0-6.0	101 J	13	5.2	7.3		7.9				2.1	6.7									10	2.1			

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TABLE 10
CAPITOL LAKES SITE - LAKE SEDIMENTS ANALYTICAL DATA
RANGES OF VALUES FOR SELECTED SEMI-VOLATILE ORGANIC COMPOUNDS (ug/kg)

ANALYTE	Area 1 North Lake	Area 2 N. North Lake	Area 3 South Lake	Area 4 East Lake
Anthracene	ND - 156	ND - 25,662	ND - 558	ND - 529
Benzo(a)anthracene	ND - 854	ND - 42,159	223 - 1,410	ND - 1,982
Benzo(a)pyrene	ND- 748	ND - 14,053	204 - 1,436	ND - 1,817
Benzo(b)fluoranthene	ND - 1,032	ND - 25,662	220 - 3,002	ND - 2,313
Benzo(g,h,i)perylene	ND - 854	ND - 5,560	ND - 1,315	ND - 2,414
Benzo(k)fluoranthene	ND - 748	ND - 32,994	324 - 2,462	ND - 1,611
Bis (2-ethylhexyl)phthalate	ND - 8,500	ND - 12,114	ND - 19,475	ND - 4,543
Chrysene	ND - 1,054	ND - 37,882	299 - 1,898	218 - 2,395
Fluoranthene	ND-1,258	ND - 73,320	ND - 2,820	223 - 2,726
Fluorene	ND	ND - 12, 220	ND - 336	ND - 1,400
Indeno(1,2,3-cd)pyrene	ND - 748	ND - 3,630	ND - 925	ND - 1,734
Phenanthrene	ND - 680	ND - 73,320	254 - 4,168	104 - 4,474
Pyrene	ND - 2,176	ND - 61,100	562 - 7,035	332 - 4,625

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TABLE 10.1

CAPITOL LAKES SITE – LAKE SEDIMENTS ANALYTICAL DATA

NORTH LAKE (AREA 1) SEMI-VOLATILE ORGANIC COMPOUNDS ug/kg (ppb)

Location	Depth	Anthracene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(g,h,I) perylene	Benzo(k) fluoranthene	bis(2-Ehtylhexyl) phthalate	Butylbenzyl phthalate	Chrysene	Di-n-octylphthalate	Dibenz(a,h) anthracene	Fluoranthene	Indeno(1,2,3-cd)pyrene	Phenanthrene	Pyrene
C01	.0-.5	76 J	479 J	605 J	781 J	655 J	479J			655 J			706	554 J	239 J	1,058
	.5-1.5		153 J	196 J	252 J	176 J	239 J			222 J			239 J	146 J		365 J
	1.5-2.5			366 J												
C02	.0-.5	90 J	544 J	680 J	870 J	490 J	707 J			734	435 J	171 J		435 J	299 J	1,115
	.5-1.5		158 J	214 J	270 J	184 J	154 J			240 J			248 J	139 J		450 J
C03	.0-.5	156 J	782 J	578 J	952 J	680 J	510 J	8,500 J	136 J	1,054 J	18,700 J	238 J	1,258	612 J	680	2,176 J
	.5-1.5		373 J	410 J	522 J	343 J	448 J			522 J	1306 J		709	280 J		1,380 J
	1.5-2.5		193 J	211 J	264 J	148 J	166 J			260 J			327 J		37 J	448 J
C04	.0-.5	125 J	854 J	748 J	1,032 J	854 J	748 J	4984 J	146 J	1,032 J	203 J	288 J	1,139	748 J	570 J	2,100 J
	.5-1.5	134 J	371 J	371 J	482 J	408 J	445 J			482 J			742	334 J	519 J	1,558 J
	1.5-2.5	85 J	307 J	316 J	363 J	179 J	401 J	1,605 J		434 J			566 J	151 J	316 J	1,180 J
C05	.0-.5		315 J	428 J	518 J	315 J	450 J			428 J			405 J	293 J		660 J
	1.5-2.5		103 J		140 J		179 J	851 J		158 J			167 J			292 J
C06	.0-.5	74 J	583 J	737 J		461 J	660 J			737			768	660 J	218 J	1,105
	.5-1.5			147 J	168 J		155 J			164 J			168 J			272 J
	1.5-2.3				80 J		67 J									120 J
	2.3-3.1			726 J	103 J		84 J									

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TABLE 10.2
CAPITOL LAKES SITE – LAKE SEDIMENT ANALYTICAL DATA
NORTHERN NORTH LAKE (AREA 2) SEMI-VOLATILE ORGANIC COMPOUNDS ug/kg (ppb)

Location	Depth	2-Methylnaphthalene	4-Methylphenol	Acenaphthene	Anthracene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(g,h,i) perylene	Benzo(k) fluoranthene	bis (2-Ethylhexyl) phthalate	Chrysene	Di-n-octylphthalate	Dibenz(a,h) anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno (1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene
C07	.0-.5							94 J		82 J											187 J
	.5-1.3							32 J		68 J											154 J
C08	.0-.5					226 J	244 J	333 J	143 J	279 J		297 J				386 J		137 J			469 J
	.5-1.5					119 J	142 J	170 J		122 J		178 J				194 J					395 J
	1.5-2.5						838 J														
C09	.0-.7	2505	165 J	7943	25662 D	42159 D	14053 D	25662 D	5560 D	32994 D		37882 D	29328 D	12220 D	6110	73320 D	12220 D	2077 D	165	73320 D	61100 D
	.7-1.7						683														
	2.0-2.5							159 J		117 J		173 J				219 J					243 J
	2.5-3.5						731	7678 D													
C10	.0-.6			1326	4397	10470 D	8376 D	523 DJ	3350 D	8376 DJ	2094 DJ	10470 D			454 J	23732 D	1187	3630 D	286 J	13960	20242 D
	.6-1.6				120 J	309 DJ			183 J	356 DJ	10400 D	502 DJ	460 DJ			575 J				335 J	1203 DJ
	1.6-2.6				27 J					180 DJ		191 J				186 J					365 J
	2.6-3.8			377 J	740	1211 J	1077 J	1010 J	337 J	1346 J	12114 DJ	1211 J	337 J		215 J	2154	303 J	350 J		2557	4442 J
C11	.0-.5				186 J	1322	1859 J	2395 J	1074 J	2272 J	3387	1817	202 J	388 J		2189		1115 J		578 J	3221
	.5-1.5					535 J	512 J	698 J	355 J	757 J	8730	640 J	134 J	146 J		931		349 J		268 J	1339
	1.5-2.5																				150 J
	2.5-4.2																				

TABLE 10.3
CAPITOL LAKES SITE – LAKE SEDIMENT ANALYTICAL DATA
SOUTH LAKE (AREA 3) SEMI-VOLATILE ORGANIC COMPOUNDS ug/kg (ppb)

Location	Depth	Acenaphthene	Anthracene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(g,h,i) perylene	Benzo(k) fluoranthene	Benzoic Acid	Benzyl Alcohol	bis(2-Chloroethoxy) methane	bis(2-Chloroethyl) ether	bis (2-Ethylhexyl) phthalate	4-Bromophenyl-phenylether	Butylbenzyl phthalate	4-Chloro-3-methylphenol	4-Chloroaniline	2-Chloronaphthalene	2-Chlorophenol	4-Chlorophenyl-phenyl ether
C12	.0-.5	159 J	342 J	985	1032 J	3002 J		1079 J					4456 B							
	.5-1.5	153 J	319 J	1410	1287 J	1778 J	362 J	1349 J					3617 B							
	1.5-2.5		150 J	397 J	404 J	660 J	166 J	660 J					1758 B							
	2.5-3.5		106 J	398 J	378 J	404 J		511 J					660 B							
C13	.0-.6		165 J	763 J	806 J	848 J	331 J	1230 J					14840 BDJ		242 J					
	.6-1.6	133 J	282 J	1283 J	1436 J	1026 J	564 J	2462 J					6156 J							
	1.6-2.6	470 J	558 J	1233 J	1409 DJ	1761 DJ	587 DJ	2113 DJ					6457 J		481 J					
	2.6-3.6	141 J	262 J	872 J	872 J	1007 J	322 J	939 J					2684 J		248 J					
	3.6-4.6	178 J		255 J	214 J	220 J		398 J					226 J							
C14	.0-.5			443 J	484 J	564 J	230J	660 J					6448 B							
	.5-1.5		189 J	572 J	484 J	572 J	224 J	748 J					6160 J							
	1.5-2.1		86 J	308 J	283 J	308 J		345 J					1540 B							
C15	.0-.5		223 J	1045 J	903 J	855 J	356 J	1093 J					19475 DJ							
	.5-1.5	182 J	364 J	766 J	910 J	1245 J	369 J	814 J					7185 J							
	1.5-2.5		202 J	487 J	422 J	564 J	196 J	713 J					4574 J							
	2.5-3.5		91 J	347 J	311 J	365 J		603 J					2314 J							
	3.5-4.9		64 J	223 J	204 J	235 J		324 J					522 BJ							
C16	.0-.5		198 J	1014 J	968 J	1014 J	392 J	1521 J					12447 DJ							
	.5-1.5	195 J	270 J	1023 J	828 J	1120 J	1315 J	633 J					4870 J		209 J					
	1.5-2.5	82 J		477 J	589 J	627 J	815 J	690 J	23 J	100 J	11 J	6.9 J	2822 J	22 J	188 J	113 J	8.2 J	4.4 J	1.9 J	58 J
	2.5-3.5	156 J	337 J	1037 J	778 J	1037 J	972 J	778 J	41 J	123 J	12 J	12 J		26 J	1944 J	21 J	9.7 J	3.9 J		12 J
	3.5-4.1		148 J	489 J	477 J	457 J	464 J	586 J												

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TABLE 10.3
CAPITOL LAKES SITE – LAKE SEDIMENT ANALYTICAL DATA
SOUTH LAKE (AREA 3) SEMI-VOLATILE ORGANIC COMPOUNDS ug/kg (ppb)

CONTINUED

Location	Depth	Chrysene	Di-n-octylphthalate	Dibenz(a,h) anthracene	Dibenzofuran	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	3,3'-Dichlorobenzidine	2,4-Dichlorophenol	Diethylphthalate	2,4-Dimethylphenol	Dimethylphthalate	4,6-Dinitro-2-methylphenol	2,4-Dinitrotoluene	Fluoranthene	Fluorene	Hexachlorobenzene	Hexachloroethane	Indeno (1,2,3-cd)pyrene
C12	.0-.5	1642														2814				
	.5-1.5	1839														2820	172 J			
	1.5-2.5	599 J														1042				
	2.5-3.5	537 J														796				172 J
C13	.0-.6	1145 J	13568 DJ													1611				276 J
	.6-1.6	1898 J	872 J														190 J			416 J
	1.6-2.6	1878 J	998 DJ													3111	1057			
	2.6-3.6	1208 J														2080	148 J			275 J
	3.6-4.6	303 J														350J				
C14	.0-.5	605 J	1048 J													846 J				214 J
	.5-1.5	704 J	1496 J	660 J												1012	251 J			202 J
	1.5-2.1	400 J	136 J													499 J				
C15	.0-.5	1188 J	32775 DJ													1473	162 J			333 J
	.5-1.5	1245 J	958 J													1629	335 J			259 J
	1.5-2.5	594 J	487 J													832	154 J			160 J
	2.5-3.5	487 J														597 J				
	3.5-4.9	299 J														363 J				
C16	.0-.5	1245 J	4241 J															337 J		396 J
	.5-1.5	1023 J	341 J													1594	336 J			925 J
	1.5-2.5	1003 J	63 J		21 J	10 J	36 J	13 J	58 J	6.9 J	3.8 J	16 J	12 J	5.6 J	38 J	1129	100 J		63 J	100 J
	2.5-3.5	1166 J	44 J		44 J	15 J	11 J	10 J	25 J	5.8 J	13 J	12 J	5.2 J	12 J	34 J	1814	194 J		123 J	130 J
	3.5-4.1	644 J														902				

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TABLE 10.3
CAPITOL LAKES SITE – LAKE SEDIMENT ANALYTICAL DATA
SOUTH LAKE (AREA 3) SEMI-VOLATILE ORGANIC COMPOUNDS ug/kg (ppb)

CONTINUED

Location	Depth	Isophorone	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	n-Nitro-di-n-propylamine	n-Nitrosodiphenylamine	Naphthalene	2-Nitroaniline	3-Nitroaniline	4-Nitroaniline	Nitrobenzene	2-Nitrophenol	4-Nitrophenol	2,2"-oxybis (1-Chloropropane)	Pentachlorophenol	Phenanthrene	Pyrene	1,2,4-Trichlorobenzene	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol
C12	.0-.5																1642	7035			
	.5-1.5																1349	3126			
	1.5-2.5																495 J	3450			
	2.5-3.5																457 J	928			
C13	.0-.6																933	2502 DJ			
	.6-1.6																1590	4155 J			
	1.6-2.6																4168	5459 J			
	2.6-3.6																1476	2885 J			
	3.6-4.6																255 J	594 J			
C14	.0-.5																484 J	1169			
	.5-1.5																1012	1939 J			
	1.5-2.1																333 J	562			
C15	.0-.5																1140	2945 J			
	.5-1.5																1485	3300 J			
	1.5-2.5																772	1782 J			
	2.5-3.5																432 J	1218 J			
	3.5-4.9																254 J	700			
C16	.0-.5																1014	2812 J			
	.5-1.5																1607	2873 J			
	1.5-2.5		36 J	16 J	16 J	100 J		33 J	17 J	34 J	5.0 J	57 J	36 J		3.1 J	24 J	752	2947 J	6.3 J	31 J	35 J
	2.5-3.5	91 J	45 J	2.6 J	37 J	37 J	104 J	54 J	6.5 J	21 J	16 J	71 J	45 J	117 J	4.5 J	71 J	1555	3629 J		19 J	20 J
	3.5-4.1																592 J	1932 J			

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TABLE 10.4

CAPITOL LAKES SITE – LAKE SEDIMENTS ANALYTICAL DATA

EAST LAKE (AREA 4) SEMI-VOLATILE ORGANIC COMPOUNDS mg/kg (ppm)

Location	Depth	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(e)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i) perylene	Benzo(k)fluoranthene	Benzoic Acid	Benzyl Alcohol	bis(2-Chloroethoxy) methane	bis(2-Chloroethyl)ether	bis(2-Ethylhexyl)phthalate	Butylbenzylphthalate	4-Chloro-3-methylphenol
C17	.0-.5			408 J	1088	1326 J	1980 J	2414 J	1088 J							
	.5-1.7				397 J	470 J	470 J	660 J	427 J							
	1.7-2.8	17 J	38 J	91 J	343 J	362 J	446 J	349 J	330 J	5.8 J	78 J	1.9 J	8.4 J		53 J	43 J
	2.8-4.3				570 J	438 J	582 J	288 J	545 J							
C18	.0-1.0	148 J		180 J	943	984 J	1148 J	1558 J	1066 J							
	1.0-2.3				552 J	400 J	460 J	690 J	451 J							
	2.3-3.6				371 J	378 J	402 J	254 J	359 J							
	3.6-5.2	107 J	52 J	113 J	561 J	435 J	523 J	277 J	536 J	14 J	76 J	1.3 J	6.3 J		14 J	52 J
C19	.0-.7	198 J		409 J	1982 J	1817 J	2313 J	1074 J	1611 J					4543 J		
	.7-1.7	467 J		453 J	1722 J	1427 J	2116 J	1082 J	1230 J							
	1.7-3.3				506 J	476 J	660 J	557 J	607 J							
	3.3-4.3				212 J	212 J	188 J		261 J							
	4.3-5.1															
C20	.0-1.0	471 J		409 J	1312	1158 J	1235 J	386 J	1158 J					1390		
	1.0-2.0	151 J		185 J	660 J	695 J	562 J	284 J	869 J					2027		
	2.0-3.0			191 J	674 J	618 J	562 J		551 J					1574 J		
	3.0-4.0	371 J		150 J	557 J	455 J	545 J	186 J	569 J					485 J		
	4.0-5.0	337 J		529 J	988 J	660 J	755 J	168 J	988 J					244 J		
	5.0-6.0			90 J	264 J	236 J	348 J		275 J							

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TABLE I0.4 CONTINUED

CAPITOL LAKES SITE – LAKE SEDIMENT ANALYTICAL DATA

EAST LAKE (AREA 4) SEMI-VOLATILE ORGANIC COMPOUNDS mg/kg (ppm)

Location	Depth	4-Chloroaniline	2-Chloronaphthalene	Chrysene	Di-n-octylphthalate	Dibenz(a,h)anthracene	Dibenzofuran	1,3-Dichlorobenzene	1,4-Dichlorobenzene	3,3'-Dichlorobenzidine	Diethylphthalate	2,4-Dimethylphenol	Dimethylphthalate	2,4-Dinotrotoluene	2,6-Dinitrotoluene
C17	.0-.5			1598		646 J									
	.5-1.7			555 J											
	1.7-2.8	3.2 J		479 J	33 J	123 J	7.1 J	11 J	9.7 J	8.4 J	5.2 J	9.7 J	6.5 J	32 J	49 J
	2.8-4.3			660 J											
C18	.0-1.0			1353		394 J									
	1.0-2.3			736 J		193 J									
	2.3-3.6			477 J											
	3.6-5.2	14 J	5 J	617 J	13 J	107 J	11 J			8.8 J	3.1 J	1.9 J	13 J	9.5 J	59 J
C19	.0-.7			2395 J		409 J									
	.7-1.7			2214 J		418 J									
	1.7-3.3			708 J											
	3.3-4.3			267 J											
	4.3-5.1			218 J											
C20	.0-1.0			1467	363 J										
	1.0-2.0			869	400 J										
	2.0-3.0			955 J	354 J										
	3.0-4.0			839											
	4.0-5.0			2092 J											
	5.0-6.0			388 J											

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TABLE 10.4 CONTINUED

CAPITOL LAKES SITE – LAKE SEDIMENT ANALYTICAL DATA

EAST LAKE (AREA 4) SEMI-VOLATILE ORGANIC COMPOUNDS mg/kg (ppm)

Location	Depth	Fluoranthene	Fluorene	Hexachloroethane	Indeno(1,2,3-cd)pyrene	Isophorone	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	N-Nitroso-di-n-propylamine	N-Nitrosodiphenylamine	Naphthalene	2-Nitroaniline	3-Nitroaniline	4-Nitroaniline	Nitrobenzene	4-Nitrophenol
C17	.0-.5	1598			1734 J												
	.5-1.7	660 J															
	1.7-2.8	401 J	32 J		58 J		16 J				13 J	16 J	3.9 J	25 J	24 J	22 J	47 J
	2.8-4.3	751			275 J												
C18	.0-1.0	1476			1066 J						193 J						
	1.0-2.3	966			552 J												
	2.3-3.6	477 J			210 J												
	3.6-5.2	756	62 J	26 J	52 J	69 J	25 J	1.9 J	1.9 J	37 J	26 J	31 J	5 J	20 J	8.2 J	25 J	29 J
C19	.0-.7	2726	289 J		1115 J												
	.7-1.7	2657	212 J		1082 J						256 J						
	1.7-3.3	961					557 J				162 J						
	3.3-4.3	321 J			73 J												
	4.3-5.1	223 J	1400 J														
C20	.0-1.0	2239	440 J		394 J												
	1.0-2.0	1274			243 J												
	2.0-3.0	1630	236 J				219 J										
	3.0-4.0	1138			186 J		11381 DF					1198					
	4.0-5.0	1801	1278		174 J		146 J					314 J					
	5.0-6.0	523 J	495 J		84 J		146 J										

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TABLE 10.4 CONTINUED

CAPITOL LAKES SITE – LAKE SEDIMENT ANALYTICAL DATA

EAST LAKE (AREA 4) SEMI-VOLATILE ORGANIC COMPOUNDS mg/kg (ppm)

Location	Depth	2,2'-oxybis(1-Chloropane)	Phenanthrene	Pyrene
C17	.0-.5		146 J	2720
	.5-1.7		243 J	1537 J
	1.7-2.8	3.2 J	104 J	712
	2.8-4.3		351 J	1002
C18	.0-1.0		738	3485
	1.0-2.3		442 J	1932 J
	2.3-3.6		149 J	743
	3.6-5.2	6.3 J	328 J	945
C19	.0-.7		1941	4543 J
	.7-1.7		1820	4625 J
	1.7-3.3		491 J	2226 J
	3.3-4.3		206 J	418 J
	4.3-5.1		208 J	332 J
C20	.0-1.0		2856	2393
	1.0-2.0		984	1679
	2.0-3.0		1180	1855 J
	3.0-4.0		839	1557
	4.0-5.0		4474	4067 J
	5.0-6.0		660	618 J

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TABLE 11
CAPITOL LAKES SITE - LAKE SEDIMENTS ANALYTICAL DATA
RANGES OF VALUES FOR METALS (mg/kg)

ANALYTE	Area 1 North Lake	Area 2 N. North Lake	Area 3 South Lake	Area 4 East Lake
Aluminum	4,182 - 8,447	1,689 - 9,752	2,455 - 1,1227	3,502 - 12,956
Arsenic	4.1 - 34	4.2 - 86	3.2 - 19	4.1 - 65
Antimony	1.7 - 39	ND - 71	ND - 24	ND - 350
Barium	111 - 189	48 - 273	95 - 226	133 - 658
Beryllium	0.099 - 0.54	ND - 0.29	ND - 0.81	ND - 0.52
Cadmium	ND - 2.7	ND - 8.9	ND -3	0.93 - 36
Calcium	1,374 - 6,570	1,230 - 28,688	1,578 - 3,836	1,394 - 32,038
Chromium	9.9 -27	8.1 - 33	9.3 - 27	11- 27
Cobalt	3.3 -7.3	3.1 - 6.8	2.2 - 5.6	2.1 - 6.2
Copper	17 - 37	11 - 64	22 -39	17 - 59
Iron	6,664 -1,1905	5,102 - 14,197	4,537 - 14,434	6,426 - 14,688
Lead	53 - 216	11 - 409	98 - 373	63 - 5,519
Magnesium	801 - 1,838	994 - 1,689	545 - 1,527	957 - 1,772
Manganese	155 - 451	192 - 587	99 - 413	179 - 486
Nickel	8.6 - 13	4.7 - 469	6.3 - 14	8.8 - 16
Potassium	294 - 820	ND - 630	180 - 849	239 - 1,046
Silver	ND - 4.3	ND - 3.9	ND - 2.9	ND - 293
Sodium	ND -80	ND - 224	ND - 104	1.2 - 326
Vanadium	10 - 20	6.4 - 22	6.3 - 23	8.2 - 24
Zirconium	76 - 249	38 - 995	119 - 252	100 - 605
Thallium	ND	ND - 0.7	ND	ND -3.5
Mercury	ND - 0.73	ND - 10	ND - 0.52	ND
Selenium	ND	ND - 0.75	ND - 91	ND

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TABLE 11.1

CAPITOL LAKES SITE – LAKE SEDIMENTS ANALYTICAL DATA

NORTH LAKE (AREA 1) METALS mg/kg (ppm)

Location	Depth	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Silver	Sodium	Vanadium	Zinc
C01	.0-.5	5569	5.5 J	8.6	121	0.17 B	0.83	1830	11	4	23	7787	105	935	234	0.15	8.8	444			13	173
	.5-1.5	7304	25 J	25	138	0.26	1.8	1643	18	5.6	27	10558	160	1152	375	0.73	12	558	4.3	68 B	15	189
	1.5-2.5	8447	4 J	7.9	126	0.54		2386	12	5.9	17	11905	53	1838	267	0.069 B	13	820		83 B	19	76
C02	.0-.5	5195		6	131	0.14 B	0.76	2192	12	4.1	27	7562	115	887	230	0.17	9.5	351			12	210
	.5-1.5	6038	9.8 J	14	146	0.2	1	1613	18	5.3	24	9750	152	994	343	0.24	11	424	3	57 B	14	183
C03	.0-.5	4182		4.1	116	0.099B	0.71	2601	13	4.1	29	6664	109	816	161	0.14	11	294			10	219
	.5-1.5	5782	2.4 J	10	166	0.18 B	0.9	1917	20	4.5	28	8691	186	921	288	0.3	11	418		61 B	12	215
	1.5-2.5	6003	16 J	20	152	0.2	1.7	1891	21	4.9	37	9453	187	972	305	0.43	10	420	3.6	61 B	14	197
C04	.0-.5	4948		4.3	111	0.071 B	.78	2310	12	3.3	26	6942	102	847	155	0.12	9.3	360			11	210
	.5-1.5	4749		10	166	0.16 B	0.52	1859	19	4.5	30	7717	216	805	252	0.21	9.6	344			11	213
	1.5-2.5	7694	6.6 J	15	189	0.28	1.1	2369	27	5.7	37	11281	204	1204	332	0.4	13	533	2.9	69 B	16	218
C05	.0-.5	5063	1.7 J	6.3	125	0.083 B	0.61	1944	11	4	22	7200	101	801	243	0.15	8.6	369			11	196
	.5-1.5	5958	29 J	23	126	0.18 B	2.1	1374	16	4.6	29	8786	159	876	262	0.43	9.4	416	3		12	205
C06	.0-.5	5127	2.5 J	5.5	145	0.13 B	0.68	6570	12	4.3	27	8320	99	1225	252	0.23	9.8	365			12	249
	.5-1.5	6293	6.9 J	14	147	0.18 B	1.6	1530	17	5.2	28	9482	128	987	290	0.52	9.9	448		51 B	13	225
	1.5-2.3	7493	39 J	34	128	0.23	2.7	1432	13	6.2	26	11239	153	1066	302	0.12	12	508	2.6	75 B	17	176
	2.3-3.0	7525	18 J	24 J	121	0.26	0.92	1685	9.9	7.3	17	10734	87	1138	451	0.069 B	13	523	1.6	80 B	20	100

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TABLE 11.2

CAPITOL LAKES SITE – LAKE SEDIMENTS ANALYTICAL DATA

NORTHERN NORTH LAKE (AREA 2) METALS mg/kg (ppm)

Location	Depth	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
C07	.0-.5	7671	44 J	30 J	223	0.24	1.8	2002	12	6	25	11416	175	994	335	0.1	12	507		3.9	73 B		14	161
	.5-1.3	8688	2.6 J	11 J	110	0.29		1386	9.7	6.8	19	12386	88	1134	373	0.11	14	625			93 B		22	139
C08	.0-.5	8613	2.9 J	9.5 J	188	0.089 B		4877	15	6.5	20	13603	64	1610	468	0.83	14	630			71 B		19	252
	.5-1.5	7624	68 J	46 J	264	0.22	5.5	2090	20	12	45	13193	300	1094	375	6.3	18	521		2.4	100		16	374
	1.5-2.5	8070		8.4 J	115	0.29		1521	9.3	6.6	15	12083	34	1186	587	0.071 B	14	578			115		22	82
C09	.0-.7	2817 J	8.6 J	11	48			25234 J	20 J	2.1 J	15	6018 J	86 J	1045 J	202 J	0.049 B	5.1 J	104			120	0.35 B	7.3	128
	.7-1.7	7563 J	8.1 J	16	236	0.081 B	1.4	5620 J	18 J	5.8 J	36	11861 J	189 J	1285 J	224 J	0.31	14 J	441					16	487 J
	2.0-2.5	8313 J	71 J	86	229	0.21	8.9	3031 J	33 J	6.5 J	64	14197 J	409 J	1261 J	331 J	4.7	16 J	528	0.75	1.8	164	0.7 B	17	995 J
	2.5-3.5	6856 J	28 J	19	125	0.25	2.4	1461 J	9 J	3.9 J	17	9835 J	69 J	1118 J	311 J	0.056 B	11 J	487	0.53 B	0.53	224	0.4 B	17	94 J
C10	.0-.6	1689 J	3.5 J	5	64			28688 J	12 J	2 J	15	5102 J	76 J	1452 J	277 J	0.07 B	4.7	124					6.4	200 J
	.6-1.6	7217 J	25 J	27	222	0.15 B	1.6	4571 J	18 J	5.2 J	39	13860 J	202 J	1229 J	328 J	0.25	14J	432		0.73 B			17	434 J
	1.6-2.6	8410 J	21 J	18	142	0.24	1.3	1438 J	11 J	5.2 J	22	12644 J	105 J	1114 J	303 J	0.11	13	538				0.29	19	124 J
	2.6-3.8	6568 J		4.2	102	0.21		1292 J	8.1 J	4.2 J	11	9893 J	11 J	1144 J	283 J	10 J	469						15	38 J
C11	.0-.5	3952 J	5 J	6.2	132	0.041 B	0.91	20774 J	12 J	3.1 J	26	6980 J	121 J	1689 J	192 J	0.087 B	8.7 J	256					9.1	241 J
	.5-1.5	7799 J	4.5 J	10	273		1.2	6402 J	16 J	5.4 J	31	12106 J	144 J	1467 J	246 J	0.19	13 J	502					16	410 J
	1.5-2.5	9752 J	25 J	40	203	0.29	2.4	2188 J	17 J	6.2 J	37	14190 J	189 J	1367 J	219 J	0.19	16 J	583					22	526 J
	2.5-4.2	8436		6.4	102	0.24	0.41 B	1230	9	4.1	12	10497	12	1204	277		11	543					17	44

TABLE 11.3

CAPITOL LAKES SITE – LAKE SEDIMENT ANALYTICAL DATA

SOUTH LAKE (AREA 3) METALS mg/kg (ppm)

Location	Depth	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Vanadium	Zinc
C12	.0-.5	4737		11	168		1.1	3836	25	3.9	35	7785	346	872	185		9.8	359	0.98 B		72 B	12	230
	.5-1.5	5505		9.8	156	0.8		2679	20	3.6	26	8092	233	969	194		9.8	408	80 b			12	140
	1.5-2.5	7487	3.6 J	14	182	0.12 B	1.1	2324	23	4.3	33	10286	231	1126	254	0.29	10	544		0.98 B	89 B	15	161
	2.5-3.5	8619	13 J	16	172	0.16 B	1.4	2102	15	4.7	22	11404	158	1346	292	0.52	11	660		1.1	96B	17	119
C13	.0-.6	2455		3.2	95	0.81		2654	9.3	2.3	25	4537	98	594	99		6.8	180				6.8	174
	.6-1.6	3688		4.2	150		1.1	3006	14	2.8	36	6156	189	754	126		11	269		1.8	55 B	8.7	237
	1.6-2.6	5260		8.8	176		1.2	2501	21	3.3	34	7455	373	839	177		8.8	400		1.2	65 B	11	201
	2.6-3.6	4918		10	163		0.87	2322	21	3.4	30	7784	245	872	198		11	370			62 B	11	143
	3.6-4.6	11227	6.5 J	11	157	0.19 B	1.2	1835	15	5.6	22	14434	119	1527	413		14	849	0.65		90 B	23	132
C14	.0-.5	3820		3.4	99		0.85	3006	10	2.5	29	6247	102	866	142		7.7	271	91 B			8.9	203
	.5-1.5	3793		7	136		1	1967	15	2.8	32	6248	247	766	148		7.9	269		1.2	104	8.8	200
	1.5-2.1	6345	6.8 J	11	146		1.6	1626	23	3.9	24	8686	202	1047	224		9.2	448		2.9	100 B	14	140
C15	.0-.5	5273		4.2	132		1	2850	15	3.8	32	7458	144	945	137		11	377		1.5	55 B	11	233
	.5-1.5	5365		6.7	176		1.3	2472	18	3.4	38	7951	318	905	165		11	404		1.6	59 B	11	252
	1.5-2.5	7009		12	173	0.13 B	1	2554	26	4.1	33	9920	304	1129	237		12	495			74 B	14	180
	2.5-3.5	7369	3.7 J	15	204	0.15 B	1.3	2284	27	4.3	39	10658	267	1145	253	0.32	10	516		1.1	77 B	16	181
	3.5-4.9	7060	8.9 J	14	176	0.14 B	1.5	2207	14	5.1	24	11321	172	1202	398		11	504		0.83 B	75 B	17	135
C16	.0-.5	5993		4.6	134		1	2743	14	3.5	33	7422	154	991	139		11	431		1.1		12	239
	.5-1.5	2825		5.4	114		0.88	1578	12	2.2	25	4851	248 J	545 J	101	0.14	6.3 J	219		1		6.3	159
	1.5-2.5	4797		11	171		0.94	2564	23	3.5	30	8841	268 J	953 J	219	0.22	11 J	367				11	154
	2.5-3.5	5093	4.2 J	10	185		1.2	2994	15	4.1	27	9201	235 J	991 J	236	0.25	9.1 J	397				13	156
	3.5-4.1	5854	24 J	19	226	0.18 B	3	2454	18	4.4	29	10175	280 J	1166 J	231	0.21	10 J	436		2.3		15	185

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TABLE 11.4

CAPITOL LAKES SITE – LAKE SEDIMENT ANALYTICAL DATA

EAST LAKE (AREA 4) METALS mg/kg (ppm)

Location	Depth	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Silver	Sodium	Thallium	Vanadium	Zinc
C17	.0-.5	3502		4.1	343	0.17 B	3.4	16456	14	2.4	43	6426	67 J	1204 J	179	8.8 J	267	0.99 B	75 B		8.2	364
	.5-1.7	7942		7.3	301	0.26	1.1	10035	15	3.5	34	10248	88 J	1102 J	303	12 J	572	13	127		14	215
	1.7-2.8	9511	7.1 J	7.1	172	0.47	1.9	1695	14	4.8	21	11517	137 J	1333 J	253	12 J	653		140		18	106
	2.8-4.3	8639	4.7 J	8.1	167	0.46	1.7	1671	13	5.2	21	12332	130 J	1308 J	453	13 J	632		208		19	128
C18	.0-1.0	4428		4.9	484	0.2	3.7	22345	18	2.7	57	7626	82 J	1505 J	265	13 J	330	2.1	92 B		9.4	409
	1.0-2.3	6394		7.4	408	0.24	1.2	10074	17	3.3	43	9246	113 J	957 J	283	12 J	431	19	130		12	273
	2.3-3.6	10214	17 J	12	201	0.52	3.3	2061	15	6.2	25	13556	155 J	1467 J	305	14 J	730	0.68 B	189		21	152
	3.6-5.2	8253	3 J	6.9	149	0.43	1.3	1518	11	5.2	19	11277	101 J	1254 J	440	12 J	590		234		17	100
C19	.0-.7	4502		4.1	364	0.19 B	3.1	29199	20	2.1	36	7269	63 J	1772 J	223	9.9 J	271	2.4	104		8.7	377
	.7-1.7	4822		4.9	556	0.21	3.3	22976	18	2.9	59	7970	85 J	1501 J	290	13 J	354	2.2	107		10	373
	1.7-3.3	9260	7.1 J	9.6	420	0.28	2.3	11132	19	3.9	43	11132	136 J	1240 J	318	14 J	668	18	173		16	282
	3.3-4.3	8908	4 J	9.1	152	0.42	1.3	1818	12	4.8	20	11635	116 J	1248 J	422	12 J	636	0.43 B	205		18	111
	4.3-5.1	11003	94 J	39	133	0.43	7.3	1469	11	5.7	21	14688	2486 J	1469 J	268	14 J	815	0.13 B	301		19	201
C20	.0-1.0	3652		5.4 J	411 J		2.4	32038	27	3.9	43	10422	93	1258	486	15	239	3.7	141		15	337
	1.0-2.0	5906		5.8 J	468 J		0.93	15575	14	3.7	31	9322	113	1210	346	13	460	4.8	135		12	242
	2.0-3.0	8823		6.7 J	658 J		1.2	17085	26	3.5	40	11858	120	1304	368	15	697	24	182		16	342
	3.0-4.0	10063	350	65 J	352 J		36	2707	21	5.5	51	12220	211	1294	334	13	773	1.9	326	3.5	17	605
	4.0-5.0	12956	27	15 J	279 J		3.4	10284	25	4.6	51	13944	4137	1586	294	16	1046	25	252		24	296
	5.0-6.0	9104	98	27	153		11	1394	11	4.8	17	12308	5519	1231	319	13	747	293	1.2		16	357

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APPENDIX C

PHOTOGRAPHS



Sediment sampling in South Lake



Sediment sampling in South Lake



Field Screening of sediment cores



North Lake



Electrofishing along the south shoreline of North Lake



Electrofishing in South Lake



Electrofishing along the southwestern shoreline of South Lake



East Lake



East Lake

APPENDIX D

BORING LOGS AND SEDIMENT SAMPLING SUBSURFACE INVESTIGATION REPORT

BORING LOG LEGEND



CL/OL – UNDIFFERENTIATED MUCKY LEAN CLAYS AND SILTS, ORGANICS



CL – SILTY CLAY



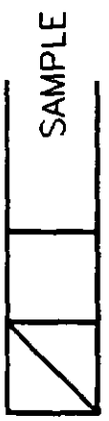
ML – SILT, CLAYEY SILT



GM – GRAVEL, SAND, SILT MIXTURE



OH – ORGANIC CLAYS



NO SAMPLE COLLECTED

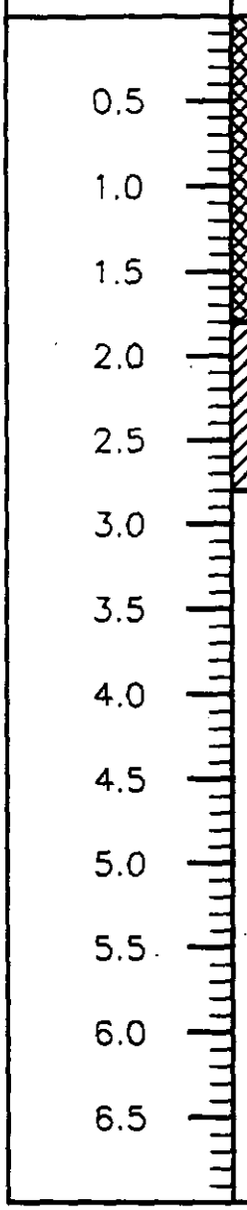
SOIL SAMPLE COLLECTED

NOTE:
DIFFERENCES IN DEPTHS DUE TO COMPACTION OR LOSS OF MATERIAL DURING RETRIEVAL.

BSS = BELOW SEDIMENT SURFACE

WALK HAYDEL
A CH2M HILL COMPANY
BATON ROUGE LOUISIANA

PROJECT NAME:	LDEQ–IASD CAPITOL LAKES
PROJECT NO.:	33828–003–0201
BORING ID:	C–01
HOLE DIAMETER:	3"
WATER DEPTH:	6.8'
TOTAL DEPTH:	9.6'
DRILLING CO.:	WOODWARD–CLYDE
GEOLOGIST/ENGINEER:	PETER GOODMAN
SAMPLING METHOD:	VIBRACORE
INSTALLATION DATE:	5–26–98



FEET (BSS)	LOG	SAMPLE	SAMPLE I.D.	UNIFIED SOIL CLASSIFICATION SYMBOL	INTERVAL FROM	INTERVAL TO	DESCRIPTION
0.5 – 1.5			A1505269804 A1505269805	CL/OL	0	1.8	UPPER 12" GREENISH LOWER–BLACK VERY SOFT MUCK
2.0 – 2.5			A1505269806	CL	1.8	2.8	GREEN GRAY SILTY CLAY SOFT, COMMON ORGANICS

BSS = BELOW SEDIMENT SURFACE

WALK HAYDEL
A DAMES & MOORE GROUP COMPANY
BATON ROUGE LOUISIANA

DWG. NO. C-01.dwg 6/9/98

PROJECT NAME:	LDEQ-IASD CAPITOL LAKES
PROJECT NO.:	33828-003-0201
BORING ID:	C-02
HOLE DIAMETER:	3"
WATER DEPTH:	6.20'
TOTAL DEPTH:	8.15'
DRILLING CO.:	WOODWARD-CLYDE
GEOLOGIST/ENGINEER:	PETER GOODMAN
SAMPLING METHOD:	VIBRACORE
INSTALLATION DATE:	5-26-98

FEET (BSS)	LOG	SAMPLE	SAMPLE I.D.	UNIFIED SOIL CLASSIFICATION SYMBOL	INTERVAL FROM	INTERVAL TO	DESCRIPTION
0.5			A1505269807	CL/OL	0	1.6'	DARK GREEN MUCK VERY SOFT
1.0			A1505269808 DUP. SAMPLE A1505269809				DARK GRAY TO BLACK VERY SOFT & MUCK
1.5							
2.0				CL	1.6'	2.0'	GREEN GRAY SILTY CLAY COMMON ORGANICS, SOFT
2.5							
3.0							
3.5							
4.0							
4.5							
5.0							
5.5							
6.0							
6.5							

BSS = BELOW SEDIMENT SURFACE

WALK HAYDEL
A DAMES & MOORE GROUP COMPANY
BATON ROUGE LOUISIANA

96/6/9 bwp 20-J ON .DWG

PROJECT NAME:	LDEQ-IASD CAPITOL LAKES
PROJECT NO.:	33828-003-0201
BORING ID:	C-03
HOLE DIAMETER:	3"
WATER DEPTH:	5.9'
TOTAL DEPTH:	10.4'
DRILLING CO.:	WOODWARD-CLYDE
GEOLOGIST/ENGINEER:	PETER GOODMAN
SAMPLING METHOD:	VIBRACORE
INSTALLATION DATE:	5-26-98

FEET (BSS)	LOG	SAMPLE	SAMPLE I.D.	UNIFIED SOIL CLASSIFICATION SYMBOL	INTERVAL FROM	INTERVAL TO	DESCRIPTION
0.5			A1505269810	CL/OL	0	2.8'	GREEN TO GREEN GRAY MUCK, VERY SOFT
1.0			A1505269811				
1.5							BECOMING DARKER & BLACKER, VERY SOFT
2.0			A1505269812				
2.5							ORGANICS @ 30"
3.0				OH	2.8'	4.5'	GREEN TO BROWNISH, GREEN ORGANIC RICH CLAY, SOFT
3.5							
4.0							
4.5							
5.0							
5.5							
6.0							
6.5							

BSS = BELOW SEDIMENT SURFACE

DCM GROUP WALK HAYDEL A DAIGLE & MOORE GROUP COMPANY BATON ROUGE LOUISIANA

IWG, NO. C 03.dwg 6/9/98

PROJECT NAME:	LDEQ-IASD CAPITOL LAKES
PROJECT NO.:	33828-003-0201
BORING ID:	C-04
HOLE DIAMETER:	3"
WATER DEPTH:	5.45'
TOTAL DEPTH:	9.95'
DRILLING CO.:	WOODWARD-CLYDE
GEOLOGIST/ENGINEER:	PETER GOODMAN
SAMPLING METHOD:	VIBRACORE
INSTALLATION DATE:	5-26-98

FEET (BSS)	LOG	SAMPLE	SAMPLE I.D.	UNIFIED SOIL CLASSIFICATION SYMBOL	INTERVAL FROM	INTERVAL TO	DESCRIPTION
0.5			A1505269813	CL/OL	0	3.0'	DARK GREEN TO GRAY MUCK, VERY SOFT
1.0			A1505269814 MS AND MSD				
1.5							
2.0			A1505269815				VERY DARK GRAY TO BLACK MUCK, VERY SOFT
2.5							
3.0				CL	3.0'	4.5'	GREEN GRAY CLAY, SOFT, COMMON ORGANICS
3.5							
4.0							
4.5							
5.0							
5.5							
6.0							
6.5							

BSS = BELOW SEDIMENT SURFACE

WALK HAYDEL
A DAMES & MOORE GROUP COMPANY
BATON ROUGE LOUISIANA

DWG. NO.: C-04.dwg 6/9/98

PROJECT NAME:	LDEQ-IASD CAPITOL LAKES
PROJECT NO.:	33828-003-0201
BORING ID:	C-05
HOLE DIAMETER:	3"
WATER DEPTH:	5.85'
TOTAL DEPTH:	8.6'
DRILLING CO.:	WOODWARD-CLYDE
GEOLOGIST/ENGINEER:	PETER GOODMAN
SAMPLING METHOD:	VIBRACORE
INSTALLATION DATE:	5-26-98

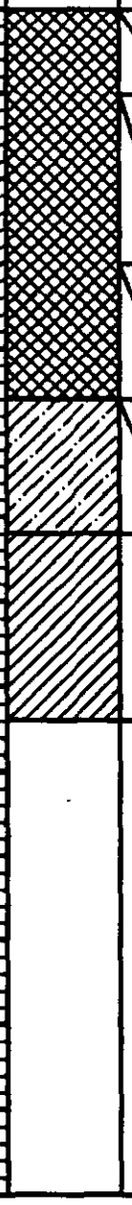
FEET (BSS)	LOG	SAMPLE	SAMPLE I.D.	UNIFIED SOIL CLASSIFICATION SYMBOL	INTERVAL FROM	INTERVAL TO	DESCRIPTION
0.5			A1505269816				GREEN MUCK
1.0			A1505269817	CL/OL	0	2.1'	DARK GRAY TO BLACK MUCK
1.5							
2.0							
2.5				CL	2.1'	2.8'	GREEN GRAY CLAY, SOFT, COMMON ORGANICS
3.0							
3.5							
4.0							
4.5							
5.0							
5.5							
6.0							
6.5							

BSS = BELOW SEDIMENT SURFACE

DCM GROUP WALK HAYDEL A DAMES & MOORE GROUP COMPANY
BATON ROUGE LOUISIANA

DWG. NO.: C-05.dwg 6/9/98

PROJECT NAME:	LDEQ-IASD CAPITOL LAKES
PROJECT NO.:	33828-003-0201
BORING ID:	C-06
HOLE DIAMETER:	3"
WATER DEPTH:	5.4'
TOTAL DEPTH:	9.5'
DRILLING CO.:	WOODWARD-CLYDE
GEOLOGIST/ENGINEER:	PETER GOODMAN
SAMPLING METHOD:	VIBRACORE
INSTALLATION DATE:	5-26-98

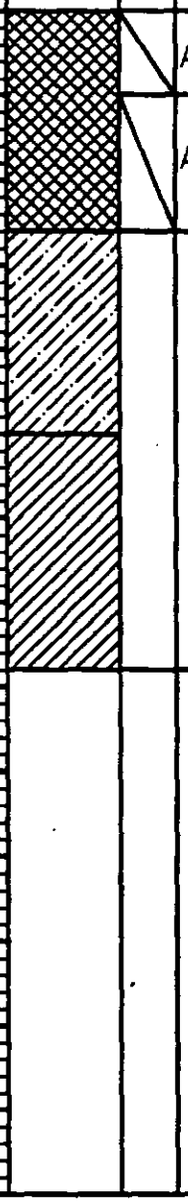


FEET (BSS)	LOG	SAMPLE	SAMPLE I.D.	UNIFIED SOIL CLASSIFICATION SYMBOL	INTERVAL FROM	INTERVAL TO	DESCRIPTION
0.5			A1505269818	CL/OL	0	2.3'	GREEN MUCK
1.0			A1505269819				
1.5							BLACK MUCK
2.0			A1505269820				
2.5			A1505269821	OH	2.3'	3.1'	DARK BROWN ORGANIC RICH CLAY, VERY SOFT
3.0							BOTTOM 2" BLACK MUCK
3.5				CL	3.1'	4.2'	GREEN GRAY CLAY, COMMON ORGANICS, SOFT
4.0							

BSS = BELOW SEDIMENT SURFACE

DCM GROUP WALK HAYDEL A CHAMBERLAIN GROUP COMPANY BATON ROUGE

PROJECT NAME:	LDEQ-IASD CAPITOL LAKES
PROJECT NO.:	33828-003-0201
BORING ID:	C-07
HOLE DIAMETER:	3"
WATER DEPTH:	4.15'
TOTAL DEPTH:	8.0'
DRILLING CO.:	WOODWARD-CLYDE
GEOLOGIST/ENGINEER:	PETER GOODMAN
SAMPLING METHOD:	VIBRACORE
INSTALLATION DATE:	5-26-98



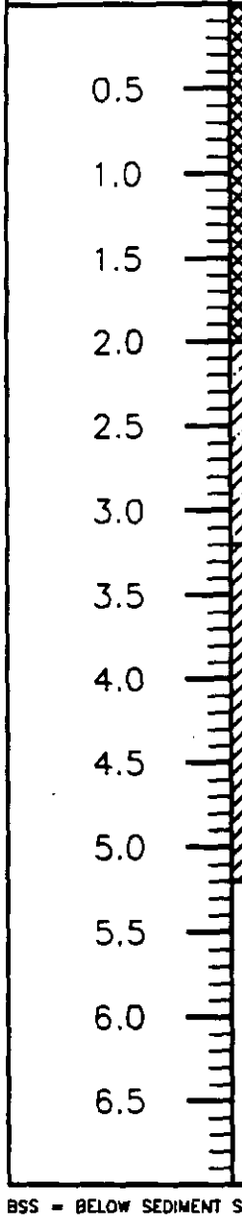
FEET (BSS)	LOG	SAMPLE	SAMPLE I.D.	UNIFIED SOIL CLASSIFICATION SYMBOL	INTERVAL FROM	INTERVAL TO	DESCRIPTION
0.5 / 1.0			A1505269822 A1505269823	CL/OL	0	1.3'	BLACK MUCK
1.5 / 2.0 / 2.5				OH	1.3'	2.5'	GREEN GRAY ORGANIC RICH CLAY, VERY SOFT
3.0 / 3.5				CL	2.5'	3.9'	GREEN CLAY, COMMON ORGANICS, SOFT
4.0 / 4.5 / 5.0 / 5.5 / 6.0 / 6.5							

BSS = BELOW SEDIMENT SURFACE

DCM GROUP WALK HAYDEL A DANIEL & MOORE GROUP COMPANY
BATON ROUGE LOUISIANA

DWG NO: C-07.dwg 6/9/98

PROJECT NAME:	LDEQ–IASD CAPITOL LAKES
PROJECT NO.:	33828–003–0201
BORING ID:	C–08
HOLE DIAMETER:	3"
WATER DEPTH:	2.80'
TOTAL DEPTH:	8.0'
DRILLING CO.:	WOODWARD–CLYDE
GEOLOGIST/ENGINEER:	PETER GOODMAN
SAMPLING METHOD:	VIBRACORE
INSTALLATION DATE:	5–26–98



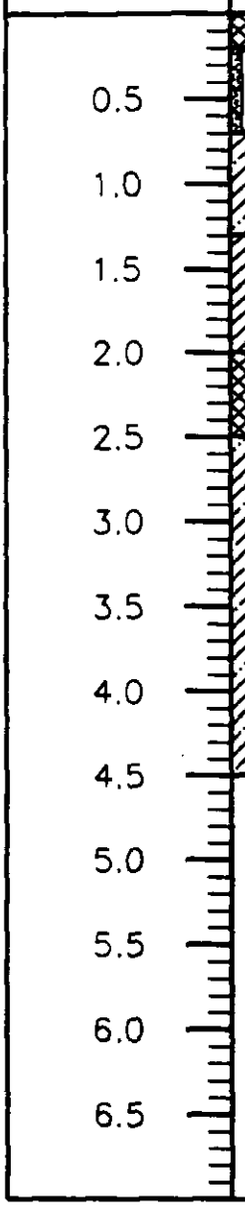
FEET (BSS)	LOG	SAMPLE	SAMPLE I.D.	UNIFIED SOIL CLASSIFICATION SYMBOL	INTERVAL FROM	INTERVAL TO	DESCRIPTION
			A1505269824	CL/OL	0	2.0'	GREEN MUCK
			A1505269825				BLACK ORGANIC RICH MUCK
			A1505269826				DARK GRAY ORGANIC RICH MUCK
				OH	2.0'	3.2'	GREEN GRAY ORGANIC RICH CLAY, VERY SOFT
				CL	3.2'	5.2'	GREEN GRAY CLAY, ABUNDANT ORGANICS

BSS = BELOW SEDIMENT SURFACE

WALK HAYDEL
A DANIEL & MOORE GROUP COMPANY
BATON ROUGE LOUISIANA

DWG NO: C-108.dwg 6/9/98

PROJECT NAME:	LDEQ-IASD CAPITOL LAKES
PROJECT NO.:	33828-003-0201
BORING ID:	C-09
HOLE DIAMETER:	3"
WATER DEPTH:	0.45'
TOTAL DEPTH:	5.0'
DRILLING CO.:	WOODWARD-CLYDE
GEOLOGIST/ENGINEER:	PETER GOODMAN
SAMPLING METHOD:	VIBRACORE
INSTALLATION DATE:	5-26-98



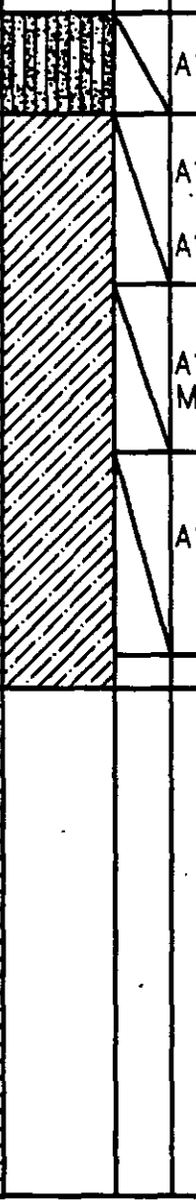
FEET (BSS)	LOG	SAMPLE	SAMPLE I.D.	UNIFIED SOIL CLASSIFICATION SYMBOL	INTERVAL FROM	INTERVAL TO	DESCRIPTION
				SL	0'	0.2'	GREEN MUCK
			A1505279829	GM	0.2'	0.7'	GRAVELLY SAND, BLACK
			A1505279830	OH	0.7'	1.3'	DARK GREEN ORGANIC RICH CLAY, VERY SOFT
				CL	1.3'	2.0'	GREEN CLAY, VERY ABUNDANT ORGANICS
			A1505279831	CL/OH	2.0'	2.5'	BLACK, VERY SOFT, CLAY/ MUCK WITH ORGANICS
			A1505279832	OH	2.5'	4.5'	GREEN ORGANIC RICH CLAY

BSS = BELOW SEDIMENT SURFACE

WALK HAYDEL
A DAMES & MOORE GROUP COMPANY
BATON ROUGE LOUISIANA

DWG. NO. C-09.dwg 6/9/98

PROJECT NAME:	LDEQ-IASD CAPITOL LAKES
PROJECT NO.:	33828-003-0201
BORING ID:	C-10
HOLE DIAMETER:	3"
WATER DEPTH:	0.75'
TOTAL DEPTH:	4.8'
DRILLING CO.:	WOODWARD-CLYDE
GEOLOGIST/ENGINEER:	PETER GOODMAN
SAMPLING METHOD:	VIBRACORE
INSTALLATION DATE:	5-26-98



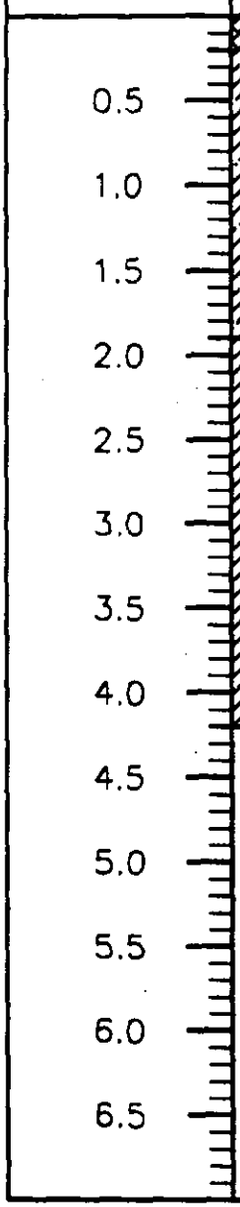
FEET (BSS)	LOG	SAMPLE	SAMPLE I.D.	UNIFIED SOIL CLASSIFICATION SYMBOL	INTERVAL FROM	INTERVAL TO	DESCRIPTION
			A1505279833	GM	0'	0.6'	DARK GREEN GRAVELLY SAND
			A1505279834 DUP. A1505279835				ORGANIC RICH, GREEN GRAY CLAY, BLACK STAINING AROUND 1' & 1.6' VERY SOFT
			A1505279836 MS & MSD	OH	0.6'	4.0'	GREEN
			A1505279837				SOFT

BSS = BELOW SEDIMENT SURFACE

WALK HAYDEL
A DAMES & MOORE GROUP COMPANY
BATON ROUGE LOUISIANA

DWG. NO.: C-10.dwg 6/9/98

PROJECT NAME:	LDEQ-IASD CAPITOL LAKES
PROJECT NO.:	33828-003-0201
BORING ID:	C-11
HOLE DIAMETER:	3"
WATER DEPTH:	0.5
TOTAL DEPTH:	5.0
DRILLING CO.:	WOODWARD-CLYDE
GEOLOGIST/ENGINEER:	PETER GOODMAN
SAMPLING METHOD:	VIBRACORE
INSTALLATION DATE:	5-27-98



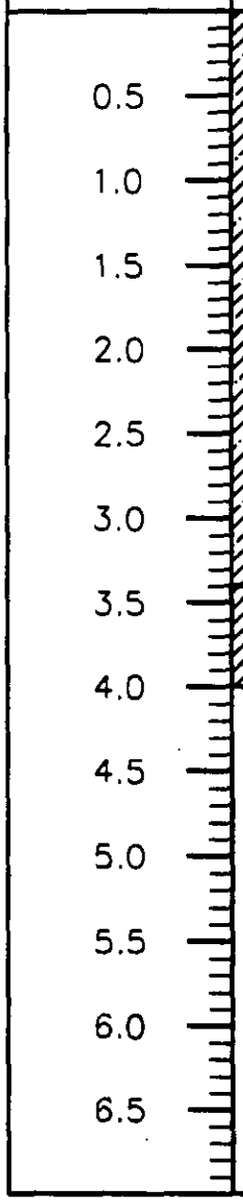
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				CL/OL	0	0.2	DARK GREEN MUCK
			A1505279838				
			A1505279839	OH	0.2	1.9	ORGANIC RICH CLAY, GREEN GRAY VERY SOFT SLIGHT STAINING UPPER 1.0'
			A1505279840				
			A1505279841	CL	1.9	4.2	GREEN CLAY, ABUNDANT ORGANICS

BSS = BELOW SEDIMENT SURFACE

WALK HAYDEL
A CH2M HILL GROUP COMPANY
BATON ROUGE LOUISIANA

DWG. NO. C-11dwg 6/9/98

PROJECT NAME:	LDEQ-IASD CAPITOL LAKES
PROJECT NO.:	33828-003-0201
BORING ID:	C-12
HOLE DIAMETER:	3"
WATER DEPTH:	2.90
TOTAL DEPTH:	7.0
DRILLING CO.:	WOODWARD-CLYDE
GEOLOGIST/ENGINEER:	PETER GOODMAN
SAMPLING METHOD:	VIBRACORE
INSTALLATION DATE:	5-27-98

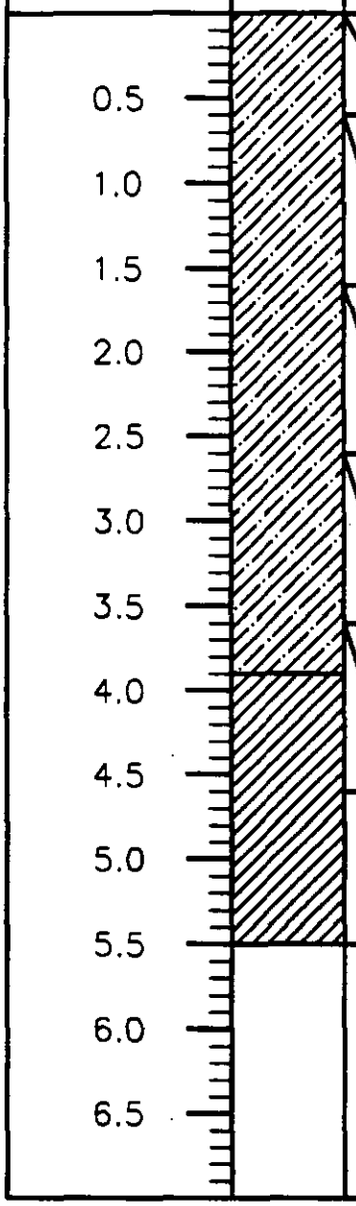


FEET (BSS)	LOG	SAMPLE	SAMPLE I.D.	UNIFIED SOIL CLASSIFICATION SYMBOL	INTERVAL FROM	INTERVAL TO	DESCRIPTION
0.5			A1505279842		0	0.5	BLACK, VERY WOODY, ORGANICS WITH CLAY
1.0			A1505279843	OH	0.5	1.3	BLACK TO DARK GRAY ORGANIC RICH CLAY, VERY SOFT
1.5							
2.0			A1505279844				
2.5					1.3	3.4	DARK GRAY ORGANIC RICH CLAY, SLIGHT STAINING THROUGHOUT, VERY SOFT
3.0			A1505279845				
3.5							
				CL	3.4	4.0	GREEN CLAY, VERY SOFT
4.0							

BSS = BELOW SEDIMENT SURFACE

DCM GROUP WALK HAYDEL
A CHAMBERLAIN GROUP CO
BATON ROUGE LA

PROJECT NAME:	LDEQ–IASD CAPITOL LAKES
PROJECT NO.:	33828–003–0201
BORING ID:	C–13
HOLE DIAMETER:	3"
WATER DEPTH:	0.90
TOTAL DEPTH:	6.5
DRILLING CO.:	WOODWARD–CLYDE
GEOLOGIST/ENGINEER:	PETER GOODMAN
SAMPLING METHOD:	VIBRACORE
INSTALLATION DATE:	5–27–98



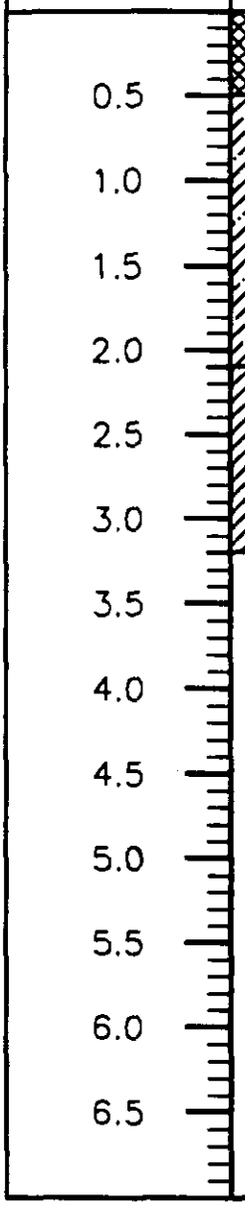
FEET (BSS)	LOG	SAMPLE	SAMPLE I.D.	UNIFIED SOIL CLASSIFICATION SYMBOL	INTERVAL FROM	INTERVAL TO	DESCRIPTION
			A1505279846	OH	0	3.9	VERY DARK GREEN TO BLACK ORGANIC RICH CLAY, SOME ODORS, VERY SOFT
			A1505279847				
			A1505279848				
			A1505279849				
			A1505279850	CL	3.9	5.5	GREEN CLAY WITH SOME BLACK STAINING, VERY SOFT, COMMON ORGANICS

BSS = BELOW SEDIMENT SURFACE

DCM GROUP WALK HAYDEL A DAMES & MOORE GROUP COMPANY
BATON ROUGE LOUISIANA

DWG. NO C-13.dwg 6/4/98

PROJECT NAME:	LDEQ-IASD CAPITOL LAKES
PROJECT NO.:	33828-003-0201
BORING ID:	C-14
HOLE DIAMETER:	3"
WATER DEPTH:	3.35
TOTAL DEPTH:	6.4
DRILLING CO.:	WOODWARD-CLYDE
GEOLOGIST/ENGINEER:	PETER GOODMAN
SAMPLING METHOD:	VIBRACORE
INSTALLATION DATE:	5-27-98



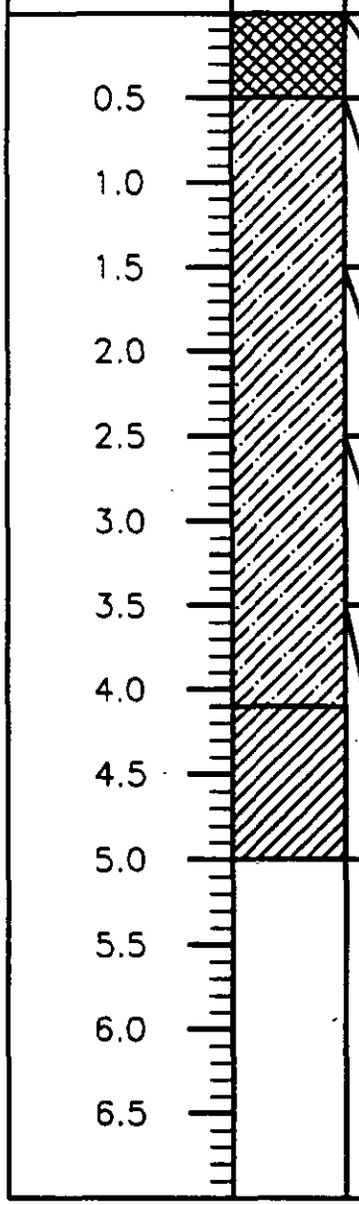
FEET (BSS)	LOG	SAMPLE	SAMPLE I.D.	UNIFIED SOIL CLASSIFICATION SYMBOL	INTERVAL FROM	INTERVAL TO	DESCRIPTION
0.5			A1505279852	CL/OL	0	0.5	DARK GREEN MUCK
1.0			A1505279853	OH	0.5	2.1	DARK GREEN TO BLACK ORGANIC RICH CLAY, VERY SOFT
1.5							
2.0			A1505279854				
2.5				CL	2.1	3.2	GREEN GRAY SILTY CLAY, FEW ORGANICS, MEDIUM STIFF
3.0							

BSS = BELOW SEDIMENT SURFACE

WALK HAYDEL
A DAMES & MOORE GROUP COMPANY
BATON ROUGE LOUISIANA

DWG. NO.: C-14.dwg 6/9/98

PROJECT NAME:	LDEQ-IASD CAPITOL LAKES
PROJECT NO.:	33828-003-0201
BORING ID:	C-15
HOLE DIAMETER:	3"
WATER DEPTH:	2.95
TOTAL DEPTH:	8.1
DRILLING CO.:	WOODWARD-CLYDE
GEOLOGIST/ENGINEER:	PETER GOODMAN
SAMPLING METHOD:	VIBRACORE
INSTALLATION DATE:	5-27-98



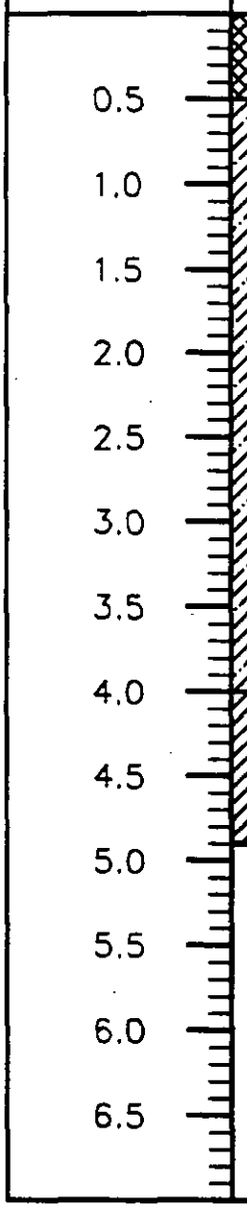
FEET (BSS)	LOG	SAMPLE	SAMPLE I.D.	UNIFIED SOIL CLASSIFICATION SYMBOL	INTERVAL FROM	INTERVAL TO	DESCRIPTION
0.5			A1505279855	CL/OL	0	0.5	DARK GREEN MUCK
1.0			A1505279856	OH	0.5	4.1	BLACK, DARK GRAY GREEN ORGANIC RICH CLAY, SOME ODORS, VERY SOFT
1.5							
2.0			A1505279857				
2.5							
3.0			A1505279858				
3.5							
4.0			A1505279859	CL	4.1	5.0	DARK GREEN, LITTLE STAINING, CLAY SOFT
4.5							
5.0							
5.5							
6.0							
6.5							

BSS = BELOW SEDIMENT SURFACE

DCM GROUP WALK HAYDEL
A CHARLES L. MADDOX GROUP COMPANY
BATON ROUGE LOUISIANA

DWG NO C-15.dwn 6/9/98

PROJECT NAME:	LDEQ–IASD CAPITOL LAKES
PROJECT NO.:	33828–003–0201
BORING ID:	C–16
HOLE DIAMETER:	3"
WATER DEPTH:	3.15'
TOTAL DEPTH:	8.2'
DRILLING CO.:	WOODWARD–CLYDE
GEOLOGIST/ENGINEER:	PETER GOODMAN
SAMPLING METHOD:	VIBRACORE
INSTALLATION DATE:	5–28–98



FEET (BSS)	LOG	SAMPLE	SAMPLE I.D.	UNIFIED SOIL CLASSIFICATION SYMBOL	INTERVAL FROM	INTERVAL TO	DESCRIPTION
0.5			A1505279860	CL/OL	0'	0.5'	DARK GREEN MUCK
1.0			A1505279861	OH	0.5'	4.0'	BLACK, VERY DARK GREEN ORGANIC RICH CLAY, ODORS, VERY SOFT
1.5							
2.0			A1505279862				
2.5							
3.0			A1505279863				
3.5							
4.0			A1505279864				
4.5				CL	4.0'	4.9'	GREEN SILTY CLAY, SOFT, COMMON ORGANICS
5.0							
5.5							
6.0							
6.5							

BSS = BELOW SEDIMENT SURFACE

DCM GROUP WALK HAYDEL A DAVIS & MOORE GROUP COMPANY
BATON ROUGE LOUISIANA

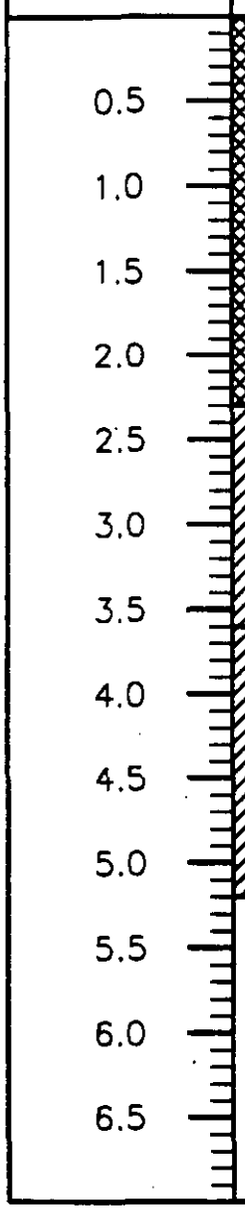
PROJECT NAME:	LDEQ-IASD CAPITOL LAKES
PROJECT NO.:	33828-003-0201
BORING ID:	C-17
HOLE DIAMETER:	3"
WATER DEPTH:	0.85'
TOTAL DEPTH:	5.60'
DRILLING CO.:	WOODWARD-CLYDE
GEOLOGIST/ENGINEER:	PETER GOODMAN
SAMPLING METHOD:	VIBRACORE
INSTALLATION DATE:	5-28-98

FEET (BSS)	LOG	SAMPLE	SAMPLE I.D.	UNIFIED SOIL CLASSIFICATION SYMBOL	INTERVAL FROM	INTERVAL TO	DESCRIPTION
0.5			A1505289866	CL/OL	0'	1.7'	BLACK EXTREMELY SOFT MUCK
1.0			A1505289867 MS & MSD				
1.5							
2.0			A1505289868 DUP A1505289869	CL	1.7'	2.8'	GREEN CLAY, VERY SOFT, COMMON ORGANICS
2.5							
3.0			A1505289870	CL	2.8'	4.3'	DARK GREEN TO BLACK CLAY, FEW ORGANICS VERY SOFT
3.5							
4.0							
4.5							
5.0							
5.5							
6.0							
6.5							

BSS = BELOW SEDIMENT SURFACE

WALK HAYDEL
A DAMES & MOORE GROUP COMPANY
BATON ROUGE LOUISIANA

PROJECT NAME:	LDEQ–IASD CAPITOL LAKES
PROJECT NO.:	33828–003–0201
BORING ID:	C–18
HOLE DIAMETER:	3"
WATER DEPTH:	1.0'
TOTAL DEPTH:	6.4'
DRILLING CO.:	WOODWARD–CLYDE
GEOLOGIST/ENGINEER:	PETER GOODMAN
SAMPLING METHOD:	VIBRACORE
INSTALLATION DATE:	5–28–98



FEET (BSS)	LOG	SAMPLE	SAMPLE I.D.	UNIFIED SOIL CLASSIFICATION SYMBOL	INTERVAL FROM	INTERVAL TO	DESCRIPTION
0.5 – 2.0			A1505289872 A1505289873	CL/OL	0'	2.3'	BLACK MUCK, ORGANICS
2.5 – 3.5			A1505289874	CL	2.3'	3.6'	GREEN GRAY CLAY, COMMON ORGANICS SOFT
4.0 – 5.0			A1505289875	CL	3.6'	5.2'	DARK GREEN CLAY, VERY SOFT, NO ORGANICS
5.5 – 6.5							

BSS = BELOW SEDIMENT SURFACE

DCM GROUP WALK HAYDEL
A DAMES & MOORE GROUP COMPANY
BATON ROUGE LOUISIANA

DWG. NO: C-18.dwg 6/9/98

PROJECT NAME:	LDEQ-IASD CAPITOL LAKES
PROJECT NO.:	33828-003-0201
BORING ID:	C-19
HOLE DIAMETER:	3"
WATER DEPTH:	0.65'
TOTAL DEPTH:	7.25'
DRILLING CO.:	WOODWARD-CLYDE
GEOLOGIST/ENGINEER:	PETER GOODMAN
SAMPLING METHOD:	VIBRACORE
INSTALLATION DATE:	5-28-98

FEET (BSS)	LOG	SAMPLE	SAMPLE I.D.	UNIFIED SOIL CLASSIFICATION SYMBOL	INTERVAL FROM	INTERVAL TO	DESCRIPTION
0.5			A1505289876	CL/OL	0'	3.3'	BLACK MUCK, ORGANICS EXTREMELY SOFT
1.0			A1505289877				
1.5							
2.0			A1505289878				
2.5							
3.0							
3.5			A1505289879	CL	3.3'	4.3'	GREEN, VERY SOFT CLAY, FEW ORGANICS
4.0							
4.5			A1505289880	OH	4.3'	5.1'	BLACK ORGANIC RICH CLAY
5.0							
5.5				OH	5.1'	5.5'	BROWN ORGANIC CLAY, VERY SOFT
6.0				CL	5.5'	6.4'	GREEN CLAY, COMMON ORGANICS, SOFT
6.5							

BSS = BELOW SEDIMENT SURFACE

WALK HAYDEL
A DAMES & MOORE GROUP COMPANY
BATON ROUGE LOUISIANA

DWG. NO.: C-19.dwg 6/9/98

PROJECT NAME:	LDEQ-IASD CAPITOL LAKES
PROJECT NO.:	33828-003-0201
BORING ID:	C-20
HOLE DIAMETER:	3"
WATER DEPTH:	0.65'
TOTAL DEPTH:	8.2'
DRILLING CO.:	WOODWARD-CLYDE
GEOLOGIST/ENGINEER:	PETER GOODMAN
SAMPLING METHOD:	VIBRACORE
INSTALLATION DATE:	5-28-98

FEET (BSS)	LOG	SAMPLE	SAMPLE I.D.	UNIFIED SOIL CLASSIFICATION SYMBOL	INTERVAL FROM	INTERVAL TO	DESCRIPTION
0.5			A1505289881	GM	0'	1.0'	GRAVELLY SAND, BLACK
1.0			A1505289882	OH	1.0'	5.7'	BLACK ORGANIC RICH CLAY VERY SOFT
1.5							
2.0			A1505289883				
2.5							
3.0			A1505289884				VERY DARK GREEN TO BLACK
3.5							
4.0			A1505289885				BLACK ORGANIC RICH CLAY
4.5							
5.0			A1505289887				
5.5							
6.0				CL	5.7'	6.2'	GREEN CLAY, VERY SOFT
6.5							

BSS = BELOW SEDIMENT SURFACE

WALK HAYDEL
A DANIEL GROUP COMPANY
BATON ROUGE LOUISIANA

DWG NO C-20.dwg 6/4/98

FINAL REPORT

SEDIMENT SAMPLING

CAPITOL LAKES SUBSURFACE INVESTIGATION

CAPITOL LAKES BATON ROUGE, LOUISIANA

Prepared for
Louisiana Department of Environmental Quality
Baton Rouge, Louisiana

July 1998

Woodward-Clyde

2822 O'Neal Lane
Baton Rouge, LA 70816
(504) 751-1873
WC File 97B181

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Table 1 Water Depth and Sample Length

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Appendix A Generator's Waste Profile Sheet
Appendix B Non-Hazardous Manifest

SECTIONONE Introduction

The Louisiana Department of Environmental Quality (LDEQ) performed a Remedial Investigation (RI) at the Capitol Lakes site in Baton Rouge, Louisiana. The investigation included identification and delineation of potential hazardous waste contamination in the sediments underlying the lakes and adjacent swampy areas. In support of the investigation, LDEQ contracted Woodward-Clyde International-Americas (Woodward-Clyde) to perform sediment sampling in the lakes and swampy areas. Woodward-Clyde collected sediment core samples at twenty (20) different locations throughout the lakes and swampy area. This document describes the sediment sampling for the Capitol Lakes site.

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The sediment sampling at the Capitol Lake site was completed during a period from May 26, 1998 through May 28, 1998. Sediment core samples were collected at twenty locations (1 through 20) which were identified by LDEQ on a site map. Sediment core samples were collected at six locations (1 through 6) in the main portion of North Capitol Lake, two locations (7 and 8) in the short tributary leading from a shallow swampy area north of North Capitol Lake, three locations (9, 10 and 11) in the shallow swampy area north of North Capitol Lake, five locations (12 through 16) in South Capitol Lake and four locations (17 through 20) in East Capitol Lake. The sediment core samples collected from the main portion of North Capitol Lake, the short tributary leading from the shallow swampy area north of North Capitol Lake and South Capitol Lake were collected using vibracore sampling techniques. The sediment core samples collected from the shallow swampy area north of North Capitol Lake and East Capitol Lake were collected by hand driving vibracore tubing.

Duplicate sediment core samples were collected at sample locations 4, 10 and 17 for quality assurance/quality control samples required by LDEQ. Additional sediment core samples were also collected at locations 15 and 20 in order to collect a core sample of greater thickness which completely penetrated the entire lake bottom sediments into the underlying substrate. These duplicate sediment core samples were identified as A and B (i.e. 10A and 10B).

2.1 MEASUREMENT OF SEDIMENT THICKNESS

The sediment sample locations were identified visually in the field by the Woodward-Clyde sampling crew as directed by LDEQ. Prior to collection of the sediment core samples at each location, a depth measurement was taken from the water surface to the top of sediment. The measuring device was allowed to settle through any loose detritus prior to measurement and was recorded to ±-0.01 foot. After collection of each sediment core sample, the total length of the core pipe which was submersed below the water line during coring was measured to ±-0.01 foot. The sediment thickness was determined based on the difference in the core pipe length and the water depth. Any length material in the core sample which was determined by LDEQ not to be sediment was taken into account when determining the true sediment thickness. Water depths ranged from 0.45 feet to 6.80 feet and sample recovery lengths ranged from 1.95 to 7.50 feet at the 20 sample locations. Table 1 summarizes the water depths and sample lengths recovered at each location.

2.2 SEDIMENT CORE SAMPLING

The subsurface sediment cores samples collected at locations 1 through 8 and 12 through 16 were obtained using a vibracore unit mounted on a 17-foot long gas powered barge. The vibracore technique used a thin-walled aluminum irrigation pipe marked in 1-foot intervals for visual reference during coring. The core pipes were steam cleaned and wrapped in plastic sheeting at each end prior to use. The vibracore unit was driven by a 7 horsepower gas powered motor. A quick release clamp was affixed to the core pipe which was then positioned over the sampling site after the barge was anchored into position at the sampling location. As the unit was throttled up, the vibrations were transferred from the head clamp to the core pipe, thus fluidizing the sediments adjacent to the core pipe allowing the pipe to pass through the sediments with minimal resistance until the desired depth was achieved or refusal occurred. All of the core samples collected using the vibracore technique were advance until refusal occurred. The cores were advanced through the entire lake bottom sediment into the underlying substrate. The vibracore unit was then stopped and disconnected. The actual core length was then measured and the remaining core pipe was filled with water and capped to create a vacuum, which enabled retention of the core when it is lifted by a battery operated winch. The core pipe was then trimmed to within a few inches of the actual sample length. Both ends of the core were then capped, labeled and marked for orientation. In sediment sample locations which were located in areas in which the water depth was not deep enough for barge access, the sediment cores were collected by hand driving the core samples from a 16-foot flat bottomed boat. This method of sediment core sampling was used in the shallow swampy area north of North Capitol Lake and in East Capitol Lake.

A 16-foot flat bottomed gas-powered boat was used to transport the cores from the barge to a sample handling area designated by LDEQ. Each core was split using electric metal shears. Two lengthwise cuts were made along opposite sides of the core pipe. Care was taken when cutting the aluminum pipe to avoid introduction of pipe cuttings into the sample. The core was opened to yield two relatively undisturbed core halves for processing. The cores were processed in the sample handling area by LDEQ.

2.3 LOCATION IDENTIFICATION

After collection of each sediment core sample, the location was staked, labeled and flagged. Each stake was labeled with the specific location identifier as indicated by LDEQ. Following

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completion of sediment core sampling, the locations were surveyed by a licensed surveyor contracted by LDEQ.

2.4 DECONTAMINATION

The core pipes were steam cleaned and wrapped in plastic sheeting at each end prior to use. The electric shears used for splitting the core samples and the hack saw used for cutting the cores was decontaminated prior to and between each use by washing with a nonphosphate detergent and water solution followed by a triple rinse with deionized water. The same procedure was followed for any other equipment which came in contact with the sediment samples. The sediment-filled core tubes were rinsed after being cut to the proper length and capped to remove any material from the outside of the core tubes prior to labeling and delivery to LDEQ sample handling area.

2.5 DOCUMENTATION

For documentation purposes, all information pertinent to field observations and sampling were recorded in a field log book with consecutively number pages. Entries in the log book included, as appropriate, the following:

- Location of sampling activity
- Water depth measurements and any other field measurements made
- Sediment thickness
- Number and lengths of core samples collected
- Description of sampling point
- Date and time of core sample collection
- LDEQ core location identification number
- Field observations
- Weather conditions

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All investigation derived waste including unused core material, used core tubing, used personnel protective equipment, and other debris was containerized in DOT approved 55-gallon drums. The unused core material, used core tubing and used personnel protective equipment (PPE) were containerized in separate drums, properly labeled and stored on-site in a portable, locked storage trailer. One drum of sediment (unused core material), three drums of used core tubing and two drums of PPE were generated during the sediment sampling.

After completion of sampling, the unused core material was sampled and characterized for PCB's and TCLP Hazardous Waste Characterization including reactivity, ignitability and corrosivity by Gulf Coast Analytical Laboratories, Inc., Baton Rouge, Louisiana. Characterization indicated that the material was eligible for disposal at a permitted solid waste facility. The material was transported to Waste Management Company's Woodside Landfill and Recycling Center, Walker, Louisiana. A generator's waste profile sheet is included as Appendix A and the non-hazardous manifest is included as Appendix B.

Tables

TABLE 1

WATER DEPTH AND SAMPLE LENGTH
SEDIMENT SAMPLING
CAPITOL LAKES SUBSURFACE INVESTIGATION
BATON ROUGE, LOUISIANA

Sediment Sample Location	Water Depth (feet)	Sample Length (feet)
Main Portion of North Capital Lake		
1	6.80	2.80
2	6.20	1.95
3	5.90	4.50
4A[1]	5.45	4.74
4B[1]	5.45	4.50
5	5.85	2.77
6	5.40	4.15
Tributary to North Capital Lake		
7	4.10	3.85
8	2.80	5.25
Swampy Area North of North Capital Lake		
9	0.45	4.60
10A[1]	0.75	3.95
10B[1]	0.75	3.95
11	0.50	4.40
South Capital Lake		
12	2.90	4.10
13	0.90	5.55
14	3.35	3.05
15A[1]	2.65	4.00
15B[1]	2.95	5.15
16	3.15	5.01
East Capital Lake		
17A[1]	0.85	4.60
17B[1]	0.85	4.75
18	1.00	5.45
19	0.65	6.60
20A[1]	0.65	6.60
20B[1]	0.65	7.50

NOTE:

[1] Duplicate sediment core samples were collected at locations 4, 10, 15, 17 and 20.

Appendix A

Generator's Waste Profile Sheet

Woodside Landfill and Recycling Center
29375 Woodside Drive
Walker, Louisiana 70785
504/667-6160 • 1-800/673-5541 • FAX: 504/667-4346

A Waste Management Company

June 18, 1998

Mr. Charles Dartez
Woodward Clyde
2822 O'Neal Lane
Baton Rouge, LA 70816

Dear Mr. Dartez:

Please find attached a copy of the approved profile # WMI 505092 for your files. The diposal price is $35.00/drum, plus attached schedule of fees. Transportation will be $250.00/haul and $60.00/hour demurrage with 1 hour free loading and unloading. Please see Section "D.5" on the Generator's Waste Profile Sheet for any precautions, conditions, or limitations on approval. The LADEQ waste code number for this material is n/a.

All terms are governed by the Agreement previously executed between our companies. By scheduling this waste you are affirming that you agree with the pricing , terms and conditions of this contract.

Please contact the Dispatcher at the facility (504) 667-6160 to schedule the arrival of your waste product. Please have the Generator's Waste Profile Sheet Code Number (_____) available.

If you have any questions, please call the office at the above referenced number. Thank you for choosing Woodside Landfill to handle your waste disposal needs.

Cordially,

Dee Ann McLin

Dee Ann McLin
Customer Service Representative

Attachments

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

Service Agreement on File? ☐YES ☐NO

Profile Number: WMI 505092
Renewal Date: 06/17/99

A. Waste Generator Information

1. Generator Name: Woodward-Clyde
2. SIC Code:
3. Facility Street Address: Capitol Lakes Drive
4. Phone: (504) 751-1763
5. Facility City: Baton Rouge
6. State/Province: LA
7. Zip/Postal Code: 70802
8. Generator USEPA/Federal ID #:
9. County: USA
10. State/Province ID #:
11. Customer Name: Woodward-Clyde Int'l-Americas
12. Customer Phone: (504) 751-1873
13. Customer Contact: Charles Dartez
14. Customer Fax: (504) 753-3616

B. Waste Stream Information

1. Name of Waste: Soil, Pipe and Paper Trash
2. State Waste Code:
3. Process Generating Waste: Soil Sediment Sampling
4. Estimated Annual Volume: Six (6) drums ☐Tons ☐Yards ☐Other (specify)
5. Personal Protective Equipment Requirements: None
6. Transporter/Transfer Station: Waste Management
7. Is this a U.S. Department of Transportation (USDOT) Hazardous Material? (If no, skip 8, 9, & 10) ☐YES ☒NO
8. Reportable Quantity (lbs.; kgs.):
9. Hazard Class/ID #:
10. USDOT Shipping Name:

TCLP-F/PCB (5/98) ☒Check if additional information is attached. Indicate the number of attached pages: 14

C. Generator's Certification

1. Is the waste represented by this waste profile sheet a "Hazardous Waste," as defined by USEPA, Canadian, Mexican and/or state/province regulation, or is the location where generated or ultimately managed? ☐YES ☒NO
2. Does the waste represented by this waste profile sheet contain regulated radioactive material or regulated concentrations of Polychlorinated Biphenyls (PCBs)? ☐YES ☒NO
3. Does this waste profile sheet and all attachments contain true and accurate descriptions of the waste material? ☒YES ☐NO
4. Has all relevant information within the possession of the Generator regarding known or suspected hazards pertaining to the waste been disclosed to the Contractor? ☒YES ☐NO
5. Is the analytical data attached hereto derived from testing a representative sample in accordance with 40 CFR 261.20 (c) or equivalent rules? ☐NA ☒YES ☐NO
6. Will all changes that occur in the character of the waste be identified by the Generator and disclosed to the Contractor prior to providing the waste to the Contractor? ☒YES ☐NO

Certification Signature: Charles Dartez Title: Sr. Consultant
Name (Type or Print): Charles Dartez Company Name: Woodward-Clyde Date: 6-16-98

D. Waste Management Section — FOR WMI USE ONLY

1. Management Method: ☒Landfill ☐Solidify ☐Bioremediation ☐Other (Specify)
2. Proposed Ultimate Management Facility: Woodside
3. Hours of acceptance: ☐NA
4. Supplemental Information:
5. Precautions, Special Handling Procedures, or Limitations on Approval: Solidify any free liquids as necessary.

Special Waste Decision: ☒Approved ☐Disapproved
Salesperson's Signature: Date:
Division Approval Signature (Optional): Date:
Special Waste Approvals Person Signature: D. Bouchard Date: 06-17-98

Form WMI-1192

OCM

Appendix B

Non-Hazardous Manifest

Woodside Landfill
A Waste Management Company

NON-HAZARDOUS MANIFEST

52524
1010 - 1030

GENERATOR

Generator Woodward-Clyde — LOUISIANA DEQ SOLID WASTE DIVISION

Shipping Location Capitol Lakes Drive — Identification # _____

Address Baton Rouge, LA 70802 — Manifest Return Address: Woodward-Clyde 2822 O'Neal Ln Attn: Charles Bartee

Phone (504) 751-1873 — Phone (504) 751-1873

Description of Waste Materials	LADEQ Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
Soil, Alum. Pipe, & Paper Trash	014	WMI 505092	6	Drums	Drums
			1 Soil		
			3 Alum.		
			2 Paper		

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable laws and regulations.

Michael L Olson — Generator Authorized Agent Name (Print)

Signature

06/19/98 — Delivery Date

TRANSPORTER

LADEQ Transporter I.D. # TOG1 3125

Transporter Name CEI

Address Walker, LA

Driver Name (Print) Jay Penn

Truck Number 6

Truck Type Pick-up + Trailer

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

Jay Penn — Driver Signature

6/19/98 — Shipment Date

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

Jay Penn — Driver Signature

6/19/98 — Delivery Date

DESTINATION

Site Name WOODSIDE LANDFILL — LADEQ Facility # D-063-1941

Address 29340 Woodside Drive — LADEQ Permit # P-0080

Walker, LA 70785 — Phone Number 504/665-3225

Disposal Location: North G, H East 14/15 Level 2

I hereby acknowledge receipt of the above-described materials.

Kevin Miller — Name of Authorized Agent (Print)

Signature

6-19-98 — Receipt Date

White – Original Canary – Disposer Retain Pink – Transporter Retain Goldenrod – Generator Retain Green – Billing

APPENDIX E

VALIDATION REPORTS

integrate inc.

November 19, 1998

Received
11/20/98
Log In 33828-003

Ms. Sally Kendrick
Walk, Haydel Environmental
600 Carondelet Street
New Orleans, LA 70130-3587

Dear Ms. Kendrick:

RE: LDEQ Capitol Lakes Sample Identification and Chain of Custody Problems

When reviewing the Capitol Lakes' data packages, two discrepancies were detected. There were two copies of the same Chain-of-Custody (COC) and each had a different laboratory receipt time. There were also two samples that the laboratory labeled A1505269819. In order to correct these problems, I personally went to American Analytical and Technical Services, Inc. (AATS) on October 8, 1998 and worked with Dr. K. M. Bagawandoss, the laboratory manager on finding where the errors occurred.

After reviewing the original sample containers and matching them to the laboratory identification tags placed on the original sample containers, we were able to confirm the following sample identifications:

SITE IDENTIFICATION	LABORATORY IDENTIFICATION
A1505269819	28098.21
A1505269817	28098.19
A1505269821	28097.06

When addressing the COC time issue, we had to look at the original COCs and look at the records kept during sample login by the sample custodian. Samples A1505279828 - A1505279841 were on the same Chain of Custody; however, they were not all contained in the same ice chest. Samples A1505279828 - A1505279840 were located in one ice chest and it was opened at 9:30, so the COC pages that were in that ice chest were signed by the Sample Custodian at 9:30 and logged into SDG 69821 under LIMS identification 28121. Sample A1505279841 - A1505279860 were located in one ice chest and it was opened at 10:00 so the COC pages that were in that ice chest were signed by the Sample Custodian at 10:00 and logged into SDG 79841 under LIMS identification 28122. For these reasons, the COC should have the laboratory receipts as May 27, 1998.

These findings were confirmed in the October 13, 1998 letter from AATS.

Should any further questions regarding the referenced project come up, please call me at (225) 930-9970.

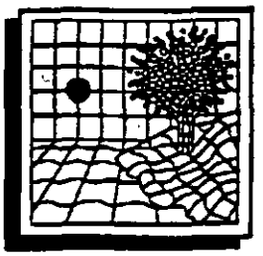
Sincerely,

Integrate, Inc.

Angela Keller-Macias

Angela Keller-Macias
Senior Chemist

Attachment



AMERICAN ANALYTICAL & TECHNICAL SERVICES, INC.

October 13, 1998

Ms. Angela Macias
Integrate, Inc.
9215 Interline Avenue
Baton Rouge, LA 70809

RE: LDEQ Capital Lakes Sediment Study

Dear Ms. Macias:

This letter is to confirm your October 8, 1998 visit to our laboratory in which you confirmed the above referenced project sample field identifications and laboratory sample numbers.

During your visit you confirmed the following sample IDs:

Site ID	Lab ID
A1505269819	28098.21
A1505269817	28098.19
A1505269821	28097.06

It was also confirmed that the chain-of-custody documentation for sample A1505279841 was divided between two coolers which arrived at the laboratory and were marked as received by the laboratory with two different receipt times. The coolers were actually received together at 09:30 AM on May 27, 1998 but were opened at different times.

Should you have any additional questions regarding the referenced project, please call me at 225-753-8650.

Sincerely,

AMERICAN ANALYTICAL & TECHNICAL SERVICES, INC.

David H. Greer, Jr.
Project Officer

/dhg

APPENDIX E INDEX

VALIDATED DATA SUMMARY TABLES

This appendix contains validated data summary tables for the various media sampled and analyzed for the Capitol Lakes Site project. The summary tables are arranged by Sample Digestion Group (SDGs) and are provided by Integrate, Inc. The summary tables serve as Executive Summaries of the validated detected results. The following tables are provided for each SDG:

1. Table E-1, a Sample Identification Cross-Reference Table, which cross-references the client's sample names and laboratory names.

2. Table E-2, a Summary of Validated Sample Detects Sorted by Client Sample and Fraction. The detected analytes of each fraction are also displayed according to their order of appearance in the data package.

3. Table E-3, a Summary of Validated Analyte Detects Sorted by Fraction, Analyte and Client Sample.

The Validated Data Summary Tables are arranged in this appendix in the following order:

Validated Data Summary Tables - Capitol Lakes Fish Project (SDG: 25226)

Validated Data Summary Tables - Capitol Lakes Water Project (SDG: 26021)

Validated Data Summary Tables - Capitol Lakes Sediment Project: SDGs *generally* will contain data for the coring locations shown, although there are exceptions for some data that may have been re-extracted and/or re-analyzed:

SDG: 69801	**Coring Locations C-01 through C-06**
SDG: 69821	**Coring Locations C-05 through C-11**
SDG: 69821A	**Coring Locations C-05 through C-08**
SDG: 79841	**Coring Locations C-12 through C-15**
SDG: 79861	**Coring Locations C-15 through C-20**
SDG: 79861A	**Coring Locations C-15 and C-16**
SDG: 89881	**Coring Locations C-19 and C-20**

Capitol Lakes Fish Project
Validated Data Summary Tables
SDG: 25226
January 1998

Sample I.D.
040-970610-01D to 040-970610-20D
and
063-970922-03A to 063-970922-14A

DCM GROUP WALK HAYDEL A DAMES & MOORE GROUP COMPANY

CAPITAL LAKES FISH PROJECT

DATA VALIDATION REPORT

SDG: 25226

Prepared for:

Louisiana DEQ
Active & Abandoned Sites
Baton Rouge, Louisiana

Integrate Project Number: 269
January 1998

00000002

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Purpose of the Validation Report

Analytical data validation is a confirmatory procedure that evaluates client-generated laboratory data in accordance with definitive regulatory performance standards set forth by the USEPA.[1,2] Integrate, Incorporated (Integrate) provides client assistance with data validation to ensure that analytical data are complete, in compliance with laboratory protocols, in agreement with the project data quality objectives, and are technically valid and legally defensible.

Format of the Introduction Section

The introduction contains summary tables that permit the reader easy access to the validated detected results. The tables are identified as: 1) ***Table E 1*** *Sample Identification Cross-Reference Table*, 2) ***Table E 2*** *Summary of Validated Sample Detects Sorted by Client Sample and Fraction* and 3) ***Table E 3*** *Summary of Validated Analyte Detects Sorted by Fraction, Analyte and Client Sample.* A brief description of the contents of each table is presented below.

Executive Summaries:

1) ***Table E 1*** *Sample Identification Cross-Reference Table:* This table is a cross-reference of client sample names and laboratory names. It also references any consultants sample names, if they are available.

2) ***Table E 2*** *Summary of Validated Sample Detects Sorted by Client Sample and Fraction:* Identification of all post-validation detected analytes by client or site sample location, fraction and analyte. The order of the analytical fractions appearing in this report follows the typical order found in a laboratory data package. That is, volatiles appear first, followed by semivolatiles, pesticides, metals and conventionals. The detected analytes of each fraction are also displayed according to their order of appearance in the data package. This table also shows the sample type, sample matrix, extraction level, dilution factor and the method quantitation limits (MQL).

3) ***Table E 3*** *Summary of Validated Analyte Detects Sorted by Fraction, Analyte and Client Sample:* Identification of all post-validation detected analytes by fraction,

[1]National Functional Guidelines For Organic Data Review, USEPA, February 1994.
[2]National Functional Guidelines For Inorganic Data Review, USEPA, February 1994.

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analyte and client site/sample location. The fractions follow the same order described above: volatiles, semivolatiles, pesticides, metals and conventionals. All detected analytes are sorted alphabetically.

Qualifier Definitions

- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J - The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
- N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."
- NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated value represents its approximate concentration.
- UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

E1 - Sample Identification Cross-Reference Table
Site Samples Sorted by Fraction

Louisiana Department of Environmental Quality
CAPITOL LAKES - FISH PROJECT

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 25226

Fraction	Client Sample	EPA Sample Number	Sample Type	Matrix	Level	Sampling Date/Time
Pesticides/PCBs						
	PBLKC	PBLKC	Method Blank	Water	Low	06/10/97 00:00
	040-970610-01D	25226.01	Site Sample	Tissue	Low	06/10/97 00:00
	040-970610-02D	25226.02	Site Sample	Tissue	Low	06/10/97 00:00
	040-970610-03D	25226.03	Site Sample	Tissue	Low	06/10/97 00:00
	040-970610-04D	25226.04	Site Sample	Tissue	Low	06/10/97 00:00
	040-970610-06D	25226.05	Site Sample	Tissue	Low	06/10/97 00:00
	040-970610-07D	25226.06	Site Sample	Tissue	Low	06/10/97 00:00
	040-970610-08D	25226.07	Site Sample	Tissue	Low	06/10/97 00:00
	040-970610-11D	25226.08	Site Sample	Tissue	Low	06/10/97 00:00
	040-970610-12D	25226.09	Site Sample	Tissue	Low	06/10/97 00:00
	040-970610-13D	25226.10	Site Sample	Tissue	Low	06/10/97 00:00
	040-970610-15D	25226.11	Site Sample	Tissue	Low	06/10/97 00:00
	040-970610-18D	25226.12	Site Sample	Tissue	Low	06/10/97 00:00
	040-970610-19D	25226.13	Site Sample	Tissue	Low	06/10/97 00:00
	040-970610-20D	25226.14	Site Sample	Tissue	Low	06/10/97 00:00
	063-970922-03A	25226.15	Site Sample	Tissue	Low	06/10/97 00:00
	063-970922-04A	25226.16	Site Sample	Tissue	Low	06/10/97 00:00
	063-970922-08A	25226.17	Site Sample	Tissue	Low	06/10/97 00:00
	063-970922-09A	25226.18	Site Sample	Tissue	Low	06/10/97 00:00
	063-970922-13A	25226.19	Site Sample	Tissue	Low	06/10/97 00:00
	063-970922-14A	25226.20	Site Sample	Tissue	Low	06/10/97 00:00
	063-970922-14AMS	25226.21	Matrix Spike	Tissue	Low	06/10/97 00:00
	063-970922-14AMSD	25226.22	Matrix Spike Duplicate	Tissue	Low	06/10/97 00:00

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Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 25226

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
040-970610-01D										
	Pesticides/PCBs									
		BETA-BHC	Site Sample	Tissue	Low	1	1.7	3.1	J	µg/Kg
		DELTA-BHC	Site Sample	Tissue	Low	1	1.7	3.6	J	µg/Kg
		HEPTACHLOR	Site Sample	Tissue	Low	1	1.7	2.8	J	µg/Kg
		ALDRIN	Site Sample	Tissue	Low	1	1.7	6.5	J	µg/Kg
		HEPT. EPOXIDE	Site Sample	Tissue	Low	1	1.7	3.1	J	µg/Kg
		DIELDRIN	Site Sample	Tissue	Low	1	3.3	11	J	µg/Kg
		4,4'-DDE	Site Sample	Tissue	Low	1	3.3	16	J	µg/Kg
		ENDRIN	Site Sample	Tissue	Low	1	3.3	5.6	J	µg/Kg
		ENDOSULFAN II	Site Sample	Tissue	Low	1	3.3	3.7	J	µg/Kg
		4,4'-DDD	Site Sample	Tissue	Low	1	3.3	18	J	µg/Kg
		4,4'-DDT	Site Sample	Tissue	Low	1	3.3	6.1	J	µg/Kg
		ENDRIN ALDEHYDE	Site Sample	Tissue	Low	1	3.3	4.1	J	µg/Kg
		ALPHA CHLORDANE	Site Sample	Tissue	Low	1	1.7	15	J	µg/Kg
		GAMMA CHLORDANE	Site Sample	Tissue	Low	1	1.7	12	J	µg/Kg
		AROCLOR-1248	Site Sample	Tissue	Low	1	33	220	J	µg/Kg
		AROCLOR-1260	Site Sample	Tissue	Low	1	33	340	J	µg/Kg
040-970610-02D										
	Pesticides/PCBs									
		ALDRIN	Site Sample	Tissue	Low	1	1.7	3.0	J	µg/Kg
		DIELDRIN	Site Sample	Tissue	Low	1	3.3	4.7	J	µg/Kg
		4,4'-DDE	Site Sample	Tissue	Low	1	3.3	7.6	J	µg/Kg
		4,4'-DDD	Site Sample	Tissue	Low	1	3.3	5.8	J	µg/Kg
		ALPHA CHLORDANE	Site Sample	Tissue	Low	1	1.7	6.6	J	µg/Kg
		GAMMA CHLORDANE	Site Sample	Tissue	Low	1	1.7	4.7	J	µg/Kg
		AROCLOR-1248	Site Sample	Tissue	Low	1	33	140	J	µg/Kg
		AROCLOR-1260	Site Sample	Tissue	Low	1	33	110	J	µg/Kg
040-970610-03D										
	Pesticides/PCBs									
		BETA-BHC	Site Sample	Tissue	Low	1	1.7	1.9	J	µg/Kg
		DELTA-BHC	Site Sample	Tissue	Low	1	1.7	1.9	J	µg/Kg
		ALDRIN	Site Sample	Tissue	Low	1	1.7	3.8	J	µg/Kg
		DIELDRIN	Site Sample	Tissue	Low	1	3.3	6.1	J	µg/Kg
		4,4'-DDE	Site Sample	Tissue	Low	1	3.3	8.8	J	µg/Kg
		4,4'-DDD	Site Sample	Tissue	Low	1	3.3	8.0	J	µg/Kg
		ALPHA CHLORDANE	Site Sample	Tissue	Low	1	1.7	8.1	J	µg/Kg
		GAMMA CHLORDANE	Site Sample	Tissue	Low	1	1.7	6.1	J	µg/Kg
		AROCLOR-1248	Site Sample	Tissue	Low	1	33	150	J	µg/Kg
		AROCLOR-1260	Site Sample	Tissue	Low	1	33	280	J	µg/Kg
040-970610-04D										
	Pesticides/PCBs									
		DELTA-BHC	Site Sample	Tissue	Low	1	1.7	2.8	J	µg/Kg
		GAMMA-BHC	Site Sample	Tissue	Low	1	1.7	1.9	J	µg/Kg
		ALDRIN	Site Sample	Tissue	Low	1	1.7	6.5	J	µg/Kg
		HEPT. EPOXIDE	Site Sample	Tissue	Low	1	1.7	3.2	J	µg/Kg
		DIELDRIN	Site Sample	Tissue	Low	1	3.3	17	J	µg/Kg
		4,4'-DDE	Site Sample	Tissue	Low	20	66	1,300		µg/Kg

Qualifiers:

J - Estimated

B - (Organics) Found in the associated method blank

D - Reported from a dilution

E - Exceeds calibration range

P - (Pesticides) Difference in column concentrations > 25%

B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

Louisiana Department of Environmental Quality
CAPITOL LAKES - FISH PROJECT

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 25226

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
040-970610-04D										
	Pesticides/PCBs									
		ENDRIN	Site Sample	Tissue	Low	1	3.3	9.6	J	µg/Kg
		ENDOSULFAN II	Site Sample	Tissue	Low	1	3.3	9.9	J	µg/Kg
		4,4'-DDD	Site Sample	Tissue	Low	1	3.3	29	J	µg/Kg
		4,4'-DDT	Site Sample	Tissue	Low	1	3.3	45	J	µg/Kg
		ENDRIN ALDEHYDE	Site Sample	Tissue	Low	1	3.3	11	J	µg/Kg
		ALPHA CHLORDANE	Site Sample	Tissue	Low	1	1.7	25	J	µg/Kg
		GAMMA CHLORDANE	Site Sample	Tissue	Low	1	1.7	10	J	µg/Kg
		AROCLOR-1248	Site Sample	Tissue	Low	1	33	480	J	µg/Kg
040-970610-06D										
	Pesticides/PCBs									
		AROCLOR-1260	Site Sample	Tissue	Low	1	33	170	J	µg/Kg
040-970610-12D										
	Pesticides/PCBs									
		AROCLOR-1248	Site Sample	Tissue	Low	1	33	87	J	µg/Kg
040-970610-13D										
	Pesticides/PCBs									
		AROCLOR-1248	Site Sample	Tissue	Low	1	33	92	J	µg/Kg
040-970610-15D										
	Pesticides/PCBs									
		ALDRIN	Site Sample	Tissue	Low	1	1.7	4.9		µg/Kg
		DIELDRIN	Site Sample	Tissue	Low	1	3.3	11		µg/Kg
		4,4'-DDE	Site Sample	Tissue	Low	1	3.3	50		µg/Kg
		ENDRIN	Site Sample	Tissue	Low	1	3.3	20		µg/Kg
		ENDOSULFAN II	Site Sample	Tissue	Low	1	3.3	13		µg/Kg
		4,4'-DDD	Site Sample	Tissue	Low	1	3.3	43		µg/Kg
		4,4'-DDT	Site Sample	Tissue	Low	1	3.3	28		µg/Kg
		ENDRIN ALDEHYDE	Site Sample	Tissue	Low	1	3.3	10		µg/Kg
		ALPHA CHLORDANE	Site Sample	Tissue	Low	1	1.7	26		µg/Kg
		GAMMA CHLORDANE	Site Sample	Tissue	Low	1	1.7	28		µg/Kg
		AROCLOR-1248	Site Sample	Tissue	Low	1	33	160		µg/Kg
		AROCLOR-1260	Site Sample	Tissue	Low	1	33	430		µg/Kg
040-970610-18D										
	Pesticides/PCBs									
		ALDRIN	Site Sample	Tissue	Low	1	1.7	1.8		µg/Kg
		DIELDRIN	Site Sample	Tissue	Low	1	3.3	6.4		µg/Kg
		4,4'-DDE	Site Sample	Tissue	Low	1	3.3	37		µg/Kg
		ENDRIN	Site Sample	Tissue	Low	1	3.3	9.3		µg/Kg
		ENDOSULFAN II	Site Sample	Tissue	Low	1	3.3	5.8		µg/Kg
		4,4'-DDD	Site Sample	Tissue	Low	1	3.3	33		µg/Kg
		4,4'-DDT	Site Sample	Tissue	Low	1	3.3	12		µg/Kg
		ENDRIN ALDEHYDE	Site Sample	Tissue	Low	1	3.3	13		µg/Kg
		ALPHA CHLORDANE	Site Sample	Tissue	Low	1	1.7	16		µg/Kg
		GAMMA CHLORDANE	Site Sample	Tissue	Low	1	1.7	8.4		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

Louisiana Department of Environmental Quality
CAPITOL LAKES - FISH PROJECT

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 25226

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
040-970610-18D									
	Pesticides/PCBs								
		AROCLOR-1248	Site Sample	Tissue	Low	1	33	160	µg/Kg
		AROCLOR-1260	Site Sample	Tissue	Low	1	33	310	µg/Kg
040-970610-19D									
	Pesticides/PCBs								
		4,4'-DDT	Site Sample	Tissue	Low	1	3.3	4.6	µg/Kg
040-970610-20D									
	Pesticides/PCBs								
		4,4'-DDE	Site Sample	Tissue	Low	1	3.3	16	µg/Kg
		4,4'-DDD	Site Sample	Tissue	Low	1	3.3	18	µg/Kg
		ENDRIN ALDEHYDE	Site Sample	Tissue	Low	1	3.3	4.7	µg/Kg
		ALPHA CHLORDANE	Site Sample	Tissue	Low	1	1.7	6.0	µg/Kg
		GAMMA CHLORDANE	Site Sample	Tissue	Low	1	1.7	2.1	µg/Kg
		AROCLOR-1248	Site Sample	Tissue	Low	1	33	200	µg/Kg
		AROCLOR-1260	Site Sample	Tissue	Low	1	33	460	µg/Kg
063-970922-03A									
	Pesticides/PCBs								
		ENDRIN ALDEHYDE	Site Sample	Tissue	Low	1	3.3	4.7	µg/Kg
		AROCLOR-1248	Site Sample	Tissue	Low	1	33	150	µg/Kg
		AROCLOR-1260	Site Sample	Tissue	Low	1	33	73	µg/Kg
063-970922-04A									
	Pesticides/PCBs								
		DIELDRIN	Site Sample	Tissue	Low	1	3.3	6.0	µg/Kg
		4,4'-DDE	Site Sample	Tissue	Low	1	3.3	8.1	µg/Kg
		4,4'-DDD	Site Sample	Tissue	Low	1	3.3	7.2	µg/Kg
		4,4'-DDT	Site Sample	Tissue	Low	1	3.3	6.8	µg/Kg
		AROCLOR-1248	Site Sample	Tissue	Low	1	33	130	µg/Kg
		AROCLOR-1260	Site Sample	Tissue	Low	1	33	140	µg/Kg
063-970922-08A									
	Pesticides/PCBs								
		DELTA-BHC	Site Sample	Tissue	Low	1	1.7	1.8	µg/Kg
		ALDRIN	Site Sample	Tissue	Low	1	1.7	6.4	µg/Kg
		DIELDRIN	Site Sample	Tissue	Low	1	3.3	7.1	µg/Kg
		4,4'-DDE	Site Sample	Tissue	Low	1	3.3	23	µg/Kg
		ENDOSULFAN II	Site Sample	Tissue	Low	1	3.3	7.6	µg/Kg
		4,4'-DDD	Site Sample	Tissue	Low	1	3.3	15	µg/Kg
		4,4'-DDT	Site Sample	Tissue	Low	1	3.3	12	µg/Kg
		ENDRIN ALDEHYDE	Site Sample	Tissue	Low	1	3.3	11	µg/Kg
		AROCLOR-1248	Site Sample	Tissue	Low	1	33	200	µg/Kg
		AROCLOR-1260	Site Sample	Tissue	Low	1	33	260	µg/Kg
063-970922-09A									
	Pesticides/PCBs								
		4,4'-DDT	Site Sample	Tissue	Low	1	3.3	6.2	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

Louisiana Department of Environmental Quality
CAPITOL LAKES - FISH PROJECT

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 25226

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
063-970922-09A									
	Pesticides/PCBs								
		AROCLOR-1248	Site Sample	Tissue	Low	1	33	120	µg/Kg
		AROCLOR-1260	Site Sample	Tissue	Low	1	33	73	µg/Kg
063-970922-13A									
	Pesticides/PCBs								
		DIELDRIN	Site Sample	Tissue	Low	1	3.3	4.5	µg/Kg
		4,4'-DDE	Site Sample	Tissue	Low	1	3.3	10	µg/Kg
		4,4'-DDD	Site Sample	Tissue	Low	1	3.3	9.9	µg/Kg
		4,4'-DDT	Site Sample	Tissue	Low	1	3.3	9.6	µg/Kg
		ENDRIN ALDEHYDE	Site Sample	Tissue	Low	1	3.3	11	µg/Kg
		GAMMA CHLORDANE	Site Sample	Tissue	Low	1	1.7	3.2	µg/Kg
		AROCLOR-1248	Site Sample	Tissue	Low	1	33	130	µg/Kg
		AROCLOR-1260	Site Sample	Tissue	Low	1	33	150	µg/Kg
063-970922-14A									
	Pesticides/PCBs								
		ALDRIN	Site Sample	Tissue	Low	1	1.7	6.1	µg/Kg
		4,4'-DDE	Site Sample	Tissue	Low	1	3.3	46	µg/Kg
		ENDRIN	Site Sample	Tissue	Low	1	3.3	7.2	µg/Kg
		ENDOSULFAN II	Site Sample	Tissue	Low	1	3.3	15	µg/Kg
		4,4'-DDD	Site Sample	Tissue	Low	1	3.3	32	µg/Kg
		4,4'-DDT	Site Sample	Tissue	Low	1	3.3	21	µg/Kg
		ENDRIN ALDEHYDE	Site Sample	Tissue	Low	1	3.3	17	µg/Kg
		GAMMA CHLORDANE	Site Sample	Tissue	Low	1	1.7	6.1	µg/Kg
		AROCLOR-1260	Site Sample	Tissue	Low	1	33	310	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

Louisiana Department of Environmental Quality
CAPITOL LAKES - FISH PROJECT

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 25226

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	ALDRIN									
		040-970610-01D	Site Sample	Tissue	Low	1	1.7	6.5	J	µg/Kg
		040-970610-02D	Site Sample	Tissue	Low	1	1.7	3.0	J	µg/Kg
		040-970610-03D	Site Sample	Tissue	Low	1	1.7	3.8	J	µg/Kg
		040-970610-04D	Site Sample	Tissue	Low	1	1.7	8.5	J	µg/Kg
		040-970610-15D	Site Sample	Tissue	Low	1	1.7	4.9		µg/Kg
		040-970610-18D	Site Sample	Tissue	Low	1	1.7	1.8		µg/Kg
		063-970922-08A	Site Sample	Tissue	Low	1	1.7	6.4		µg/Kg
		063-970922-14A	Site Sample	Tissue	Low	1	1.7	6.1		µg/Kg
	AROCLOR-1248									
		040-970610-01D	Site Sample	Tissue	Low	1	33	220	J	µg/Kg
		040-970610-02D	Site Sample	Tissue	Low	1	33	140	J	µg/Kg
		040-970610-03D	Site Sample	Tissue	Low	1	33	150	J	µg/Kg
		040-970610-04D	Site Sample	Tissue	Low	1	33	480	J	µg/Kg
		040-970610-12D	Site Sample	Tissue	Low	1	33	87	J	µg/Kg
		040-970610-13D	Site Sample	Tissue	Low	1	33	92	J	µg/Kg
		040-970610-15D	Site Sample	Tissue	Low	1	33	160		µg/Kg
		040-970610-18D	Site Sample	Tissue	Low	1	33	160		µg/Kg
		040-970610-20D	Site Sample	Tissue	Low	1	33	200		µg/Kg
		063-970922-03A	Site Sample	Tissue	Low	1	33	150		µg/Kg
		063-970922-04A	Site Sample	Tissue	Low	1	33	130		µg/Kg
		063-970922-08A	Site Sample	Tissue	Low	1	33	200		µg/Kg
		063-970922-09A	Site Sample	Tissue	Low	1	33	120		µg/Kg
		063-970922-13A	Site Sample	Tissue	Low	1	33	130		µg/Kg
	AROCLOR-1260									
		040-970610-01D	Site Sample	Tissue	Low	1	33	340	J	µg/Kg
		040-970610-02D	Site Sample	Tissue	Low	1	33	110	J	µg/Kg
		040-970610-03D	Site Sample	Tissue	Low	1	33	280	J	µg/Kg
		040-970610-06D	Site Sample	Tissue	Low	1	33	170	J	µg/Kg
		040-970610-15D	Site Sample	Tissue	Low	1	33	430		µg/Kg
		040-970610-18D	Site Sample	Tissue	Low	1	33	310		µg/Kg
		040-970610-20D	Site Sample	Tissue	Low	1	33	460		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

Louisiana Department of Environmental Quality
CAPITOL LAKES - FISH PROJECT

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 25228

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	AROCLOR-1260									
		063-970922-03A	Site Sample	Tissue	Low	1	33	73		µg/Kg
		063-970922-04A	Site Sample	Tissue	Low	1	33	140		µg/Kg
		063-970922-08A	Site Sample	Tissue	Low	1	33	260		µg/Kg
		063-970922-09A	Site Sample	Tissue	Low	1	33	73		µg/Kg
		063-970922-13A	Site Sample	Tissue	Low	1	33	150		µg/Kg
		063-970922-14A	Site Sample	Tissue	Low	1	33	310		µg/Kg
	BETA-BHC									
		040-970610-01D	Site Sample	Tissue	Low	1	1.7	3.1	J	µg/Kg
		040-970610-03D	Site Sample	Tissue	Low	1	1.7	1.9	J	µg/Kg
	DELTA-BHC									
		040-970610-01D	Site Sample	Tissue	Low	1	1.7	3.6	J	µg/Kg
		040-970610-03D	Site Sample	Tissue	Low	1	1.7	1.9	J	µg/Kg
		040-970610-04D	Site Sample	Tissue	Low	1	1.7	2.8	J	µg/Kg
		063-970922-08A	Site Sample	Tissue	Low	1	1.7	1.8		µg/Kg
	GAMMA-BHC									
		040-970610-04D	Site Sample	Tissue	Low	1	1.7	1.9	J	µg/Kg
	ALPHA CHLORDANE									
		040-970610-01D	Site Sample	Tissue	Low	1	1.7	15	J	µg/Kg
		040-970610-02D	Site Sample	Tissue	Low	1	1.7	6.6	J	µg/Kg
		040-970610-03D	Site Sample	Tissue	Low	1	1.7	8.1	J	µg/Kg
		040-970610-04D	Site Sample	Tissue	Low	1	1.7	25	J	µg/Kg
		040-970610-15D	Site Sample	Tissue	Low	1	1.7	26		µg/Kg
		040-970610-18D	Site Sample	Tissue	Low	1	1.7	16		µg/Kg
		040-970610-20D	Site Sample	Tissue	Low	1	1.7	6.0		µg/Kg
	GAMMA CHLORDANE									
		040-970610-01D	Site Sample	Tissue	Low	1	1.7	12	J	µg/Kg
		040-970610-02D	Site Sample	Tissue	Low	1	1.7	4.7	J	µg/Kg
		040-970610-03D	Site Sample	Tissue	Low	1	1.7	6.1	J	µg/Kg
		040-970610-04D	Site Sample	Tissue	Low	1	1.7	10	J	µg/Kg
		040-970610-15D	Site Sample	Tissue	Low	1	1.7	26		µg/Kg
		040-970610-18D	Site Sample	Tissue	Low	1	1.7	8.4		µg/Kg

Qualifiers:

J - Estimated

B - (Organics) Found in the associated method blank

D - Reported from a dilution

E - Exceeds calibration range

P - (Pesticides) Difference in column concentrations > 25%

B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

Louisiana Department of Environmental Quality
CAPITOL LAKES - FISH PROJECT

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 25226

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	GAMMA CHLORDANE									
		040-970610-20D	Site Sample	Tissue	Low	1	1.7	2.1		µg/Kg
		063-970922-13A	Site Sample	Tissue	Low	1	1.7	3.2		µg/Kg
		063-970922-14A	Site Sample	Tissue	Low	1	1.7	6.1		µg/Kg
	4,4'-DDD									
		040-970610-01D	Site Sample	Tissue	Low	1	3.3	18	J	µg/Kg
		040-970610-02D	Site Sample	Tissue	Low	1	3.3	5.8	J	µg/Kg
		040-970610-03D	Site Sample	Tissue	Low	1	3.3	8.0	J	µg/Kg
		040-970610-04D	Site Sample	Tissue	Low	1	3.3	29	J	µg/Kg
		040-970610-15D	Site Sample	Tissue	Low	1	3.3	43		µg/Kg
		040-970610-18D	Site Sample	Tissue	Low	1	3.3	33		µg/Kg
		040-970610-20D	Site Sample	Tissue	Low	1	3.3	18		µg/Kg
		063-970922-04A	Site Sample	Tissue	Low	1	3.3	7.2		µg/Kg
		063-970922-08A	Site Sample	Tissue	Low	1	3.3	15		µg/Kg
		063-970922-13A	Site Sample	Tissue	Low	1	3.3	9.9		µg/Kg
		063-970922-14A	Site Sample	Tissue	Low	1	3.3	32		µg/Kg
	4,4'-DDE									
		040-970610-01D	Site Sample	Tissue	Low	1	3.3	16	J	µg/Kg
		040-970610-02D	Site Sample	Tissue	Low	1	3.3	7.6	J	µg/Kg
		040-970610-03D	Site Sample	Tissue	Low	1	3.3	8.6	J	µg/Kg
		040-970610-04D	Site Sample	Tissue	Low	20	66	1,300		µg/Kg
		040-970610-15D	Site Sample	Tissue	Low	1	3.3	50		µg/Kg
		040-970610-18D	Site Sample	Tissue	Low	1	3.3	37		µg/Kg
		040-970610-20D	Site Sample	Tissue	Low	1	3.3	16		µg/Kg
		063-970922-04A	Site Sample	Tissue	Low	1	3.3	8.1		µg/Kg
		063-970922-08A	Site Sample	Tissue	Low	1	3.3	23		µg/Kg
		063-970922-13A	Site Sample	Tissue	Low	1	3.3	10		µg/Kg
		063-970922-14A	Site Sample	Tissue	Low	1	3.3	46		µg/Kg
	4,4'-DDT									
		040-970610-01D	Site Sample	Tissue	Low	1	3.3	6.1	J	µg/Kg
		040-970610-04D	Site Sample	Tissue	Low	1	3.3	45	J	µg/Kg
		040-970610-15D	Site Sample	Tissue	Low	1	3.3	28		µg/Kg

Qualifiers:
J - Estimated
B - (Organics) Found in the associated method blank
D - Reported from a dilution
E - Exceeds calibration range
P - (Pesticides) Difference in column concentrations > 25%
B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

Louisiana Department of Environmental Quality
CAPITOL LAKES - FISH PROJECT

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 25226

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	4,4'-DDT									
		040-970610-18D	Site Sample	Tissue	Low	1	3.3	12		µg/Kg
		040-970610-19D	Site Sample	Tissue	Low	1	3.3	4.6		µg/Kg
		063-970922-04A	Site Sample	Tissue	Low	1	3.3	6.8		µg/Kg
		063-970922-08A	Site Sample	Tissue	Low	1	3.3	12		µg/Kg
		063-970922-09A	Site Sample	Tissue	Low	1	3.3	6.2		µg/Kg
		063-970922-13A	Site Sample	Tissue	Low	1	3.3	9.6		µg/Kg
		063-970922-14A	Site Sample	Tissue	Low	1	3.3	21		µg/Kg
	DIELDRIN									
		040-970610-01D	Site Sample	Tissue	Low	1	3.3	11	J	µg/Kg
		040-970610-02D	Site Sample	Tissue	Low	1	3.3	4.7	J	µg/Kg
		040-970610-03D	Site Sample	Tissue	Low	1	3.3	6.1	J	µg/Kg
		040-970610-04D	Site Sample	Tissue	Low	1	3.3	17	J	µg/Kg
		040-970610-15D	Site Sample	Tissue	Low	1	3.3	11		µg/Kg
		040-970610-18D	Site Sample	Tissue	Low	1	3.3	6.4		µg/Kg
		063-970922-04A	Site Sample	Tissue	Low	1	3.3	6.0		µg/Kg
		063-970922-08A	Site Sample	Tissue	Low	1	3.3	7.1		µg/Kg
		063-970922-13A	Site Sample	Tissue	Low	1	3.3	4.5		µg/Kg
	ENDOSULFAN II									
		040-970610-01D	Site Sample	Tissue	Low	1	3.3	3.7	J	µg/Kg
		040-970610-04D	Site Sample	Tissue	Low	1	3.3	9.9	J	µg/Kg
		040-970610-15D	Site Sample	Tissue	Low	1	3.3	13		µg/Kg
		040-970610-18D	Site Sample	Tissue	Low	1	3.3	5.8		µg/Kg
		063-970922-08A	Site Sample	Tissue	Low	1	3.3	7.6		µg/Kg
		063-970922-14A	Site Sample	Tissue	Low	1	3.3	15		µg/Kg
	ENDRIN									
		040-970610-01D	Site Sample	Tissue	Low	1	3.3	5.6	J	µg/Kg
		040-970610-04D	Site Sample	Tissue	Low	1	3.3	9.6	J	µg/Kg
		040-970610-15D	Site Sample	Tissue	Low	1	3.3	20		µg/Kg
		040-970610-18D	Site Sample	Tissue	Low	1	3.3	9.3		µg/Kg
		063-970922-14A	Site Sample	Tissue	Low	1	3.3	7.2		µg/Kg

Qualifiers:
J - Estimated
B - (Organics) Found in the associated method blank
D - Reported from a dilution
E - Exceeds calibration range
P - (Pesticides) Difference in column concentrations > 25%
B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

Louisiana Department of Environmental Quality
CAPITOL LAKES - FISH PROJECT

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 25228

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	ENDRIN ALDEHYDE									
		040-970610-01D	Site Sample	Tissue	Low	1	3.3	4.1	J	µg/Kg
		040-970610-04D	Site Sample	Tissue	Low	1	3.3	11	J	µg/Kg
		040-970610-15D	Site Sample	Tissue	Low	1	3.3	10		µg/Kg
		040-970610-18D	Site Sample	Tissue	Low	1	3.3	13		µg/Kg
		040-970610-20D	Site Sample	Tissue	Low	1	3.3	4.7		µg/Kg
		063-970922-03A	Site Sample	Tissue	Low	1	3.3	4.7		µg/Kg
		063-970922-08A	Site Sample	Tissue	Low	1	3.3	11		µg/Kg
		063-970922-13A	Site Sample	Tissue	Low	1	3.3	11		µg/Kg
		063-970922-14A	Site Sample	Tissue	Low	1	3.3	17		µg/Kg
	HEPTACHLOR									
		040-970610-01D	Site Sample	Tissue	Low	1	1.7	2.8	J	µg/Kg
	HEPT. EPOXIDE									
		040-970610-01D	Site Sample	Tissue	Low	1	1.7	3.1	J	µg/Kg
		040-970610-04D	Site Sample	Tissue	Low	1	1.7	3.2	J	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

Louisiana Department of Environmental Quality
CAPITOL LAKES - FISH PROJECT

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 25228

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	ENDRIN ALDEHYDE									
		040-970610-01D	Site Sample	Tissue	Low	1	3.3	4.1	J	µg/Kg
		040-970610-04D	Site Sample	Tissue	Low	1	3.3	11	J	µg/Kg
		040-970610-15D	Site Sample	Tissue	Low	1	3.3	10		µg/Kg
		040-970610-18D	Site Sample	Tissue	Low	1	3.3	13		µg/Kg
		040-970610-20D	Site Sample	Tissue	Low	1	3.3	4.7		µg/Kg
		063-970922-03A	Site Sample	Tissue	Low	1	3.3	4.7		µg/Kg
		063-970922-08A	Site Sample	Tissue	Low	1	3.3	11		µg/Kg
		063-970922-13A	Site Sample	Tissue	Low	1	3.3	11		µg/Kg
		063-970922-14A	Site Sample	Tissue	Low	1	3.3	17		µg/Kg
	HEPTACHLOR									
		040-970610-01D	Site Sample	Tissue	Low	1	1.7	2.8	J	µg/Kg
	HEPT. EPOXIDE									
		040-970610-01D	Site Sample	Tissue	Low	1	1.7	3.1	J	µg/Kg
		040-970610-04D	Site Sample	Tissue	Low	1	1.7	3.2	J	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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Capitol Lakes Water Project
Validated Data Summary Tables
SDG: 26021
March 1998
Sample I.D.
40-980204-01 to 40-980204-08

DCM GROUP WALK HAYDEL A DAMES & MOORE GROUP COMPANY

CAPITAL LAKES WATER PROJECT

DATA VALIDATION REPORT

SDG: 26021

Prepared for:

Louisiana DEQ
Active & Abandoned Sites
Baton Rouge, Louisiana

Integrate Project Number: 269
March 1998

LDEQ-EDMS Document 2469808, Page 178 of 717

Purpose of the Validation Report

Analytical data validation is a confirmatory procedure that evaluates client-generated laboratory data in accordance with definitive regulatory performance standards set forth by the USEPA.[1,2] Integrate, Incorporated (Integrate) provides client assistance with data validation to ensure that analytical data are complete, in compliance with laboratory protocols, in agreement with the project data quality objectives, and are technically valid and legally defensible.

Format of the Introduction Section

The introduction contains summary tables that permit the reader easy access to the validated detected results. The tables are identified as: 1) ***Table E 1*** *Sample Identification Cross-Reference Table*, 2) ***Table E 2*** *Summary of Validated Sample Detects Sorted by Client Sample and Fraction* and 3) ***Table E 3*** *Summary of Validated Analyte Detects Sorted by Fraction, Analyte and Client Sample.* A brief description of the contents of each table is presented below.

Executive Summaries:

1) ***Table E 1*** *Sample Identification Cross-Reference Table:* This table is a cross-reference of client sample names and laboratory names. It also references any consultants sample names, if they are available.

2) ***Table E 2*** *Summary of Validated Sample Detects Sorted by Client Sample and Fraction:* Identification of all post-validation detected analytes by client or site sample location, fraction and analyte. The order of the analytical fractions appearing in this report follows the typical order found in a laboratory data package. That is, volatiles appear first, followed by semivolatiles, pesticides, metals and conventionals. The detected analytes of each fraction are also displayed according to their order of appearance in the data package. This table also shows the sample type, sample matrix, extraction level, dilution factor and the method quantitation limits (MQL).

3) ***Table E 3*** *Summary of Validated Analyte Detects Sorted by Fraction, Analyte and Client Sample:* Identification of all post-validation detected analytes by fraction,

[1]National Functional Guidelines For Organic Data Review, USEPA, February 1994.
[2]National Functional Guidelines For Inorganic Data Review, USEPA, February 1994.

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analyte and client site/sample location. The fractions follow the same order described above: volatiles, semivolatiles, pesticides, metals and conventionals. All detected analytes are sorted alphabetically.

Qualifier Definitions

- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J - The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
- N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."
- NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated value represents its approximate concentration.
- UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

E1 - Sample Identification Cross-Reference Table

Site Samples Sorted by Fraction

Louisiana Department of Environmental Quality
CAPITOL LAKES

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 26021

Fraction	Client Sample	EPA Sample Number	Sample Type	Matrix	Level	Sampling Date/Time
Semivolatiles						
	40-980204-01	98020401	Site Sample	Water	Low	02/04/98 14:30
	40-980204-01 DUP	98020401DUP	Field Duplicate	Water	Low	02/04/98 14:30
	40-980204-03	98020403	Site Sample	Water	Low	02/04/98 14:30
	40-980204-05	98020405	Site Sample	Water	Low	02/04/98 14:30
	40-980204-07	98020407	Site Sample	Water	Low	02/04/98 14:30
	SBLKFM	SBLKFM	Method Blank	Water	Low	-
	SBLKFN	SBLKFN	Method Blank	Water	Low	-
	40-980204-03MSD	98020403MSD	Matrix Spike Duplicate	Water	Low	02/04/98 14:30
	40-980204-03MS	98020403MS	Matrix Spike	Water	Low	02/04/98 14:30
Pesticides/PCBs						
	BLK020698 B	BLK020698 B	Method Blank	Water	Low	-
	40-980204-01	98020401	Site Sample	Water	Low	02/04/98 14:30
	40-980204-01 DUP	98020401DUP	Field Duplicate	Water	Low	02/04/98 14:30
	40-980204-03	98020403	Site Sample	Water	Low	02/04/98 14:30
	40-980204-05	98020405	Site Sample	Water	Low	02/04/98 14:30
	40-980204-07	98020407	Site Sample	Water	Low	02/04/98 14:30
	40-980204-01MS	98020401MS	Matrix Spike	Water	Low	02/04/98 14:30
	40-980204-01MSD	98020401MSD	Matrix Spike Duplicate	Water	Low	02/04/98 14:30
Metals						
	40-980204-02	98020402	Site Sample	Water	Low	02/04/98 14:30
	40-980204-04	98020404	Site Sample	Water	Low	02/04/98 14:30
	40-980204-06	98020406	Site Sample	Water	Low	02/04/98 14:30
	40-980204-08	98020408	Site Sample	Water	Low	02/04/98 14:30
	40-980204-02 DUP	98020402 DUP	Field Duplicate	Water	Low	02/04/98 14:30

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

Louisiana Department of Environmental Quality
CAPITOL LAKES

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 26021

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
40-980204-02										
	Metals									
		Aluminum	Site Sample	Water	Low	1	100	149		µg/L
		Arsenic	Site Sample	Water	Low	1	10	2.4	B	µg/L
		Barium	Site Sample	Water	Low	1	10	48		µg/L
		Calcium	Site Sample	Water	Low	1	100	25,000		µg/L
		Copper	Site Sample	Water	Low	1	5.0	2.3	B	µg/L
		Iron	Site Sample	Water	Low	1	50	332		µg/L
		Lead	Site Sample	Water	Low	1	5.0	3.1	B	µg/L
		Magnesium	Site Sample	Water	Low	1	100	2,690		µg/L
		Manganese	Site Sample	Water	Low	1	5.0	73		µg/L
		Sodium	Site Sample	Water	Low	1	1,000	10,300		µg/L
		Vanadium	Site Sample	Water	Low	1	5.0	1.5	B	µg/L
40-980204-02 DUP										
	Metals									
		Aluminum	Field Duplicate	Water	Low	1	100	143		µg/L
		Arsenic	Field Duplicate	Water	Low	1	10	2.7	B	µg/L
		Barium	Field Duplicate	Water	Low	1	10	52		µg/L
		Calcium	Field Duplicate	Water	Low	1	100	27,000		µg/L
		Copper	Field Duplicate	Water	Low	1	5.0	2.4	B	µg/L
		Iron	Field Duplicate	Water	Low	1	50	335		µg/L
		Lead	Field Duplicate	Water	Low	1	5.0	3.2	B	µg/L
		Magnesium	Field Duplicate	Water	Low	1	100	2,910		µg/L
		Manganese	Field Duplicate	Water	Low	1	5.0	77		µg/L
		Sodium	Field Duplicate	Water	Low	1	1,000	11,200		µg/L
		Vanadium	Field Duplicate	Water	Low	1	5.0	1.4	B	µg/L
40-980204-04										
	Metals									
		Aluminum	Site Sample	Water	Low	1	100	142		µg/L
		Arsenic	Site Sample	Water	Low	1	10	2.3	B	µg/L
		Barium	Site Sample	Water	Low	1	10	47		µg/L
		Calcium	Site Sample	Water	Low	1	100	27,700		µg/L
		Copper	Site Sample	Water	Low	1	5.0	1.9	B	µg/L
		Iron	Site Sample	Water	Low	1	50	272		µg/L
		Lead	Site Sample	Water	Low	1	5.0	2.8	B	µg/L
		Magnesium	Site Sample	Water	Low	1	100	2,670		µg/L
		Manganese	Site Sample	Water	Low	1	5.0	69		µg/L
		Sodium	Site Sample	Water	Low	1	1,000	7,110		µg/L
		Vanadium	Site Sample	Water	Low	1	5.0	1.3	B	µg/L
40-980204-06										
	Metals									
		Aluminum	Site Sample	Water	Low	1	100	187		µg/L
		Arsenic	Site Sample	Water	Low	1	10	1.5	B	µg/L
		Barium	Site Sample	Water	Low	1	10	52		µg/L
		Calcium	Site Sample	Water	Low	1	100	30,800		µg/L
		Chromium	Site Sample	Water	Low	1	5.0	1.7	B	µg/L
		Copper	Site Sample	Water	Low	1	5.0	2.6	B	µg/L
		Iron	Site Sample	Water	Low	1	50	354		µg/L

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

Louisiana Department of Environmental Quality
CAPITOL LAKES

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 26021

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
40-980204-06										
	Metals									
		Lead	Site Sample	Water	Low	1	5.0	5.4		µg/L
		Magnesium	Site Sample	Water	Low	1	100	2,970		µg/L
		Manganese	Site Sample	Water	Low	1	5.0	84		µg/L
		Sodium	Site Sample	Water	Low	1	1,000	7,840		µg/L
		Vanadium	Site Sample	Water	Low	1	5.0	1.4	B	µg/L
40-980204-08										
	Metals									
		Aluminum	Site Sample	Water	Low	1	100	647		µg/L
		Arsenic	Site Sample	Water	Low	1	10	4.7	B	µg/L
		Barium	Site Sample	Water	Low	1	10	120		µg/L
		Cadmium	Site Sample	Water	Low	1	5.0	0.55	B	µg/L
		Calcium	Site Sample	Water	Low	1	100	50,700		µg/L
		Chromium	Site Sample	Water	Low	1	5.0	2.2	B	µg/L
		Cobalt	Site Sample	Water	Low	1	5.0	1.2	B	µg/L
		Copper	Site Sample	Water	Low	1	5.0	6.4		µg/L
		Iron	Site Sample	Water	Low	1	50	1,560		µg/L
		Lead	Site Sample	Water	Low	1	5.0	8.1		µg/L
		Magnesium	Site Sample	Water	Low	1	100	6,610		µg/L
		Manganese	Site Sample	Water	Low	1	5.0	269		µg/L
		Mercury	Site Sample	Water	Low	1	0.20	2.5		µg/L
		Potassium	Site Sample	Water	Low	1	500	3,660		µg/L
		Sodium	Site Sample	Water	Low	1	1,000	15,600		µg/L
		Vanadium	Site Sample	Water	Low	1	5.0	2.9	B	µg/L
		Zinc	Site Sample	Water	Low	1	5.0	62		µg/L

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **26021**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Aluminum									
		40-980204-02	Site Sample	Water	Low	1	100	149		µg/L
		40-980204-02 DUP	Field Duplicate	Water	Low	1	100	143		µg/L
		40-980204-04	Site Sample	Water	Low	1	100	142		µg/L
		40-980204-06	Site Sample	Water	Low	1	100	187		µg/L
		40-980204-08	Site Sample	Water	Low	1	100	647		µg/L
	Arsenic									
		40-980204-02	Site Sample	Water	Low	1	10	2.4	B	µg/L
		40-980204-02 DUP	Field Duplicate	Water	Low	1	10	2.7	B	µg/L
		40-980204-04	Site Sample	Water	Low	1	10	2.3	B	µg/L
		40-980204-06	Site Sample	Water	Low	1	10	1.5	B	µg/L
		40-980204-08	Site Sample	Water	Low	1	10	4.7	B	µg/L
	Barium									
		40-980204-02	Site Sample	Water	Low	1	10	48		µg/L
		40-980204-02 DUP	Field Duplicate	Water	Low	1	10	52		µg/L
		40-980204-04	Site Sample	Water	Low	1	10	47		µg/L
		40-980204-06	Site Sample	Water	Low	1	10	52		µg/L
		40-980204-08	Site Sample	Water	Low	1	10	120		µg/L
	Cadmium									
		40-980204-08	Site Sample	Water	Low	1	5.0	0.55	B	µg/L
	Calcium									
		40-980204-02	Site Sample	Water	Low	1	100	25,000		µg/L
		40-980204-02 DUP	Field Duplicate	Water	Low	1	100	27,000		µg/L
		40-980204-04	Site Sample	Water	Low	1	100	27,700		µg/L
		40-980204-06	Site Sample	Water	Low	1	100	30,800		µg/L
		40-980204-08	Site Sample	Water	Low	1	100	50,700		µg/L
	Chromium									
		40-980204-06	Site Sample	Water	Low	1	5.0	1.7	B	µg/L
		40-980204-08	Site Sample	Water	Low	1	5.0	2.2	B	µg/L
	Cobalt									
		40-980204-08	Site Sample	Water	Low	1	5.0	1.2	B	µg/L

Qualifiers:

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- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

Louisiana Department of Environmental Quality
CAPITOL LAKES

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **26021**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Copper									
		40-980204-02	Site Sample	Water	Low	1	5.0	2.3	B	µg/L
		40-980204-02 DUP	Field Duplicate	Water	Low	1	5.0	2.4	B	µg/L
		40-980204-04	Site Sample	Water	Low	1	5.0	1.9	B	µg/L
		40-980204-06	Site Sample	Water	Low	1	5.0	2.6	B	µg/L
		40-980204-08	Site Sample	Water	Low	1	5.0	6.4		µg/L
	Iron									
		40-980204-02	Site Sample	Water	Low	1	50	332		µg/L
		40-980204-02 DUP	Field Duplicate	Water	Low	1	50	335		µg/L
		40-980204-04	Site Sample	Water	Low	1	50	272		µg/L
		40-980204-06	Site Sample	Water	Low	1	50	354		µg/L
		40-980204-08	Site Sample	Water	Low	1	50	1,560		µg/L
	Lead									
		40-980204-02	Site Sample	Water	Low	1	5.0	3.1	B	µg/L
		40-980204-02 DUP	Field Duplicate	Water	Low	1	5.0	3.2	B	µg/L
		40-980204-04	Site Sample	Water	Low	1	5.0	2.8	B	µg/L
		40-980204-06	Site Sample	Water	Low	1	5.0	5.4		µg/L
		40-980204-08	Site Sample	Water	Low	1	5.0	8.1		µg/L
	Magnesium									
		40-980204-02	Site Sample	Water	Low	1	100	2,690		µg/L
		40-980204-02 DUP	Field Duplicate	Water	Low	1	100	2,910		µg/L
		40-980204-04	Site Sample	Water	Low	1	100	2,670		µg/L
		40-980204-06	Site Sample	Water	Low	1	100	2,970		µg/L
		40-980204-08	Site Sample	Water	Low	1	100	6,610		µg/L
	Manganese									
		40-980204-02	Site Sample	Water	Low	1	5.0	73		µg/L
		40-980204-02 DUP	Field Duplicate	Water	Low	1	5.0	77		µg/L
		40-980204-04	Site Sample	Water	Low	1	5.0	69		µg/L
		40-980204-06	Site Sample	Water	Low	1	5.0	84		µg/L
		40-980204-08	Site Sample	Water	Low	1	5.0	269		µg/L
	Mercury									
		40-980204-08	Site Sample	Water	Low	1	0.20	2.5		µg/L

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
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- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

Louisiana Department of Environmental Quality
CAPITOL LAKES

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 26021

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Potassium									
		40-980204-08	Site Sample	Water	Low	1	500	3,660		µg/L
	Sodium									
		40-980204-02	Site Sample	Water	Low	1	1,000	10,300		µg/L
		40-980204-02 DUP	Field Duplicate	Water	Low	1	1,000	11,200		µg/L
		40-980204-04	Site Sample	Water	Low	1	1,000	7,110		µg/L
		40-980204-06	Site Sample	Water	Low	1	1,000	7,840		µg/L
		40-980204-08	Site Sample	Water	Low	1	1,000	15,600		µg/L
	Vanadium									
		40-980204-02	Site Sample	Water	Low	1	5.0	1.5	B	µg/L
		40-980204-02 DUP	Field Duplicate	Water	Low	1	5.0	1.4	B	µg/L
		40-980204-04	Site Sample	Water	Low	1	5.0	1.3	B	µg/L
		40-980204-06	Site Sample	Water	Low	1	5.0	1.4	B	µg/L
		40-980204-08	Site Sample	Water	Low	1	5.0	2.9	B	µg/L
	Zinc									
		40-980204-08	Site Sample	Water	Low	1	5.0	62		µg/L

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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Capitol Lakes Sediment Project
Validated Data Summary Tables
SDG: 69801
October 1998
Sample I.D.
A1505269802 – A1505269820

DCM GROUP WALK HAYDEL A DAMES & MOORE GROUP COMPANY

CAPITOL LAKES SEDIMENT PROJECT

DATA VALIDATION REPORT

SDG: 69801

Prepared for:

Louisiana DEQ
Baton Rouge, Louisiana

Integrate Project Number: 269
October 1998

00000002

Purpose of the Validation Report

Analytical data validation is a confirmatory procedure that evaluates client-generated laboratory data in accordance with definitive regulatory performance standards set forth by the USEPA.[1,2] Integrate, Incorporated (Integrate) provides client assistance with data validation to ensure that analytical data are complete, in compliance with laboratory protocols, in agreement with the project data quality objectives, and are technically valid and legally defensible.

Format of the Introduction Section

The introduction contains summary tables that permit the reader easy access to the validated detected results. The tables are identified as: 1) ***Table E 1*** *Sample Identification Cross-Reference Table*, 2) ***Table E 2*** *Summary of Validated Sample Detects Sorted by Client Sample and Fraction* and 3) ***Table E 3*** *Summary of Validated Analyte Detects Sorted by Fraction, Analyte and Client Sample.* A brief description of the contents of each table is presented below.

Executive Summaries:

1) ***Table E 1*** *Sample Identification Cross-Reference Table:* This table is a cross-reference of client sample names and laboratory names. It also references any consultants sample names, if they are available.

2) ***Table E 2*** *Summary of Validated Sample Detects Sorted by Client Sample and Fraction:* Identification of all post-validation detected analytes by client or site sample location, fraction and analyte. The order of the analytical fractions appearing in this report follows the typical order found in a laboratory data package. That is, volatiles appear first, followed by semivolatiles, pesticides, metals and conventionals. The detected analytes of each fraction are also displayed according to their order of appearance in the data package. This table also shows the sample type, sample matrix, extraction level, dilution factor and the method quantitation limits (MQL).

3) ***Table E 3*** *Summary of Validated Analyte Detects Sorted by Fraction, Analyte and Client Sample:* Identification of all post-validation detected analytes by fraction,

[1]National Functional Guidelines For Organic Data Review, USEPA, February 1994.
[2]National Functional Guidelines For Inorganic Data Review, USEPA, February 1994.

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analyte and client site/sample location. The fractions follow the same order described above: volatiles, semivolatiles, pesticides, metals and conventionals. All detected analytes are sorted alphabetically.

Qualifier Definitions

- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J - The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
- N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."
- NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated value represents its approximate concentration.
- UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

NOTE:

All dilution results were combined onto one form four for the varies fractions. If results from a dilution were used they are given a "D" qualifier as per CLP guidelines.

E1 - Sample Identification Cross-Reference Table

Site Samples Sorted by Fraction

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Client Sample	EPA Sample Number	Sample Type	Matrix	Level	Sampling Date/Time
Semivolatiles						
	A1505269802	269802	Site Sample	Water	Low	05/26/98 10:17
	A1505269804	269804	Site Sample	Soil	Low	05/26/98 10:40
	A1505269804RE	269804RE	Re-extraction/Re-analysis	Soil	Low	05/26/98 10:40
	A1505269805	269805	Site Sample	Soil	Low	05/26/98 10:40
	A1505269805RE	269805RE	Re-extraction/Re-analysis	Soil	Low	05/26/98 10:40
	A1505269806	269806	Site Sample	Soil	Low	05/26/98 10:40
	A1505269807	269807	Site Sample	Soil	Low	05/26/98 11:20
	A1505269807RE	269807RE	Re-extraction/Re-analysis	Soil	Low	05/26/98 11:20
	A1505269808	269808	Site Sample	Soil	Low	05/26/98 11:25
	A1505269808RE	269808RE	Re-extraction/Re-analysis	Soil	Low	05/26/98 11:25
	A1505269809	269809	Site Sample	Soil	Low	05/26/98 11:25
	A1505269809RE	269809RE	Re-extraction/Re-analysis	Soil	Low	05/26/98 11:25
	A1505269810	269810	Site Sample	Soil	Low	05/26/98 13:22
	A1505269811	269811	Site Sample	Soil	Low	05/26/98 13:25
	A1505269811RE	269811RE	Re-extraction/Re-analysis	Soil	Low	05/26/98 13:25
	A1505269812	269812	Site Sample	Soil	Low	05/26/98 13:30
	A1505269812RE	269812RE	Re-extraction/Re-analysis	Soil	Low	05/26/98 13:30
	A1505269813	269813	Site Sample	Soil	Low	05/26/98 15:00
	A1505269813RE	269813RE	Re-extraction/Re-analysis	Soil	Low	05/26/98 15:00
	A1505269814	269814	Site Sample	Soil	Low	05/26/98 15:03
	A1505269815	269815	Site Sample	Soil	Low	05/26/98 15:07
	A1505269815RE	269815RE	Re-extraction/Re-analysis	Soil	Low	05/26/98 15:07
	A1505269816	269816	Site Sample	Soil	Low	05/26/98 15:30
	A1505269816RE	269816RE	Re-extraction/Re-analysis	Soil	Low	05/26/98 15:30
	A1505269818	269818	Site Sample	Soil	Low	05/26/98 16:06
	A1505269818RE	269818RE	Re-extraction/Re-analysis	Soil	Low	05/26/98 16:06
	A1505269817	269819	Site Sample	Soil	Low	05/26/98 15:34
	A1505269817RE	269819RE	Re-extraction/Re-analysis	Soil	Low	05/26/98 15:34
	A1505269820	269820	Site Sample	Soil	Low	05/26/98 16:16
	A1505269820RE	269820RE	Re-extraction/Re-analysis	Soil	Low	05/26/98 16:16
	A1505269819	269821	Site Sample	Soil	Low	05/26/98 16:11
	A1505269819RE	269821RE	Re-extraction/Re-analysis	Soil	Low	05/26/98 16:11
	SBLKFR	SBLKFR	Method Blank	Water	Low	-
	SBLKFS	SBLKFS	Method Blank	Soil	Low	-
	A1505269814MS	269814MS	Matrix Spike	Soil	Low	05/26/98 15:03
	A1505269814MSD	269814MSD	Matrix Spike Duplicate	Soil	Low	05/26/98 15:03
Pesticides/PCBs						
	A1505269803	269803	Site Sample	Water	Low	05/26/98 10:17
	A1505269804	269804	Site Sample	Soil	Low	05/26/98 10:40
	A1505269805	269805	Site Sample	Soil	Low	05/26/98 10:40
	A1505269806	269806	Site Sample	Soil	Low	05/26/98 10:40
	A1505269807	269807	Site Sample	Soil	Low	05/26/98 11:20
	A1505269808	269808	Site Sample	Soil	Low	05/26/98 11:25
	A1505269809	269809	Site Sample	Soil	Low	05/26/98 11:25
	A1505269810	269810	Site Sample	Soil	Low	05/26/98 13:22
	A1505269811	269811	Site Sample	Soil	Low	05/26/98 13:25
	A1505269812	269812	Site Sample	Soil	Low	05/26/98 13:30
	A1505269813	269813	Site Sample	Soil	Low	05/26/98 15:00
	A1505269814	269814	Site Sample	Soil	Low	05/26/98 15:03
	A1505269814MS	269814MS	Matrix Spike	Soil	Low	05/26/98 15:03
	A1505269814MSD	269814MSD	Matrix Spike Duplicate	Soil	Low	05/26/98 15:03
	A1505269815	269815	Site Sample	Soil	Low	05/26/98 17:07
	A1505269816	269816	Site Sample	Soil	Low	05/26/98 15:30
	A1505269817	269819	Site Sample	Soil	Low	05/26/98 15:34
	A1505269818	269818	Site Sample	Soil	Low	05/26/98 16:06

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E1 - Sample Identification Cross-Reference Table

Site Samples Sorted by Fraction

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Client Sample	EPA Sample Number	Sample Type	Matrix	Level	Sampling Date/Time
	A1505269819	269821	Site Sample	Soil	Low	05/26/98 16:11
	A1505269820	269820	Site Sample	Soil	Low	05/26/98 16:16
	METHOD BLANK	METHOD BLANK	Method Blank	Water	Low	-
	METHOD BLANK	METHOD BLANK	Method Blank	Soil	Low	-
Metals						
	A1505269801	269801	Site Sample	Water	Low	05/26/98 10:17
	A1505269804	269804	Site Sample	Soil	Low	05/26/98 10:40
	A1505269805	269805	Site Sample	Soil	Low	05/26/98 10:40
	A1505269806	269806	Site Sample	Soil	Low	05/26/98 10:40
	A1505269807	269807	Site Sample	Soil	Low	05/26/98 11:20
	A1505269808	269808	Site Sample	Soil	Low	05/26/98 11:25
	A1505269809	269809	Site Sample	Soil	Low	05/26/98 11:25
	A1505269810	269810	Site Sample	Soil	Low	05/26/98 13:22
	A1505269811	269811	Site Sample	Soil	Low	05/26/98 13:25
	A1505269812	269812	Site Sample	Soil	Low	05/26/98 13:30
	A1505269813	269813	Site Sample	Soil	Low	05/26/98 15:00
	A1505269814	269814	Site Sample	Soil	Low	05/26/98 15:03
	A1505269815	269815	Site Sample	Soil	Low	05/26/98 17:07
	A1505269816	269816	Site Sample	Soil	Low	05/26/98 15:30
	A1505269818	269818	Site Sample	Soil	Low	05/26/98 16:06
	A1505269817	269819	Site Sample	Soil	Low	05/26/98 15:34
	A1505269820	269820	Site Sample	Soil	Low	05/26/98 16:16
	A1505269819	269821	Site Sample	Soil	Low	05/26/98 16:11
Conventionals						
	A1505269813	269813	Site Sample	Soil	Low	05/26/98 15:00
	A1505269817	269817	Site Sample	Soil	Low	05/26/98 15:34
	A1505269819	269819	Site Sample	Soil	Low	05/26/98 16:11
	A1505269820	269820	Site Sample	Soil	Low	05/26/98 16:16

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505269801										
	Metals									
		Aluminum	Site Sample	Water	Low	1	75	64	B	µg/L
		Calcium	Site Sample	Water	Low	1	100	3,230		µg/L
		Copper	Site Sample	Water	Low	1	5.0	27		µg/L
		Iron	Site Sample	Water	Low	1	50	125		µg/L
		Lead	Site Sample	Water	Low	1	5.0	15		µg/L
		Magnesium	Site Sample	Water	Low	1	100	133		µg/L
		Manganese	Site Sample	Water	Low	1	5.0	10		µg/L
		Potassium	Site Sample	Water	Low	1	500	455	B	µg/L
		Sodium	Site Sample	Water	Low	1	1,000	2,990		µg/L
		Zinc	Site Sample	Water	Low	1	10	361		µg/L
A1505269802										
	Semivolatiles									
		Phenol	Site Sample	Water	Low	1	10	13		µg/L
		Benzoic Acid	Site Sample	Water	Low	1	10	3.0	J	µg/L
		Diethylphthalate	Site Sample	Water	Low	1	10	5.0	J	µg/L
		Di-n-butylphthalate	Site Sample	Water	Low	1	10	11	B	µg/L
		bis(2-Ethylhexyl)phthalate	Site Sample	Water	Low	1	10	5.0	BJ	µg/L
A1505269803										
	Pesticides/PCBs									
		4,4'-DDD	Site Sample	Water	Low	1	0.10	0.10		µg/L
		4,4'-DDT	Site Sample	Water	Low	1	0.10	0.10		µg/L
A1505269804										
	Semivolatiles									
		Phenanthrene	Site Sample	Soil	Low	2	660	239	J	µg/Kg
		Anthracene	Site Sample	Soil	Low	2	660	76	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	660	706		µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	1,058		µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	479	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	655	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	781	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	479	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	605	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	660	554	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	655	J	µg/Kg
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	1.7	2.0		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	3.8		µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	4.0		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	2.5		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	43		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	4.5		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	10		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	6.8		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	33		µg/Kg
		gamma-Chlordane	Site Sample	Soil	Low	1	1.7	2.8		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

00000007

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505269804										
	Pesticides/PCBs									
		Aroclor-1260	Site Sample	Soil	Low	1	33	151		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	7.5	5,569		mg/Kg
		Antimony	Site Sample	Soil	Low	1	5.0	5.5	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	8.6		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	121		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.17	B	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	0.83		mg/Kg
		Calcium	Site Sample	Soil	Low	1	10	1,830		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	11		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	1.0	4.0		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	23		mg/Kg
		Iron	Site Sample	Soil	Low	1	5.0	7,787		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	105		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	10	935		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	234		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.15		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	8.8		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	444		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	1.0	13		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	173		mg/Kg
A1505269805										
	Semivolatiles									
		Fluoranthene	Site Sample	Soil	Low	2	660	239	J	µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	365	J	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	153	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	222	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	252	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	239	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	196	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	660	146	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	176	J	µg/Kg
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	1.7	2.4		µg/Kg
		gamma-BHC (Lindane)	Site Sample	Soil	Low	1	1.7	2.4		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	9.6		µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	7.0		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	43		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	7.6		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	12		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	11		µg/Kg
		gamma-Chlordane	Site Sample	Soil	Low	1	1.7	2.1		µg/Kg
		Toxaphene	Site Sample	Soil	Low	1	166	2.4		µg/Kg
		Aroclor-1248	Site Sample	Soil	Low	1	33	232		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	173		µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505269805										
	Metals									
		Aluminum	Site Sample	Soil	Low	1	7.5	7,304		mg/Kg
		Antimony	Site Sample	Soil	Low	1	5.0	25	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	25		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	138		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.26		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.8		mg/Kg
		Calcium	Site Sample	Soil	Low	1	10	1,643		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	18		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	1.0	5.6		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	27		mg/Kg
		Iron	Site Sample	Soil	Low	1	5.0	10,558		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	160		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	10	1,152		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	375		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.73		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	12		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	558		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	4.3		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	68	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	1.0	15		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	189		mg/Kg
A1505269806										
	Semivolatiles									
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	366	J	µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	7.5	8,447		mg/Kg
		Antimony	Site Sample	Soil	Low	1	5.0	4.0	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	7.9		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	126		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.54		mg/Kg
		Calcium	Site Sample	Soil	Low	1	10	2,386		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	12		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	1.0	5.9		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	17		mg/Kg
		Iron	Site Sample	Soil	Low	1	5.0	11,905		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	53		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	10	1,838		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	267		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.069	B	mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	13		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	820		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	83	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	1.0	19		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	76		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

00000009

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 69801

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505269807										
	Semivolatiles									
		Phenanthrene	Site Sample	Soil	Low	2	660	299	J	µg/Kg
		Anthracene	Site Sample	Soil	Low	2	660	90	J	µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	1,115		µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	544	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	734		µg/Kg
		Di-n-octylphthalate	Site Sample	Soil	Low	2	660	435	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	870	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	707	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	680	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	660	435	J	µg/Kg
		Dibenz(a,h)anthracene	Site Sample	Soil	Low	2	660	171	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	490	J	µg/Kg
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	1.7	2.0		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	3.0		µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	3.0		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	33		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	7.9		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	7.1		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	35		µg/Kg
		alpha-Chlordane	Site Sample	Soil	Low	1	1.7	2.0		µg/Kg
		gamma-Chlordane	Site Sample	Soil	Low	1	1.7	3.0		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	141		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	7.5	5,195		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	6.0		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	131		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.14	B	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	0.76		mg/Kg
		Calcium	Site Sample	Soil	Low	1	10	2,192		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	12		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	1.0	4.1		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	27		mg/Kg
		Iron	Site Sample	Soil	Low	1	5.0	7,562		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	115		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	10	887		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	230		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.17		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	9.5		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	351		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	1.0	12		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	210		mg/Kg
A1505269808										
	Pesticides/PCBs									
		Aldrin	Site Sample	Soil	Low	1	1.7	9.0		µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	7.1		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	34		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505269808										
	Pesticides/PCBs									
		Endosulfan II	Site Sample	Soil	Low	1	3.3	23		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	7.9		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	12		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	31		µg/Kg
		gamma-Chlordane	Site Sample	Soil	Low	1	1.7	4.9		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	33	214		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	158		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	7.5	6,038		mg/Kg
		Antimony	Site Sample	Soil	Low	1	5.0	9.8	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	14		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	146		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.20		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.0		mg/Kg
		Calcium	Site Sample	Soil	Low	1	10	1,613		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	18		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	1.0	5.3		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	24		mg/Kg
		Iron	Site Sample	Soil	Low	1	5.0	9,750		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	152		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	10	994		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	343		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.24		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	11		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	424		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	3.0		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	57	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	1.0	14		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	183		mg/Kg
A1505269808RE										
	Semivolatiles									
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	248	J	µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	450	J	µg/Kg
		Benzo(a)anthracene	Re-extraction/Re-analysis	Soil	Low	2	660	158	J	µg/Kg
		Chrysene	Re-extraction/Re-analysis	Soil	Low	2	660	240	J	µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	270	J	µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	154	J	µg/Kg
		Benzo(a)pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	214	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	139	J	µg/Kg
		Benzo(g,h,i)perylene	Re-extraction/Re-analysis	Soil	Low	2	660	184	J	µg/Kg
A1505269809										
	Semivolatiles									
		Fluoranthene	Site Sample	Soil	Low	2	660	337	J	µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	660	J	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	199	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	306	J	µg/Kg

Qualifiers:

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- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505269809										
	Semivolatiles									
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	310	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	318	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	262	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	660	167	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	183	J	µg/Kg
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	1.7	2.2		µg/Kg
		gamma-BHC (Lindane)	Site Sample	Soil	Low	1	1.7	2.4		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	9.1		µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	7.1		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	30		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	5.2		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	6.0		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	9.9		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	21		µg/Kg
		alpha-Chlordane	Site Sample	Soil	Low	1	1.7	2.0		µg/Kg
		gamma-Chlordane	Site Sample	Soil	Low	1	1.7	4.0		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	33	199		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	147		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	7.5	7,861		mg/Kg
		Antimony	Site Sample	Soil	Low	1	5.0	11	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	15		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	152		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.24		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.3		mg/Kg
		Calcium	Site Sample	Soil	Low	1	10	1,663		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	19		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	1.0	6.0		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	25		mg/Kg
		Iron	Site Sample	Soil	Low	1	5.0	11,076		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	154		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	10	1,179		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	352		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.26		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	13		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	548		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	3.4		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	66	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	1.0	17		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	193		mg/Kg
A1505269810										
	Semivolatiles									
		Phenanthrene	Site Sample	Soil	Low	2	660	680		µg/Kg
		Anthracene	Site Sample	Soil	Low	2	660	156	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	660	1,258		µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	2,176	J	µg/Kg

Qualifiers:

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- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505269810										
	Semivolatiles									
		Butylbenzylphthalate	Site Sample	Soil	Low	2	660	136	J	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	782	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	1,054	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Site Sample	Soil	Low	2	660	8,500	J	µg/Kg
		Di-n-octylphthalate	Site Sample	Soil	Low	10	3,300	18,700	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	952	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	510	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	578	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	660	612	J	µg/Kg
		Dibenz(a,h)anthracene	Site Sample	Soil	Low	2	660	238	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	680	J	µg/Kg
	Pesticides/PCBs									
		beta-BHC	Site Sample	Soil	Low	1	1.7	3.0		µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	5.1		µg/Kg
		Endrin	Site Sample	Soil	Low	1	3.3	4.1		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	9.9		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	8.2		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	9.9		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	99		µg/Kg
		alpha-Chlordane	Site Sample	Soil	Low	1	1.7	8.2		µg/Kg
		gamma-Chlordane	Site Sample	Soil	Low	1	1.7	16		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	33	167		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	173		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	7.5	4,182		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	4.1		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	116		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.099	B	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	0.71		mg/Kg
		Calcium	Site Sample	Soil	Low	1	10	2,601		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	13		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	1.0	4.1		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	29		mg/Kg
		Iron	Site Sample	Soil	Low	1	5.0	6,664		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	109		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	10	816		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	161		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.14		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	11		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	294		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	1.0	10		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	219		mg/Kg
A1505269811										
	Semivolatiles									
		Fluoranthene	Site Sample	Soil	Low	2	660	709		µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	1,380	J	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	373	J	µg/Kg

Qualifiers:

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- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505269811										
	Semivolatiles									
		Chrysene	Site Sample	Soil	Low	2	660	522	J	µg/Kg
		Di-n-octylphthalate	Site Sample	Soil	Low	2	660	1,306	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	522	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	448	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	410	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	660	280	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	343	J	µg/Kg
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	1.7	7.8		µg/Kg
		gamma-BHC (Lindane)	Site Sample	Soil	Low	1	1.7	4.8		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	15		µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	12		µg/Kg
		Endosulfan I	Site Sample	Soil	Low	1	1.7	4.1		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	48		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	28		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	7.8		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	11		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	30		µg/Kg
		alpha-Chlordane	Site Sample	Soil	Low	1	1.7	7.8		µg/Kg
		gamma-Chlordane	Site Sample	Soil	Low	1	1.7	10		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	33	328		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	183		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	7.5	5,782		mg/Kg
		Antimony	Site Sample	Soil	Low	1	5.0	2.4	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	10		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	166		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.18	B	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	0.90		mg/Kg
		Calcium	Site Sample	Soil	Low	1	10	1,917		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	20		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	1.0	4.5		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	28		mg/Kg
		Iron	Site Sample	Soil	Low	1	5.0	8,691		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	186		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	10	921		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	286		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.30		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	11		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	418		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	81	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	1.0	12		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	215		mg/Kg
A1505269812										
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	1.7	29		µg/Kg
		gamma-BHC (Lindane)	Site Sample	Soil	Low	1	1.7	4.9		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
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- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505269812										
	Pesticides/PCBs									
		Aldrin	Site Sample	Soil	Low	1	1.7	23		µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	16		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	16		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	72		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	40		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	42		µg/Kg
		Endosulfan sulfate	Site Sample	Soil	Low	1	3.3	4.9		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	22		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	49		µg/Kg
		gamma-Chlordane	Site Sample	Soil	Low	1	1.7	4.0		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	33	448		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	314		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	7.5	6,003		mg/Kg
		Antimony	Site Sample	Soil	Low	1	5.0	16	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	20		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	152		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.20		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.7		mg/Kg
		Calcium	Site Sample	Soil	Low	1	10	1,891		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	21		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	1.0	4.9		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	37		mg/Kg
		Iron	Site Sample	Soil	Low	1	5.0	9,453		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	187		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	10	972		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	305		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.43		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	10		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	420		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	3.6		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	61	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	1.0	14		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	197		mg/Kg
A1505269812RE										
	Semivolatiles									
		Phenanthrene	Re-extraction/Re-analysis	Soil	Low	2	660	37	J	µg/Kg
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	327	J	µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	448	J	µg/Kg
		Benzo(a)anthracene	Re-extraction/Re-analysis	Soil	Low	2	660	193	J	µg/Kg
		Chrysene	Re-extraction/Re-analysis	Soil	Low	2	660	260	J	µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	264	J	µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	166	J	µg/Kg
		Benzo(a)pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	211	J	µg/Kg
		Benzo(g,h,i)perylene	Re-extraction/Re-analysis	Soil	Low	2	660	148	J	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - *Reported from a dilution*
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

00000015

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 69801

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505269813										
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	1.7	2.0		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	6.1		µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	3.9		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	16		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	10		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	6.1		µg/Kg
		Endosulfan sulfate	Site Sample	Soil	Low	1	3.3	18		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	18		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	61		µg/Kg
		alpha-Chlordane	Site Sample	Soil	Low	1	1.7	6.1		µg/Kg
		gamma-Chlordane	Site Sample	Soil	Low	1	1.7	13		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	231		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	7.5	4,948		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	4.3		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	111		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.071	B	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	0.78		mg/Kg
		Calcium	Site Sample	Soil	Low	1	10	2,310		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	12		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	1.0	3.3		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	26		mg/Kg
		Iron	Site Sample	Soil	Low	1	5.0	6,942		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	102		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	10	847		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	155		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.12		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	9.3		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	360		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	1.0	11		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	210		mg/Kg
	Conventionals									
		Total Organic Carbon (TOC)	Site Sample	Soil	Low	1	100	17,800		mg/Kg
		Oil and Grease	Site Sample	Soil	Low	1	100	4,300		mg/Kg
		Percent Moisture	Site Sample	Soil	Low	1	0.10	64		%
A1505269813RE										
	Semivolatiles									
		Phenanthrene	Re-extraction/Re-analysis	Soil	Low	2	660	570	J	µg/Kg
		Anthracene	Re-extraction/Re-analysis	Soil	Low	2	660	125	J	µg/Kg
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	1,139		µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	2,100	J	µg/Kg
		Butylbenzylphthalate	Re-extraction/Re-analysis	Soil	Low	2	660	148	J	µg/Kg
		Benzo(a)anthracene	Re-extraction/Re-analysis	Soil	Low	2	660	854	J	µg/Kg
		Chrysene	Re-extraction/Re-analysis	Soil	Low	2	660	1,032	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Re-extraction/Re-analysis	Soil	Low	2	660	4,984	J	µg/Kg
		Di-n-octylphthalate	Re-extraction/Re-analysis	Soil	Low	2	660	203	J	µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	1,032	J	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505269813RE										
	Semivolatiles									
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	748	J	µg/Kg
		Benzo(a)pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	748	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	748	J	µg/Kg
		Dibenz(a,h)anthracene	Re-extraction/Re-analysis	Soil	Low	2	660	288	J	µg/Kg
		Benzo(g,h,i)perylene	Re-extraction/Re-analysis	Soil	Low	2	660	854	J	µg/Kg
A1505269814										
	Semivolatiles									
		Phenanthrene	Site Sample	Soil	Low	2	660	519	J	µg/Kg
		Anthracene	Site Sample	Soil	Low	2	660	134	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	660	742		µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	1,558	J	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	371	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	482	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	482	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	445	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	371	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	660	334	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	408	J	µg/Kg
	Pesticides/PCBs									
		alpha-BHC	Site Sample	Soil	Low	1	1.7	2.0		µg/Kg
		delta-BHC	Site Sample	Soil	Low	1	1.7	5.9		µg/Kg
		gamma-BHC (Lindane)	Site Sample	Soil	Low	1	1.7	5.2		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	15		µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	12		µg/Kg
		Endosulfan I	Site Sample	Soil	Low	1	1.7	4.8		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	51		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	7.0		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	11		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	11		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	32		µg/Kg
		alpha-Chlordane	Site Sample	Soil	Low	1	1.7	4.8		µg/Kg
		gamma-Chlordane	Site Sample	Soil	Low	1	1.7	12		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	33	408		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	174		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	7.5	4,749		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	10		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	166		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.16	B	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	0.52		mg/Kg
		Calcium	Site Sample	Soil	Low	1	10	1,859		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	19		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	1.0	4.5		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	30		mg/Kg
		Iron	Site Sample	Soil	Low	1	5.0	7,717		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	216		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	10	805		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL.

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 69801

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505269814										
	Metals									
		Manganese	Site Sample	Soil	Low	1	0.50	252		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.21		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	9.6		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	344		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	1.0	11		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	213		mg/Kg
A1505269815										
	Semivolatiles									
		Phenanthrene	Site Sample	Soil	Low	2	660	316	J	µg/Kg
		Anthracene	Site Sample	Soil	Low	2	660	85	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	660	566	J	µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	1,180	J	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	307	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	434	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Site Sample	Soil	Low	2	660	1,605	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	363	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	401	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	316	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	660	151	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	179	J	µg/Kg
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	1.7	8.0		µg/Kg
		gamma-BHC (Lindane)	Site Sample	Soil	Low	1	1.7	6.6		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	24		µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	17		µg/Kg
		Endosulfan I	Site Sample	Soil	Low	1	1.7	5.2		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	14		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	66		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	16		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	31		µg/Kg
		Endosulfan sulfate	Site Sample	Soil	Low	1	3.3	5.2		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	21		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	26		µg/Kg
		alpha-Chlordane	Site Sample	Soil	Low	1	1.7	6.1		µg/Kg
		gamma-Chlordane	Site Sample	Soil	Low	1	1.7	11		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	33	661		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	354		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	7.5	7,694		mg/Kg
		Antimony	Site Sample	Soil	Low	1	5.0	6.6	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	15		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	189		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.28		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.1		mg/Kg
		Calcium	Site Sample	Soil	Low	1	10	2,369		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	27		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	1.0	5.7		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **89801**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505269815										
	Metals									
		Copper	Site Sample	Soil	Low	1	0.50	37		mg/Kg
		Iron	Site Sample	Soil	Low	1	5.0	11,281		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	204		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	10	1,204		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	332		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.40		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	13		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	533		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	2.9		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	69	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	1.0	16		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	218		mg/Kg
A1505269816										
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	1.7	2.1		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	5.2		µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	4.3		µg/Kg
		Endosulfan I	Site Sample	Soil	Low	1	1.7	2.1		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	34		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	4.3		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	5.2		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	7.4		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	21		µg/Kg
		gamma-Chlordane	Site Sample	Soil	Low	1	1.7	3.1		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	122		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	7.5	5,063		mg/Kg
		Antimony	Site Sample	Soil	Low	1	5.0	1.7	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	6.3		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	125		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.083	B	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	0.61		mg/Kg
		Calcium	Site Sample	Soil	Low	1	10	1,944		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	11		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	1.0	4.0		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	22		mg/Kg
		Iron	Site Sample	Soil	Low	1	5.0	7,200		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	101		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	10	801		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	243		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.15		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	8.6		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	369		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	1.0	11		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	196		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505269816RE										
	Semivolatiles									
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	405	J	µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	660	J	µg/Kg
		Benzo(a)anthracene	Re-extraction/Re-analysis	Soil	Low	2	660	315	J	µg/Kg
		Chrysene	Re-extraction/Re-analysis	Soil	Low	2	660	428	J	µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	518	J	µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	450	J	µg/Kg
		Benzo(a)pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	428	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	293	J	µg/Kg
		Benzo(g,h,i)perylene	Re-extraction/Re-analysis	Soil	Low	2	660	315	J	µg/Kg
A1505269817										
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	1.7	3.0		µg/Kg
		gamma-BHC (Lindane)	Site Sample	Soil	Low	1	1.7	2.4		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	7.9		µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	7.0		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	6.1		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	40		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	9.1		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	18		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	15		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	7.0		µg/Kg
		alpha-Chlordane	Site Sample	Soil	Low	1	1.7	4.9		µg/Kg
		gamma-Chlordane	Site Sample	Soil	Low	1	1.7	2.0		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	33	240		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	274		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	7.5	5,958		mg/Kg
		Antimony	Site Sample	Soil	Low	1	5.0	29	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	23		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	126		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.18	B	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	2.1		mg/Kg
		Calcium	Site Sample	Soil	Low	1	10	1,374		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	16		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	1.0	4.6		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	29		mg/Kg
		Iron	Site Sample	Soil	Low	1	5.0	8,786		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	159		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	10	876		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	262		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.43		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	9.4		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	416		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	3.0		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	1.0	12		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	205		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505269817										
	Conventionals									
		Total Organic Carbon (TOC)	Site Sample	Soil	Low	1	100	9,120		mg/Kg
		Oil and Grease	Site Sample	Soil	Low	1	100	1,640		mg/Kg
		Percent Moisture	Site Sample	Soil	Low	1	0.10	70		%
A1505269817RE										
	Semivolatiles									
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	167	J	µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	292	NJ	µg/Kg
		Benzo(a)anthracene	Re-extraction/Re-analysis	Soil	Low	2	660	103	J	µg/Kg
		Chrysene	Re-extraction/Re-analysis	Soil	Low	2	660	158	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Re-extraction/Re-analysis	Soil	Low	2	660	851	J	µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	140	J	µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	179	J	µg/Kg
A1505269818										
	Pesticides/PCBs									
		Aldrin	Site Sample	Soil	Low	1	1.7	5.5		µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	4.3		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	27		µg/Kg
		Endrin	Site Sample	Soil	Low	1	3.3	4.0		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	9.8		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	11		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	15		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	10		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	33	111		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	172		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	7.5	5,127		mg/Kg
		Antimony	Site Sample	Soil	Low	1	5.0	2.5	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	5.5		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	145		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.13	B	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	0.68		mg/Kg
		Calcium	Site Sample	Soil	Low	1	10	6,570		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	12		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	1.0	4.3		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	27		mg/Kg
		Iron	Site Sample	Soil	Low	1	5.0	8,320		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	99		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	10	1,225		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	252		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.23		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	9.8		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	365		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	1.0	12		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	249		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505269818RE										
	Semivolatiles									
		Phenanthrene	Re-extraction/Re-analysis	Soil	Low	2	660	218	J	µg/Kg
		Anthracene	Re-extraction/Re-analysis	Soil	Low	2	660	74	J	µg/Kg
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	768		µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	1,105		µg/Kg
		Benzo(a)anthracene	Re-extraction/Re-analysis	Soil	Low	2	660	583	J	µg/Kg
		Chrysene	Re-extraction/Re-analysis	Soil	Low	2	660	737		µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	660	J	µg/Kg
		Benzo(a)pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	737	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	660	J	µg/Kg
		Benzo(g,h,i)perylene	Re-extraction/Re-analysis	Soil	Low	2	660	461	J	µg/Kg
A1505269819										
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	1.7	2.0		µg/Kg
		gamma-BHC (Lindane)	Site Sample	Soil	Low	1	1.7	2.4		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	9.9		µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	6.0		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	4.0		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	33		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	12		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	8.2		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	17		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	18		µg/Kg
		alpha-Chlordane	Site Sample	Soil	Low	1	1.7	5.2		µg/Kg
		gamma-Chlordane	Site Sample	Soil	Low	1	1.7	2.0		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	33	224		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	284		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	7.5	6,293		mg/Kg
		Antimony	Site Sample	Soil	Low	1	5.0	6.9	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	14		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	147		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.18	B	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.6		mg/Kg
		Calcium	Site Sample	Soil	Low	1	10	1,530		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	17		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	1.0	5.2		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	28		mg/Kg
		Iron	Site Sample	Soil	Low	1	5.0	9,462		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	128		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	10	987		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	290		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.52		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	9.9		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	448		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	51	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	1.0	13		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	225		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505269819										
	Conventionals									
		Total Organic Carbon (TOC)	Site Sample	Soil	Low	1	100	9,913		mg/Kg
		Oil and Grease	Site Sample	Soil	Low	1	100	2,010		mg/Kg
		Percent Moisture	Site Sample	Soil	Low	1	0.10	57		%
A1505269819RE										
	Semivolatiles									
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	168	J	µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	272	J	µg/Kg
		Chrysene	Re-extraction/Re-analysis	Soil	Low	2	660	164	J	µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	168	J	µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	155	J	µg/Kg
		Benzo(a)pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	147	J	µg/Kg
A1505269820										
	Pesticides/PCBs									
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	18		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	8.9		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	4.0		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	134		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	7.5	7,493		mg/Kg
		Antimony	Site Sample	Soil	Low	1	5.0	39	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	34		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	128		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.23		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	2.7		mg/Kg
		Calcium	Site Sample	Soil	Low	1	10	1,432		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	13		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	1.0	6.2		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	26		mg/Kg
		Iron	Site Sample	Soil	Low	1	5.0	11,239		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	153		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	10	1,066		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	302		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.12		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	12		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	508		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	2.6		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	75	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	1.0	17		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	176		mg/Kg
	Conventionals									
		Total Organic Carbon (TOC)	Site Sample	Soil	Low	1	100	10,258		mg/Kg
		Oil and Grease	Site Sample	Soil	Low	1	100	990		mg/Kg
		Percent Moisture	Site Sample	Soil	Low	1	0.10	55		%

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL .

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505269820RE										
	Semivolatiles									
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	120	J	µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	80	J	µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	67	J	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Anthracene									
		A1505269804	Site Sample	Soil	Low	2	660	76	J	µg/Kg
		A1505269807	Site Sample	Soil	Low	2	660	90	J	µg/Kg
		A1505269810	Site Sample	Soil	Low	2	660	156	J	µg/Kg
		A1505269813RE	Re-extraction/Re-analysis	Soil	Low	2	660	125	J	µg/Kg
		A1505269814	Site Sample	Soil	Low	2	660	134	J	µg/Kg
		A1505269815	Site Sample	Soil	Low	2	660	85	J	µg/Kg
		A1505269818RE	Re-extraction/Re-analysis	Soil	Low	2	660	74	J	µg/Kg
	Benzo(a)anthracene									
		A1505269804	Site Sample	Soil	Low	2	660	479	J	µg/Kg
		A1505269805	Site Sample	Soil	Low	2	660	153	J	µg/Kg
		A1505269807	Site Sample	Soil	Low	2	660	544	J	µg/Kg
		A1505269808RE	Re-extraction/Re-analysis	Soil	Low	2	660	158	J	µg/Kg
		A1505269809	Site Sample	Soil	Low	2	660	199	J	µg/Kg

Qualifiers:

J - Estimated

B - (Organics) Found in the associated method blank

D - Reported from a dilution

E - Exceeds calibration range

P - (Pesticides) Difference in column concentrations > 25%

B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: *AATSLA / American Analytical & Technical Services, Inc.* SDG ID: *69801*

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(a)anthracene									
		A1505269810	Site Sample	Soil	Low	2	660	782	J	µg/Kg
		A1505269811	Site Sample	Soil	Low	2	660	373	J	µg/Kg
		A1505269812RE	Re-extraction/Re-analysis	Soil	Low	2	660	193	J	µg/Kg
		A1505269813RE	Re-extraction/Re-analysis	Soil	Low	2	660	854	J	µg/Kg
		A1505269814	Site Sample	Soil	Low	2	660	371	J	µg/Kg
		A1505269815	Site Sample	Soil	Low	2	660	307	J	µg/Kg
		A1505269816RE	Re-extraction/Re-analysis	Soil	Low	2	660	315	J	µg/Kg
		A1505269817RE	Re-extraction/Re-analysis	Soil	Low	2	660	103	J	µg/Kg
		A1505269818RE	Re-extraction/Re-analysis	Soil	Low	2	660	583	J	µg/Kg
	Benzo(a)pyrene									
		A1505269804	Site Sample	Soil	Low	2	660	605	J	µg/Kg
		A1505269805	Site Sample	Soil	Low	2	660	196	J	µg/Kg
		A1505269806	Site Sample	Soil	Low	2	660	366	J	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - *(Organics) Found in the associated method blank*
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - *(Inorganics) Lab qualifier* - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(a)pyrene									
		A1505269807	Site Sample	Soil	Low	2	660	680	J	µg/Kg
		A1505269808RE	Re-extraction/Re-analysis	Soil	Low	2	660	214	J	µg/Kg
		A1505269809	Site Sample	Soil	Low	2	660	262	J	µg/Kg
		A1505269810	Site Sample	Soil	Low	2	660	578	J	µg/Kg
		A1505269811	Site Sample	Soil	Low	2	660	410	J	µg/Kg
		A1505269812RE	Re-extraction/Re-analysis	Soil	Low	2	660	211	J	µg/Kg
		A1505269813RE	Re-extraction/Re-analysis	Soil	Low	2	660	748	J	µg/Kg
		A1505269814	Site Sample	Soil	Low	2	660	371	J	µg/Kg
		A1505269815	Site Sample	Soil	Low	2	660	316	J	µg/Kg
		A1505269816RE	Re-extraction/Re-analysis	Soil	Low	2	660	428	J	µg/Kg
		A1505269818RE	Re-extraction/Re-analysis	Soil	Low	2	660	737	J	µg/Kg
		A1505269819RE	Re-extraction/Re-analysis	Soil	Low	2	660	147	J	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(b)fluoranthene									
		A1505269804	Site Sample	Soil	Low	2	660	781	J	µg/Kg
		A1505269805	Site Sample	Soil	Low	2	660	252	J	µg/Kg
		A1505269807	Site Sample	Soil	Low	2	660	870	J	µg/Kg
		A1505269808RE	Re-extraction/Re-analysis	Soil	Low	2	660	270	J	µg/Kg
		A1505269809	Site Sample	Soil	Low	2	660	310	J	µg/Kg
		A1505269810	Site Sample	Soil	Low	2	660	952	J	µg/Kg
		A1505269811	Site Sample	Soil	Low	2	660	522	J	µg/Kg
		A1505269812RE	Re-extraction/Re-analysis	Soil	Low	2	660	264	J	µg/Kg
		A1505269813RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,032	J	µg/Kg
		A1505269814	Site Sample	Soil	Low	2	660	482	J	µg/Kg
		A1505269815	Site Sample	Soil	Low	2	660	363	J	µg/Kg
		A1505269816RE	Re-extraction/Re-analysis	Soil	Low	2	660	518	J	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(b)fluoranthene									
		A1505269817RE	Re-extraction/Re-analysis	Soil	Low	2	660	140	J	µg/Kg
		A1505269819RE	Re-extraction/Re-analysis	Soil	Low	2	660	168	J	µg/Kg
		A1505269820RE	Re-extraction/Re-analysis	Soil	Low	2	660	80	J	µg/Kg
	Benzo(g,h,i)perylene									
		A1505269804	Site Sample	Soil	Low	2	660	655	J	µg/Kg
		A1505269805	Site Sample	Soil	Low	2	660	176	J	µg/Kg
		A1505269807	Site Sample	Soil	Low	2	660	490	J	µg/Kg
		A1505269808RE	Re-extraction/Re-analysis	Soil	Low	2	660	184	J	µg/Kg
		A1505269809	Site Sample	Soil	Low	2	660	183	J	µg/Kg
		A1505269810	Site Sample	Soil	Low	2	660	680	J	µg/Kg
		A1505269811	Site Sample	Soil	Low	2	660	343	J	µg/Kg
		A1505269812RE	Re-extraction/Re-analysis	Soil	Low	2	660	148	J	µg/Kg
		A1505269813RE	Re-extraction/Re-analysis	Soil	Low	2	660	854	J	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(g,h,i)perylene									
		A1505269814	Site Sample	Soil	Low	2	660	408	J	µg/Kg
		A1505269815	Site Sample	Soil	Low	2	660	179	J	µg/Kg
		A1505269816RE	Re-extraction/Re-analysis	Soil	Low	2	660	315	J	µg/Kg
		A1505269818RE	Re-extraction/Re-analysis	Soil	Low	2	660	461	J	µg/Kg
	Benzo(k)fluoranthene									
		A1505269804	Site Sample	Soil	Low	2	660	479	J	µg/Kg
		A1505269805	Site Sample	Soil	Low	2	660	239	J	µg/Kg
		A1505269807	Site Sample	Soil	Low	2	660	707	J	µg/Kg
		A1505269808RE	Re-extraction/Re-analysis	Soil	Low	2	660	154	J	µg/Kg
		A1505269809	Site Sample	Soil	Low	2	660	318	J	µg/Kg
		A1505269810	Site Sample	Soil	Low	2	660	510	J	µg/Kg
		A1505269811	Site Sample	Soil	Low	2	660	448	J	µg/Kg
		A1505269812RE	Re-extraction/Re-analysis	Soil	Low	2	660	168	J	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(k)fluoranthene									
		A1505269813RE	Re-extraction/Re-analysis	Soil	Low	2	660	748	J	µg/Kg
		A1505269814	Site Sample	Soil	Low	2	660	445	J	µg/Kg
		A1505269815	Site Sample	Soil	Low	2	660	401	J	µg/Kg
		A1505269816RE	Re-extraction/Re-analysis	Soil	Low	2	660	450	J	µg/Kg
		A1505269817RE	Re-extraction/Re-analysis	Soil	Low	2	660	179	J	µg/Kg
		A1505269818RE	Re-extraction/Re-analysis	Soil	Low	2	660	660	J	µg/Kg
		A1505269819RE	Re-extraction/Re-analysis	Soil	Low	2	660	155	J	µg/Kg
		A1505269820RE	Re-extraction/Re-analysis	Soil	Low	2	660	67	J	µg/Kg
	Benzoic Acid									
		A1505269802	Site Sample	Water	Low	1	10	3.0	J	µg/L
	bis(2-Ethylhexyl)phthalate									
		A1505269802	Site Sample	Water	Low	1	10	5.0	BJ	µg/L
		A1505269810	Site Sample	Soil	Low	2	660	8,500	J	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	bis(2-Ethylhexyl)phthalate									
		A1505269813RE	Re-extraction/Re-analysis	Soil	Low	2	660	4,984	J	µg/Kg
		A1505269815	Site Sample	Soil	Low	2	660	1,605	J	µg/Kg
		A1505269817RE	Re-extraction/Re-analysis	Soil	Low	2	660	851	J	µg/Kg
	Butylbenzylphthalate									
		A1505269810	Site Sample	Soil	Low	2	660	136	J	µg/Kg
		A1505269813RE	Re-extraction/Re-analysis	Soil	Low	2	660	146	J	µg/Kg
	Chrysene									
		A1505269804	Site Sample	Soil	Low	2	660	655	J	µg/Kg
		A1505269805	Site Sample	Soil	Low	2	660	222	J	µg/Kg
		A1505269607	Site Sample	Soil	Low	2	660	734		µg/Kg
		A1505269808RE	Re-extraction/Re-analysis	Soil	Low	2	660	240	J	µg/Kg
		A1505269809	Site Sample	Soil	Low	2	660	306	J	µg/Kg
		A1505269810	Site Sample	Soil	Low	2	660	1,054	J	µg/Kg

Qualifiers:

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- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Chrysene									
		A1505269811	Site Sample	Soil	Low	2	660	522	J	µg/Kg
		A1505269812RE	Re-extraction/Re-analysis	Soil	Low	2	660	260	J	µg/Kg
		A1505269813RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,032	J	µg/Kg
		A1505269814	Site Sample	Soil	Low	2	660	482	J	µg/Kg
		A1505269815	Site Sample	Soil	Low	2	660	434	J	µg/Kg
		A1505269816RE	Re-extraction/Re-analysis	Soil	Low	2	660	428	J	µg/Kg
		A1505269817RE	Re-extraction/Re-analysis	Soil	Low	2	660	158	J	µg/Kg
		A1505269818RE	Re-extraction/Re-analysis	Soil	Low	2	660	737		µg/Kg
		A1505269819RE	Re-extraction/Re-analysis	Soil	Low	2	660	164	J	µg/Kg
	Di-n-butylphthalate									
		A1505269802	Site Sample	Water	Low	1	10	11	B	µg/L
	Di-n-octylphthalate									
		A1505269807	Site Sample	Soil	Low	2	660	435	J	µg/Kg

Qualifiers:

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- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 89801

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Di-n-octylphthalate									
		A1505269810	Site Sample	Soil	Low	10	3,300	18,700	J	µg/Kg
		A1505269811	Site Sample	Soil	Low	2	660	1,306	J	µg/Kg
		A1505269813RE	Re-extraction/Re-analysis	Soil	Low	2	660	203	J	µg/Kg
	Dibenz(a,h)anthracene									
		A1505269807	Site Sample	Soil	Low	2	660	171	J	µg/Kg
		A1505269810	Site Sample	Soil	Low	2	660	238	J	µg/Kg
		A1505269813RE	Re-extraction/Re-analysis	Soil	Low	2	660	288	J	µg/Kg
	Diethylphthalate									
		A1505269602	Site Sample	Water	Low	1	10	5.0	J	µg/L
	Fluoranthene									
		A1505269804	Site Sample	Soil	Low	2	660	706		µg/Kg
		A1505269805	Site Sample	Soil	Low	2	660	239	J	µg/Kg
		A1505269808RE	Re-extraction/Re-analysis	Soil	Low	2	660	248	J	µg/Kg
		A1505269809	Site Sample	Soil	Low	2	660	337	J	µg/Kg

Qualifiers:

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- B - (Organics) Found in the associated method blank
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- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Fluoranthene									
		A1505269810	Site Sample	Soil	Low	2	660	1,258		µg/Kg
		A1505269811	Site Sample	Soil	Low	2	660	709		µg/Kg
		A1505269812RE	Re-extraction/Re-analysis	Soil	Low	2	660	327	J	µg/Kg
		A1505269813RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,139		µg/Kg
		A1505269814	Site Sample	Soil	Low	2	660	742		µg/Kg
		A1505269815	Site Sample	Soil	Low	2	660	566	J	µg/Kg
		A1505269816RE	Re-extraction/Re-analysis	Soil	Low	2	660	405	J	µg/Kg
		A1505269817RE	Re-extraction/Re-analysis	Soil	Low	2	660	167	J	µg/Kg
		A1505269818RE	Re-extraction/Re-analysis	Soil	Low	2	660	768		µg/Kg
		A1505269819RE	Re-extraction/Re-analysis	Soil	Low	2	660	188	J	µg/Kg
	Indeno(1,2,3-cd)pyrene									
		A1505269804	Site Sample	Soil	Low	2	660	554	J	µg/Kg
		A1505269805	Site Sample	Soil	Low	2	660	146	J	µg/Kg

Qualifiers:

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- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Indeno(1,2,3-cd)pyrene									
		A1505269807	Site Sample	Soil	Low	2	660	435	J	µg/Kg
		A1505269808RE	Re-extraction/Re-analysis	Soil	Low	2	660	139	J	µg/Kg
		A1505269809	Site Sample	Soil	Low	2	660	167	J	µg/Kg
		A1505269810	Site Sample	Soil	Low	2	660	612	J	µg/Kg
		A1505269811	Site Sample	Soil	Low	2	660	280	J	µg/Kg
		A1505269813RE	Re-extraction/Re-analysis	Soil	Low	2	660	748	J	µg/Kg
		A1505269814	Site Sample	Soil	Low	2	660	334	J	µg/Kg
		A1505269815	Site Sample	Soil	Low	2	660	151	J	µg/Kg
		A1505269816RE	Re-extraction/Re-analysis	Soil	Low	2	660	293	J	µg/Kg
		A1505269818RE	Re-extraction/Re-analysis	Soil	Low	2	660	660	J	µg/Kg
	Phenanthrene									
		A1505269804	Site Sample	Soil	Low	2	660	239	J	µg/Kg
		A1505269807	Site Sample	Soil	Low	2	660	299	J	µg/Kg

Qualifiers:
- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Phenanthrene									
		A1505269810	Site Sample	Soil	Low	2	660	680		µg/Kg
		A1505269812RE	Re-extraction/Re-analysis	Soil	Low	2	660	37	J	µg/Kg
		A1505269813RE	Re-extraction/Re-analysis	Soil	Low	2	660	570	J	µg/Kg
		A1505269814	Site Sample	Soil	Low	2	660	519	J	µg/Kg
		A1505269815	Site Sample	Soil	Low	2	660	316	J	µg/Kg
		A1505269818RE	Re-extraction/Re-analysis	Soil	Low	2	660	218	J	µg/Kg
	Phenol									
		A1505269802	Site Sample	Water	Low	1	10	13		µg/L
	Pyrene									
		A1505269804	Site Sample	Soil	Low	2	660	1,058		µg/Kg
		A1505269805	Site Sample	Soil	Low	2	660	365	J	µg/Kg
		A1505269807	Site Sample	Soil	Low	2	660	1,115		µg/Kg
		A1505269808RE	Re-extraction/Re-analysis	Soil	Low	2	660	450	J	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Pyrene									
		A1505269809	Site Sample	Soil	Low	2	660	660	J	µg/Kg
		A1505269810	Site Sample	Soil	Low	2	660	2,176	J	µg/Kg
		A1505269811	Site Sample	Soil	Low	2	660	1,380	J	µg/Kg
		A1505269812RE	Re-extraction/Re-analysis	Soil	Low	2	660	448	J	µg/Kg
		A1505269813RE	Re-extraction/Re-analysis	Soil	Low	2	660	2,100	J	µg/Kg
		A1505269814	Site Sample	Soil	Low	2	660	1,558	J	µg/Kg
		A1505269815	Site Sample	Soil	Low	2	660	1,180	J	µg/Kg
		A1505269816RE	Re-extraction/Re-analysis	Soil	Low	2	660	660	J	µg/Kg
		A1505269817RE	Re-extraction/Re-analysis	Soil	Low	2	660	292	NJ	µg/Kg
		A1505269818RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,105		µg/Kg
		A1505269819RE	Re-extraction/Re-analysis	Soil	Low	2	660	272	J	µg/Kg
		A1505269820RE	Re-extraction/Re-analysis	Soil	Low	2	660	120	J	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	Aldrin								
		A1505269804	Site Sample	Soil	Low	1	1.7	3.8	µg/Kg
		A1505269805	Site Sample	Soil	Low	1	1.7	9.6	µg/Kg
		A1505269807	Site Sample	Soil	Low	1	1.7	3.0	µg/Kg
		A1505269808	Site Sample	Soil	Low	1	1.7	9.0	µg/Kg
		A1505269809	Site Sample	Soil	Low	1	1.7	9.1	µg/Kg
		A1505269811	Site Sample	Soil	Low	1	1.7	15	µg/Kg
		A1505269812	Site Sample	Soil	Low	1	1.7	23	µg/Kg
		A1505269813	Site Sample	Soil	Low	1	1.7	6.1	µg/Kg
		A1505269814	Site Sample	Soil	Low	1	1.7	15	µg/Kg
		A1505269815	Site Sample	Soil	Low	1	1.7	24	µg/Kg
		A1505269816	Site Sample	Soil	Low	1	1.7	5.2	µg/Kg
		A1505269817	Site Sample	Soil	Low	1	1.7	7.9	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	Aldrin								
		A1505269818	Site Sample	Soil	Low	1	1.7	5.5	µg/Kg
		A1505269819	Site Sample	Soil	Low	1	1.7	9.9	µg/Kg
	Aroclor-1242								
		A1505269808	Site Sample	Soil	Low	1	33	214	µg/Kg
		A1505269809	Site Sample	Soil	Low	1	33	199	µg/Kg
		A1505269810	Site Sample	Soil	Low	1	33	167	µg/Kg
		A1505269811	Site Sample	Soil	Low	1	33	328	µg/Kg
		A1505269812	Site Sample	Soil	Low	1	33	448	µg/Kg
		A1505269814	Site Sample	Soil	Low	1	33	408	µg/Kg
		A1505269815	Site Sample	Soil	Low	1	33	661	µg/Kg
		A1505269817	Site Sample	Soil	Low	1	33	240	µg/Kg
		A1505269818	Site Sample	Soil	Low	1	33	111	µg/Kg
		A1505269819	Site Sample	Soil	Low	1	33	224	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	Aroclor-1248								
		A1505269805	Site Sample	Soil	Low	1	33	232	µg/Kg
	Aroclor-1260								
		A1505269804	Site Sample	Soil	Low	1	33	151	µg/Kg
		A1505269805	Site Sample	Soil	Low	1	33	173	µg/Kg
		A1505269807	Site Sample	Soil	Low	1	33	141	µg/Kg
		A1505269808	Site Sample	Soil	Low	1	33	158	µg/Kg
		A1505269809	Site Sample	Soil	Low	1	33	147	µg/Kg
		A1505269810	Site Sample	Soil	Low	1	33	173	µg/Kg
		A1505269811	Site Sample	Soil	Low	1	33	183	µg/Kg
		A1505269812	Site Sample	Soil	Low	1	33	314	µg/Kg
		A1505269813	Site Sample	Soil	Low	1	33	231	µg/Kg
		A1505269814	Site Sample	Soil	Low	1	33	174	µg/Kg
		A1505269815	Site Sample	Soil	Low	1	33	354	µg/Kg

Qualifiers:
- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **89801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	Aroclor-1260								
		A1505269816	Site Sample	Soil	Low	1	33	122	µg/Kg
		A1505269817	Site Sample	Soil	Low	1	33	274	µg/Kg
		A1505269818	Site Sample	Soil	Low	1	33	172	µg/Kg
		A1505269819	Site Sample	Soil	Low	1	33	284	µg/Kg
		A1505269820	Site Sample	Soil	Low	1	33	134	µg/Kg
	alpha-BHC								
		A1505269814	Site Sample	Soil	Low	1	1.7	2.0	µg/Kg
	beta-BHC								
		A1505269810	Site Sample	Soil	Low	1	1.7	3.0	µg/Kg
	delta-BHC								
		A1505269804	Site Sample	Soil	Low	1	1.7	2.0	µg/Kg
		A1505269805	Site Sample	Soil	Low	1	1.7	2.4	µg/Kg
		A1505269807	Site Sample	Soil	Low	1	1.7	2.0	µg/Kg
		A1505269809	Site Sample	Soil	Low	1	1.7	2.2	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	delta-BHC								
		A1505269811	Site Sample	Soil	Low	1	1.7	7.8	µg/Kg
		A1505269812	Site Sample	Soil	Low	1	1.7	29	µg/Kg
		A1505269813	Site Sample	Soil	Low	1	1.7	2.0	µg/Kg
		A1505269814	Site Sample	Soil	Low	1	1.7	5.9	µg/Kg
		A1505269815	Site Sample	Soil	Low	1	1.7	8.0	µg/Kg
		A1505269816	Site Sample	Soil	Low	1	1.7	2.1	µg/Kg
		A1505269817	Site Sample	Soil	Low	1	1.7	3.0	µg/Kg
		A1505269819	Site Sample	Soil	Low	1	1.7	2.0	µg/Kg
	gamma-BHC (Lindane)								
		A1505269805	Site Sample	Soil	Low	1	1.7	2.4	µg/Kg
		A1505269809	Site Sample	Soil	Low	1	1.7	2.4	µg/Kg
		A1505269811	Site Sample	Soil	Low	1	1.7	4.8	µg/Kg
		A1505269812	Site Sample	Soil	Low	1	1.7	4.9	µg/Kg

Qualifiers:

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E3 - Summary of Validated Analyte Detects

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LDEQ
Capitol Lakes Sediment

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Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	gamma-BHC (Lindane)								
		A1505269814	Site Sample	Soil	Low	1	1.7	5.2	µg/Kg
		A1505269815	Site Sample	Soil	Low	1	1.7	6.6	µg/Kg
		A1505269817	Site Sample	Soil	Low	1	1.7	2.4	µg/Kg
		A1505269819	Site Sample	Soil	Low	1	1.7	2.4	µg/Kg
	alpha-Chlordane								
		A1505269807	Site Sample	Soil	Low	1	1.7	2.0	µg/Kg
		A1505269809	Site Sample	Soil	Low	1	1.7	2.0	µg/Kg
		A1505269810	Site Sample	Soil	Low	1	1.7	8.2	µg/Kg
		A1505269811	Site Sample	Soil	Low	1	1.7	7.8	µg/Kg
		A1505269813	Site Sample	Soil	Low	1	1.7	6.1	µg/Kg
		A1505269814	Site Sample	Soil	Low	1	1.7	4.8	µg/Kg
		A1505269815	Site Sample	Soil	Low	1	1.7	6.1	µg/Kg
		A1505269817	Site Sample	Soil	Low	1	1.7	4.9	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
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Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	alpha-Chlordane								
		A1505269819	Site Sample	Soil	Low	1	1.7	5.2	µg/Kg
	gamma-Chlordane								
		A1505269804	Site Sample	Soil	Low	1	1.7	2.8	µg/Kg
		A1505269805	Site Sample	Soil	Low	1	1.7	2.1	µg/Kg
		A1505269807	Site Sample	Soil	Low	1	1.7	3.0	µg/Kg
		A1505269808	Site Sample	Soil	Low	1	1.7	4.9	µg/Kg
		A1505269809	Site Sample	Soil	Low	1	1.7	4.0	µg/Kg
		A1505269810	Site Sample	Soil	Low	1	1.7	16	µg/Kg
		A1505269811	Site Sample	Soil	Low	1	1.7	10	µg/Kg
		A1505269812	Site Sample	Soil	Low	1	1.7	4.0	µg/Kg
		A1505269813	Site Sample	Soil	Low	1	1.7	13	µg/Kg
		A1505269814	Site Sample	Soil	Low	1	1.7	12	µg/Kg
		A1505269815	Site Sample	Soil	Low	1	1.7	11	µg/Kg

Qualifiers:

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- **D** - Reported from a dilution
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Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

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Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	gamma-Chlordane								
		A1505269816	Site Sample	Soil	Low	1	1.7	3.1	µg/Kg
		A1505269817	Site Sample	Soil	Low	1	1.7	2.0	µg/Kg
		A1505269819	Site Sample	Soil	Low	1	1.7	2.0	µg/Kg
	4,4'-DDD								
		A1505269803	Site Sample	Water	Low	1	0.10	0.10	µg/L
		A1505269804	Site Sample	Soil	Low	1	3.3	10	µg/Kg
		A1505269805	Site Sample	Soil	Low	1	3.3	12	µg/Kg
		A1505269808	Site Sample	Soil	Low	1	3.3	7.9	µg/Kg
		A1505269809	Site Sample	Soil	Low	1	3.3	6.0	µg/Kg
		A1505269810	Site Sample	Soil	Low	1	3.3	8.2	µg/Kg
		A1505269811	Site Sample	Soil	Low	1	3.3	7.8	µg/Kg
		A1505269812	Site Sample	Soil	Low	1	3.3	42	µg/Kg
		A1505269813	Site Sample	Soil	Low	1	3.3	6.1	µg/Kg

Qualifiers:

J - Estimated

B - (Organics) Found in the associated method blank

D - Reported from a dilution

E - Exceeds calibration range

P - (Pesticides) Difference in column concentrations > 25%

B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

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Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	4,4'-DDD								
		A1505269814	Site Sample	Soil	Low	1	3.3	11	µg/Kg
		A1505269815	Site Sample	Soil	Low	1	3.3	31	µg/Kg
		A1505269816	Site Sample	Soil	Low	1	3.3	5.2	µg/Kg
		A1505269817	Site Sample	Soil	Low	1	3.3	18	µg/Kg
		A1505269818	Site Sample	Soil	Low	1	3.3	11	µg/Kg
		A1505269819	Site Sample	Soil	Low	1	3.3	8.2	µg/Kg
	4,4'-DDE								
		A1505269804	Site Sample	Soil	Low	1	3.3	43	µg/Kg
		A1505269805	Site Sample	Soil	Low	1	3.3	43	µg/Kg
		A1505269807	Site Sample	Soil	Low	1	3.3	33	µg/Kg
		A1505269808	Site Sample	Soil	Low	1	3.3	34	µg/Kg
		A1505269809	Site Sample	Soil	Low	1	3.3	30	µg/Kg
		A1505269811	Site Sample	Soil	Low	1	3.3	48	µg/Kg

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

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Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	4,4'-DDE								
		A1505269812	Site Sample	Soil	Low	1	3.3	72	µg/Kg
		A1505269813	Site Sample	Soil	Low	1	3.3	16	µg/Kg
		A1505269814	Site Sample	Soil	Low	1	3.3	51	µg/Kg
		A1505269815	Site Sample	Soil	Low	1	3.3	66	µg/Kg
		A1505269816	Site Sample	Soil	Low	1	3.3	34	µg/Kg
		A1505269817	Site Sample	Soil	Low	1	3.3	40	µg/Kg
		A1505269818	Site Sample	Soil	Low	1	3.3	27	µg/Kg
		A1505269819	Site Sample	Soil	Low	1	3.3	33	µg/Kg
		A1505269820	Site Sample	Soil	Low	1	3.3	18	µg/Kg
	4,4'-DDT								
		A1505269803	Site Sample	Water	Low	1	0.10	0.10	µg/L
		A1505269804	Site Sample	Soil	Low	1	3.3	6.8	µg/Kg
		A1505269805	Site Sample	Soil	Low	1	3.3	11	µg/Kg

Qualifiers:

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- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
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Sorted by Fraction, Analyte and Client Sample

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Capitol Lakes Sediment

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Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	4,4'-DDT								
		A1505269807	Site Sample	Soil	Low	1	3.3	7.1	µg/Kg
		A1505269808	Site Sample	Soil	Low	1	3.3	12	µg/Kg
		A1505269809	Site Sample	Soil	Low	1	3.3	9.9	µg/Kg
		A1505269810	Site Sample	Soil	Low	1	3.3	9.9	µg/Kg
		A1505269811	Site Sample	Soil	Low	1	3.3	11	µg/Kg
		A1505269812	Site Sample	Soil	Low	1	3.3	22	µg/Kg
		A1505269813	Site Sample	Soil	Low	1	3.3	18	µg/Kg
		A1505269814	Site Sample	Soil	Low	1	3.3	11	µg/Kg
		A1505269815	Site Sample	Soil	Low	1	3.3	21	µg/Kg
		A1505269816	Site Sample	Soil	Low	1	3.3	7.4	µg/Kg
		A1505269817	Site Sample	Soil	Low	1	3.3	15	µg/Kg
		A1505269818	Site Sample	Soil	Low	1	3.3	15	µg/Kg

Qualifiers:

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E3 - Summary of Validated Analyte Detects

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Capitol Lakes Sediment

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SDG ID: 69801

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	4,4'-DDT								
		A1505269819	Site Sample	Soil	Low	1	3.3	17	µg/Kg
		A1505269820	Site Sample	Soil	Low	1	3.3	8.9	µg/Kg
	Dieldrin								
		A1505269804	Site Sample	Soil	Low	1	3.3	2.5	µg/Kg
		A1505269812	Site Sample	Soil	Low	1	3.3	16	µg/Kg
		A1505269815	Site Sample	Soil	Low	1	3.3	14	µg/Kg
		A1505269817	Site Sample	Soil	Low	1	3.3	6.1	µg/Kg
		A1505269819	Site Sample	Soil	Low	1	3.3	4.0	µg/Kg
	Endosulfan I								
		A1505269811	Site Sample	Soil	Low	1	1.7	4.1	µg/Kg
		A1505269814	Site Sample	Soil	Low	1	1.7	4.8	µg/Kg
		A1505269815	Site Sample	Soil	Low	1	1.7	5.2	µg/Kg
		A1505269816	Site Sample	Soil	Low	1	1.7	2.1	µg/Kg

Qualifiers:

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- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
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Capitol Lakes Sediment

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Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	Endosulfan II								
		A1505269804	Site Sample	Soil	Low	1	3.3	4.5	µg/Kg
		A1505269805	Site Sample	Soil	Low	1	3.3	7.6	µg/Kg
		A1505269807	Site Sample	Soil	Low	1	3.3	7.9	µg/Kg
		A1505269808	Site Sample	Soil	Low	1	3.3	23	µg/Kg
		A1505269809	Site Sample	Soil	Low	1	3.3	5.2	µg/Kg
		A1505269810	Site Sample	Soil	Low	1	3.3	9.9	µg/Kg
		A1505269811	Site Sample	Soil	Low	1	3.3	28	µg/Kg
		A1505269812	Site Sample	Soil	Low	1	3.3	40	µg/Kg
		A1505269813	Site Sample	Soil	Low	1	3.3	10	µg/Kg
		A1505269814	Site Sample	Soil	Low	1	3.3	7.0	µg/Kg
		A1505269815	Site Sample	Soil	Low	1	3.3	16	µg/Kg
		A1505269816	Site Sample	Soil	Low	1	3.3	4.3	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
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- P - (Pesticides) Difference in column concentrations > 25%
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Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	Endosulfan II								
		A1505269817	Site Sample	Soil	Low	1	3.3	9.1	µg/Kg
		A1505269818	Site Sample	Soil	Low	1	3.3	9.8	µg/Kg
		A1505269819	Site Sample	Soil	Low	1	3.3	12	µg/Kg
	Endosulfan sulfate								
		A1505269812	Site Sample	Soil	Low	1	3.3	4.9	µg/Kg
		A1505269813	Site Sample	Soil	Low	1	3.3	18	µg/Kg
		A1505269815	Site Sample	Soil	Low	1	3.3	5.2	µg/Kg
	Endrin								
		A1505269810	Site Sample	Soil	Low	1	3.3	4.1	µg/Kg
		A1505269818	Site Sample	Soil	Low	1	3.3	4.0	µg/Kg
	Endrin aldehyde								
		A1505269804	Site Sample	Soil	Low	1	3.3	33	µg/Kg
		A1505269807	Site Sample	Soil	Low	1	3.3	35	µg/Kg
		A1505269808	Site Sample	Soil	Low	1	3.3	31	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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LDEQ
Capitol Lakes Sediment

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Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	Endrin aldehyde								
		A1505269809	Site Sample	Soil	Low	1	3.3	21	µg/Kg
		A1505269810	Site Sample	Soil	Low	1	3.3	99	µg/Kg
		A1505269811	Site Sample	Soil	Low	1	3.3	30	µg/Kg
		A1505269812	Site Sample	Soil	Low	1	3.3	49	µg/Kg
		A1505269813	Site Sample	Soil	Low	1	3.3	61	µg/Kg
		A1505269814	Site Sample	Soil	Low	1	3.3	32	µg/Kg
		A1505269815	Site Sample	Soil	Low	1	3.3	26	µg/Kg
		A1505269816	Site Sample	Soil	Low	1	3.3	21	µg/Kg
		A1505269817	Site Sample	Soil	Low	1	3.3	7.0	µg/Kg
		A1505269818	Site Sample	Soil	Low	1	3.3	10	µg/Kg
		A1505269819	Site Sample	Soil	Low	1	3.3	18	µg/Kg
		A1505269820	Site Sample	Soil	Low	1	3.3	4.0	µg/Kg

Qualifiers:

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- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
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Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	Heptachlor epoxide								
		A1505269804	Site Sample	Soil	Low	1	1.7	4.0	µg/Kg
		A1505269805	Site Sample	Soil	Low	1	1.7	7.0	µg/Kg
		A1505269807	Site Sample	Soil	Low	1	1.7	3.0	µg/Kg
		A1505269808	Site Sample	Soil	Low	1	1.7	7.1	µg/Kg
		A1505269809	Site Sample	Soil	Low	1	1.7	7.1	µg/Kg
		A1505269810	Site Sample	Soil	Low	1	1.7	5.1	µg/Kg
		A1505269811	Site Sample	Soil	Low	1	1.7	12	µg/Kg
		A1505269812	Site Sample	Soil	Low	1	1.7	16	µg/Kg
		A1505269813	Site Sample	Soil	Low	1	1.7	3.9	µg/Kg
		A1505269814	Site Sample	Soil	Low	1	1.7	12	µg/Kg
		A1505269815	Site Sample	Soil	Low	1	1.7	17	µg/Kg
		A1505269816	Site Sample	Soil	Low	1	1.7	4.3	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	Heptachlor epoxide									
		A1505269817	Site Sample	Soil	Low	1	1.7	7.0		µg/Kg
		A1505269818	Site Sample	Soil	Low	1	1.7	4.3		µg/Kg
		A1505269819	Site Sample	Soil	Low	1	1.7	6.0		µg/Kg
	Toxaphene									
		A1505269805	Site Sample	Soil	Low	1	166	2.4		µg/Kg
Metals										
	Aluminum									
		A1505269801	Site Sample	Water	Low	1	75	64	B	µg/L
		A1505269804	Site Sample	Soil	Low	1	7.5	5,569		mg/Kg
		A1505269805	Site Sample	Soil	Low	1	7.5	7,304		mg/Kg
		A1505269806	Site Sample	Soil	Low	1	7.5	8,447		mg/Kg
		A1505269807	Site Sample	Soil	Low	1	7.5	5,195		mg/Kg
		A1505269808	Site Sample	Soil	Low	1	7.5	6,038		mg/Kg
		A1505269809	Site Sample	Soil	Low	1	7.5	7,861		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - *(Organics) Found in the* associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - *(Inorganics) Lab qualifier - analyte detected* between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Aluminum									
		A1505269810	Site Sample	Soil	Low	1	7.5	4,182		mg/Kg
		A1505269811	Site Sample	Soil	Low	1	7.5	5,782		mg/Kg
		A1505269812	Site Sample	Soil	Low	1	7.5	6,003		mg/Kg
		A1505269813	Site Sample	Soil	Low	1	7.5	4,948		mg/Kg
		A1505269814	Site Sample	Soil	Low	1	7.5	4,749		mg/Kg
		A1505269815	Site Sample	Soil	Low	1	7.5	7,694		mg/Kg
		A1505269816	Site Sample	Soil	Low	1	7.5	5,063		mg/Kg
		A1505269817	Site Sample	Soil	Low	1	7.5	5,958		mg/Kg
		A1505269818	Site Sample	Soil	Low	1	7.5	5,127		mg/Kg
		A1505269819	Site Sample	Soil	Low	1	7.5	6,293		mg/Kg
		A1505269820	Site Sample	Soil	Low	1	7.5	7,493		mg/Kg
	Antimony									
		A1505269804	Site Sample	Soil	Low	1	5.0	5.5	J	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Antimony									
		A1505269805	Site Sample	Soil	Low	1	5.0	25	J	mg/Kg
		A1505269806	Site Sample	Soil	Low	1	5.0	4.0	J	mg/Kg
		A1505269808	Site Sample	Soil	Low	1	5.0	9.8	J	mg/Kg
		A1505269809	Site Sample	Soil	Low	1	5.0	11	J	mg/Kg
		A1505269811	Site Sample	Soil	Low	1	5.0	2.4	J	mg/Kg
		A1505269812	Site Sample	Soil	Low	1	5.0	16	J	mg/Kg
		A1505269815	Site Sample	Soil	Low	1	5.0	6.6	J	mg/Kg
		A1505269816	Site Sample	Soil	Low	1	5.0	1.7	J	mg/Kg
		A1505269817	Site Sample	Soil	Low	1	5.0	29	J	mg/Kg
		A1505269818	Site Sample	Soil	Low	1	5.0	2.5	J	mg/Kg
		A1505269819	Site Sample	Soil	Low	1	5.0	6.9	J	mg/Kg
		A1505269820	Site Sample	Soil	Low	1	5.0	39	J	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Arsenic								
		A1505269804	Site Sample	Soil	Low	1	1.0	8.6	mg/Kg
		A1505269805	Site Sample	Soil	Low	1	1.0	25	mg/Kg
		A1505269806	Site Sample	Soil	Low	1	1.0	7.9	mg/Kg
		A1505269807	Site Sample	Soil	Low	1	1.0	6.0	mg/Kg
		A1505269808	Site Sample	Soil	Low	1	1.0	14	mg/Kg
		A1505269809	Site Sample	Soil	Low	1	1.0	15	mg/Kg
		A1505269810	Site Sample	Soil	Low	1	1.0	4.1	mg/Kg
		A1505269811	Site Sample	Soil	Low	1	1.0	10	mg/Kg
		A1505269812	Site Sample	Soil	Low	1	1.0	20	mg/Kg
		A1505269813	Site Sample	Soil	Low	1	1.0	4.3	mg/Kg
		A1505269814	Site Sample	Soil	Low	1	1.0	10	mg/Kg
		A1505269815	Site Sample	Soil	Low	1	1.0	15	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Arsenic								
		A1505269816	Site Sample	Soil	Low	1	1.0	6.3	mg/Kg
		A1505269817	Site Sample	Soil	Low	1	1.0	23	mg/Kg
		A1505269818	Site Sample	Soil	Low	1	1.0	5.5	mg/Kg
		A1505269819	Site Sample	Soil	Low	1	1.0	14	mg/Kg
		A1505269820	Site Sample	Soil	Low	1	1.0	34	mg/Kg
	Barium								
		A1505269804	Site Sample	Soil	Low	1	1.0	121	mg/Kg
		A1505269805	Site Sample	Soil	Low	1	1.0	138	mg/Kg
		A1505269806	Site Sample	Soil	Low	1	1.0	126	mg/Kg
		A1505269807	Site Sample	Soil	Low	1	1.0	131	mg/Kg
		A1505269808	Site Sample	Soil	Low	1	1.0	148	mg/Kg
		A1505269809	Site Sample	Soil	Low	1	1.0	152	mg/Kg
		A1505269810	Site Sample	Soil	Low	1	1.0	116	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Barium									
		A1505269811	Site Sample	Soil	Low	1	1.0	166		mg/Kg
		A1505269812	Site Sample	Soil	Low	1	1.0	152		mg/Kg
		A1505269813	Site Sample	Soil	Low	1	1.0	111		mg/Kg
		A1505269814	Site Sample	Soil	Low	1	1.0	166		mg/Kg
		A1505269815	Site Sample	Soil	Low	1	1.0	189		mg/Kg
		A1505269816	Site Sample	Soil	Low	1	1.0	125		mg/Kg
		A1505269817	Site Sample	Soil	Low	1	1.0	128		mg/Kg
		A1505269818	Site Sample	Soil	Low	1	1.0	145		mg/Kg
		A1505269819	Site Sample	Soil	Low	1	1.0	147		mg/Kg
		A1505269820	Site Sample	Soil	Low	1	1.0	128		mg/Kg
	Beryllium									
		A1505269804	Site Sample	Soil	Low	1	0.20	0.17	B	mg/Kg
		A1505269805	Site Sample	Soil	Low	1	0.20	0.26		mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Beryllium									
		A1505269806	Site Sample	Soil	Low	1	0.20	0.54		mg/Kg
		A1505269807	Site Sample	Soil	Low	1	0.20	0.14	B	mg/Kg
		A1505269808	Site Sample	Soil	Low	1	0.20	0.20		mg/Kg
		A1505269809	Site Sample	Soil	Low	1	0.20	0.24		mg/Kg
		A1505269810	Site Sample	Soil	Low	1	0.20	0.099	B	mg/Kg
		A1505269811	Site Sample	Soil	Low	1	0.20	0.18	B	mg/Kg
		A1505269812	Site Sample	Soil	Low	1	0.20	0.20		mg/Kg
		A1505269813	Site Sample	Soil	Low	1	0.20	0.071	B	mg/Kg
		A1505269814	Site Sample	Soil	Low	1	0.20	0.16	B	mg/Kg
		A1505269815	Site Sample	Soil	Low	1	0.20	0.28		mg/Kg
		A1505269816	Site Sample	Soil	Low	1	0.20	0.083	B	mg/Kg
		A1505269817	Site Sample	Soil	Low	1	0.20	0.18	B	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Beryllium									
		A1505269818	Site Sample	Soil	Low	1	0.20	0.13	B	mg/Kg
		A1505269819	Site Sample	Soil	Low	1	0.20	0.18	B	mg/Kg
		A1505269820	Site Sample	Soil	Low	1	0.20	0.23		mg/Kg
	Cadmium									
		A1505269804	Site Sample	Soil	Low	1	0.50	0.83		mg/Kg
		A1505269805	Site Sample	Soil	Low	1	0.50	1.8		mg/Kg
		A1505269807	Site Sample	Soil	Low	1	0.50	0.76		mg/Kg
		A1505269808	Site Sample	Soil	Low	1	0.50	1.0		mg/Kg
		A1505269809	Site Sample	Soil	Low	1	0.50	1.3		mg/Kg
		A1505269810	Site Sample	Soil	Low	1	0.50	0.71		mg/Kg
		A1505269811	Site Sample	Soil	Low	1	0.50	0.90		mg/Kg
		A1505269812	Site Sample	Soil	Low	1	0.50	1.7		mg/Kg
		A1505269813	Site Sample	Soil	Low	1	0.50	0.78		mg/Kg

Qualifiers:

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- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Cadmium								
		A1505269814	Site Sample	Soil	Low	1	0.50	0.52	mg/Kg
		A1505269815	Site Sample	Soil	Low	1	0.50	1.1	mg/Kg
		A1505269816	Site Sample	Soil	Low	1	0.50	0.61	mg/Kg
		A1505269817	Site Sample	Soil	Low	1	0.50	2.1	mg/Kg
		A1505269818	Site Sample	Soil	Low	1	0.50	0.68	mg/Kg
		A1505269819	Site Sample	Soil	Low	1	0.50	1.6	mg/Kg
		A1505269820	Site Sample	Soil	Low	1	0.50	2.7	mg/Kg
	Calcium								
		A1505269801	Site Sample	Water	Low	1	100	3,230	µg/L
		A1505269804	Site Sample	Soil	Low	1	10	1,830	mg/Kg
		A1505269805	Site Sample	Soil	Low	1	10	1,643	mg/Kg
		A1505269806	Site Sample	Soil	Low	1	10	2,386	mg/Kg
		A1505269807	Site Sample	Soil	Low	1	10	2,192	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Calcium								
		A1505269808	Site Sample	Soil	Low	1	10	1,613	mg/Kg
		A1505269809	Site Sample	Soil	Low	1	10	1,663	mg/Kg
		A1505269810	Site Sample	Soil	Low	1	10	2,601	mg/Kg
		A1505269811	Site Sample	Soil	Low	1	10	1,917	mg/Kg
		A1505269812	Site Sample	Soil	Low	1	10	1,891	mg/Kg
		A1505269813	Site Sample	Soil	Low	1	10	2,310	mg/Kg
		A1505269814	Site Sample	Soil	Low	1	10	1,859	mg/Kg
		A1505269815	Site Sample	Soil	Low	1	10	2,369	mg/Kg
		A1505269816	Site Sample	Soil	Low	1	10	1,944	mg/Kg
		A1505269817	Site Sample	Soil	Low	1	10	1,374	mg/Kg
		A1505269818	Site Sample	Soil	Low	1	10	6,570	mg/Kg
		A1505269819	Site Sample	Soil	Low	1	10	1,530	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Calcium								
		A1505269820	Site Sample	Soil	Low	1	10	1,432	mg/Kg
	Chromium								
		A1505269804	Site Sample	Soil	Low	1	1.0	11	mg/Kg
		A1505269805	Site Sample	Soil	Low	1	1.0	18	mg/Kg
		A1505269806	Site Sample	Soil	Low	1	1.0	12	mg/Kg
		A1505269807	Site Sample	Soil	Low	1	1.0	12	mg/Kg
		A1505269808	Site Sample	Soil	Low	1	1.0	18	mg/Kg
		A1505269809	Site Sample	Soil	Low	1	1.0	19	mg/Kg
		A1505269810	Site Sample	Soil	Low	1	1.0	13	mg/Kg
		A1505269811	Site Sample	Soil	Low	1	1.0	20	mg/Kg
		A1505269812	Site Sample	Soil	Low	1	1.0	21	mg/Kg
		A1505269813	Site Sample	Soil	Low	1	1.0	12	mg/Kg
		A1505269814	Site Sample	Soil	Low	1	1.0	19	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Chromium								
		A1505269815	Site Sample	Soil	Low	1	1.0	27	mg/Kg
		A1505269816	Site Sample	Soil	Low	1	1.0	11	mg/Kg
		A1505269817	Site Sample	Soil	Low	1	1.0	16	mg/Kg
		A1505269818	Site Sample	Soil	Low	1	1.0	12	mg/Kg
		A1505269819	Site Sample	Soil	Low	1	1.0	17	mg/Kg
		A1505269820	Site Sample	Soil	Low	1	1.0	13	mg/Kg
	Cobalt								
		A1505269804	Site Sample	Soil	Low	1	1.0	4.0	mg/Kg
		A1505269805	Site Sample	Soil	Low	1	1.0	5.6	mg/Kg
		A1505269806	Site Sample	Soil	Low	1	1.0	5.9	mg/Kg
		A1505269807	Site Sample	Soil	Low	1	1.0	4.1	mg/Kg
		A1505269808	Site Sample	Soil	Low	1	1.0	5.3	mg/Kg
		A1505269809	Site Sample	Soil	Low	1	1.0	6.0	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Cobalt								
		A1505269810	Site Sample	Soil	Low	1	1.0	4.1	mg/Kg
		A1505269811	Site Sample	Soil	Low	1	1.0	4.5	mg/Kg
		A1505269812	Site Sample	Soil	Low	1	1.0	4.9	mg/Kg
		A1505269813	Site Sample	Soil	Low	1	1.0	3.3	mg/Kg
		A1505269814	Site Sample	Soil	Low	1	1.0	4.5	mg/Kg
		A1505269815	Site Sample	Soil	Low	1	1.0	5.7	mg/Kg
		A1505269816	Site Sample	Soil	Low	1	1.0	4.0	mg/Kg
		A1505269817	Site Sample	Soil	Low	1	1.0	4.6	mg/Kg
		A1505269818	Site Sample	Soil	Low	1	1.0	4.3	mg/Kg
		A1505269819	Site Sample	Soil	Low	1	1.0	5.2	mg/Kg
		A1505269820	Site Sample	Soil	Low	1	1.0	6.2	mg/Kg
	Copper								
		A1505269801	Site Sample	Water	Low	1	5.0	27	µg/L

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Copper								
		A1505269804	Site Sample	Soil	Low	1	0.50	23	mg/Kg
		A1505269805	Site Sample	Soil	Low	1	0.50	27	mg/Kg
		A1505269806	Site Sample	Soil	Low	1	0.50	17	mg/Kg
		A1505269807	Site Sample	Soil	Low	1	0.50	27	mg/Kg
		A1505269808	Site Sample	Soil	Low	1	0.50	24	mg/Kg
		A1505269809	Site Sample	Soil	Low	1	0.50	25	mg/Kg
		A1505269810	Site Sample	Soil	Low	1	0.50	29	mg/Kg
		A1505269811	Site Sample	Soil	Low	1	0.50	28	mg/Kg
		A1505269812	Site Sample	Soil	Low	1	0.50	37	mg/Kg
		A1505269813	Site Sample	Soil	Low	1	0.50	26	mg/Kg
		A1505269814	Site Sample	Soil	Low	1	0.50	30	mg/Kg
		A1505269815	Site Sample	Soil	Low	1	0.50	37	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Copper								
		A1505269816	Site Sample	Soil	Low	1	0.50	22	mg/Kg
		A1505269817	Site Sample	Soil	Low	1	0.50	29	mg/Kg
		A1505269818	Site Sample	Soil	Low	1	0.50	27	mg/Kg
		A1505269819	Site Sample	Soil	Low	1	0.50	28	mg/Kg
		A1505269820	Site Sample	Soil	Low	1	0.50	26	mg/Kg
	Iron								
		A1505269801	Site Sample	Water	Low	1	50	125	µg/L
		A1505269804	Site Sample	Soil	Low	1	5.0	7,787	mg/Kg
		A1505269805	Site Sample	Soil	Low	1	5.0	10,558	mg/Kg
		A1505269806	Site Sample	Soil	Low	1	5.0	11,905	mg/Kg
		A1505269807	Site Sample	Soil	Low	1	5.0	7,562	mg/Kg
		A1505269808	Site Sample	Soil	Low	1	5.0	9,750	mg/Kg
		A1505269809	Site Sample	Soil	Low	1	5.0	11,076	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Iron								
		A1505269810	Site Sample	Soil	Low	1	5.0	6,664	mg/Kg
		A1505269811	Site Sample	Soil	Low	1	5.0	8,691	mg/Kg
		A1505269812	Site Sample	Soil	Low	1	5.0	9,453	mg/Kg
		A1505269813	Site Sample	Soil	Low	1	5.0	6,942	mg/Kg
		A1505269814	Site Sample	Soil	Low	1	5.0	7,717	mg/Kg
		A1505269815	Site Sample	Soil	Low	1	5.0	11,281	mg/Kg
		A1505269816	Site Sample	Soil	Low	1	5.0	7,200	mg/Kg
		A1505269817	Site Sample	Soil	Low	1	5.0	8,786	mg/Kg
		A1505269818	Site Sample	Soil	Low	1	5.0	8,320	mg/Kg
		A1505269819	Site Sample	Soil	Low	1	5.0	9,482	mg/Kg
		A1505269820	Site Sample	Soil	Low	1	5.0	11,239	mg/Kg
	Lead								
		A1505269801	Site Sample	Water	Low	1	5.0	15	µg/L

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Lead								
		A1505269804	Site Sample	Soil	Low	1	0.50	105	mg/Kg
		A1505269805	Site Sample	Soil	Low	1	0.50	160	mg/Kg
		A1505269806	Site Sample	Soil	Low	1	0.50	53	mg/Kg
		A1505269807	Site Sample	Soil	Low	1	0.50	115	mg/Kg
		A1505269808	Site Sample	Soil	Low	1	0.50	152	mg/Kg
		A1505269809	Site Sample	Soil	Low	1	0.50	154	mg/Kg
		A1505269810	Site Sample	Soil	Low	1	0.50	109	mg/Kg
		A1505269811	Site Sample	Soil	Low	1	0.50	186	mg/Kg
		A1505269812	Site Sample	Soil	Low	1	0.50	187	mg/Kg
		A1505269813	Site Sample	Soil	Low	1	0.50	102	mg/Kg
		A1505269814	Site Sample	Soil	Low	1	0.50	216	mg/Kg
		A1505269815	Site Sample	Soil	Low	1	0.50	204	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Lead								
		A1505269816	Site Sample	Soil	Low	1	0.50	101	mg/Kg
		A1505269817	Site Sample	Soil	Low	1	0.50	159	mg/Kg
		A1505269818	Site Sample	Soil	Low	1	0.50	99	mg/Kg
		A1505269819	Site Sample	Soil	Low	1	0.50	128	mg/Kg
		A1505269820	Site Sample	Soil	Low	1	0.50	153	mg/Kg
	Magnesium								
		A1505269801	Site Sample	Water	Low	1	100	133	µg/L
		A1505269804	Site Sample	Soil	Low	1	10	935	mg/Kg
		A1505269805	Site Sample	Soil	Low	1	10	1,152	mg/Kg
		A1505269806	Site Sample	Soil	Low	1	10	1,838	mg/Kg
		A1505269807	Site Sample	Soil	Low	1	10	887	mg/Kg
		A1505269808	Site Sample	Soil	Low	1	10	994	mg/Kg
		A1505269809	Site Sample	Soil	Low	1	10	1,179	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Magnesium								
		A1505269810	Site Sample	Soil	Low	1	10	816	mg/Kg
		A1505269811	Site Sample	Soil	Low	1	10	921	mg/Kg
		A1505269812	Site Sample	Soil	Low	1	10	972	mg/Kg
		A1505269813	Site Sample	Soil	Low	1	10	847	mg/Kg
		A1505269814	Site Sample	Soil	Low	1	10	805	mg/Kg
		A1505269815	Site Sample	Soil	Low	1	10	1,204	mg/Kg
		A1505269816	Site Sample	Soil	Low	1	10	801	mg/Kg
		A1505269817	Site Sample	Soil	Low	1	10	878	mg/Kg
		A1505269818	Site Sample	Soil	Low	1	10	1,225	mg/Kg
		A1505269819	Site Sample	Soil	Low	1	10	987	mg/Kg
		A1505269820	Site Sample	Soil	Low	1	10	1,066	mg/Kg
	Manganese								
		A1505269801	Site Sample	Water	Low	1	5.0	10	µg/L

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Manganese								
		A1505269804	Site Sample	Soil	Low	1	0.50	234	mg/Kg
		A1505269805	Site Sample	Soil	Low	1	0.50	375	mg/Kg
		A1505269806	Site Sample	Soil	Low	1	0.50	267	mg/Kg
		A1505269807	Site Sample	Soil	Low	1	0.50	230	mg/Kg
		A1505269808	Site Sample	Soil	Low	1	0.50	343	mg/Kg
		A1505269809	Site Sample	Soil	Low	1	0.50	352	mg/Kg
		A1505269810	Site Sample	Soil	Low	1	0.50	161	mg/Kg
		A1505269811	Site Sample	Soil	Low	1	0.50	288	mg/Kg
		A1505269812	Site Sample	Soil	Low	1	0.50	305	mg/Kg
		A1505269813	Site Sample	Soil	Low	1	0.50	155	mg/Kg
		A1505269814	Site Sample	Soil	Low	1	0.50	252	mg/Kg
		A1505269815	Site Sample	Soil	Low	1	0.50	332	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 69801

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Manganese									
		A1505269816	Site Sample	Soil	Low	1	0.50	243		mg/Kg
		A1505269817	Site Sample	Soil	Low	1	0.50	262		mg/Kg
		A1505269818	Site Sample	Soil	Low	1	0.50	252		mg/Kg
		A1505269819	Site Sample	Soil	Low	1	0.50	290		mg/Kg
		A1505269820	Site Sample	Soil	Low	1	0.50	302		mg/Kg
	Mercury									
		A1505269804	Site Sample	Soil	Low	1	0.10	0.15		mg/Kg
		A1505269805	Site Sample	Soil	Low	1	0.10	0.73		mg/Kg
		A1505269806	Site Sample	Soil	Low	1	0.10	0.069	B	mg/Kg
		A1505269807	Site Sample	Soil	Low	1	0.10	0.17		mg/Kg
		A1505269808	Site Sample	Soil	Low	1	0.10	0.24		mg/Kg
		A1505269809	Site Sample	Soil	Low	1	0.10	0.26		mg/Kg
		A1505269810	Site Sample	Soil	Low	1	0.10	0.14		mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) *and the MQL*

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Mercury								
		A1505269811	Site Sample	Soil	Low	1	0.10	0.30	mg/Kg
		A1505269812	Site Sample	Soil	Low	1	0.10	0.43	mg/Kg
		A1505269813	Site Sample	Soil	Low	1	0.10	0.12	mg/Kg
		A1505269814	Site Sample	Soil	Low	1	0.10	0.21	mg/Kg
		A1505269815	Site Sample	Soil	Low	1	0.10	0.40	mg/Kg
		A1505269816	Site Sample	Soil	Low	1	0.10	0.15	mg/Kg
		A1505269817	Site Sample	Soil	Low	1	0.10	0.43	mg/Kg
		A1505269818	Site Sample	Soil	Low	1	0.10	0.23	mg/Kg
		A1505269819	Site Sample	Soil	Low	1	0.10	0.52	mg/Kg
		A1505269820	Site Sample	Soil	Low	1	0.10	0.12	mg/Kg
	Nickel								
		A1505269804	Site Sample	Soil	Low	1	1.0	8.8	mg/Kg
		A1505269805	Site Sample	Soil	Low	1	1.0	12	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Nickel								
		A1505269806	Site Sample	Soil	Low	1	1.0	13	mg/Kg
		A1505269807	Site Sample	Soil	Low	1	1.0	9.5	mg/Kg
		A1505269808	Site Sample	Soil	Low	1	1.0	11	mg/Kg
		A1505269809	Site Sample	Soil	Low	1	1.0	13	mg/Kg
		A1505269810	Site Sample	Soil	Low	1	1.0	11	mg/Kg
		A1505269811	Site Sample	Soil	Low	1	1.0	11	mg/Kg
		A1505269812	Site Sample	Soil	Low	1	1.0	10	mg/Kg
		A1505269813	Site Sample	Soil	Low	1	1.0	9.3	mg/Kg
		A1505269814	Site Sample	Soil	Low	1	1.0	9.6	mg/Kg
		A1505269815	Site Sample	Soil	Low	1	1.0	13	mg/Kg
		A1505269816	Site Sample	Soil	Low	1	1.0	8.6	mg/Kg
		A1505269817	Site Sample	Soil	Low	1	1.0	9.4	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Nickel									
		A1505269818	Site Sample	Soil	Low	1	1.0	9.8		mg/Kg
		A1505269819	Site Sample	Soil	Low	1	1.0	9.9		mg/Kg
		A1505269820	Site Sample	Soil	Low	1	1.0	12		mg/Kg
	Potassium									
		A1505269801	Site Sample	Water	Low	1	500	455	B	µg/L
		A1505269804	Site Sample	Soil	Low	1	50	444		mg/Kg
		A1505269805	Site Sample	Soil	Low	1	50	558		mg/Kg
		A1505269806	Site Sample	Soil	Low	1	50	820		mg/Kg
		A1505269807	Site Sample	Soil	Low	1	50	351		mg/Kg
		A1505269808	Site Sample	Soil	Low	1	50	424		mg/Kg
		A1505269809	Site Sample	Soil	Low	1	50	548		mg/Kg
		A1505269810	Site Sample	Soil	Low	1	50	294		mg/Kg
		A1505269811	Site Sample	Soil	Low	1	50	418		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - *Summary of Validated Analyte Detects*
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Potassium								
		A1505269812	Site Sample	Soil	Low	1	50	420	mg/Kg
		A1505269813	Site Sample	Soil	Low	1	50	360	mg/Kg
		A1505269814	Site Sample	Soil	Low	1	50	344	mg/Kg
		A1505269815	Site Sample	Soil	Low	1	50	533	mg/Kg
		A1505269816	Site Sample	Soil	Low	1	50	369	mg/Kg
		A1505269817	Site Sample	Soil	Low	1	50	416	mg/Kg
		A1505269818	Site Sample	Soil	Low	1	50	365	mg/Kg
		A1505269819	Site Sample	Soil	Low	1	50	448	mg/Kg
		A1505269820	Site Sample	Soil	Low	1	50	508	mg/Kg
	Silver								
		A1505269805	Site Sample	Soil	Low	1	1.0	4.3	mg/Kg
		A1505269808	Site Sample	Soil	Low	1	1.0	3.0	mg/Kg
		A1505269809	Site Sample	Soil	Low	1	1.0	3.4	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Silver									
		A1505269812	Site Sample	Soil	Low	1	1.0	3.6		mg/Kg
		A1505269815	Site Sample	Soil	Low	1	1.0	2.9		mg/Kg
		A1505269817	Site Sample	Soil	Low	1	1.0	3.0		mg/Kg
		A1505269820	Site Sample	Soil	Low	1	1.0	2.6		mg/Kg
	Sodium									
		A1505269801	Site Sample	Water	Low	1	1,000	2,990		µg/L
		A1505269805	Site Sample	Soil	Low	1	100	68	B	mg/Kg
		A1505269806	Site Sample	Soil	Low	1	100	83	B	mg/Kg
		A1505269808	Site Sample	Soil	Low	1	100	57	B	mg/Kg
		A1505269809	Site Sample	Soil	Low	1	100	66	B	mg/Kg
		A1505269811	Site Sample	Soil	Low	1	100	61	B	mg/Kg
		A1505269812	Site Sample	Soil	Low	1	100	61	B	mg/Kg
		A1505269815	Site Sample	Soil	Low	1	100	69	B	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Sodium									
		A1505269819	Site Sample	Soil	Low	1	100	51	B	mg/Kg
		A1505269820	Site Sample	Soil	Low	1	100	75	B	mg/Kg
	Vanadium									
		A1505269804	Site Sample	Soil	Low	1	1.0	13		mg/Kg
		A1505269805	Site Sample	Soil	Low	1	1.0	15		mg/Kg
		A1505269806	Site Sample	Soil	Low	1	1.0	19		mg/Kg
		A1505269807	Site Sample	Soil	Low	1	1.0	12		mg/Kg
		A1505269808	Site Sample	Soil	Low	1	1.0	14		mg/Kg
		A1505269809	Site Sample	Soil	Low	1	1.0	17		mg/Kg
		A1505269810	Site Sample	Soil	Low	1	1.0	10		mg/Kg
		A1505269811	Site Sample	Soil	Low	1	1.0	12		mg/Kg
		A1505269812	Site Sample	Soil	Low	1	1.0	14		mg/Kg
		A1505269813	Site Sample	Soil	Low	1	1.0	11		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Vanadium								
		A1505269814	Site Sample	Soil	Low	1	1.0	11	mg/Kg
		A1505269815	Site Sample	Soil	Low	1	1.0	16	mg/Kg
		A1505269816	Site Sample	Soil	Low	1	1.0	11	mg/Kg
		A1505269817	Site Sample	Soil	Low	1	1.0	12	mg/Kg
		A1505269818	Site Sample	Soil	Low	1	1.0	12	mg/Kg
		A1505269819	Site Sample	Soil	Low	1	1.0	13	mg/Kg
		A1505269820	Site Sample	Soil	Low	1	1.0	17	mg/Kg
	Zinc								
		A1505269801	Site Sample	Water	Low	1	10	361	µg/L
		A1505269804	Site Sample	Soil	Low	1	1.0	173	mg/Kg
		A1505269805	Site Sample	Soil	Low	1	1.0	189	mg/Kg
		A1505269806	Site Sample	Soil	Low	1	1.0	76	mg/Kg
		A1505269807	Site Sample	Soil	Low	1	1.0	210	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Zinc								
		A1505269808	Site Sample	Soil	Low	1	1.0	183	mg/Kg
		A1505269809	Site Sample	Soil	Low	1	1.0	193	mg/Kg
		A1505269810	Site Sample	Soil	Low	1	1.0	219	mg/Kg
		A1505269811	Site Sample	Soil	Low	1	1.0	215	mg/Kg
		A1505269812	Site Sample	Soil	Low	1	1.0	197	mg/Kg
		A1505269813	Site Sample	Soil	Low	1	1.0	210	mg/Kg
		A1505269814	Site Sample	Soil	Low	1	1.0	213	mg/Kg
		A1505269815	Site Sample	Soil	Low	1	1.0	218	mg/Kg
		A1505269816	Site Sample	Soil	Low	1	1.0	196	mg/Kg
		A1505269817	Site Sample	Soil	Low	1	1.0	205	mg/Kg
		A1505269818	Site Sample	Soil	Low	1	1.0	249	mg/Kg
		A1505269819	Site Sample	Soil	Low	1	1.0	225	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Zinc								
		A1505269820	Site Sample	Soil	Low	1	1.0	176	mg/Kg
Conventionals									
	Oil and Grease								
		A1505269813	Site Sample	Soil	Low	1	100	4,300	mg/Kg
		A1505269813	Site Sample	Soil	Low	1	100	17,800	mg/Kg
		A1505269813	Site Sample	Soil	Low	1	0.10	64	%
		A1505269817	Site Sample	Soil	Low	1	0.10	70	%
		A1505269817	Site Sample	Soil	Low	1	100	1,640	mg/Kg
		A1505269817	Site Sample	Soil	Low	1	100	9,120	mg/Kg
		A1505269819	Site Sample	Soil	Low	1	0.10	57	%
		A1505269819	Site Sample	Soil	Low	1	100	2,010	mg/Kg
		A1505269819	Site Sample	Soil	Low	1	100	9,913	mg/Kg
		A1505269820	Site Sample	Soil	Low	1	100	990	mg/Kg
		A1505269820	Site Sample	Soil	Low	1	0.10	55	%

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69801**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Conventionals									
	Oil and Grease								
		A1505269820	Site Sample	Soil	Low	1	100	10,258	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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Capitol Lakes Sediment Project
Validated Data Summary Tables
SDG: 69821
October 1998
Sample I.D.
A1505269821 – A1505279840

DCM GROUP WALK HAYDEL A DAMES & MOORE GROUP COMPANY

CAPITOL LAKES SEDIMENT PROJECT

DATA VALIDATION REPORT

SDG: 69821

Prepared for:

Louisiana DEQ
Baton Rouge, Louisiana

Integrate Project Number: 269
October 1998

LDEQ-EDMS Document 2469808, Page 273 of 717

Purpose of the Validation Report

Analytical data validation is a confirmatory procedure that evaluates client-generated laboratory data in accordance with definitive regulatory performance standards set forth by the USEPA.[1,2] Integrate, Incorporated (Integrate) provides client assistance with data validation to ensure that analytical data are complete, in compliance with laboratory protocols, in agreement with the project data quality objectives, and are technically valid and legally defensible.

Format of the Introduction Section

The introduction contains summary tables that permit the reader easy access to the validated detected results. The tables are identified as: 1) ***Table E 1*** *Sample Identification Cross-Reference Table*, 2) ***Table E 2*** *Summary of Validated Sample Detects Sorted by Client Sample and Fraction* and 3) ***Table E 3*** *Summary of Validated Analyte Detects Sorted by Fraction, Analyte and Client Sample.* A brief description of the contents of each table is presented below.

Executive Summaries:

1) ***Table E 1*** *Sample Identification Cross-Reference Table:* This table is a cross-reference of client sample names and laboratory names. It also references any consultants sample names, if they are available.

2) ***Table E 2*** *Summary of Validated Sample Detects Sorted by Client Sample and Fraction:* Identification of all post-validation detected analytes by client or site sample location, fraction and analyte. The order of the analytical fractions appearing in this report follows the typical order found in a laboratory data package. That is, volatiles appear first, followed by semivolatiles, pesticides, metals and conventionals. The detected analytes of each fraction are also displayed according to their order of appearance in the data package. This table also shows the sample type, sample matrix, extraction level, dilution factor and the method quantitation limits (MQL).

3) ***Table E 3*** *Summary of Validated Analyte Detects Sorted by Fraction, Analyte and Client Sample:* Identification of all post-validation detected analytes by fraction,

[1]National Functional Guidelines For Organic Data Review, USEPA, February 1994.
[2]National Functional Guidelines For Inorganic Data Review, USEPA, February 1994.

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analyte and client site/sample location. The fractions follow the same order described above: volatiles, semivolatiles, pesticides, metals and conventionals. All detected analytes are sorted alphabetically.

Qualifier Definitions

- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J - The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
- N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."
- NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated value represents its approximate concentration.
- UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

NOTES:

All dilution results were combined onto one form four for the various fractions. If results from a dilution were used they are given a "D" qualifier as per CLP guidelines.

E1 - Sample Identification Cross-Reference Table

Site Samples Sorted by Fraction

LDEQ
Capitol Lakes Sediments

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 69821

Fraction	Client Sample	EPA Sample Number	Sample Type	Matrix	Level	Sampling Date/Time
Semivolatiles						
	A1505269821	A1505269821	Site Sample	Soil	Low	05/26/98 16:22
	A1505269821RE	A1505269821R	Re-extraction/Re-analysis	Soil	Low	05/26/98 16:22
	A1505269822	A1505269822	Site Sample	Soil	Low	05/26/98 16:38
	A1505269822RE	A1505269822R	Re-extraction/Re-analysis	Soil	Low	05/26/98 16:38
	A1505269823	A1505269823	Site Sample	Soil	Low	05/26/98 16:45
	A1505269823RE	A1505269823R	Re-extraction/Re-analysis	Soil	Low	05/26/98 16:45
	A1505269824	A1505269824	Site Sample	Soil	Low	05/26/98 17:18
	A1505269824RE	A1505269824R	Re-extraction/Re-analysis	Soil	Low	05/26/98 17:18
	A1505269825	A1505269825	Site Sample	Soil	Low	05/26/98 17:22
	A1505269825RE	A1505269825R	Re-extraction/Re-analysis	Soil	Low	05/26/98 17:22
	A1505269826	A1505269826	Site Sample	Soil	Low	05/26/98 17:30
	A1505269826RE	A1505269826R	Re-extraction/Re-analysis	Soil	Low	05/26/98 17:30
	A1505269827	A1505269827	Field Blank	Water	Low	05/26/98 17:21
	A1505279828	A1505279828	Equipment Rinsate	Water	Low	05/27/98 07:43
	A1505279828DL	A1505279828D	Rinsate Dilution	Water	Low	05/27/98 07:43
	A1505279829	A1505279829	Site Sample	Soil	Low	05/27/98 09:31
	A1505279830	A1505279830	Site Sample	Soil	Low	05/27/98 09:33
	A1505279831	A1505279831	Site Sample	Soil	Low	05/27/98 09:39
	A1505279831RE	A1505279831R	Re-extraction/Re-analysis	Soil	Low	05/27/98 09:39
	A1505279832	A1505279832	Site Sample	Soil	Low	05/27/98 09:50
	A1505279833	A1505279833	Site Sample	Soil	Low	05/27/98 10:16
	A1505279834	A1505279834	Site Sample	Soil	Low	05/27/98 10:32
	A1505279835	A1505279835	Site Sample	Soil	Low	05/27/98 10:35
	A1505279836	A1505279836	Site Sample	Soil	Low	05/27/98 10:50
	A1505279837	A1505279837	Site Sample	Soil	Low	05/27/98 10:40
	A1505279838	A1505279838	Site Sample	Soil	Low	05/27/98 10:56
	A1505279838RE	A1505279838R	Re-extraction/Re-analysis	Soil	Low	-
	A1505279839	A1505279839	Site Sample	Soil	Low	05/27/98 11:05
	A1505279839RE	A1505279839R	Re-extraction/Re-analysis	Soil	Low	-
	A1505279840	A1505279840	Site Sample	Soil	Low	05/27/98 11:08
	SBLKFQ	SBLKFQ	Method Blank	Water	Low	-
	SBLKFT	SBLKFT	Method Blank	Soil	Low	-
	SBLKDC	SBLKDC	Method Blank	Water	Low	-
	SBLKDG	SBLKDG	Method Blank	Soil	Low	-
	A1505279836MS	A1505279836M	Matrix Spike	Soil	Low	05/27/98 10:55
	A1505279836MSD	A1505279836M	Matrix Spike Duplicate	Soil	Low	05/27/98 10:58
Pesticides/PCBs						
	A1505279828	279828	Equipment Rinsate	Water	Low	05/27/98 07:43
	A1505279829	279829	Site Sample	Soil	Low	05/27/98 09:31
	A1505279830	279830	Site Sample	Soil	Low	05/27/98 09:33
	A1505279831	279831	Site Sample	Soil	Low	05/27/98 09:39
	A1505279832	279832	Site Sample	Soil	Low	05/27/98 09:50
	A1505279833	279833	Site Sample	Soil	Low	05/27/98 10:16
	A1505279834	279834	Site Sample	Soil	Low	05/27/98 10:32
	A1505279835	279835	Site Sample	Soil	Low	05/27/98 10:35
	A1505279836	279836	Site Sample	Soil	Low	05/27/98 10:50
	A1505279836MS	279836MS	Matrix Spike	Soil	Low	05/27/98 10:50
	A1505279836MSD	279836MSD	Matrix Spike Duplicate	Soil	Low	05/27/98 10:50
	A1505279837	279837	Site Sample	Soil	Low	05/27/98 10:40
	A1505279838	279838	Site Sample	Soil	Low	05/27/98 10:56
	A1505279839	279839	Site Sample	Soil	Low	05/27/98 11:05
	A1505279840	279840	Site Sample	Soil	Low	05/27/98 11:08
	METHOD BLANK	METHOD BLANK	Method Blank	Water	Low	-
	METHOD BLANK	METHOD BLANK	Method Blank	Soil	Low	-

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E1 - Sample Identification Cross-Reference Table

Site Samples Sorted by Fraction

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Client Sample	EPA Sample Number	Sample Type	Matrix	Level	Sampling Date/Time
Metals						
	A1505279828	279828	Equipment Rinsate	Water	Low	05/27/98 07:43
	A1505279829	279829	Site Sample	Soil	Low	05/27/98 09:31
	A1505279830	279830	Site Sample	Soil	Low	05/27/98 09:33
	A1505279831	279831	Site Sample	Soil	Low	05/27/98 09:39
	A1505279832	279832	Site Sample	Soil	Low	05/27/98 09:50
	A1505279833	279833	Site Sample	Soil	Low	05/27/98 10:16
	A1505279834	279834	Site Sample	Soil	Low	05/27/98 10:32
	A1505279835	279835	Site Sample	Soil	Low	05/27/98 10:35
	A1505279836	279836	Site Sample	Soil	Low	05/27/98 10:50
	A1505279837	279837	Site Sample	Soil	Low	05/27/98 10:40
	A1505279838	279838	Site Sample	Soil	Low	05/27/98 10:56
	A1505279839	279839	Site Sample	Soil	Low	05/27/98 11:05
	A1505279840	279840	Site Sample	Soil	Low	05/27/98 11:08
Conventionals						
	A1505279834	279834	Site Sample	Soil	Low	05/27/98 10:32
	A1505279835	279835	Site Sample	Soil	Low	05/27/98 10:35

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505269821										
	Semivolatiles									
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	103	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	84	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	726	J	µg/Kg
A1505269822										
	Semivolatiles									
		Pyrene	Site Sample	Soil	Low	2	660	187	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	94	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	82	J	µg/Kg
A1505269823										
	Semivolatiles									
		Pyrene	Site Sample	Soil	Low	2	660	154	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	32	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	68	J	µg/Kg
A1505269824RE										
	Semivolatiles									
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	386	J	µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	469	J	µg/Kg
		Benzo(a)anthracene	Re-extraction/Re-analysis	Soil	Low	2	660	226	J	µg/Kg
		Chrysene	Re-extraction/Re-analysis	Soil	Low	2	660	297	J	µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	333	J	µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	279	J	µg/Kg
		Benzo(a)pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	244	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	137	J	µg/Kg
		Benzo(g,h,i)perylene	Re-extraction/Re-analysis	Soil	Low	2	660	143	J	µg/Kg
A1505269825RE										
	Semivolatiles									
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	194	J	µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	395	J	µg/Kg
		Benzo(a)anthracene	Re-extraction/Re-analysis	Soil	Low	2	660	119	J	µg/Kg
		Chrysene	Re-extraction/Re-analysis	Soil	Low	2	660	178	J	µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	170	J	µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	122	J	µg/Kg
		Benzo(a)pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	142	J	µg/Kg
A1505269826RE										
	Semivolatiles									
		Benzo(a)pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	838	J	µg/Kg
A1505279829										
	Semivolatiles									
		4-Methylphenol	Site Sample	Soil	Low	2	660	165	J	µg/Kg
		Naphthalene	Site Sample	Soil	Low	2	660	165		µg/Kg
		2-Methylnaphthalene	Site Sample	Soil	Low	2	660	2,505		µg/Kg
		Acenaphthene	Site Sample	Soil	Low	2	660	7,943		µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279829										
	Semivolatiles									
		Dibenzofuran	Site Sample	Soil	Low	2	660	6,110		µg/Kg
		Fluorene	Site Sample	Soil	Low	20	6,600	12,220	D	µg/Kg
		Phenanthrene	Site Sample	Soil	Low	20	6,600	73,320	D	µg/Kg
		Anthracene	Site Sample	Soil	Low	20	6,600	25,662	D	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	20	6,600	73,320	D	µg/Kg
		Pyrene	Site Sample	Soil	Low	20	6,600	61,100	D	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	20	6,600	42,159	D	µg/Kg
		Chrysene	Site Sample	Soil	Low	20	6,600	37,882	D	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	20	6,600	29,328	D	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	20	6,600	25,662	D	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	20	6,600	32,994	D	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	20	6,600	14,053	D	µg/Kg
		Dibenz(a,h)anthracene	Site Sample	Soil	Low	20	6,600	2,077	DJ	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	20	6,600	12,220	D	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	20	6,600	5,560	D	µg/Kg
	Pesticides/PCBs									
		alpha-BHC	Site Sample	Soil	Low	1	1.7	1.6		µg/Kg
		beta-BHC	Site Sample	Soil	Low	1	1.7	1.8		µg/Kg
		delta-BHC	Site Sample	Soil	Low	1	1.7	2.4		µg/Kg
		gamma-BHC (Lindane)	Site Sample	Soil	Low	1	1.7	1.8		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	5.6		µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	3.3		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	6.7		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	12		µg/Kg
		Endrin	Site Sample	Soil	Low	1	3.3	4.3		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	27		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	13		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	19		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	19		µg/Kg
		alpha-Chlordane	Site Sample	Soil	Low	1	1.7	4.3		µg/Kg
		gamma-Chlordane	Site Sample	Soil	Low	1	1.7	7.3		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	220		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	2,817	J	mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	8.6	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	11		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	48		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	25,234	J	mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	20	J	mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	2.1	J	mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	15		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	6,018	J	mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	88	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,045	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	202	J	mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.049	B	mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	5.1	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	104		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279829										
	Metals									
		Sodium	Site Sample	Soil	Low	1	100	120		mg/Kg
		Thallium	Site Sample	Soil	Low	1	1.0	0.35	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	7.3		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	128	J	mg/Kg
A1505279830										
	Semivolatiles									
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	683		µg/Kg
	Pesticides/PCBs									
		gamma-BHC (Lindane)	Site Sample	Soil	Low	1	1.7	3.7	J	µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	23	J	µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	9.3	J	µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	7.5	J	µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	33	J	µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	30	J	µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	11	J	µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	40	J	µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	35	J	µg/Kg
		alpha-Chlordane	Site Sample	Soil	Low	1	1.7	9.9	J	µg/Kg
		gamma-Chlordane	Site Sample	Soil	Low	1	1.7	16	J	µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	869		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	7,563	J	mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	8.1	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	16		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	236		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.081	B	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.4		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	5,620	J	mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	18	J	mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	5.8	J	mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	36		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	11,861	J	mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	189	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,285	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	224	J	mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.31		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	14	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	441		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	16		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	487	J	mg/Kg
A1505279831										
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	1.7	4.7		µg/Kg
		Aldrin	Site Sample	Soil	Low	10	17	93	D	µg/Kg
		Dieldrin	Site Sample	Soil	Low	10	33	103	D	µg/Kg

Qualifiers:

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- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279831										
	Pesticides/PCBs									
		4,4'-DDE	Site Sample	Soil	Low	10	33	98	D	µg/Kg
		Endosulfan II	Site Sample	Soil	Low	10	33	201	D	µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	26		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	10	33	794	D	µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	10	33	234	D	µg/Kg
		alpha-Chlordane	Site Sample	Soil	Low	1	1.7	32		µg/Kg
		gamma-Chlordane	Site Sample	Soil	Low	1	1.7	8.9		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	10	330	2,475	D	µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	10	330	5,604	D	µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	8,313	J	mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	71	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	86		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	229		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.21		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	8.9		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	3,031	J	mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	33	J	mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	6.5	J	mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	64		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	14,197	J	mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	409	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,261	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	331	J	mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	4.7		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	16	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	528		mg/Kg
		Selenium	Site Sample	Soil	Low	1	0.50	0.75		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	1.8		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	164		mg/Kg
		Thallium	Site Sample	Soil	Low	1	1.0	0.70	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	17		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	995	J	mg/Kg
A1505279831RE										
	Semivolatiles									
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	219	J	µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	243	J	µg/Kg
		Chrysene	Re-extraction/Re-analysis	Soil	Low	2	660	173	J	µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	159	J	µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	117	J	µg/Kg
A1505279832										
	Semivolatiles									
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	731		µg/Kg
	Pesticides/PCBs									
		Endosulfan II	Site Sample	Soil	Low	1	3.3	3.6		µg/Kg

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- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279832										
	Pesticides/PCBs									
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	9.0		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	6.2		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	152		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	6,856	J	mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	28	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	19		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	125		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.25		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	2.4		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	1,461	J	mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	9.0	J	mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	3.9	J	mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	17		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	9,835	J	mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	69	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,118	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	311	J	mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.056	B	mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	11	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	487		mg/Kg
		Selenium	Site Sample	Soil	Low	1	0.50	0.53		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	0.53	B	mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	224		mg/Kg
		Thallium	Site Sample	Soil	Low	1	1.0	0.40	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	17		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	94	J	mg/Kg
A1505279833										
	Semivolatiles									
		Naphthalene	Site Sample	Soil	Low	2	660	286	J	µg/Kg
		Acenaphthene	Site Sample	Soil	Low	2	660	1,326		µg/Kg
		Dibenzofuran	Site Sample	Soil	Low	2	660	454	J	µg/Kg
		Fluorene	Site Sample	Soil	Low	2	660	1,187		µg/Kg
		Phenanthrene	Site Sample	Soil	Low	10	3,300	13,960	D	µg/Kg
		Anthracene	Site Sample	Soil	Low	2	660	4,397		µg/Kg
		Fluoranthene	Site Sample	Soil	Low	10	3,300	23,732	D	µg/Kg
		Pyrene	Site Sample	Soil	Low	10	3,300	20,242	D	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	10	3,300	10,470	D	µg/Kg
		Chrysene	Site Sample	Soil	Low	10	3,300	10,470	D	µg/Kg
		bis(2-Ethylhexyl)phthalate	Site Sample	Soil	Low	10	3,300	2,094	DJ	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	10	3,300	7,678	D	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	10	3,300	8,376	DJ	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	10	3,300	8,376	D	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	10	3,300	3,630	D	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	10	3,300	3,350	D	µg/Kg
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	1.7	2.7		µg/Kg

Qualifiers:

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- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediments

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 69821

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279833										
	Pesticides/PCBs									
		Aldrin	Site Sample	Soil	Low	1	1.7	7.7		µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	6.3		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	3.7		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	14		µg/Kg
		Endrin	Site Sample	Soil	Low	1	3.3	2.9		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	22		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	13		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	24		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	59		µg/Kg
		alpha-Chlordane	Site Sample	Soil	Low	1	1.7	3.5		µg/Kg
		gamma-Chlordane	Site Sample	Soil	Low	1	1.7	7.0		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	433		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	1,689	J	mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	3.5	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	5.0		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	64		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	28,688	J	mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	12	J	mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	2.0	J	mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	15		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	5,102	J	mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	76	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,452	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	277	J	mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.070	B	mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	4.7	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	124		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	6.4		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	200	J	mg/Kg
A1505279834										
	Semivolatiles									
		Phenanthrene	Site Sample	Soil	Low	2	660	335	J	µg/Kg
		Anthracene	Site Sample	Soil	Low	2	660	120	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	660	575	J	µg/Kg
		Pyrene	Site Sample	Soil	Low	4	1,300	1,203	DJ	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	4	1,300	309	DJ	µg/Kg
		Chrysene	Site Sample	Soil	Low	4	1,300	502	DJ	µg/Kg
		Di-n-octylphthalate	Site Sample	Soil	Low	4	1,300	10,400	D	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	4	1,300	460	DJ	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	4	1,300	523	DJ	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	4	1,300	356	DJ	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	183	J	µg/Kg
	Pesticides/PCBs									
		gamma-BHC (Lindane)	Site Sample	Soil	Low	10	17	35	J	µg/Kg
		Aldrin	Site Sample	Soil	Low	10	17	152	J	µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	10	33	84	J	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediments

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 69821

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279834										
	Pesticides/PCBs									
		Endosulfan II	Site Sample	Soil	Low	10	33	52	J	µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	10	33	146	J	µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	10	33	73	J	µg/Kg
		alpha-Chlordane	Site Sample	Soil	Low	10	17	26	J	µg/Kg
		gamma-Chlordane	Site Sample	Soil	Low	10	17	22	J	µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	10	330	4,498		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	10	330	1,788		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	7,217	J	mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	25	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	27		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	222		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.15	B	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.6		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	4,571	J	mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	18	J	mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	5.2	J	mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	39		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	13,860	J	mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	202	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,229	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	328	J	mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.25		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	14	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	432		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	0.73	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	17		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	434	J	mg/Kg
	Conventionals									
		Total Organic Carbon (TOC)	Site Sample	Soil	Low	1	100	28,080		mg/Kg
		Oil and Grease	Site Sample	Soil	Low	1	100	1,300		mg/Kg
		Percent Moisture	Site Sample	Soil	Low	1	0.10	48		%
A1505279835										
	Semivolatiles									
		Phenanthrene	Site Sample	Soil	Low	2	660	298	J	µg/Kg
		Anthracene	Site Sample	Soil	Low	2	660	96	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	660	556	J	µg/Kg
		Pyrene	Site Sample	Soil	Low	4	1,300	960	DJ	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	4	1,300	283	DJ	µg/Kg
		Chrysene	Site Sample	Soil	Low	4	1,300	404	DJ	µg/Kg
		bis(2-Ethylhexyl)phthalate	Site Sample	Soil	Low	4	1,300	7,575	D	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	4	1,300	389	DJ	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	4	1,300	283	DJ	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	4	1,300	263	DJ	µg/Kg
	Pesticides/PCBs									
		alpha-BHC	Site Sample	Soil	Low	1	1.7	2.1		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediments

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 69821

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279835										
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	1.7	5.0		µg/Kg
		gamma-BHC (Lindane)	Site Sample	Soil	Low	1	1.7	10		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	50		µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	13		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	6.1		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	30		µg/Kg
		Endrin	Site Sample	Soil	Low	1	3.3	4.5		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	25		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	9.6		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	36		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	31		µg/Kg
		alpha-Chlordane	Site Sample	Soil	Low	1	1.7	28		µg/Kg
		gamma-Chlordane	Site Sample	Soil	Low	1	1.7	11		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	5	165	1,364	D	µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	5	165	1,111	D	µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	7,828	J	mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	13	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	29		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	200		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.17	B	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.4		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	4,787	J	mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	22	J	mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	6.1	J	mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	39		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	14,443	J	mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	175	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,409	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	307	J	mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.25		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	16	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	493		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	18		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	422	J	mg/Kg
	Conventionals									
		Total Organic Carbon (TOC)	Site Sample	Soil	Low	1	200	28,000		mg/Kg
		Oil and Grease	Site Sample	Soil	Low	1	100	8,240		mg/Kg
		Percent Moisture	Site Sample	Soil	Low	1	0.10	50		%
A1505279836										
	Semivolatiles									
		Anthracene	Site Sample	Soil	Low	2	660	27	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	660	186	J	µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	365	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	191	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	180	J	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279836										
	Pesticides/PCBs									
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	3.4		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	4.0		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	12		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	7.0		µg/Kg
		alpha-Chlordane	Site Sample	Soil	Low	1	1.7	2.2		µg/Kg
		gamma-Chlordane	Site Sample	Soil	Low	1	1.7	4.5		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	104		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	8,410	J	mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	21	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	18		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	142		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.24		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.3		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	1,438	J	mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	11	J	mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	5.2	J	mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	22		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	12,644	J	mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	105	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,114	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	303	J	mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.11		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	13	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	538		mg/Kg
		Thallium	Site Sample	Soil	Low	1	1.0	0.29		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	19		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	124	J	mg/Kg
A1505279837										
	Semivolatiles									
		Acenaphthene	Site Sample	Soil	Low	2	660	377	J	µg/Kg
		Dibenzofuran	Site Sample	Soil	Low	2	660	215	J	µg/Kg
		Fluorene	Site Sample	Soil	Low	2	660	303	J	µg/Kg
		Phenanthrene	Site Sample	Soil	Low	2	660	2,557		µg/Kg
		Anthracene	Site Sample	Soil	Low	2	660	740		µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	660	2,154		µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	4,442	J	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	1,211	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	1,211	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Site Sample	Soil	Low	4	1,300	12,114	DJ	µg/Kg
		Di-n-octylphthalate	Site Sample	Soil	Low	2	660	337	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	1,010	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	1,346	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	1,077	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	660	350	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	337	J	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279837										
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	6,568	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	4.2		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	102		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.21		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	1,292	J	mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	8.1	J	mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	4.2	J	mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	11		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	9,893	J	mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	11	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,144	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	283	J	mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	10	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	469		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	15		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	38	J	mg/Kg
A1505279838										
	Pesticides/PCBs									
		alpha-BHC	Site Sample	Soil	Low	1	1.7	2.0		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	5.4		µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	3.0		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	12		µg/Kg
		Endrin	Site Sample	Soil	Low	1	3.3	4.1		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	13		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	6.6		µg/Kg
		Endosulfan sulfate	Site Sample	Soil	Low	1	3.3	6.2		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	17		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	14		µg/Kg
		alpha-Chlordane	Site Sample	Soil	Low	1	1.7	3.2		µg/Kg
		gamma-Chlordane	Site Sample	Soil	Low	1	1.7	6.6		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	252		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	3,952	J	mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	5.0	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	6.2		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	132		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.041	B	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	0.91		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	20,774	J	mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	12	J	mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	3.1	J	mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	26		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	6,980	J	mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	121	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,689	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	192	J	mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.087	B	mg/Kg

Qualifiers:

- **J** - Estimated
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- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279838										
	Metals									
		Nickel	Site Sample	Soil	Low	1	1.0	8.7	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	256		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	9.1		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	241	J	mg/Kg
A1505279838RE										
	Semivolatiles									
		Phenanthrene	Re-extraction/Re-analysis	Soil	Low	2	660	578	J	µg/Kg
		Anthracene	Re-extraction/Re-analysis	Soil	Low	2	660	186	J	µg/Kg
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	2,189		µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	3,221		µg/Kg
		Benzo(a)anthracene	Re-extraction/Re-analysis	Soil	Low	2	660	1,322		µg/Kg
		Chrysene	Re-extraction/Re-analysis	Soil	Low	2	660	1,817		µg/Kg
		bis(2-Ethylhexyl)phthalate	Re-extraction/Re-analysis	Soil	Low	2	660	3,387		µg/Kg
		Di-n-octylphthalate	Re-extraction/Re-analysis	Soil	Low	2	660	202	J	µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	2,395	J	µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	2,272	J	µg/Kg
		Benzo(a)pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	1,859	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	1,115	J	µg/Kg
		Dibenz(a,h)anthracene	Re-extraction/Re-analysis	Soil	Low	2	660	388	J	µg/Kg
		Benzo(g,h,i)perylene	Re-extraction/Re-analysis	Soil	Low	2	660	1,074	J	µg/Kg
A1505279839										
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	1.7	5.4		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	18		µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	9.9		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	5.8		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	30		µg/Kg
		Endrin	Site Sample	Soil	Low	1	3.3	12		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	31		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	11		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	32		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	32		µg/Kg
		alpha-Chlordane	Site Sample	Soil	Low	1	1.7	23		µg/Kg
		gamma-Chlordane	Site Sample	Soil	Low	1	1.7	13		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	33	227		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	640		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	7,799	J	mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	4.5	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	10		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	273		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.2		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	6,402	J	mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	16	J	mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	5.4	J	mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	31		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279839										
	Metals									
		Iron	Site Sample	Soil	Low	1	10	12,106	J	mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	144	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,467	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	246	J	mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.19		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	13	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	502		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	16		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	410	J	mg/Kg
A1505279839RE										
	Semivolatiles									
		Phenanthrene	Re-extraction/Re-analysis	Soil	Low	2	660	268	J	µg/Kg
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	931		µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	1,339		µg/Kg
		Benzo(a)anthracene	Re-extraction/Re-analysis	Soil	Low	2	660	535	J	µg/Kg
		Chrysene	Re-extraction/Re-analysis	Soil	Low	2	660	640	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Re-extraction/Re-analysis	Soil	Low	2	660	8,730		µg/Kg
		Di-n-octylphthalate	Re-extraction/Re-analysis	Soil	Low	2	660	134	J	µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	698	J	µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	757	J	µg/Kg
		Benzo(a)pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	512	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	349	J	µg/Kg
		Dibenz(a,h)anthracene	Re-extraction/Re-analysis	Soil	Low	2	660	146	J	µg/Kg
		Benzo(g,h,i)perylene	Re-extraction/Re-analysis	Soil	Low	2	660	355	J	µg/Kg
A1505279840										
	Semivolatiles									
		Pyrene	Site Sample	Soil	Low	2	660	150	J	µg/Kg
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	1.7	2.1		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	13		µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	7.2		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	4.1		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	17		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	127		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	10		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	194		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	10	33	268	J	µg/Kg
		alpha-Chlordane	Site Sample	Soil	Low	1	1.7	15		µg/Kg
		gamma-Chlordane	Site Sample	Soil	Low	1	1.7	7.7		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	10	330	5,057	J	µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	9,752	J	mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	25	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	40		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	203		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279840										
	Metals									
		Beryllium	Site Sample	Soil	Low	1	0.20	0.29		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	2.4		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	2,188	J	mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	17	J	mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	6.2	J	mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	37		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	14,190	J	mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	189	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,367	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	219	J	mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.19		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	16	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	583		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	22		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	526	J	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Acenaphthene									
		A1505279829	Site Sample	Soil	Low	2	660	7,943		µg/Kg
		A1505279833	Site Sample	Soil	Low	2	660	1,326		µg/Kg
		A1505279837	Site Sample	Soil	Low	2	660	377	J	µg/Kg
	Anthracene									
		A1505279829	Site Sample	Soil	Low	20	6,600	25,662	D	µg/Kg
		A1505279833	Site Sample	Soil	Low	2	660	4,397		µg/Kg
		A1505279834	Site Sample	Soil	Low	2	660	120	J	µg/Kg
		A1505279835	Site Sample	Soil	Low	2	660	96	J	µg/Kg
		A1505279836	Site Sample	Soil	Low	2	660	27	J	µg/Kg
		A1505279837	Site Sample	Soil	Low	2	660	740		µg/Kg
		A1505279838RE	Re-extraction/Re-analysis	Soil	Low	2	660	186	J	µg/Kg
	Benzo(a)anthracene									
		A1505269824RE	Re-extraction/Re-analysis	Soil	Low	2	660	228	J	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(a)anthracene									
		A1505269825RE	Re-extraction/Re-analysis	Soil	Low	2	660	119	J	µg/Kg
		A1505279829	Site Sample	Soil	Low	20	6,600	42,159	D	µg/Kg
		A1505279833	Site Sample	Soil	Low	10	3,300	10,470	D	µg/Kg
		A1505279834	Site Sample	Soil	Low	4	1,300	309	DJ	µg/Kg
		A1505279835	Site Sample	Soil	Low	4	1,300	283	DJ	µg/Kg
		A1505279837	Site Sample	Soil	Low	2	660	1,211	J	µg/Kg
		A1505279838RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,322		µg/Kg
		A1505279839RE	Re-extraction/Re-analysis	Soil	Low	2	660	535	J	µg/Kg
	Benzo(a)pyrene									
		A1505269821	Site Sample	Soil	Low	2	660	726	J	µg/Kg
		A1505269824RE	Re-extraction/Re-analysis	Soil	Low	2	660	244	J	µg/Kg
		A1505269825RE	Re-extraction/Re-analysis	Soil	Low	2	660	142	J	µg/Kg
		A1505269826RE	Re-extraction/Re-analysis	Soil	Low	2	660	838	J	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(a)pyrene									
		A1505279829	Site Sample	Soil	Low	20	6,600	14,053	D	µg/Kg
		A1505279830	Site Sample	Soil	Low	2	660	683		µg/Kg
		A1505279832	Site Sample	Soil	Low	2	660	731		µg/Kg
		A1505279833	Site Sample	Soil	Low	10	3,300	8,376	D	µg/Kg
		A1505279835	Site Sample	Soil	Low	4	1,300	263	DJ	µg/Kg
		A1505279837	Site Sample	Soil	Low	2	660	1,077	J	µg/Kg
		A1505279838RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,859	J	µg/Kg
		A1505279839RE	Re-extraction/Re-analysis	Soil	Low	2	660	512	J	µg/Kg
	Benzo(b)fluoranthene									
		A1505269821	Site Sample	Soil	Low	2	660	103	J	µg/Kg
		A1505269822	Site Sample	Soil	Low	2	660	94	J	µg/Kg
		A1505269823	Site Sample	Soil	Low	2	660	32	J	µg/Kg
		A1505269824RE	Re-extraction/Re-analysis	Soil	Low	2	660	333	J	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(b)fluoranthene									
		A1505269825RE	Re-extraction/Re-analysis	Soil	Low	2	660	170	J	µg/Kg
		A1505279829	Site Sample	Soil	Low	20	6,600	25,662	D	µg/Kg
		A1505279831RE	Re-extraction/Re-analysis	Soil	Low	2	660	159	J	µg/Kg
		A1505279833	Site Sample	Soil	Low	10	3,300	7,678	D	µg/Kg
		A1505279834	Site Sample	Soil	Low	4	1,300	523	DJ	µg/Kg
		A1505279835	Site Sample	Soil	Low	4	1,300	389	DJ	µg/Kg
		A1505279837	Site Sample	Soil	Low	2	660	1,010	J	µg/Kg
		A1505279838RE	Re-extraction/Re-analysis	Soil	Low	2	660	2,395	J	µg/Kg
		A1505279839RE	Re-extraction/Re-analysis	Soil	Low	2	660	698	J	µg/Kg
	Benzo(g,h,i)perylene									
		A1505269824RE	Re-extraction/Re-analysis	Soil	Low	2	660	143	J	µg/Kg
		A1505279829	Site Sample	Soil	Low	20	6,600	5,560	D	µg/Kg
		A1505279833	Site Sample	Soil	Low	10	3,300	3,350	D	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 69821

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(g,h,i)perylene									
		A1505279834	Site Sample	Soil	Low	2	660	183	J	µg/Kg
		A1505279837	Site Sample	Soil	Low	2	660	337	J	µg/Kg
		A1505279838RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,074	J	µg/Kg
		A1505279839RE	Re-extraction/Re-analysis	Soil	Low	2	660	355	J	µg/Kg
	Benzo(k)fluoranthene									
		A1505269821	Site Sample	Soil	Low	2	660	84	J	µg/Kg
		A1505269822	Site Sample	Soil	Low	2	660	82	J	µg/Kg
		A1505269823	Site Sample	Soil	Low	2	660	68	J	µg/Kg
		A1505269824RE	Re-extraction/Re-analysis	Soil	Low	2	660	279	J	µg/Kg
		A1505269825RE	Re-extraction/Re-analysis	Soil	Low	2	660	122	J	µg/Kg
		A1505279829	Site Sample	Soil	Low	20	6,600	32,994	D	µg/Kg
		A1505279831RE	Re-extraction/Re-analysis	Soil	Low	2	660	117	J	µg/Kg
		A1505279833	Site Sample	Soil	Low	10	3,300	8,376	DJ	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(k)fluoranthene									
		A1505279834	Site Sample	Soil	Low	4	1,300	356	DJ	µg/Kg
		A1505279835	Site Sample	Soil	Low	4	1,300	283	DJ	µg/Kg
		A1505279836	Site Sample	Soil	Low	2	660	180	J	µg/Kg
		A1505279837	Site Sample	Soil	Low	2	660	1,346	J	µg/Kg
		A1505279838RE	Re-extraction/Re-analysis	Soil	Low	2	660	2,272	J	µg/Kg
		A1505279839RE	Re-extraction/Re-analysis	Soil	Low	2	660	757	J	µg/Kg
	bis(2-Ethylhexyl)phthalate									
		A1505279833	Site Sample	Soil	Low	10	3,300	2,094	DJ	µg/Kg
		A1505279834	Site Sample	Soil	Low	4	1,300	10,400	D	µg/Kg
		A1505279835	Site Sample	Soil	Low	4	1,300	7,575	D	µg/Kg
		A1505279837	Site Sample	Soil	Low	4	1,300	12,114	DJ	µg/Kg
		A1505279838RE	Re-extraction/Re-analysis	Soil	Low	2	660	3,387		µg/Kg
		A1505279839RE	Re-extraction/Re-analysis	Soil	Low	2	660	8,730		µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Chrysene									
		A1505269824RE	Re-extraction/Re-analysis	Soil	Low	2	660	297	J	µg/Kg
		A1505269825RE	Re-extraction/Re-analysis	Soil	Low	2	660	178	J	µg/Kg
		A1505279829	Site Sample	Soil	Low	20	6,600	37,882	D	µg/Kg
		A1505279831RE	Re-extraction/Re-analysis	Soil	Low	2	660	173	J	µg/Kg
		A1505279833	Site Sample	Soil	Low	10	3,300	10,470	D	µg/Kg
		A1505279834	Site Sample	Soil	Low	4	1,300	502	DJ	µg/Kg
		A1505279835	Site Sample	Soil	Low	4	1,300	404	DJ	µg/Kg
		A1505279836	Site Sample	Soil	Low	2	660	191	J	µg/Kg
		A1505279837	Site Sample	Soil	Low	2	660	1,211	J	µg/Kg
		A1505279838RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,817		µg/Kg
		A1505279839RE	Re-extraction/Re-analysis	Soil	Low	2	660	640	J	µg/Kg
	Benzo(b)fluoranthene									
		A1505279829	Site Sample	Soil	Low	20	6,600	29,328	D	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(b)fluoranthene									
		A1505279834	Site Sample	Soil	Low	4	1,300	460	DJ	µg/Kg
		A1505279837	Site Sample	Soil	Low	2	660	337	J	µg/Kg
		A1505279838RE	Re-extraction/Re-analysis	Soil	Low	2	660	202	J	µg/Kg
		A1505279839RE	Re-extraction/Re-analysis	Soil	Low	2	660	134	J	µg/Kg
	Benzo(g,h,i)perylene									
		A1505279829	Site Sample	Soil	Low	20	6,600	12,220	D	µg/Kg
		A1505279838RE	Re-extraction/Re-analysis	Soil	Low	2	660	388	J	µg/Kg
		A1505279839RE	Re-extraction/Re-analysis	Soil	Low	2	660	146	J	µg/Kg
	Dibenzofuran									
		A1505279829	Site Sample	Soil	Low	2	660	6,110		µg/Kg
		A1505279833	Site Sample	Soil	Low	2	660	454	J	µg/Kg
		A1505279837	Site Sample	Soil	Low	2	660	215	J	µg/Kg
	Fluoranthene									
		A1505269824RE	Re-extraction/Re-analysis	Soil	Low	2	660	386	J	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Fluoranthene									
		A1505269825RE	Re-extraction/Re-analysis	Soil	Low	2	660	194	J	µg/Kg
		A1505279829	Site Sample	Soil	Low	20	6,600	73,320	D	µg/Kg
		A1505279831RE	Re-extraction/Re-analysis	Soil	Low	2	660	219	J	µg/Kg
		A1505279833	Site Sample	Soil	Low	10	3,300	23,732	D	µg/Kg
		A1505279834	Site Sample	Soil	Low	2	660	575	J	µg/Kg
		A1505279835	Site Sample	Soil	Low	2	660	556	J	µg/Kg
		A1505279836	Site Sample	Soil	Low	2	660	186	J	µg/Kg
		A1505279837	Site Sample	Soil	Low	2	860	2,154		µg/Kg
		A1505279838RE	Re-extraction/Re-analysis	Soil	Low	2	660	2,189		µg/Kg
		A1505279839RE	Re-extraction/Re-analysis	Soil	Low	2	660	931		µg/Kg
	Fluorene									
		A1505279829	Site Sample	Soil	Low	20	6,600	12,220	D	µg/Kg
		A1505279833	Site Sample	Soil	Low	2	660	1,187		µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Fluorene									
		A1505279837	Site Sample	Soil	Low	2	660	303	J	µg/Kg
	Indeno(1,2,3-cd)pyrene									
		A1505269824RE	Re-extraction/Re-analysis	Soil	Low	2	660	137	J	µg/Kg
		A1505279829	Site Sample	Soil	Low	20	6,600	2,077	DJ	µg/Kg
		A1505279833	Site Sample	Soil	Low	10	3,300	3,630	D	µg/Kg
		A1505279837	Site Sample	Soil	Low	2	660	350	J	µg/Kg
		A1505279838RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,115	J	µg/Kg
		A1505279839RE	Re-extraction/Re-analysis	Soil	Low	2	660	349	J	µg/Kg
	2-Methylnaphthalene									
		A1505279829	Site Sample	Soil	Low	2	660	2,505		µg/Kg
	4-Methylphenol									
		A1505279829	Site Sample	Soil	Low	2	660	165	J	µg/Kg
	Naphthalene									
		A1505279829	Site Sample	Soil	Low	2	660	165		µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Naphthalene									
		A1505279833	Site Sample	Soil	Low	2	660	286	J	µg/Kg
	Phenanthrene									
		A1505279829	Site Sample	Soil	Low	20	6,600	73,320	D	µg/Kg
		A1505279833	Site Sample	Soil	Low	10	3,300	13,960	D	µg/Kg
		A1505279834	Site Sample	Soil	Low	2	660	335	J	µg/Kg
		A1505279835	Site Sample	Soil	Low	2	660	298	J	µg/Kg
		A1505279837	Site Sample	Soil	Low	2	660	2,557		µg/Kg
		A1505279838RE	Re-extraction/Re-analysis	Soil	Low	2	660	578	J	µg/Kg
		A1505279839RE	Re-extraction/Re-analysis	Soil	Low	2	660	268	J	µg/Kg
	Pyrene									
		A1505269822	Site Sample	Soil	Low	2	660	187	J	µg/Kg
		A1505269823	Site Sample	Soil	Low	2	660	154	J	µg/Kg
		A1505269824RE	Re-extraction/Re-analysis	Soil	Low	2	660	469	J	µg/Kg

Qualifiers:

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- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Pyrene									
		A1505269825RE	Re-extraction/Re-analysis	Soil	Low	2	660	395	J	µg/Kg
		A1505279829	Site Sample	Soil	Low	20	6,600	61,100	D	µg/Kg
		A1505279831RE	Re-extraction/Re-analysis	Soil	Low	2	660	243	J	µg/Kg
		A1505279833	Site Sample	Soil	Low	10	3,300	20,242	D	µg/Kg
		A1505279834	Site Sample	Soil	Low	4	1,300	1,203	DJ	µg/Kg
		A1505279835	Site Sample	Soil	Low	4	1,300	960	DJ	µg/Kg
		A1505279836	Site Sample	Soil	Low	2	660	365	J	µg/Kg
		A1505279837	Site Sample	Soil	Low	2	660	4,442	J	µg/Kg
		A1505279838RE	Re-extraction/Re-analysis	Soil	Low	2	660	3,221		µg/Kg
		A1505279839RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,339		µg/Kg
		A1505279840	Site Sample	Soil	Low	2	660	150	J	µg/Kg

Qualifiers:

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	Aldrin									
		A1505279829	Site Sample	Soil	Low	1	1.7	5.6		µg/Kg
		A1505279830	Site Sample	Soil	Low	1	1.7	23	J	µg/Kg
		A1505279831	Site Sample	Soil	Low	10	17	93	D	µg/Kg
		A1505279833	Site Sample	Soil	Low	1	1.7	7.7		µg/Kg
		A1505279834	Site Sample	Soil	Low	10	17	152	J	µg/Kg
		A1505279835	Site Sample	Soil	Low	1	1.7	50		µg/Kg
		A1505279838	Site Sample	Soil	Low	1	1.7	5.4		µg/Kg
		A1505279839	Site Sample	Soil	Low	1	1.7	18		µg/Kg
		A1505279840	Site Sample	Soil	Low	1	1.7	13		µg/Kg
	Aroclor-1242									
		A1505279831	Site Sample	Soil	Low	10	330	2,475	D	µg/Kg
		A1505279834	Site Sample	Soil	Low	10	330	4,498		µg/Kg
		A1505279835	Site Sample	Soil	Low	5	165	1,364	D	µg/Kg

Qualifiers:

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- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	Aroclor-1242									
		A1505279839	Site Sample	Soil	Low	1	33	227		µg/Kg
	Aroclor-1260									
		A1505279829	Site Sample	Soil	Low	1	33	220		µg/Kg
		A1505279830	Site Sample	Soil	Low	1	33	869		µg/Kg
		A1505279831	Site Sample	Soil	Low	10	330	5,604	D	µg/Kg
		A1505279832	Site Sample	Soil	Low	1	33	152		µg/Kg
		A1505279833	Site Sample	Soil	Low	1	33	433		µg/Kg
		A1505279834	Site Sample	Soil	Low	10	330	1,788		µg/Kg
		A1505279835	Site Sample	Soil	Low	5	165	1,111	D	µg/Kg
		A1505279836	Site Sample	Soil	Low	1	33	104		µg/Kg
		A1505279838	Site Sample	Soil	Low	1	33	252		µg/Kg
		A1505279839	Site Sample	Soil	Low	1	33	640		µg/Kg
		A1505279840	Site Sample	Soil	Low	10	330	5,057	J	µg/Kg

Qualifiers:

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- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	alpha-BHC								
		A1505279829	Site Sample	Soil	Low	1	1.7	1.6	µg/Kg
		A1505279835	Site Sample	Soil	Low	1	1.7	2.1	µg/Kg
		A1505279838	Site Sample	Soil	Low	1	1.7	2.0	µg/Kg
	beta-BHC								
		A1505279829	Site Sample	Soil	Low	1	1.7	1.8	µg/Kg
	delta-BHC								
		A1505279829	Site Sample	Soil	Low	1	1.7	2.4	µg/Kg
		A1505279831	Site Sample	Soil	Low	1	1.7	4.7	µg/Kg
		A1505279833	Site Sample	Soil	Low	1	1.7	2.7	µg/Kg
		A1505279835	Site Sample	Soil	Low	1	1.7	5.0	µg/Kg
		A1505279839	Site Sample	Soil	Low	1	1.7	5.4	µg/Kg
		A1505279840	Site Sample	Soil	Low	1	1.7	2.1	µg/Kg
	gamma-BHC (Lindane)								
		A1505279829	Site Sample	Soil	Low	1	1.7	1.8	µg/Kg

Qualifiers:

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- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	gamma-BHC (Lindane)									
		A1505279830	Site Sample	Soil	Low	1	1.7	3.7	J	µg/Kg
		A1505279834	Site Sample	Soil	Low	10	17	35	J	µg/Kg
		A1505279835	Site Sample	Soil	Low	1	1.7	10		µg/Kg
	alpha-Chlordane									
		A1505279829	Site Sample	Soil	Low	1	1.7	4.3		µg/Kg
		A1505279830	Site Sample	Soil	Low	1	1.7	9.9	J	µg/Kg
		A1505279831	Site Sample	Soil	Low	1	1.7	32		µg/Kg
		A1505279833	Site Sample	Soil	Low	1	1.7	3.5		µg/Kg
		A1505279834	Site Sample	Soil	Low	10	17	26	J	µg/Kg
		A1505279835	Site Sample	Soil	Low	1	1.7	28		µg/Kg
		A1505279836	Site Sample	Soil	Low	1	1.7	2.2		µg/Kg
		A1505279838	Site Sample	Soil	Low	1	1.7	3.2		µg/Kg
		A1505279839	Site Sample	Soil	Low	1	1.7	23		µg/Kg

Qualifiers:

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- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	alpha-Chlordane									
		A1505279840	Site Sample	Soil	Low	1	1.7	15		µg/Kg
	gamma-Chlordane									
		A1505279829	Site Sample	Soil	Low	1	1.7	7.3		µg/Kg
		A1505279830	Site Sample	Soil	Low	1	1.7	16	J	µg/Kg
		A1505279831	Site Sample	Soil	Low	1	1.7	8.9		µg/Kg
		A1505279833	Site Sample	Soil	Low	1	1.7	7.0		µg/Kg
		A1505279834	Site Sample	Soil	Low	10	17	22	J	µg/Kg
		A1505279835	Site Sample	Soil	Low	1	1.7	11		µg/Kg
		A1505279836	Site Sample	Soil	Low	1	1.7	4.5		µg/Kg
		A1505279838	Site Sample	Soil	Low	1	1.7	6.6		µg/Kg
		A1505279839	Site Sample	Soil	Low	1	1.7	13		µg/Kg
		A1505279840	Site Sample	Soil	Low	1	1.7	7.7		µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
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- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	4,4'-DDD									
		A1505279829	Site Sample	Soil	Low	1	3.3	13		µg/Kg
		A1505279830	Site Sample	Soil	Low	1	3.3	11	J	µg/Kg
		A1505279831	Site Sample	Soil	Low	1	3.3	26		µg/Kg
		A1505279833	Site Sample	Soil	Low	1	3.3	13		µg/Kg
		A1505279835	Site Sample	Soil	Low	1	3.3	9.6		µg/Kg
		A1505279838	Site Sample	Soil	Low	1	3.3	6.6		µg/Kg
		A1505279839	Site Sample	Soil	Low	1	3.3	11		µg/Kg
		A1505279840	Site Sample	Soil	Low	1	3.3	10		µg/Kg
	4,4'-DDE									
		A1505279829	Site Sample	Soil	Low	1	3.3	12		µg/Kg
		A1505279830	Site Sample	Soil	Low	1	3.3	33	J	µg/Kg
		A1505279831	Site Sample	Soil	Low	10	33	98	D	µg/Kg
		A1505279833	Site Sample	Soil	Low	1	3.3	14		µg/Kg

Qualifiers:

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- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	4,4'-DDE									
		A1505279834	Site Sample	Soil	Low	10	33	84	J	µg/Kg
		A1505279835	Site Sample	Soil	Low	1	3.3	30		µg/Kg
		A1505279836	Site Sample	Soil	Low	1	3.3	3.4		µg/Kg
		A1505279838	Site Sample	Soil	Low	1	3.3	12		µg/Kg
		A1505279839	Site Sample	Soil	Low	1	3.3	30		µg/Kg
		A1505279840	Site Sample	Soil	Low	1	3.3	17		µg/Kg
	4,4'-DDT									
		A1505279829	Site Sample	Soil	Low	1	3.3	19		µg/Kg
		A1505279830	Site Sample	Soil	Low	1	3.3	40	J	µg/Kg
		A1505279831	Site Sample	Soil	Low	10	33	794	D	µg/Kg
		A1505279832	Site Sample	Soil	Low	1	3.3	9.0		µg/Kg
		A1505279833	Site Sample	Soil	Low	1	3.3	24		µg/Kg
		A1505279834	Site Sample	Soil	Low	10	33	146	J	µg/Kg

Qualifiers:

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	4,4'-DDT									
		A1505279835	Site Sample	Soil	Low	1	3.3	36		µg/Kg
		A1505279836	Site Sample	Soil	Low	1	3.3	12		µg/Kg
		A1505279836	Site Sample	Soil	Low	1	3.3	17		µg/Kg
		A1505279839	Site Sample	Soil	Low	1	3.3	32		µg/Kg
		A1505279840	Site Sample	Soil	Low	1	3.3	194		µg/Kg
	Dieldrin									
		A1505279829	Site Sample	Soil	Low	1	3.3	6.7		µg/Kg
		A1505279830	Site Sample	Soil	Low	1	3.3	7.5	J	µg/Kg
		A1505279831	Site Sample	Soil	Low	10	33	103	D	µg/Kg
		A1505279833	Site Sample	Soil	Low	1	3.3	3.7		µg/Kg
		A1505279835	Site Sample	Soil	Low	1	3.3	6.1		µg/Kg
		A1505279839	Site Sample	Soil	Low	1	3.3	5.8		µg/Kg
		A1505279840	Site Sample	Soil	Low	1	3.3	4.1		µg/Kg

Qualifiers:

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	Endosulfan II									
		A1505279829	Site Sample	Soil	Low	1	3.3	27		µg/Kg
		A1505279830	Site Sample	Soil	Low	1	3.3	30	J	µg/Kg
		A1505279831	Site Sample	Soil	Low	10	33	201	D	µg/Kg
		A1505279832	Site Sample	Soil	Low	1	3.3	3.6		µg/Kg
		A1505279833	Site Sample	Soil	Low	1	3.3	22		µg/Kg
		A1505279834	Site Sample	Soil	Low	10	33	52	J	µg/Kg
		A1505279835	Site Sample	Soil	Low	1	3.3	25		µg/Kg
		A1505279836	Site Sample	Soil	Low	1	3.3	4.0		µg/Kg
		A1505279838	Site Sample	Soil	Low	1	3.3	13		µg/Kg
		A1505279839	Site Sample	Soil	Low	1	3.3	31		µg/Kg
		A1505279840	Site Sample	Soil	Low	1	3.3	127		µg/Kg
	Endosulfan sulfate									
		A1505279838	Site Sample	Soil	Low	1	3.3	6.2		µg/Kg

Qualifiers:

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- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
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- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	Endrin									
		A1505279829	Site Sample	Soil	Low	1	3.3	4.3		µg/Kg
		A1505279833	Site Sample	Soil	Low	1	3.3	2.9		µg/Kg
		A1505279835	Site Sample	Soil	Low	1	3.3	4.5		µg/Kg
		A1505279838	Site Sample	Soil	Low	1	3.3	4.1		µg/Kg
		A1505279839	Site Sample	Soil	Low	1	3.3	12		µg/Kg
	Endrin aldehyde									
		A1505279829	Site Sample	Soil	Low	1	3.3	19		µg/Kg
		A1505279830	Site Sample	Soil	Low	1	3.3	35	J	µg/Kg
		A1505279831	Site Sample	Soil	Low	10	33	234	D	µg/Kg
		A1505279832	Site Sample	Soil	Low	1	3.3	6.2		µg/Kg
		A1505279833	Site Sample	Soil	Low	1	3.3	59		µg/Kg
		A1505279834	Site Sample	Soil	Low	10	33	73	J	µg/Kg
		A1505279835	Site Sample	Soil	Low	1	3.3	31		µg/Kg

Qualifiers:

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- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	Endrin aldehyde									
		A1505279836	Site Sample	Soil	Low	1	3.3	7.0		µg/Kg
		A1505279838	Site Sample	Soil	Low	1	3.3	14		µg/Kg
		A1505279839	Site Sample	Soil	Low	1	3.3	32		µg/Kg
		A1505279840	Site Sample	Soil	Low	10	33	268	J	µg/Kg
	Heptachlor epoxide									
		A1505279829	Site Sample	Soil	Low	1	1.7	3.3		µg/Kg
		A1505279830	Site Sample	Soil	Low	1	1.7	9.3	J	µg/Kg
		A1505279833	Site Sample	Soil	Low	1	1.7	6.3		µg/Kg
		A1505279835	Site Sample	Soil	Low	1	1.7	13		µg/Kg
		A1505279838	Site Sample	Soil	Low	1	1.7	3.0		µg/Kg
		A1505279839	Site Sample	Soil	Low	1	1.7	9.9		µg/Kg
		A1505279840	Site Sample	Soil	Low	1	1.7	7.2		µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Aluminum									
		A1505279829	Site Sample	Soil	Low	1	20	2,817	J	mg/Kg
		A1505279830	Site Sample	Soil	Low	1	20	7,563	J	mg/Kg
		A1505279831	Site Sample	Soil	Low	1	20	8,313	J	mg/Kg
		A1505279832	Site Sample	Soil	Low	1	20	6,856	J	mg/Kg
		A1505279833	Site Sample	Soil	Low	1	20	1,689	J	mg/Kg
		A1505279834	Site Sample	Soil	Low	1	20	7,217	J	mg/Kg
		A1505279835	Site Sample	Soil	Low	1	20	7,626	J	mg/Kg
		A1505279836	Site Sample	Soil	Low	1	20	8,410	J	mg/Kg
		A1505279837	Site Sample	Soil	Low	1	20	6,568	J	mg/Kg
		A1505279838	Site Sample	Soil	Low	1	20	3,952	J	mg/Kg
		A1505279839	Site Sample	Soil	Low	1	20	7,799	J	mg/Kg
		A1505279840	Site Sample	Soil	Low	1	20	9,752	J	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Antimony									
		A1505279829	Site Sample	Soil	Low	1	1.0	8.6	J	mg/Kg
		A1505279830	Site Sample	Soil	Low	1	1.0	8.1	J	mg/Kg
		A1505279831	Site Sample	Soil	Low	1	1.0	71	J	mg/Kg
		A1505279832	Site Sample	Soil	Low	1	1.0	28	J	mg/Kg
		A1505279833	Site Sample	Soil	Low	1	1.0	3.5	J	mg/Kg
		A1505279834	Site Sample	Soil	Low	1	1.0	25	J	mg/Kg
		A1505279835	Site Sample	Soil	Low	1	1.0	13	J	mg/Kg
		A1505279836	Site Sample	Soil	Low	1	1.0	21	J	mg/Kg
		A1505279838	Site Sample	Soil	Low	1	1.0	5.0	J	mg/Kg
		A1505279839	Site Sample	Soil	Low	1	1.0	4.5	J	mg/Kg
		A1505279840	Site Sample	Soil	Low	1	1.0	25	J	mg/Kg
	Arsenic									
		A1505279829	Site Sample	Soil	Low	1	1.0	11		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Arsenic								
		A1505279830	Site Sample	Soil	Low	1	1.0	16	mg/Kg
		A1505279831	Site Sample	Soil	Low	1	1.0	86	mg/Kg
		A1505279832	Site Sample	Soil	Low	1	1.0	19	mg/Kg
		A1505279833	Site Sample	Soil	Low	1	1.0	5.0	mg/Kg
		A1505279834	Site Sample	Soil	Low	1	1.0	27	mg/Kg
		A1505279835	Site Sample	Soil	Low	1	1.0	29	mg/Kg
		A1505279836	Site Sample	Soil	Low	1	1.0	18	mg/Kg
		A1505279837	Site Sample	Soil	Low	1	1.0	4.2	mg/Kg
		A1505279838	Site Sample	Soil	Low	1	1.0	6.2	mg/Kg
		A1505279839	Site Sample	Soil	Low	1	1.0	10	mg/Kg
		A1505279840	Site Sample	Soil	Low	1	1.0	40	mg/Kg
	Barium								
		A1505279829	Site Sample	Soil	Low	1	1.0	48	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **89821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Barium									
		A1505279830	Site Sample	Soil	Low	1	1.0	236		mg/Kg
		A1505279831	Site Sample	Soil	Low	1	1.0	229		mg/Kg
		A1505279832	Site Sample	Soil	Low	1	1.0	125		mg/Kg
		A1505279833	Site Sample	Soil	Low	1	1.0	84		mg/Kg
		A1505279834	Site Sample	Soil	Low	1	1.0	222		mg/Kg
		A1505279835	Site Sample	Soil	Low	1	1.0	200		mg/Kg
		A1505279836	Site Sample	Soil	Low	1	1.0	142		mg/Kg
		A1505279837	Site Sample	Soil	Low	1	1.0	102		mg/Kg
		A1505279838	Site Sample	Soil	Low	1	1.0	132		mg/Kg
		A1505279839	Site Sample	Soil	Low	1	1.0	273		mg/Kg
		A1505279840	Site Sample	Soil	Low	1	1.0	203		mg/Kg
	Beryllium									
		A1505279830	Site Sample	Soil	Low	1	0.20	0.081	B	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Beryllium									
		A1505279831	Site Sample	Soil	Low	1	0.20	0.21		mg/Kg
		A1505279832	Site Sample	Soil	Low	1	0.20	0.25		mg/Kg
		A1505279834	Site Sample	Soil	Low	1	0.20	0.15	B	mg/Kg
		A1505279835	Site Sample	Soil	Low	1	0.20	0.17	B	mg/Kg
		A1505279836	Site Sample	Soil	Low	1	0.20	0.24		mg/Kg
		A1505279837	Site Sample	Soil	Low	1	0.20	0.21		mg/Kg
		A1505279838	Site Sample	Soil	Low	1	0.20	0.041	B	mg/Kg
		A1505279840	Site Sample	Soil	Low	1	0.20	0.29		mg/Kg
	Cadmium									
		A1505279830	Site Sample	Soil	Low	1	0.50	1.4		mg/Kg
		A1505279831	Site Sample	Soil	Low	1	0.50	8.9		mg/Kg
		A1505279832	Site Sample	Soil	Low	1	0.50	2.4		mg/Kg
		A1505279834	Site Sample	Soil	Low	1	0.50	1.6		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Cadmium									
		A1505279835	Site Sample	Soil	Low	1	0.50	1.4		mg/Kg
		A1505279836	Site Sample	Soil	Low	1	0.50	1.3		mg/Kg
		A1505279838	Site Sample	Soil	Low	1	0.50	0.91		mg/Kg
		A1505279839	Site Sample	Soil	Low	1	0.50	1.2		mg/Kg
		A1505279840	Site Sample	Soil	Low	1	0.50	2.4		mg/Kg
	Calcium									
		A1505279829	Site Sample	Soil	Low	1	30	25,234	J	mg/Kg
		A1505279830	Site Sample	Soil	Low	1	30	5,620	J	mg/Kg
		A1505279831	Site Sample	Soil	Low	1	30	3,031	J	mg/Kg
		A1505279832	Site Sample	Soil	Low	1	30	1,461	J	mg/Kg
		A1505279833	Site Sample	Soil	Low	1	30	28,688	J	mg/Kg
		A1505279834	Site Sample	Soil	Low	1	30	4,571	J	mg/Kg
		A1505279835	Site Sample	Soil	Low	1	30	4,787	J	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Calcium									
		A1505279836	Site Sample	Soil	Low	1	30	1,438	J	mg/Kg
		A1505279837	Site Sample	Soil	Low	1	30	1,292	J	mg/Kg
		A1505279838	Site Sample	Soil	Low	1	30	20,774	J	mg/Kg
		A1505279839	Site Sample	Soil	Low	1	30	6,402	J	mg/Kg
		A1505279840	Site Sample	Soil	Low	1	30	2,188	J	mg/Kg
	Chromium									
		A1505279829	Site Sample	Soil	Low	1	1.0	20	J	mg/Kg
		A1505279830	Site Sample	Soil	Low	1	1.0	18	J	mg/Kg
		A1505279831	Site Sample	Soil	Low	1	1.0	33	J	mg/Kg
		A1505279832	Site Sample	Soil	Low	1	1.0	9.0	J	mg/Kg
		A1505279833	Site Sample	Soil	Low	1	1.0	12	J	mg/Kg
		A1505279834	Site Sample	Soil	Low	1	1.0	18	J	mg/Kg
		A1505279835	Site Sample	Soil	Low	1	1.0	22	J	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Chromium									
		A1505279836	Site Sample	Soil	Low	1	1.0	11	J	mg/Kg
		A1505279837	Site Sample	Soil	Low	1	1.0	8.1	J	mg/Kg
		A1505279838	Site Sample	Soil	Low	1	1.0	12	J	mg/Kg
		A1505279839	Site Sample	Soil	Low	1	1.0	16	J	mg/Kg
		A1505279840	Site Sample	Soil	Low	1	1.0	17	J	mg/Kg
	Cobalt									
		A1505279829	Site Sample	Soil	Low	1	0.50	2.1	J	mg/Kg
		A1505279830	Site Sample	Soil	Low	1	0.50	5.8	J	mg/Kg
		A1505279831	Site Sample	Soil	Low	1	0.50	6.5	J	mg/Kg
		A1505279832	Site Sample	Soil	Low	1	0.50	3.9	J	mg/Kg
		A1505279833	Site Sample	Soil	Low	1	0.50	2.0	J	mg/Kg
		A1505279834	Site Sample	Soil	Low	1	0.50	5.2	J	mg/Kg
		A1505279835	Site Sample	Soil	Low	1	0.50	6.1	J	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Cobalt									
		A1505279836	Site Sample	Soil	Low	1	0.50	5.2	J	mg/Kg
		A1505279837	Site Sample	Soil	Low	1	0.50	4.2	J	mg/Kg
		A1505279838	Site Sample	Soil	Low	1	0.50	3.1	J	mg/Kg
		A1505279839	Site Sample	Soil	Low	1	0.50	5.4	J	mg/Kg
		A1505279840	Site Sample	Soil	Low	1	0.50	6.2	J	mg/Kg
	Copper									
		A1505279829	Site Sample	Soil	Low	1	0.50	15		mg/Kg
		A1505279830	Site Sample	Soil	Low	1	0.50	36		mg/Kg
		A1505279831	Site Sample	Soil	Low	1	0.50	64		mg/Kg
		A1505279832	Site Sample	Soil	Low	1	0.50	17		mg/Kg
		A1505279833	Site Sample	Soil	Low	1	0.50	15		mg/Kg
		A1505279834	Site Sample	Soil	Low	1	0.50	39		mg/Kg
		A1505279835	Site Sample	Soil	Low	1	0.50	39		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Copper									
		A1505279836	Site Sample	Soil	Low	1	0.50	22		mg/Kg
		A1505279837	Site Sample	Soil	Low	1	0.50	11		mg/Kg
		A1505279838	Site Sample	Soil	Low	1	0.50	26		mg/Kg
		A1505279839	Site Sample	Soil	Low	1	0.50	31		mg/Kg
		A1505279840	Site Sample	Soil	Low	1	0.50	37		mg/Kg
	Iron									
		A1505279829	Site Sample	Soil	Low	1	10	6,018	J	mg/Kg
		A1505279830	Site Sample	Soil	Low	1	10	11,861	J	mg/Kg
		A1505279831	Site Sample	Soil	Low	1	10	14,197	J	mg/Kg
		A1505279832	Site Sample	Soil	Low	1	10	9,835	J	mg/Kg
		A1505279833	Site Sample	Soil	Low	1	10	5,102	J	mg/Kg
		A1505279834	Site Sample	Soil	Low	1	10	13,860	J	mg/Kg
		A1505279835	Site Sample	Soil	Low	1	10	14,443	J	mg/Kg

Qualifiers:
- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Iron									
		A1505279836	Site Sample	Soil	Low	1	10	12,644	J	mg/Kg
		A1505279837	Site Sample	Soil	Low	1	10	9,893	J	mg/Kg
		A1505279838	Site Sample	Soil	Low	1	10	6,980	J	mg/Kg
		A1505279839	Site Sample	Soil	Low	1	10	12,106	J	mg/Kg
		A1505279840	Site Sample	Soil	Low	1	10	14,190	J	mg/Kg
	Lead									
		A1505279829	Site Sample	Soil	Low	1	0.50	86	J	mg/Kg
		A1505279830	Site Sample	Soil	Low	1	0.50	189	J	mg/Kg
		A1505279831	Site Sample	Soil	Low	1	0.50	409	J	mg/Kg
		A1505279832	Site Sample	Soil	Low	1	0.50	69	J	mg/Kg
		A1505279833	Site Sample	Soil	Low	1	0.50	78	J	mg/Kg
		A1505279834	Site Sample	Soil	Low	1	0.50	202	J	mg/Kg
		A1505279835	Site Sample	Soil	Low	1	0.50	175	J	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Lead									
		A1505279836	Site Sample	Soil	Low	1	0.50	105	J	mg/Kg
		A1505279837	Site Sample	Soil	Low	1	0.50	11	J	mg/Kg
		A1505279838	Site Sample	Soil	Low	1	0.50	121	J	mg/Kg
		A1505279839	Site Sample	Soil	Low	1	0.50	144	J	mg/Kg
		A1505279840	Site Sample	Soil	Low	1	0.50	189	J	mg/Kg
	Magnesium									
		A1505279829	Site Sample	Soil	Low	1	20	1,045	J	mg/Kg
		A1505279830	Site Sample	Soil	Low	1	20	1,285	J	mg/Kg
		A1505279831	Site Sample	Soil	Low	1	20	1,261	J	mg/Kg
		A1505279832	Site Sample	Soil	Low	1	20	1,118	J	mg/Kg
		A1505279833	Site Sample	Soil	Low	1	20	1,452	J	mg/Kg
		A1505279834	Site Sample	Soil	Low	1	20	1,229	J	mg/Kg
		A1505279835	Site Sample	Soil	Low	1	20	1,409	J	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Magnesium									
		A1505279836	Site Sample	Soil	Low	1	20	1,114	J	mg/Kg
		A1505279837	Site Sample	Soil	Low	1	20	1,144	J	mg/Kg
		A1505279838	Site Sample	Soil	Low	1	20	1,689	J	mg/Kg
		A1505279839	Site Sample	Soil	Low	1	20	1,467	J	mg/Kg
		A1505279840	Site Sample	Soil	Low	1	20	1,367	J	mg/Kg
	Manganese									
		A1505279829	Site Sample	Soil	Low	1	0.50	202	J	mg/Kg
		A1505279830	Site Sample	Soil	Low	1	0.50	224	J	mg/Kg
		A1505279831	Site Sample	Soil	Low	1	0.50	331	J	mg/Kg
		A1505279832	Site Sample	Soil	Low	1	0.50	311	J	mg/Kg
		A1505279833	Site Sample	Soil	Low	1	0.50	277	J	mg/Kg
		A1505279834	Site Sample	Soil	Low	1	0.50	328	J	mg/Kg
		A1505279835	Site Sample	Soil	Low	1	0.50	307	J	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 69821

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Manganese									
		A1505279836	Site Sample	Soil	Low	1	0.50	303	J	mg/Kg
		A1505279837	Site Sample	Soil	Low	1	0.50	283	J	mg/Kg
		A1505279838	Site Sample	Soil	Low	1	0.50	192	J	mg/Kg
		A1505279839	Site Sample	Soil	Low	1	0.50	246	J	mg/Kg
		A1505279840	Site Sample	Soil	Low	1	0.50	219	J	mg/Kg
	Mercury									
		A1505279829	Site Sample	Soil	Low	1	0.10	0.049	B	mg/Kg
		A1505279830	Site Sample	Soil	Low	1	0.10	0.31		mg/Kg
		A1505279831	Site Sample	Soil	Low	1	0.10	4.7		mg/Kg
		A1505279832	Site Sample	Soil	Low	1	0.10	0.056	B	mg/Kg
		A1505279833	Site Sample	Soil	Low	1	0.10	0.070	B	mg/Kg
		A1505279834	Site Sample	Soil	Low	1	0.10	0.25		mg/Kg
		A1505279835	Site Sample	Soil	Low	1	0.10	0.25		mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Mercury									
		A1505279836	Site Sample	Soil	Low	1	0.10	0.11		mg/Kg
		A1505279838	Site Sample	Soil	Low	1	0.10	0.087	B	mg/Kg
		A1505279839	Site Sample	Soil	Low	1	0.10	0.19		mg/Kg
		A1505279840	Site Sample	Soil	Low	1	0.10	0.19		mg/Kg
	Nickel									
		A1505279829	Site Sample	Soil	Low	1	1.0	5.1	J	mg/Kg
		A1505279830	Site Sample	Soil	Low	1	1.0	14	J	mg/Kg
		A1505279831	Site Sample	Soil	Low	1	1.0	16	J	mg/Kg
		A1505279832	Site Sample	Soil	Low	1	1.0	11	J	mg/Kg
		A1505279833	Site Sample	Soil	Low	1	1.0	4.7	J	mg/Kg
		A1505279834	Site Sample	Soil	Low	1	1.0	14	J	mg/Kg
		A1505279835	Site Sample	Soil	Low	1	1.0	16	J	mg/Kg
		A1505279836	Site Sample	Soil	Low	1	1.0	13	J	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Nickel									
		A1505279837	Site Sample	Soil	Low	1	1.0	10	J	mg/Kg
		A1505279838	Site Sample	Soil	Low	1	1.0	8.7	J	mg/Kg
		A1505279839	Site Sample	Soil	Low	1	1.0	13	J	mg/Kg
		A1505279840	Site Sample	Soil	Low	1	1.0	16	J	mg/Kg
	Potassium									
		A1505279829	Site Sample	Soil	Low	1	50	104		mg/Kg
		A1505279830	Site Sample	Soil	Low	1	50	441		mg/Kg
		A1505279831	Site Sample	Soil	Low	1	50	528		mg/Kg
		A1505279832	Site Sample	Soil	Low	1	50	487		mg/Kg
		A1505279833	Site Sample	Soil	Low	1	50	124		mg/Kg
		A1505279834	Site Sample	Soil	Low	1	50	432		mg/Kg
		A1505279835	Site Sample	Soil	Low	1	50	493		mg/Kg
		A1505279836	Site Sample	Soil	Low	1	50	538		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Potassium									
		A1505279837	Site Sample	Soil	Low	1	50	469		mg/Kg
		A1505279838	Site Sample	Soil	Low	1	50	256		mg/Kg
		A1505279839	Site Sample	Soil	Low	1	50	502		mg/Kg
		A1505279840	Site Sample	Soil	Low	1	50	583		mg/Kg
	Selenium									
		A1505279831	Site Sample	Soil	Low	1	0.50	0.75		mg/Kg
		A1505279832	Site Sample	Soil	Low	1	0.50	0.53		mg/Kg
	Silver									
		A1505279831	Site Sample	Soil	Low	1	1.0	1.8		mg/Kg
		A1505279832	Site Sample	Soil	Low	1	1.0	0.53	B	mg/Kg
		A1505279834	Site Sample	Soil	Low	1	1.0	0.73	B	mg/Kg
	Sodium									
		A1505279829	Site Sample	Soil	Low	1	100	120		mg/Kg
		A1505279831	Site Sample	Soil	Low	1	100	164		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Sodium									
		A1505279832	Site Sample	Soil	Low	1	100	224		mg/Kg
	Thallium									
		A1505279829	Site Sample	Soil	Low	1	1.0	0.35	B	mg/Kg
		A1505279831	Site Sample	Soil	Low	1	1.0	0.70	B	mg/Kg
		A1505279832	Site Sample	Soil	Low	1	1.0	0.40	B	mg/Kg
		A1505279836	Site Sample	Soil	Low	1	1.0	0.29		mg/Kg
	Vanadium									
		A1505279829	Site Sample	Soil	Low	1	0.50	7.3		mg/Kg
		A1505279830	Site Sample	Soil	Low	1	0.50	16		mg/Kg
		A1505279831	Site Sample	Soil	Low	1	0.50	17		mg/Kg
		A1505279832	Site Sample	Soil	Low	1	0.50	17		mg/Kg
		A1505279833	Site Sample	Soil	Low	1	0.50	6.4		mg/Kg
		A1505279834	Site Sample	Soil	Low	1	0.50	17		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Vanadium									
		A1505279835	Site Sample	Soil	Low	1	0.50	18		mg/Kg
		A1505279836	Site Sample	Soil	Low	1	0.50	19		mg/Kg
		A1505279837	Site Sample	Soil	Low	1	0.50	15		mg/Kg
		A1505279838	Site Sample	Soil	Low	1	0.50	9.1		mg/Kg
		A1505279839	Site Sample	Soil	Low	1	0.50	16		mg/Kg
		A1505279840	Site Sample	Soil	Low	1	0.50	22		mg/Kg
	Zinc									
		A1505279829	Site Sample	Soil	Low	1	1.0	128	J	mg/Kg
		A1505279830	Site Sample	Soil	Low	1	1.0	487	J	mg/Kg
		A1505279831	Site Sample	Soil	Low	1	1.0	995	J	mg/Kg
		A1505279832	Site Sample	Soil	Low	1	1.0	94	J	mg/Kg
		A1505279833	Site Sample	Soil	Low	1	1.0	200	J	mg/Kg
		A1505279834	Site Sample	Soil	Low	1	1.0	434	J	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Zinc									
		A1505279835	Site Sample	Soil	Low	1	1.0	422	J	mg/Kg
		A1505279836	Site Sample	Soil	Low	1	1.0	124	J	mg/Kg
		A1505279837	Site Sample	Soil	Low	1	1.0	38	J	mg/Kg
		A1505279838	Site Sample	Soil	Low	1	1.0	241	J	mg/Kg
		A1505279839	Site Sample	Soil	Low	1	1.0	410	J	mg/Kg
		A1505279840	Site Sample	Soil	Low	1	1.0	526	J	mg/Kg
Conventionals										
	Percent Moisture									
		A1505279834	Site Sample	Soil	Low	1	0.10	48		%
		A1505279834	Site Sample	Soil	Low	1	100	28,080		mg/Kg
		A1505279834	Site Sample	Soil	Low	1	100	1,300		mg/Kg
		A1505279835	Site Sample	Soil	Low	1	0.10	50		%
		A1505279835	Site Sample	Soil	Low	1	100	8,240		mg/Kg
		A1505279835	Site Sample	Soil	Low	1	200	26,000		mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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CTION

CT

Capitol Lakes Sediment Project
Validated Data Summary Tables
SDG: 69821A
October 1998
Sample I.D.
A1505269823 – A1505269827

Prepared for:

siana DEQ
Louisiana

ject Number: 269
October 1998

00000002

WALK HAYDEL

Purpose of the Validation Report

Analytical data validation is a confirmatory procedure that evaluates client-generated laboratory data in accordance with definitive regulatory performance standards set forth by the USEPA.[1,2] Integrate, Incorporated (Integrate) provides client assistance with data validation to ensure that analytical data are complete, in compliance with laboratory protocols, in agreement with the project data quality objectives, and are technically valid and legally defensible.

Format of the Introduction Section

The introduction contains summary tables that permit the reader easy access to the validated detected results. The tables are identified as: 1) ***Table E 1*** *Sample Identification Cross-Reference Table*, 2) ***Table E 2*** *Summary of Validated Sample Detects Sorted by Client Sample and Fraction* and 3) ***Table E 3*** *Summary of Validated Analyte Detects Sorted by Fraction, Analyte and Client Sample.* A brief description of the contents of each table is presented below.

Executive Summaries:

1) ***Table E 1*** *Sample Identification Cross-Reference Table:* This table is a cross-reference of client sample names and laboratory names. It also references any consultants sample names, if they are available.

2) ***Table E 2*** *Summary of Validated Sample Detects Sorted by Client Sample and Fraction:* Identification of all post-validation detected analytes by client or site sample location, fraction and analyte. The order of the analytical fractions appearing in this report follows the typical order found in a laboratory data package. That is, volatiles appear first, followed by semivolatiles, pesticides, metals and conventionals. The detected analytes of each fraction are also displayed according to their order of appearance in the data package. This table also shows the sample type, sample matrix, extraction level, dilution factor and the method quantitation limits (MQL).

3) ***Table E 3*** *Summary of Validated Analyte Detects Sorted by Fraction, Analyte and Client Sample:* Identification of all post-validation detected analytes by fraction,

[1]National Functional Guidelines For Organic Data Review, USEPA, February 1994.
[2]National Functional Guidelines For Inorganic Data Review, USEPA, February 1994.

analyte and client site/sample location. The fractions follow the same order described above: volatiles, semivolatiles, pesticides, metals and conventionals. All detected analytes are sorted alphabetically.

Qualifier Definitions

- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J - The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
- N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."
- NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated value represents its approximate concentration.
- UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

NOTE:

All dilution results were combined onto one form four for the various fractions. If results from a dilution were used they are given a "D" qualifier as per CLP guidelines.

E1 - Sample Identification Cross-Reference Table

Site Samples Sorted by Fraction

LDEQ

Capitol Lakes Sediments

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 69821A

Fraction	Client Sample	EPA Sample Number	Sample Type	Matrix	Level	Sampling Date/Time
Pesticides/PCBs						
	A1505269823	269823	Site Sample	Soil	Low	05/26/98 16:45
	A1505269824	269824	Site Sample	Soil	Low	05/26/98 17:18
	A1505269825	269825	Site Sample	Soil	Low	05/26/98 17:22
	A1505269826	269826	Site Sample	Soil	Low	05/26/98 17:30
	A1505269827	269827	Field Blank	Water	Low	05/26/98 17:21
	A1505269821	269821	Site Sample	Soil	Low	05/26/98 16:22
	A1505269822	269822	Site Sample	Soil	Low	05/26/98 16:38
	METHOD BLANK	METHOD BLANK	Method Blank	Soil	Low	-
	METHOD BLANK	METHOD BLANK	Method Blank	Water	Low	-
Metals						
	A1505269821	269821	Site Sample	Soil	Low	05/26/98 16:22
	A1505269822	269822	Site Sample	Soil	Low	05/26/98 16:38
	A1505269823	269823	Site Sample	Soil	Low	05/26/98 16:45
	A1505269824	269824	Site Sample	Soil	Low	05/26/98 17:18
	A1505269825	269825	Site Sample	Soil	Low	05/26/98 17:22
	A1505269826	269826	Site Sample	Soil	Low	05/26/98 17:30
	A1505269827	269827	Field Blank	Water	Low	05/26/98 17:21
Conventionals						
	A1505269826	269826	Site Sample	Soil	Low	05/26/98 17:30

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821A**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505269821										
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	7,525		mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	18	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	24	J	mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	121		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.26		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	0.92		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	1,685		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	9.9		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	7.3		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	17		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	10,734		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	87		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,138		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	451		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.069	B	mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	13		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	523		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	1.6		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	80	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	20		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	100		mg/Kg
A1505269822										
	Pesticides/PCBs									
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	6.9		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	4.5		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	8.2		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	6.6		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	112		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	7,671		mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	44	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	30	J	mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	223		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.24		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.8		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	2,002		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	12		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	6.0		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	25		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	11,416		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	175		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	994		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	335		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.10		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	12		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	507		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	3.9		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821A**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505269822										
	Metals									
		Sodium	Site Sample	Soil	Low	1	100	73	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	14		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	161		mg/Kg
A1505269823										
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	8,688		mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	2.6	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	11	J	mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	110		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.29		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	1,386		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	9.7		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	6.8		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	19		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	12,386		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	88		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,134		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	373		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.11		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	14		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	625		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	93	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	22		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	139		mg/Kg
A1505269824										
	Pesticides/PCBs									
		gamma-BHC (Lindane)	Site Sample	Soil	Low	1	1.7	3.7		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	15		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	7.1		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	11		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	15		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	5.9		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	23		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	12		µg/Kg
		alpha-Chlordane	Site Sample	Soil	Low	1	1.7	2.0		µg/Kg
		gamma-Chlordane	Site Sample	Soil	Low	1	1.7	3.9		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	33	410		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	475		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	8,613		mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	2.9	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	9.5	J	mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	188		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.089	B	mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	4,877		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	15		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821A**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505269824										
	Metals									
		Cobalt	Site Sample	Soil	Low	1	0.50	6.5		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	20		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	13,603		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	64		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,610		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	468		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.83		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	14		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	630		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	71	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	19		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	252		mg/Kg
A1505269825										
	Pesticides/PCBs									
		gamma-BHC (Lindane)	Site Sample	Soil	Low	1	1.7	2.7		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	1.9		µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	6.7		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	16		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	59		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	119		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	21		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	55		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	27		µg/Kg
		alpha-Chlordane	Site Sample	Soil	Low	1	1.7	9.9		µg/Kg
		gamma-Chlordane	Site Sample	Soil	Low	1	1.7	2.6		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	33	265		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	2	66	985		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	7,624		mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	68	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	46	J	mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	264		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.22		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	5.5		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	2,090		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	20		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	12		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	45		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	13,193		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	300		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,094		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	375		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	6.3		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	18		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	521		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	2.4		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	100		mg/Kg

Qualifiers:

- **J** - Estimated
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- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821A**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505269825										
	Metals									
		Vanadium	Site Sample	Soil	Low	1	0.50	16		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	374		mg/Kg
A1505269826										
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	8,070		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	8.4	J	mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	115		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.29		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	1,521		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	9.3		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	6.6		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	15		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	12,083		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	34		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,186		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	587		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.071	B	mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	14		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	578		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	115		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	22		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	82		mg/Kg
	Conventionals									
		Total Organic Carbon (TOC)	Site Sample	Soil	Low	1	100	10,120		mg/Kg
		Oil and Grease	Site Sample	Soil	Low	1	100	260		mg/Kg
		Percent Moisture	Site Sample	Soil	Low	1	0.10	56		%

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821A**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	Aldrin								
		A1505269824	Site Sample	Soil	Low	1	1.7	15	µg/Kg
		A1505269825	Site Sample	Soil	Low	1	1.7	1.9	µg/Kg
	Aroclor-1242								
		A1505269824	Site Sample	Soil	Low	1	33	410	µg/Kg
		A1505269825	Site Sample	Soil	Low	1	33	265	µg/Kg
	Aroclor-1260								
		A1505269822	Site Sample	Soil	Low	1	33	112	µg/Kg
		A1505269824	Site Sample	Soil	Low	1	33	475	µg/Kg
		A1505269825	Site Sample	Soil	Low	2	66	985	µg/Kg
	gamma-BHC (Lindane)								
		A1505269824	Site Sample	Soil	Low	1	1.7	3.7	µg/Kg
		A1505269825	Site Sample	Soil	Low	1	1.7	2.7	µg/Kg
	alpha-Chlordane								
		A1505269824	Site Sample	Soil	Low	1	1.7	2.0	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821A**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	alpha-Chlordane								
		A1505269825	Site Sample	Soil	Low	1	1.7	9.9	µg/Kg
	gamma-Chlordane								
		A1505269824	Site Sample	Soil	Low	1	1.7	3.9	µg/Kg
		A1505269825	Site Sample	Soil	Low	1	1.7	2.6	µg/Kg
	4,4'-DDD								
		A1505269822	Site Sample	Soil	Low	1	3.3	4.5	µg/Kg
		A1505269824	Site Sample	Soil	Low	1	3.3	5.9	µg/Kg
		A1505269825	Site Sample	Soil	Low	1	3.3	21	µg/Kg
	4,4'-DDE								
		A1505269822	Site Sample	Soil	Low	1	3.3	6.9	µg/Kg
		A1505269824	Site Sample	Soil	Low	1	3.3	11	µg/Kg
		A1505269825	Site Sample	Soil	Low	1	3.3	59	µg/Kg
	4,4'-DDT								
		A1505269822	Site Sample	Soil	Low	1	3.3	8.2	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821A**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	4,4'-DDT								
		A1505269824	Site Sample	Soil	Low	1	3.3	23	µg/Kg
		A1505269825	Site Sample	Soil	Low	1	3.3	55	µg/Kg
	Dieldrin								
		A1505269824	Site Sample	Soil	Low	1	3.3	7.1	µg/Kg
		A1505269825	Site Sample	Soil	Low	1	3.3	16	µg/Kg
	Endosulfan II								
		A1505269824	Site Sample	Soil	Low	1	3.3	15	µg/Kg
		A1505269825	Site Sample	Soil	Low	1	3.3	119	µg/Kg
	Endrin aldehyde								
		A1505269822	Site Sample	Soil	Low	1	3.3	6.6	µg/Kg
		A1505269824	Site Sample	Soil	Low	1	3.3	12	µg/Kg
		A1505269825	Site Sample	Soil	Low	1	3.3	27	µg/Kg
	Heptachlor epoxide								
		A1505269825	Site Sample	Soil	Low	1	1.7	6.7	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821A**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Aluminum									
		A1505269821	Site Sample	Soil	Low	1	20	7,525		mg/Kg
		A1505269822	Site Sample	Soil	Low	1	20	7,671		mg/Kg
		A1505269823	Site Sample	Soil	Low	1	20	8,688		mg/Kg
		A1505269824	Site Sample	Soil	Low	1	20	8,613		mg/Kg
		A1505269825	Site Sample	Soil	Low	1	20	7,824		mg/Kg
		A1505269826	Site Sample	Soil	Low	1	20	8,070		mg/Kg
	Antimony									
		A1505269821	Site Sample	Soil	Low	1	1.0	18	J	mg/Kg
		A1505269822	Site Sample	Soil	Low	1	1.0	44	J	mg/Kg
		A1505269823	Site Sample	Soil	Low	1	1.0	2.6	J	mg/Kg
		A1505269824	Site Sample	Soil	Low	1	1.0	2.9	J	mg/Kg
		A1505269825	Site Sample	Soil	Low	1	1.0	68	J	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821A**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Arsenic									
		A1505269821	Site Sample	Soil	Low	1	1.0	24	J	mg/Kg
		A1505269822	Site Sample	Soil	Low	1	1.0	30	J	mg/Kg
		A1505269823	Site Sample	Soil	Low	1	1.0	11	J	mg/Kg
		A1505269824	Site Sample	Soil	Low	1	1.0	9.5	J	mg/Kg
		A1505269825	Site Sample	Soil	Low	1	1.0	46	J	mg/Kg
		A1505269826	Site Sample	Soil	Low	1	1.0	8.4	J	mg/Kg
	Barium									
		A1505269821	Site Sample	Soil	Low	1	1.0	121		mg/Kg
		A1505269822	Site Sample	Soil	Low	1	1.0	223		mg/Kg
		A1505269823	Site Sample	Soil	Low	1	1.0	110		mg/Kg
		A1505269824	Site Sample	Soil	Low	1	1.0	188		mg/Kg
		A1505269825	Site Sample	Soil	Low	1	1.0	264		mg/Kg
		A1505269826	Site Sample	Soil	Low	1	1.0	115		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821A**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Beryllium									
		A1505269821	Site Sample	Soil	Low	1	0.20	0.26		mg/Kg
		A1505269822	Site Sample	Soil	Low	1	0.20	0.24		mg/Kg
		A1505269823	Site Sample	Soil	Low	1	0.20	0.29		mg/Kg
		A1505269824	Site Sample	Soil	Low	1	0.20	0.089	B	mg/Kg
		A1505269825	Site Sample	Soil	Low	1	0.20	0.22		mg/Kg
		A1505269826	Site Sample	Soil	Low	1	0.20	0.29		mg/Kg
	Cadmium									
		A1505269821	Site Sample	Soil	Low	1	0.50	0.92		mg/Kg
		A1505269822	Site Sample	Soil	Low	1	0.50	1.8		mg/Kg
		A1505269825	Site Sample	Soil	Low	1	0.50	5.5		mg/Kg
	Calcium									
		A1505269821	Site Sample	Soil	Low	1	30	1,685		mg/Kg
		A1505269822	Site Sample	Soil	Low	1	30	2,002		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821A**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Calcium								
		A1505269823	Site Sample	Soil	Low	1	30	1,386	mg/Kg
		A1505269824	Site Sample	Soil	Low	1	30	4,877	mg/Kg
		A1505269825	Site Sample	Soil	Low	1	30	2,090	mg/Kg
		A1505269826	Site Sample	Soil	Low	1	30	1,521	mg/Kg
	Chromium								
		A1505269821	Site Sample	Soil	Low	1	1.0	9.9	mg/Kg
		A1505269822	Site Sample	Soil	Low	1	1.0	12	mg/Kg
		A1505269823	Site Sample	Soil	Low	1	1.0	9.7	mg/Kg
		A1505269824	Site Sample	Soil	Low	1	1.0	15	mg/Kg
		A1505269825	Site Sample	Soil	Low	1	1.0	20	mg/Kg
		A1505269826	Site Sample	Soil	Low	1	1.0	9.3	mg/Kg
	Cobalt								
		A1505269821	Site Sample	Soil	Low	1	0.50	7.3	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821A**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Cobalt								
		A1505269822	Site Sample	Soil	Low	1	0.50	6.0	mg/Kg
		A1505269823	Site Sample	Soil	Low	1	0.50	6.8	mg/Kg
		A1505269824	Site Sample	Soil	Low	1	0.50	6.5	mg/Kg
		A1505269825	Site Sample	Soil	Low	1	0.50	12	mg/Kg
		A1505269826	Site Sample	Soil	Low	1	0.50	6.6	mg/Kg
	Copper								
		A1505269821	Site Sample	Soil	Low	1	0.50	17	mg/Kg
		A1505269822	Site Sample	Soil	Low	1	0.50	25	mg/Kg
		A1505269823	Site Sample	Soil	Low	1	0.50	19	mg/Kg
		A1505269824	Site Sample	Soil	Low	1	0.50	20	mg/Kg
		A1505269825	Site Sample	Soil	Low	1	0.50	45	mg/Kg
		A1505269826	Site Sample	Soil	Low	1	0.50	15	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821A**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Iron								
		A1505269821	Site Sample	Soil	Low	1	10	10,734	mg/Kg
		A1505269822	Site Sample	Soil	Low	1	10	11,416	mg/Kg
		A1505269823	Site Sample	Soil	Low	1	10	12,386	mg/Kg
		A1505269824	Site Sample	Soil	Low	1	10	13,603	mg/Kg
		A1505269825	Site Sample	Soil	Low	1	10	13,193	mg/Kg
		A1505269826	Site Sample	Soil	Low	1	10	12,083	mg/Kg
	Lead								
		A1505269821	Site Sample	Soil	Low	1	0.50	87	mg/Kg
		A1505269822	Site Sample	Soil	Low	1	0.50	175	mg/Kg
		A1505269823	Site Sample	Soil	Low	1	0.50	88	mg/Kg
		A1505269824	Site Sample	Soil	Low	1	0.50	64	mg/Kg
		A1505269825	Site Sample	Soil	Low	1	0.50	300	mg/Kg
		A1505269826	Site Sample	Soil	Low	1	0.50	34	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821A**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Magnesium								
		A1505269821	Site Sample	Soil	Low	1	20	1,138	mg/Kg
		A1505269822	Site Sample	Soil	Low	1	20	994	mg/Kg
		A1505269823	Site Sample	Soil	Low	1	20	1,134	mg/Kg
		A1505269824	Site Sample	Soil	Low	1	20	1,810	mg/Kg
		A1505269825	Site Sample	Soil	Low	1	20	1,094	mg/Kg
		A1505269826	Site Sample	Soil	Low	1	20	1,186	mg/Kg
	Manganese								
		A1505269821	Site Sample	Soil	Low	1	0.50	451	mg/Kg
		A1505269822	Site Sample	Soil	Low	1	0.50	335	mg/Kg
		A1505269823	Site Sample	Soil	Low	1	0.50	373	mg/Kg
		A1505269824	Site Sample	Soil	Low	1	0.50	468	mg/Kg
		A1505269825	Site Sample	Soil	Low	1	0.50	375	mg/Kg
		A1505269826	Site Sample	Soil	Low	1	0.50	587	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821A**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Mercury									
		A1505269821	Site Sample	Soil	Low	1	0.10	0.069	B	mg/Kg
		A1505269822	Site Sample	Soil	Low	1	0.10	0.10		mg/Kg
		A1505269823	Site Sample	Soil	Low	1	0.10	0.11		mg/Kg
		A1505269824	Site Sample	Soil	Low	1	0.10	0.83		mg/Kg
		A1505269825	Site Sample	Soil	Low	1	0.10	6.3		mg/Kg
		A1505269826	Site Sample	Soil	Low	1	0.10	0.071	B	mg/Kg
	Nickel									
		A1505269821	Site Sample	Soil	Low	1	1.0	13		mg/Kg
		A1505269822	Site Sample	Soil	Low	1	1.0	12		mg/Kg
		A1505269823	Site Sample	Soil	Low	1	1.0	14		mg/Kg
		A1505269824	Site Sample	Soil	Low	1	1.0	14		mg/Kg
		A1505269825	Site Sample	Soil	Low	1	1.0	18		mg/Kg
		A1505269826	Site Sample	Soil	Low	1	1.0	14		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821A**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Potassium									
		A1505269821	Site Sample	Soil	Low	1	50	523		mg/Kg
		A1505269822	Site Sample	Soil	Low	1	50	507		mg/Kg
		A1505269823	Site Sample	Soil	Low	1	50	625		mg/Kg
		A1505269824	Site Sample	Soil	Low	1	50	630		mg/Kg
		A1505269825	Site Sample	Soil	Low	1	50	521		mg/Kg
		A1505269826	Site Sample	Soil	Low	1	50	578		mg/Kg
	Silver									
		A1505269821	Site Sample	Soil	Low	1	1.0	1.6		mg/Kg
		A1505269822	Site Sample	Soil	Low	1	1.0	3.9		mg/Kg
		A1505269825	Site Sample	Soil	Low	1	1.0	2.4		mg/Kg
	Sodium									
		A1505269821	Site Sample	Soil	Low	1	100	80	B	mg/Kg
		A1505269822	Site Sample	Soil	Low	1	100	73	B	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821A**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Sodium									
		A1505269823	Site Sample	Soil	Low	1	100	93	B	mg/Kg
		A1505269824	Site Sample	Soil	Low	1	100	71	B	mg/Kg
		A1505269825	Site Sample	Soil	Low	1	100	100		mg/Kg
		A1505269826	Site Sample	Soil	Low	1	100	115		mg/Kg
	Vanadium									
		A1505269821	Site Sample	Soil	Low	1	0.50	20		mg/Kg
		A1505269822	Site Sample	Soil	Low	1	0.50	14		mg/Kg
		A1505269823	Site Sample	Soil	Low	1	0.50	22		mg/Kg
		A1505269824	Site Sample	Soil	Low	1	0.50	19		mg/Kg
		A1505269825	Site Sample	Soil	Low	1	0.50	16		mg/Kg
		A1505269826	Site Sample	Soil	Low	1	0.50	22		mg/Kg
	Zinc									
		A1505269821	Site Sample	Soil	Low	1	1.0	100		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediments

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **69821A**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Zinc								
		A1505269822	Site Sample	Soil	Low	1	1.0	161	mg/Kg
		A1505269823	Site Sample	Soil	Low	1	1.0	139	mg/Kg
		A1505269824	Site Sample	Soil	Low	1	1.0	252	mg/Kg
		A1505269825	Site Sample	Soil	Low	1	1.0	374	mg/Kg
		A1505269826	Site Sample	Soil	Low	1	1.0	82	mg/Kg
Conventionals									
	Total Organic Carbon (TOC)								
		A1505269826	Site Sample	Soil	Low	1	100	10,120	mg/Kg
		A1505269826	Site Sample	Soil	Low	1	0.10	56	%
		A1505269826	Site Sample	Soil	Low	1	100	260	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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Capitol Lakes Sediment Project
Validated Data Summary Tables
SDG: 79841
October 1998
Sample I.D.
A1505279841 – A1505279860

DCM GROUP WALK HAYDEL A DAMES & MOORE GROUP COMPANY

CAPITOL LAKES SEDIMENT PROJECT

DATA VALIDATION REPORT

SDG: 79841

Prepared for:

Louisiana DEQ
Baton Rouge, Louisiana

Integrate Project Number: 269
October 1998

00000002

LDEQ-EDMS Document 2469808, Page 357 of 717

Purpose of the Validation Report

Analytical data validation is a confirmatory procedure that evaluates client-generated laboratory data in accordance with definitive regulatory performance standards set forth by the USEPA.[1,2] Integrate, Incorporated (Integrate) provides client assistance with data validation to ensure that analytical data are complete, in compliance with laboratory protocols, in agreement with the project data quality objectives, and are technically valid and legally defensible.

Format of the Introduction Section

The introduction contains summary tables that permit the reader easy access to the validated detected results. The tables are identified as: 1) ***Table E 1*** *Sample Identification Cross-Reference Table*, 2) ***Table E 2*** *Summary of Validated Sample Detects Sorted by Client Sample and Fraction* and 3) ***Table E 3*** *Summary of Validated Analyte Detects Sorted by Fraction, Analyte and Client Sample.* A brief description of the contents of each table is presented below.

Executive Summaries:

1) ***Table E 1*** *Sample Identification Cross-Reference Table:* This table is a cross-reference of client sample names and laboratory names. It also references any consultants sample names, if they are available.

2) ***Table E 2*** *Summary of Validated Sample Detects Sorted by Client Sample and Fraction:* Identification of all post-validation detected analytes by client or site sample location, fraction and analyte. The order of the analytical fractions appearing in this report follows the typical order found in a laboratory data package. That is, volatiles appear first, followed by semivolatiles, pesticides, metals and conventionals. The detected analytes of each fraction are also displayed according to their order of appearance in the data package. This table also shows the sample type, sample matrix, extraction level, dilution factor and the method quantitation limits (MQL).

3) ***Table E 3*** *Summary of Validated Analyte Detects Sorted by Fraction, Analyte and Client Sample:* Identification of all post-validation detected analytes by fraction,

[1]National Functional Guidelines For Organic Data Review, USEPA, February 1994.
[2]National Functional Guidelines For Inorganic Data Review, USEPA, February 1994.

analyte and client site/sample location. The fractions follow the same order described above: volatiles, semivolatiles, pesticides, metals and conventionals. All detected analytes are sorted alphabetically.

Qualifier Definitions

- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J - The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
- N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."
- NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated value represents its approximate concentration.
- UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

NOTES:

All dilution results were combined onto one form four for the various fractions. If results from a dilution were used they are given a "D" qualifier as per CLP guidelines.

E1 - Sample Identification Cross-Reference Table

Site Samples Sorted by Fraction

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Client Sample	EPA Sample Number	Sample Type	Matrix	Level	Sampling Date/Time
Semivolatiles						
	A1505279841	279841	Site Sample	Soil	Low	05/27/98 11:10
	A1505279842	279842	Site Sample	Soil	Low	05/27/98 11:17
	A1505279842RE	279842RE	Re-extraction/Re-analysis	Soil	Low	05/27/98 11:17
	A1505279843	279843	Site Sample	Soil	Low	05/27/98 11:25
	A1505279843RE	279843RE	Re-extraction/Re-analysis	Soil	Low	05/27/98 11:25
	A1505279844	279844	Site Sample	Soil	Low	05/27/98 11:33
	A1505279844RE	279844RE	Re-extraction/Re-analysis	Soil	Low	05/27/98 11:33
	A1505279845	279845	Site Sample	Soil	Low	05/27/98 11:40
	A1505279845RE	279845RE	Re-extraction/Re-analysis	Soil	Low	05/27/98 11:40
	A1505279846	279846	Site Sample	Soil	Low	05/27/98 13:30
	A1505279847	279847	Site Sample	Soil	Low	05/27/98 13:40
	A1505279847RE	279847RE	Re-extraction/Re-analysis	Soil	Low	05/27/98 13:40
	A1505279848	279848	Site Sample	Soil	Low	05/27/98 13:43
	A1505279849	279849	Site Sample	Soil	Low	05/27/98 13:46
	A1505279849RE	279849RE	Re-extraction/Re-analysis	Soil	Low	05/27/98 13:46
	A1505279850	279850	Site Sample	Soil	Low	05/27/98 13:45
	A1505279850RE	279850RE	Re-extraction/Re-analysis	Soil	Low	05/27/98 13:45
	A1505279851	279851	Equipment Rinsate	Water	Low	05/27/98 13:50
	A1505279852	279852	Site Sample	Soil	Low	05/27/98 14:35
	A1505279852RE	279852RE	Re-extraction/Re-analysis	Soil	Low	05/27/98 14:35
	A1505279853	279853	Site Sample	Soil	Low	05/27/98 14:40
	A1505279853RE	279853RE	Re-extraction/Re-analysis	Soil	Low	05/27/98 14:40
	A1505279854	279854	Site Sample	Soil	Low	05/27/98 14:45
	A1505279854RE	279854RE	Re-extraction/Re-analysis	Soil	Low	05/27/98 14:45
	A1505279855	279855	Site Sample	Soil	Low	05/27/98 15:10
	A1505279856	279856	Site Sample	Soil	Low	05/27/98 15:15
	A1505279857	279857	Site Sample	Soil	Low	05/27/98 15:18
	A1505279857RE	279857RE	Re-extraction/Re-analysis	Soil	Low	05/27/98 15:18
	A1505279858	279858	Site Sample	Soil	Low	05/27/98 15:20
	A1505279858RE	279858RE	Re-extraction/Re-analysis	Soil	Low	05/27/98 15:20
	A1505279859	279859	Site Sample	Soil	Low	05/27/98 15:32
	A1505279859RE	279859RE	Re-extraction/Re-analysis	Soil	Low	05/27/98 15:32
	A1505279860	279860	Site Sample	Soil	Low	05/27/98 15:42
	SBLKDC	SBLKDC	Method Blank	Water	Low	-
	SBLKDD	SBLKDD	Method Blank	Soil	Low	-
	A1505279856M	279856MS	Matrix Spike	Soil	Low	05/27/98 15:15
	A1505279856M	279856MSD	Matrix Spike Duplicate	Soil	Low	05/27/98 15:15
Pesticides/PCBs						
	A1505279841	279841	Site Sample	Soil	Low	05/27/98 11:10
	A1505279842	279842	Site Sample	Soil	Low	05/27/98 11:17
	A1505279843	279843	Site Sample	Soil	Low	05/27/98 11:25
	A1505279844	279844	Site Sample	Soil	Low	05/27/98 11:33
	A1505279845	279845	Site Sample	Soil	Low	05/27/98 11:40
	A1505279846	279846	Site Sample	Soil	Low	05/27/98 13:30
	A1505279847	279847	Site Sample	Soil	Low	05/27/98 13:40
	A1505279848	279848	Site Sample	Soil	Low	05/28/98 13:43
	A1505279849	279849	Site Sample	Soil	Low	05/27/98 13:46
	A1505279850	279850	Site Sample	Soil	Low	05/27/98 13:45
	A1505279851	279851	Equipment Rinsate	Water	Low	05/27/98 13:50
	A1505279852	279852	Site Sample	Soil	Low	05/27/98 14:35
	A1505279853	279853	Site Sample	Soil	Low	05/27/98 14:40
	A1505279854	279854	Site Sample	Soil	Low	05/27/98 14:45
	A1505279855	279855	Site Sample	Soil	Low	05/27/98 15:10
	A1505279856	279856	Site Sample	Soil	Low	05/27/98 15:15
	A1505279857	279857	Site Sample	Soil	Low	05/27/98 15:18

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E1 - Sample Identification Cross-Reference Table

Site Samples Sorted by Fraction

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Client Sample	EPA Sample Number	Sample Type	Matrix	Level	Sampling Date/Time
	A1505279858	279858	Site Sample	Soil	Low	05/27/98 15:20
	A1505279859	279859	Site Sample	Soil	Low	05/27/98 15:32
	A1505279860	279860	Site Sample	Soil	Low	05/27/98 15:42
	A1505279856MS	279856MS	Matrix Spike	Soil	Low	05/27/98 15:15
	A1505279856MSD	279856MSD	Matrix Spike Duplicate	Soil	Low	05/27/98 15:15
	METHOD BLANK	BLK052898G	Method Blank	Water	Low	-
	METHOD BLANK	BLK060198B	Method Blank	Soil	Low	-
Metals						
	A1505279856	279856	Site Sample	Soil	Low	05/27/98 15:15
	A1505279857	279857	Site Sample	Soil	Low	05/27/98 15:18
	A1505279858	279858	Site Sample	Soil	Low	05/27/98 15:20
	A1505279859	279859	Site Sample	Soil	Low	05/27/98 15:32
	A1505279860	279860	Site Sample	Soil	Low	05/27/98 15:42
	A1505279841	279841	Site Sample	Soil	Low	05/27/98 11:10
	A1505279842	279842	Site Sample	Soil	Low	05/27/98 11:17
	A1505279843	279843	Site Sample	Soil	Low	05/27/98 11:25
	A1505279844	279844	Site Sample	Soil	Low	05/27/98 11:33
	A1505279845	279845	Site Sample	Soil	Low	05/27/98 11:40
	A1505279846	279846	Site Sample	Soil	Low	05/27/98 13:30
	A1505279847	279847	Site Sample	Soil	Low	05/27/98 13:40
	A1505279848	279846	Site Sample	Soil	Low	05/28/98 13:43
	A1505279849	279849	Site Sample	Soil	Low	05/27/98 13:46
	A1505279850	279850	Site Sample	Soil	Low	05/27/98 13:45
	A1505279851	279851	Equipment Rinsate	Water	Low	05/27/98 13:50
	A1505279852	279852	Site Sample	Soil	Low	05/27/98 14:35
	A1505279853	279853	Site Sample	Soil	Low	05/27/98 14:40
	A1505279854	279854	Site Sample	Soil	Low	05/27/98 14:45
	A1505279855	279855	Site Sample	Soil	Low	05/27/98 15:10
Conventionals						
	A1505279847	279847	Site Sample	Soil	Low	05/27/98 13:40
	A1505279849	279849	Site Sample	Soil	Low	05/27/98 13:46
	A1505279854	279854	Site Sample	Soil	Low	05/27/98 14:45
	A1505279855	279855	Site Sample	Soil	Low	05/27/98 15:10
	A1505279858	279858	Site Sample	Soil	Low	05/27/98 15:20
	A1505279859	279859	Site Sample	Soil	Low	05/27/98 15:32

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279841										
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	8,436		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	6.4		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	102		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.24		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	0.41	B	mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	1,230		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	9.0		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	4.1		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	12		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	10,497		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	12		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,204		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	277		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	11		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	543		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	105		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	17		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	44		mg/Kg
A1505279842										
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	3.6	22		µg/Kg
		gamma-BHC	Site Sample	Soil	Low	1	3.6	19		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	3.6	31		µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	3.6	13		µg/Kg
		Endosulfan I	Site Sample	Soil	Low	1	3.6	8.9		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	7.0	14		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	7.0	36		µg/Kg
		Endrin	Site Sample	Soil	Low	1	7.0	7.0		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	7.0	19		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	7.0	13		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	7.0	24		µg/Kg
		Endrin Ketone	Site Sample	Soil	Low	1	7.0	8.9		µg/Kg
		Endrin Aldehyde	Site Sample	Soil	Low	1	7.0	20		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	7.0	27		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	7.0	36		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	2	140	1,219		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	2	140	389		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	4,737		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	11		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	168		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.1		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	3,836		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	25		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	3.9		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	35		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	7,785		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

00000007

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279842										
	Metals									
		Lead	Site Sample	Soil	Low	1	0.50	346		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	872		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	185		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	9.8		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	359		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	0.98	B	mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	72	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	12		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	230		mg/Kg
A1505279842RE										
	Semivolatiles									
		Acenaphthene	*Re-extraction/Re-analysis*	*Soil*	*Low*	2	6,800	159	J	µg/Kg
		Fluorene	Re-extraction/Re-analysis	Soil	Low	2	6,800	211	J	µg/Kg
		Phenanthrene	Re-extraction/Re-analysis	Soil	Low	2	1,400	1,642		µg/Kg
		Anthracene	Re-extraction/Re-analysis	Soil	Low	2	1,400	342	J	µg/Kg
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,400	2,814		µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	1,400	7,035		µg/Kg
		Benzo(a)anthracene	Re-extraction/Re-analysis	Soil	Low	2	1,400	985		µg/Kg
		Chrysene	Re-extraction/Re-analysis	Soil	Low	2	1,400	1,642		µg/Kg
		bis(2-Ethylhexyl)phthalate	Re-extraction/Re-analysis	Soil	Low	2	1,400	4,456	B	µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,400	3,002	J	µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,400	1,079	J	µg/Kg
		Benzo(a)pyrene	Re-extraction/Re-analysis	Soil	Low	2	1,400	1,032	J	µg/Kg
A1505279843										
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	2.8	12		µg/Kg
		gamma-BHC	Site Sample	Soil	Low	1	2.8	9.8		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	2.8	28		µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	2.8	14		µg/Kg
		Endosulfan I	Site Sample	Soil	Low	1	2.8	7.4		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	5.4	5.3		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	5.4	50		µg/Kg
		Endrin	Site Sample	Soil	Low	1	5.4	6.7		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	5.4	17		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	5.4	34		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	5.4	29		µg/Kg
		Endrin Ketone	Site Sample	Soil	Low	1	5.4	34		µg/Kg
		Endrin Aldehyde	Site Sample	Soil	Low	1	5.4	20		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	5.4	22		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	5.4	36		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	54	797		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	54	343		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	5,505		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	9.8		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	156		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

00000008

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279843										
	Metals									
		Cadmium	Site Sample	Soil	Low	1	0.50	0.80		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	2,679		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	20		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	3.6		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	26		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	8,092		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	233		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	969		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	194		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	9.8		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	408		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	80	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	12		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	140		mg/Kg
A1505279843RE										
	Semivolatiles									
		Acenaphthene	Re-extraction/Re-analysis	Soil	Low	2	1,100	153	J	µg/Kg
		Fluorene	Re-extraction/Re-analysis	Soil	Low	2	5,200	172	J	µg/Kg
		Phenanthrene	Re-extraction/Re-analysis	Soil	Low	2	1,100	1,349		µg/Kg
		Anthracene	Re-extraction/Re-analysis	Soil	Low	2	1,100	319	J	µg/Kg
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,100	2,820		µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	1,100	3,126		µg/Kg
		Benzo(a)anthracene	Re-extraction/Re-analysis	Soil	Low	2	1,100	1,410		µg/Kg
		Chrysene	Re-extraction/Re-analysis	Soil	Low	2	1,100	1,839		µg/Kg
		bis(2-Ethylhexyl)phthalate	Re-extraction/Re-analysis	Soil	Low	2	1,100	3,617	B	µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,100	1,778	J	µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,100	1,349	J	µg/Kg
		Benzo(a)pyrene	Re-extraction/Re-analysis	Soil	Low	2	1,100	1,287	J	µg/Kg
		Benzo(g,h,i)perylene	Re-extraction/Re-analysis	Soil	Low	2	1,100	362	J	µg/Kg
A1505279844										
	Pesticides/PCBs									
		alpha-BHC	Site Sample	Soil	Low	1	2.6	4.8		µg/Kg
		delta-BHC	Site Sample	Soil	Low	1	2.6	16	J	µg/Kg
		gamma-BHC	Site Sample	Soil	Low	1	2.6	16	J	µg/Kg
		Aldrin	Site Sample	Soil	Low	1	2.6	19		µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	2.6	27	J	µg/Kg
		Endosulfan I	Site Sample	Soil	Low	1	2.6	9.1	J	µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	5.1	7.2	J	µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	5.1	94	J	µg/Kg
		Endrin	Site Sample	Soil	Low	1	5.1	7.2	J	µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	5.1	21	J	µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	5.1	38		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	5.1	42		µg/Kg
		Endrin Aldehyde	Site Sample	Soil	Low	1	5.1	61	J	µg/Kg
		Methoxychlor	Site Sample	Soil	Low	1	26	25		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	5.1	12		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	5.1	27	J	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL.

00000009

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279844										
	Pesticides/PCBs									
		Aroclor-1242	Site Sample	Soil	Low	2	100	1,302		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	2	100	326	J	µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	7,487		mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	3.6	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	14		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	182		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.12	B	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.1		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	2,324		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	23		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	4.3		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	33		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	10,286		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	231		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,126		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	254		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.29		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	10		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	544		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	0.98	B	mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	89	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	15		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	161		mg/Kg
A1505279844RE										
	Semivolatiles									
		Phenanthrene	Re-extraction/Re-analysis	Soil	Low	2	1,000	495	J	µg/Kg
		Anthracene	Re-extraction/Re-analysis	Soil	Low	2	1,000	150	J	µg/Kg
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,000	1,042		µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	1,000	3,450		µg/Kg
		Benzo(a)anthracene	Re-extraction/Re-analysis	Soil	Low	2	1,000	397	J	µg/Kg
		Chrysene	Re-extraction/Re-analysis	Soil	Low	2	1,000	599	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Re-extraction/Re-analysis	Soil	Low	2	1,000	1,758	B	µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,000	660	J	µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,000	660	J	µg/Kg
		Benzo(a)pyrene	Re-extraction/Re-analysis	Soil	Low	2	1,000	404	J	µg/Kg
A1505279845										
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	2.6	5.8		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	2.6	9.9		µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	2.6	6.6		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	5.0	3.5		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	5.0	30		µg/Kg
		Endrin	Site Sample	Soil	Low	1	5.0	3.8		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	5.0	9.9		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	5.0	17		µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279845										
	Pesticides/PCBs									
		4,4'-DDT	Site Sample	Soil	Low	1	5.0	17		µg/Kg
		Endrin Aldehyde	Site Sample	Soil	Low	1	5.0	20		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	5.0	5.2		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	5.0	9.3		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	50	239		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	50	179		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	8,819		mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	13	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	16		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	172		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.16	B	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.4		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	2,102		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	15		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	4.7		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	22		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	11,404		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	158		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,348		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	292		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.52		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	11		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	660		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	1.1		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	96	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	17		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	119		mg/Kg
A1505279845RE										
	Semivolatiles									
		Phenanthrene	Re-extraction/Re-analysis	Soil	Low	2	1,000	457	J	µg/Kg
		Anthracene	Re-extraction/Re-analysis	Soil	Low	2	1,000	106	J	µg/Kg
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,000	796		µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	1,000	928		µg/Kg
		Benzo(a)anthracene	Re-extraction/Re-analysis	Soil	Low	2	1,000	398	J	µg/Kg
		Chrysene	Re-extraction/Re-analysis	Soil	Low	2	1,000	537	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Re-extraction/Re-analysis	Soil	Low	2	1,000	660	B	µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,000	404	J	µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,000	511	J	µg/Kg
		Benzo(a)pyrene	Re-extraction/Re-analysis	Soil	Low	2	1,000	378	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Re-extraction/Re-analysis	Soil	Low	2	1,000	172	J	µg/Kg
		Benzo(g,h,i)perylene	Re-extraction/Re-analysis	Soil	Low	2	1,000	166	J	µg/Kg
A1505279846										
	Semivolatiles									
		Phenanthrene	Site Sample	Soil	Low	2	1,600	933		µg/Kg
		Anthracene	Site Sample	Soil	Low	2	1,600	165	J	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279846										
	Semivolatiles									
		Fluoranthene	Site Sample	Soil	Low	2	1,600	1,611		µg/Kg
		Pyrene	Site Sample	Soil	Low	4	3,100	2,502	DJ	µg/Kg
		Butylbenzylphthalate	Site Sample	Soil	Low	2	1,600	242	J	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	1,600	763	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	1,600	1,145	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Site Sample	Soil	Low	4	3,100	14,840	BDJ	µg/Kg
		Di-n-octylphthalate	Site Sample	Soil	Low	4	3,100	13,568	DJ	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	1,600	848	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	1,600	1,230	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	1,600	806	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	1,600	276	J	µg/Kg
		Benzo(g,h,i)perylene	*Site Sample*	Soil	Low	2	1,600	331	J	µg/Kg
	Pesticides/PCBs									
		alpha-BHC	Site Sample	Soil	Low	1	4.0	3.2		µg/Kg
		delta-BHC	Site Sample	Soil	Low	1	4.0	4.2		µg/Kg
		gamma-BHC	Site Sample	Soil	Low	1	4.0	4.2		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	4.0	11		µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	4.0	6.4		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	7.8	12		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	7.8	19		µg/Kg
		Endrin	Site Sample	Soil	Low	1	7.8	5.9		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	7.8	13		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	7.8	18		µg/Kg
		Endo. Sulfate	Site Sample	Soil	Low	1	7.8	25		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	7.8	16		µg/Kg
		Endrin Aldehyde	Site Sample	Soil	Low	1	7.8	20		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	7.8	29		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	7.8	30		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	78	280		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	78	335		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	2,455		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	3.2		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	95		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	0.81		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	2,654		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	9.3		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	2.3		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	25		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	4,537		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	98		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	594		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	99		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	6.8		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	180		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	6.8		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	174		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

00000012

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279847										
	Semivolatiles									
		Acenaphthene	Site Sample	Soil	Low	2	1,300	133	J	µg/Kg
		Fluorene	Site Sample	Soil	Low	2	1,300	190	J	µg/Kg
		Phenanthrene	Site Sample	Soil	Low	2	1,300	1,590		µg/Kg
		Anthracene	Site Sample	Soil	Low	2	1,300	282	J	µg/Kg
		Pyrene	Site Sample	Soil	Low	2	1,300	4,155	J	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	1,300	1,283	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	1,300	1,898	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Site Sample	Soil	Low	2	1,300	6,156	J	µg/Kg
		Di-n-octylphthalate	Site Sample	Soil	Low	2	1,300	872	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	1,300	1,026	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	1,300	2,462	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	1,300	1,436	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	1,300	416	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	1,300	564	J	µg/Kg
	Pesticides/PCBs									
		alpha-BHC	Site Sample	Soil	Low	1	3.0	4.0		µg/Kg
		delta-BHC	Site Sample	Soil	Low	1	3.0	17		µg/Kg
		gamma-BHC	Site Sample	Soil	Low	1	3.0	3.8		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	3.0	11		µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	3.0	9.2		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	5.9	7.7		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	5.9	24		µg/Kg
		Endrin	Site Sample	Soil	Low	1	5.9	7.7		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	5.9	11		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	5.9	13		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	5.9	16		µg/Kg
		Endrin Aldehyde	Site Sample	Soil	Low	1	5.9	7.2		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	5.9	27		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	5.9	32		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	59	339		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	59	246		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	3,688		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	4.2		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	150		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.1		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	3,006		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	14		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	2.8		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	36		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	6,156		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	189		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	754		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	126		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	11		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	269		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	1.8		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	55	B	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

00000013

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279847										
	Metals									
		Vanadium	Site Sample	Soil	Low	1	0.50	8.7		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	237		mg/Kg
	Conventionals									
		Total Organic Carbon (TOC)	Site Sample	Soil	Low	1	100	38,860		mg/Kg
		Oil and Grease	Site Sample	Soil	Low	1	100	730		mg/Kg
		Percent Moisture	Site Sample	Soil	Low	1	0.10	49		%
A1505279848										
	Semivolatiles									
		Acenaphthene	Site Sample	Soil	Low	2	1,100	470	J	µg/Kg
		Fluorene	Site Sample	Soil	Low	2	1,100	1,057		µg/Kg
		Phenanthrene	Site Sample	Soil	Low	2	1,100	4,168		µg/Kg
		Anthracene	Site Sample	Soil	Low	2	1,100	558	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	1,100	3,111		µg/Kg
		Pyrene	Site Sample	Soil	Low	2	1,100	5,459	J	µg/Kg
		Butylbenzylphthalate	Site Sample	Soil	Low	2	1,100	481	J	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	1,100	1,233	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	1,100	1,878	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Site Sample	Soil	Low	2	1,100	6,457	J	µg/Kg
		Di-n-octylphthalate	Site Sample	Soil	Low	4	2,200	998	DJ	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	4	2,200	1,781	DJ	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	4	2,200	2,113	DJ	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	4	2,200	1,409	DJ	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	4	2,200	587	DJ	µg/Kg
	Pesticides/PCBs									
		alpha-BHC	Site Sample	Soil	Low	1	2.9	10		µg/Kg
		delta-BHC	Site Sample	Soil	Low	1	2.9	12	J	µg/Kg
		gamma-BHC	Site Sample	Soil	Low	1	2.9	18		µg/Kg
		Heptachlor	Site Sample	Soil	Low	1	2.9	3.0		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	2.9	14	J	µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	2.9	21	J	µg/Kg
		Endosulfan I	Site Sample	Soil	Low	1	2.9	12	J	µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	5.6	5.9	J	µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	5.6	37	J	µg/Kg
		Endrin	Site Sample	Soil	Low	1	5.6	9.4	J	µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	5.6	15		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	5.6	15	J	µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	5.6	20	J	µg/Kg
		Endrin Aldehyde	Site Sample	Soil	Low	1	5.6	12		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	5.6	26	J	µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	5.6	43	J	µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	56	1,233		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	56	252	J	µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	5,260		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	8.8		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	176		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279848										
	Metals									
		Cadmium	Site Sample	Soil	Low	1	0.50	1.2		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	2,501		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	21		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	3.3		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	34		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	7,455		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	373		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	839		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	177		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	8.8		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	400		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	1.2		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	65	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	11		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	201		mg/Kg
A1505279849										
	Semivolatiles									
		Acenaphthene	Site Sample	Soil	Low	2	990	141	J	µg/Kg
		Fluorene	Site Sample	Soil	Low	2	990	148	J	µg/Kg
		Phenanthrene	Site Sample	Soil	Low	2	990	1,476		µg/Kg
		Anthracene	Site Sample	Soil	Low	2	990	262	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	990	2,080		µg/Kg
		Pyrene	Site Sample	Soil	Low	2	990	2,885	J	µg/Kg
		Butylbenzylphthalate	Site Sample	Soil	Low	2	990	248	J	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	990	872	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	990	1,208	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Site Sample	Soil	Low	2	990	2,684	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	990	1,007	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	990	939	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	990	872	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	990	275	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	990	322	J	µg/Kg
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	2.5	13		µg/Kg
		gamma-BHC	Site Sample	Soil	Low	1	2.5	13		µg/Kg
		Heptachlor	Site Sample	Soil	Low	1	2.5	25		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	2.5	41		µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	2.5	15		µg/Kg
		Endosulfan I	Site Sample	Soil	Low	1	2.5	6.7		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	4.9	5.8		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	4.9	60		µg/Kg
		Endrin	Site Sample	Soil	Low	1	4.9	6.1		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	4.9	20		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	4.9	21		µg/Kg
		Endo. Sulfate	Site Sample	Soil	Low	1	4.9	5.4		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	4.9	27		µg/Kg
		Endrin Aldehyde	Site Sample	Soil	Low	1	4.9	34		µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279849										
	Pesticides/PCBs									
		Methoxychlor	Site Sample	Soil	Low	1	25	23		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	4.9	15		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	4.9	26		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	49	1,409		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	49	403		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	4,918		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	10		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	163		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	0.87		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	2,322		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	21		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	3.4		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	30		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	7,784		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	245		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	872		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	198		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	11		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	370		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	62	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	11		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	143		mg/Kg
	Conventionals									
		Total Organic Carbon (TOC)	Site Sample	Soil	Low	1	100	2,077		mg/Kg
		Oil and Grease	Site Sample	Soil	Low	1	100	750		mg/Kg
		Percent Moisture	Site Sample	Soil	Low	1	0.10	33		%
A1505279850										
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	2.9	3.3		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	2.9	5.6		µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	2.9	4.2		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	5.6	15		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	5.6	4.6		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	5.6	8.9		µg/Kg
		Endo. Sulfate	Site Sample	Soil	Low	1	5.6	8.9		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	5.6	12		µg/Kg
		Endrin Aldehyde	Site Sample	Soil	Low	1	5.6	9.5		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	5.6	2.7		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	5.6	4.6		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	56	149		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	56	143		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	11,227		mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	6.5	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	11		mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279850										
	Metals									
		Barium	Site Sample	Soil	Low	1	1.0	157		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.19	B	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.2		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	1,835		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	15		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	5.6		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	22		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	14,434		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	119		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,527		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	413		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	14		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	849		mg/Kg
		Selenium	Site Sample	Soil	Low	1	0.50	0.65		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	90	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	23		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	132		mg/Kg
A1505279850RE										
	Semivolatiles									
		Acenaphthene	Re-extraction/Re-analysis	Soil	Low	2	1,100	178	J	µg/Kg
		Phenanthrene	Re-extraction/Re-analysis	Soil	Low	2	1,100	255	J	µg/Kg
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,100	350	J	µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	1,100	594	J	µg/Kg
		Benzo(a)anthracene	Re-extraction/Re-analysis	Soil	Low	2	1,100	255	J	µg/Kg
		Chrysene	Re-extraction/Re-analysis	Soil	Low	2	1,100	303	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Re-extraction/Re-analysis	Soil	Low	2	1,100	226	J	µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,100	220	J	µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,100	398	J	µg/Kg
		Benzo(a)pyrene	Re-extraction/Re-analysis	Soil	Low	2	1,100	214	J	µg/Kg
A1505279852										
	Pesticides/PCBs									
		Aldrin	Site Sample	Soil	Low	1	4.2	4.8		µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	4.2	2.1		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	8.2	6.0		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	8.2	6.9		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	8.2	7.7		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	8.2	8.1		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	8.2	13		µg/Kg
		Endrin Aldehyde	Site Sample	Soil	Low	1	8.2	7.7		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	8.2	9.7		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	8.2	16		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	82	73		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	82	129		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	3,820		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	3.4		mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279852										
	Metals									
		Barium	Site Sample	Soil	Low	1	1.0	99		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	0.85		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	3,006		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	10		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	2.5		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	29		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	6,247		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	102		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	866		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	142		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	7.7		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	271		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	91	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	8.9		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	203		mg/Kg
A1505279852RE										
	Semivolatiles									
		Phenanthrene	Re-extraction/Re-analysis	Soil	Low	2	1,600	484	J	µg/Kg
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,600	848		µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	1,600	1,169		µg/Kg
		Benzo(a)anthracene	Re-extraction/Re-analysis	Soil	Low	2	1,600	443	J	µg/Kg
		Chrysene	Re-extraction/Re-analysis	Soil	Low	2	1,600	605	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Re-extraction/Re-analysis	Soil	Low	2	1,600	6,448	B	µg/Kg
		Di-n-octylphthalate	Re-extraction/Re-analysis	Soil	Low	2	1,600	1,048	J	µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,600	564	J	µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,600	660	J	µg/Kg
		Benzo(a)pyrene	Re-extraction/Re-analysis	Soil	Low	2	1,600	484	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Re-extraction/Re-analysis	Soil	Low	2	1,600	214	J	µg/Kg
		Benzo(g,h,i)perylene	Re-extraction/Re-analysis	Soil	Low	2	1,600	230	J	µg/Kg
A1505279853										
	Pesticides/PCBs									
		alpha-BHC	Site Sample	Soil	Low	1	3.9	4.1		µg/Kg
		delta-BHC	Site Sample	Soil	Low	1	3.9	7.0		µg/Kg
		gamma-BHC	Site Sample	Soil	Low	1	3.9	4.0		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	3.9	21		µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	3.9	15		µg/Kg
		Endosulfan I	Site Sample	Soil	Low	1	3.9	6.8		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	7.5	6.6		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	7.5	32		µg/Kg
		Endrin	Site Sample	Soil	Low	1	7.5	5.3		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	7.5	16		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	7.5	8.8		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	7.5	24		µg/Kg
		Endrin Aldehyde	Site Sample	Soil	Low	1	7.5	16		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	7.5	17		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	7.5	28		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	75	572		µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279853										
	Pesticides/PCBs									
		Aroclor-1260	Site Sample	Soil	Low	1	75	246		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	3,793		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	7.0		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	136		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.0		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	1,967		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	15		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	2.8		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	32		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	6,248		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	247		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	768		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	148		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	7.9		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	269		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	1.2		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	104		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	8.8		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	200		mg/Kg
A1505279853RE										
	Semivolatiles									
		Fluorene	Re-extraction/Re-analysis	Soil	Low	2	1,500	251	J	µg/Kg
		Phenanthrene	Re-extraction/Re-analysis	Soil	Low	2	1,500	1,012		µg/Kg
		Anthracene	Re-extraction/Re-analysis	Soil	Low	2	1,500	189	J	µg/Kg
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,500	1,012		µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	1,500	1,936	J	µg/Kg
		Benzo(a)anthracene	Re-extraction/Re-analysis	Soil	Low	2	1,500	572	J	µg/Kg
		Chrysene	Re-extraction/Re-analysis	Soil	Low	2	1,500	704	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Re-extraction/Re-analysis	Soil	Low	2	1,500	6,160	J	µg/Kg
		Di-n-octylphthalate	Re-extraction/Re-analysis	Soil	Low	2	1,500	1,496	J	µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,500	572	J	µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,500	748	J	µg/Kg
		Benzo(a)pyrene	Re-extraction/Re-analysis	Soil	Low	2	1,500	484	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Re-extraction/Re-analysis	Soil	Low	2	1,500	202	J	µg/Kg
		Dibenz(a,h)anthracene	Re-extraction/Re-analysis	Soil	Low	2	1,500	660	J	µg/Kg
		Benzo(g,h,i)perylene	Re-extraction/Re-analysis	Soil	Low	2	1,500	224	J	µg/Kg
A1505279854										
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	2.8	6.8		µg/Kg
		gamma-BHC	Site Sample	Soil	Low	1	2.8	6.8		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	2.8	19		µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	2.8	9.2		µg/Kg
		Endosulfan I	Site Sample	Soil	Low	1	2.8	4.1		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	5.4	5.5		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	5.4	38		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279854										
	Pesticides/PCBs									
		Endrin	Site Sample	Soil	Low	1	5.4	3.4		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	5.4	13		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	5.4	10		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	5.4	17		µg/Kg
		Endrin Aldehyde	Site Sample	Soil	Low	1	5.4	18		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	5.4	10		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	5.4	17		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	54	616		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	54	222		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	6,345		mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	6.8	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	11		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	146		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.6		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	1,626		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	23		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	3.9		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	24		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	8,686		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	202		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,047		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	224		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	9.2		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	448		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	2.9		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	100	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	14		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	140		mg/Kg
	Conventionals									
		Total Organic Carbon (TOC)	Site Sample	Soil	Low	1	160	9,920		mg/Kg
		Oil and Grease	Site Sample	Soil	Low	1	100	2,490		mg/Kg
		Percent Moisture	Site Sample	Soil	Low	1	0.10	38		%
A1505279854RE										
	Semivolatiles									
		Phenanthrene	Re-extraction/Re-analysis	Soil	Low	2	1,100	333	J	µg/Kg
		Anthracene	Re-extraction/Re-analysis	Soil	Low	2	1,100	86	J	µg/Kg
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,100	499	J	µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	1,100	862		µg/Kg
		Benzo(a)anthracene	Re-extraction/Re-analysis	Soil	Low	2	1,100	308	J	µg/Kg
		Chrysene	Re-extraction/Re-analysis	Soil	Low	2	1,100	400	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Re-extraction/Re-analysis	Soil	Low	2	1,100	1,540	B	µg/Kg
		Di-n-octylphthalate	Re-extraction/Re-analysis	Soil	Low	2	1,100	136	J	µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,100	308	J	µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,100	345	J	µg/Kg
		Benzo(a)pyrene	Re-extraction/Re-analysis	Soil	Low	2	1,100	283	J	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279855										
	Semivolatiles									
		Fluorene	Site Sample	Soil	Low	2	1,400	182	J	µg/Kg
		Phenanthrene	Site Sample	Soil	Low	2	1,400	1,140		µg/Kg
		Anthracene	Site Sample	Soil	Low	2	1,400	233	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	1,400	1,473		µg/Kg
		Pyrene	Site Sample	Soil	Low	2	1,400	2,945	J	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	1,400	1,045	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	1,400	1,188	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Site Sample	Soil	Low	4	2,800	19,475	DJ	µg/Kg
		Di-n-octylphthalate	Site Sample	Soil	Low	4	2,800	32,775	DJ	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	1,400	855	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	1,400	1,093	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	1,400	903	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	1,400	333	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	1,400	356	J	µg/Kg
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	3.6	2.8		µg/Kg
		gamma-BHC	Site Sample	Soil	Low	1	3.6	2.3		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	3.6	7.1		µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	3.6	6.2		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	6.9	11		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	6.9	13		µg/Kg
		Endrin	Site Sample	Soil	Low	1	6.9	5.7		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	6.9	15		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	6.9	9.0		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	6.9	11		µg/Kg
		Endrin Aldehyde	Site Sample	Soil	Low	1	6.9	20		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	6.9	13		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	6.9	24		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	69	190		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	69	261		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	5,273		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	4.2		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	132		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.0		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	2,850		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	15		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	3.8		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	32		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	7,458		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	144		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	945		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	137		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	11		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	377		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	1.5		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	55	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	11		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279855										
	Metals									
		Zinc	Site Sample	Soil	Low	1	1.0	233		mg/Kg
	Conventionals									
		Total Organic Carbon (TOC)	Site Sample	Soil	Low	1	100	22,560		mg/Kg
		Oil and Grease	Site Sample	Soil	Low	1	100	5,530		mg/Kg
		Percent Moisture	Site Sample	Soil	Low	1	0.10	53		%
A1505279856										
	Semivolatiles									
		Acenaphthene	Site Sample	Soil	Low	2	1,400	182	J	µg/Kg
		Fluorene	Site Sample	Soil	Low	2	1,400	335	J	µg/Kg
		Phenanthrene	Site Sample	Soil	Low	2	1,400	1,485		µg/Kg
		Anthracene	Site Sample	Soil	Low	2	1,400	364	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	1,400	1,629		µg/Kg
		Pyrene	Site Sample	Soil	Low	2	1,400	3,300	J	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	1,400	766	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	1,400	1,245	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Site Sample	Soil	Low	2	1,400	7,185	J	µg/Kg
		Di-n-octylphthalate	Site Sample	Soil	Low	2	1,400	958	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	1,400	1,245	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	1,400	814	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	1,400	910	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	1,400	259	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	1,400	369	J	µg/Kg
	Pesticides/PCBs									
		alpha-BHC	Site Sample	Soil	Low	1	3.5	7.2		µg/Kg
		delta-BHC	Site Sample	Soil	Low	1	3.5	12		µg/Kg
		gamma-BHC	Site Sample	Soil	Low	1	3.5	15		µg/Kg
		Heptachlor	Site Sample	Soil	Low	1	3.5	1.9		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	3.5	30		µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	3.5	20		µg/Kg
		Endosulfan I	Site Sample	Soil	Low	1	3.5	12		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	6.9	6.2		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	6.9	39		µg/Kg
		Endrin	Site Sample	Soil	Low	1	6.9	7.2		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	6.9	16		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	6.9	11		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	6.9	17		µg/Kg
		Endrin Aldehyde	Site Sample	Soil	Low	1	6.9	13		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	6.9	22		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	6.9	37		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	69	958		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	69	259		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	5,365		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	6.7		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	176		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.3		mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279856										
	Metals									
		Calcium	Site Sample	Soil	Low	1	30	2,472		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	18		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	3.4		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	38		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	7,951		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	318		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	905		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	165		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	11		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	404		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	1.6		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	59	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	11		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	252		mg/Kg
A1505279857										
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	2.9	10		µg/Kg
		gamma-BHC	Site Sample	Soil	Low	1	2.9	9.5		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	2.9	12		µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	2.9	14		µg/Kg
		Endosulfan I	Site Sample	Soil	Low	1	2.9	5.9		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	5.6	6.5		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	5.6	39		µg/Kg
		Endrin	Site Sample	Soil	Low	1	5.6	4.1		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	5.6	14		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	5.6	8.9		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	5.6	16		µg/Kg
		Endrin Aldehyde	Site Sample	Soil	Low	1	5.6	18		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	5.6	15		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	5.6	26		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	2	110	1,069		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	2	110	261		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	7,009		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	12		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	173		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.13	B	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.0		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	2,554		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	26		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	4.1		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	33		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	9,920		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	304		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,129		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	237		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	12		mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279857										
	Metals									
		Potassium	Site Sample	Soil	Low	1	50	495		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	74	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	14		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	180		mg/Kg
A1505279857RE										
	Semivolatiles									
		Fluorene	Re-extraction/Re-analysis	Soil	Low	2	1,100	154	J	µg/Kg
		Phenanthrene	Re-extraction/Re-analysis	Soil	Low	2	1,100	772		µg/Kg
		Anthracene	Re-extraction/Re-analysis	Soil	Low	2	1,100	202	J	µg/Kg
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,100	832		µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	1,100	1,782	J	µg/Kg
		Benzo(a)anthracene	Re-extraction/Re-analysis	Soil	Low	2	1,100	487	J	µg/Kg
		Chrysene	Re-extraction/Re-analysis	Soil	Low	2	1,100	594	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Re-extraction/Re-analysis	Soil	Low	2	1,100	4,574	J	µg/Kg
		Di-n-octylphthalate	Re-extraction/Re-analysis	Soil	Low	2	1,100	487	J	µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,100	564	J	µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,100	713	J	µg/Kg
		Benzo(a)pyrene	Re-extraction/Re-analysis	Soil	Low	2	1,100	422	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Re-extraction/Re-analysis	Soil	Low	2	1,100	160	J	µg/Kg
		Benzo(g,h,i)perylene	Re-extraction/Re-analysis	Soil	Low	2	1,100	196	J	µg/Kg
A1505279858										
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	2.8	12		µg/Kg
		gamma-BHC	Site Sample	Soil	Low	1	2.8	12		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	2.8	38		µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	2.8	18		µg/Kg
		Endosulfan I	Site Sample	Soil	Low	1	2.8	6.7		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	5.4	6.1		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	5.4	68		µg/Kg
		Endrin	Site Sample	Soil	Low	1	5.4	3.7		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	5.4	18		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	5.4	24		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	5.4	52		µg/Kg
		Endrin Ketone	Site Sample	Soil	Low	1	5.4	7.9		µg/Kg
		Endrin Aldehyde	Site Sample	Soil	Low	1	5.4	54		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	5.4	10		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	5.4	20		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	5	270	1,705		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	5	270	530		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	7,369		mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	3.7	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	15		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	204		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.15	B	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.3		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279858										
	Metals									
		Calcium	Site Sample	Soil	Low	1	30	2,284		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	27		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	4.3		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	39		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	10,658		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	267		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,145		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	253		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.32		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	10		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	516		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	1.1		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	77	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	16		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	181		mg/Kg
	Conventionals									
		Total Organic Carbon (TOC)	Site Sample	Soil	Low	1	100	17,690		mg/Kg
		Oil and Grease	Site Sample	Soil	Low	1	100	779		mg/Kg
		Percent Moisture	Site Sample	Soil	Low	1	0.10	39		%
A1505279858RE										
	Semivolatiles									
		Phenanthrene	Re-extraction/Re-analysis	Soil	Low	2	1,100	432	J	µg/Kg
		Anthracene	Re-extraction/Re-analysis	Soil	Low	2	1,100	91	J	µg/Kg
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,100	597	J	µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	1,100	1,218	J	µg/Kg
		Benzo(a)anthracene	Re-extraction/Re-analysis	Soil	Low	2	1,100	347	J	µg/Kg
		Chrysene	Re-extraction/Re-analysis	Soil	Low	2	1,100	487	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Re-extraction/Re-analysis	Soil	Low	2	1,100	2,314	J	µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,100	365	J	µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	1,100	603	J	µg/Kg
		Benzo(a)pyrene	Re-extraction/Re-analysis	Soil	Low	2	1,100	311	J	µg/Kg
A1505279859										
	Semivolatiles									
		Phenanthrene	Site Sample	Soil	Low	2	1,000	254	J	µg/Kg
		Anthracene	Site Sample	Soil	Low	2	1,000	64	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	1,000	363	J	µg/Kg
		Pyrene	Site Sample	Soil	Low	2	1,000	700		µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	1,000	223	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	1,000	299	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Site Sample	Soil	Low	2	1,000	522	BJ	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	1,000	235	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	1,000	324	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	1,000	204	J	µg/Kg
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	2.7	7.0		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279859										
	Pesticides/PCBs									
		Heptachlor	Site Sample	Soil	Low	1	2.7	2.2		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	2.7	11		µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	2.7	6.4		µg/Kg
		Endosulfan I	Site Sample	Soil	Low	1	2.7	2.5		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	5.2	3.5		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	5.2	31		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	5.2	10		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	5.2	21		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	5.2	16		µg/Kg
		Endrin Aldehyde	Site Sample	Soil	Low	1	5.2	22		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	5.2	5.9		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	5.2	8.3		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	52	375		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	52	165		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	7,060		mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	8.9	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	14		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	176		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.14	B	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.5		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	2,207		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	14		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	5.1		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	24		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	11,321		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	172		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,202		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	398		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	11		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	504		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	0.83	B	mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	75	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	17		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	135		mg/Kg
	Conventionals									
		Total Organic Carbon (TOC)	Site Sample	Soil	Low	1	160	12,800		mg/Kg
		Oil and Grease	Site Sample	Soil	Low	1	100	569		mg/Kg
		Percent Moisture	Site Sample	Soil	Low	1	0.10	36		%
A1505279860										
	Semivolatiles									
		Hexachlorobenzene	Site Sample	Soil	Low	2	1,400	337	J	µg/Kg
		Phenanthrene	Site Sample	Soil	Low	2	1,400	1,014		µg/Kg
		Anthracene	Site Sample	Soil	Low	2	1,400	198	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	1,400	1,752		µg/Kg
		Pyrene	Site Sample	Soil	Low	2	1,400	2,812	J	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	1,400	1,014	J	µg/Kg

Qualifiers:

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- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279860										
	Semivolatiles									
		Chrysene	Site Sample	Soil	Low	2	1,400	1,245	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Site Sample	Soil	Low	4	2,900	12,447	DJ	µg/Kg
		Di-n-octylphthalate	Site Sample	Soil	Low	2	1,400	4,241	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	1,400	1,014	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	1,400	1,521	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	1,400	968	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	1,400	396	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	1,400	392	J	µg/Kg
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	3.7	4.1		µg/Kg
		gamma-BHC	Site Sample	Soil	Low	1	3.7	3.4		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	3.7	8.8		µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	3.7	9.2		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	7.2	12		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	7.2	18		µg/Kg
		Endrin	Site Sample	Soil	Low	1	7.2	7.4		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	7.2	13		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	7.2	14		µg/Kg
		Endo. Sulfate	Site Sample	Soil	Low	1	7.2	23		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	7.2	17		µg/Kg
		Endrin Aldehyde	Site Sample	Soil	Low	1	7.2	15		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	7.2	24		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	7.2	28		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	72	212		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	72	332		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	5,993		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	4.6		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	134		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.0		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	2,743		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	14		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	3.5		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	33		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	7,422		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	154		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	991		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	139		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	11		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	431		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	1.1		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	12		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	239		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL.

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Acenaphthene									
		A1505279842RE	Re-extraction/Re-analysis	Soil	Low	2	6,800	159	J	µg/Kg
		A1505279843RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	153	J	µg/Kg
		A1505279847	Site Sample	Soil	Low	2	1,300	133	J	µg/Kg
		A1505279848	Site Sample	Soil	Low	2	1,100	470	J	µg/Kg
		A1505279849	Site Sample	Soil	Low	2	990	141	J	µg/Kg
		A1505279850RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	178	J	µg/Kg
		A1505279856	Site Sample	Soil	Low	2	1,400	182	J	µg/Kg
	Anthracene									
		A1505279842RE	Re-extraction/Re-analysis	Soil	Low	2	1,400	342	J	µg/Kg
		A1505279843RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	319	J	µg/Kg
		A1505279844RE	Re-extraction/Re-analysis	Soil	Low	2	1,000	150	J	µg/Kg
		A1505279845RE	Re-extraction/Re-analysis	Soil	Low	2	1,000	106	J	µg/Kg
		A1505279846	Site Sample	Soil	Low	2	1,600	165	J	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Anthracene									
		A1505279847	Site Sample	Soil	Low	2	1,300	282	J	µg/Kg
		A1505279848	Site Sample	Soil	Low	2	1,100	558	J	µg/Kg
		A1505279849	Site Sample	Soil	Low	2	990	262	J	µg/Kg
		A1505279853RE	Re-extraction/Re-analysis	Soil	Low	2	1,500	189	J	µg/Kg
		A1505279854RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	86	J	µg/Kg
		A1505279855	Site Sample	Soil	Low	2	1,400	233	J	µg/Kg
		A1505279856	Site Sample	Soil	Low	2	1,400	364	J	µg/Kg
		A1505279857RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	202	J	µg/Kg
		A1505279858RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	91	J	µg/Kg
		A1505279859	Site Sample	Soil	Low	2	1,000	84	J	µg/Kg
		A1505279860	Site Sample	Soil	Low	2	1,400	198	J	µg/Kg
	Benzo(a)anthracene									
		A1505279842RE	Re-extraction/Re-analysis	Soil	Low	2	1,400	985		µg/Kg

Qualifiers:
- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(a)anthracene									
		A1505279843RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	1,410		µg/Kg
		A1505279844RE	Re-extraction/Re-analysis	Soil	Low	2	1,000	397	J	µg/Kg
		A1505279845RE	Re-extraction/Re-analysis	Soil	Low	2	1,000	398	J	µg/Kg
		A1505279846	Site Sample	Soil	Low	2	1,600	763	J	µg/Kg
		A1505279847	Site Sample	Soil	Low	2	1,300	1,283	J	µg/Kg
		A1505279848	Site Sample	Soil	Low	2	1,100	1,233	J	µg/Kg
		A1505279849	Site Sample	Soil	Low	2	990	872	J	µg/Kg
		A1505279850RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	255	J	µg/Kg
		A1505279852RE	Re-extraction/Re-analysis	Soil	Low	2	1,600	443	J	µg/Kg
		A1505279853RE	Re-extraction/Re-analysis	Soil	Low	2	1,500	572	J	µg/Kg
		A1505279854RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	308	J	µg/Kg
		A1505279855	Site Sample	Soil	Low	2	1,400	1,045	J	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(a)anthracene									
		A1505279856	Site Sample	Soil	Low	2	1,400	766	J	µg/Kg
		A1505279857RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	487	J	µg/Kg
		A1505279858RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	347	J	µg/Kg
		A1505279859	Site Sample	Soil	Low	2	1,000	223	J	µg/Kg
		A1505279860	Site Sample	Soil	Low	2	1,400	1,014	J	µg/Kg
	Benzo(a)pyrene									
		A1505279842RE	Re-extraction/Re-analysis	Soil	Low	2	1,400	1,032	J	µg/Kg
		A1505279843RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	1,287	J	µg/Kg
		A1505279844RE	Re-extraction/Re-analysis	Soil	Low	2	1,000	404	J	µg/Kg
		A1505279845RE	Re-extraction/Re-analysis	Soil	Low	2	1,000	378	J	µg/Kg
		A1505279846	Site Sample	Soil	Low	2	1,600	806	J	µg/Kg
		A1505279847	Site Sample	Soil	Low	2	1,300	1,436	J	µg/Kg
		A1505279848	Site Sample	Soil	Low	4	2,200	1,409	DJ	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(a)pyrene									
		A1505279849	Site Sample	Soil	Low	2	990	872	J	µg/Kg
		A1505279850RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	214	J	µg/Kg
		A1505279852RE	Re-extraction/Re-analysis	Soil	Low	2	1,600	484	J	µg/Kg
		A1505279853RE	Re-extraction/Re-analysis	Soil	Low	2	1,500	484	J	µg/Kg
		A1505279854RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	283	J	µg/Kg
		A1505279855	Site Sample	Soil	Low	2	1,400	903	J	µg/Kg
		A1505279856	Site Sample	Soil	Low	2	1,400	910	J	µg/Kg
		A1505279857RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	422	J	µg/Kg
		A1505279858RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	311	J	µg/Kg
		A1505279859	Site Sample	Soil	Low	2	1,000	204	J	µg/Kg
		A1505279860	Site Sample	Soil	Low	2	1,400	968	J	µg/Kg
	Benzo(b)fluoranthene									
		A1505279842RE	Re-extraction/Re-analysis	Soil	Low	2	1,400	3,002	J	µg/Kg

Qualifiers:

J - Estimated

B - (Organics) Found in the associated method blank

D - Reported from a dilution

E - Exceeds calibration range

P - (Pesticides) Difference in column concentrations > 25%

B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(b)fluoranthene									
		A1505279843RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	1,778	J	µg/Kg
		A1505279844RE	Re-extraction/Re-analysis	Soil	Low	2	1,000	660	J	µg/Kg
		A1505279845RE	Re-extraction/Re-analysis	Soil	Low	2	1,000	404	J	µg/Kg
		A1505279846	Site Sample	Soil	Low	2	1,600	848	J	µg/Kg
		A1505279847	Site Sample	Soil	Low	2	1,300	1,026	J	µg/Kg
		A1505279848	Site Sample	Soil	Low	4	2,200	1,761	DJ	µg/Kg
		A1505279849	Site Sample	Soil	Low	2	990	1,007	J	µg/Kg
		A1505279850RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	220	J	µg/Kg
		A1505279852RE	Re-extraction/Re-analysis	Soil	Low	2	1,600	564	J	µg/Kg
		A1505279853RE	Re-extraction/Re-analysis	Soil	Low	2	1,500	572	J	µg/Kg
		A1505279854RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	306	J	µg/Kg
		A1505279855	Site Sample	Soil	Low	2	1,400	855	J	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(b)fluoranthene									
		A1505279856	Site Sample	Soil	Low	2	1,400	1,245	J	µg/Kg
		A1505279857RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	564	J	µg/Kg
		A1505279858RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	365	J	µg/Kg
		A1505279859	Site Sample	Soil	Low	2	1,000	235	J	µg/Kg
		A1505279860	Site Sample	Soil	Low	2	1,400	1,014	J	µg/Kg
	Benzo(g,h,i)perylene									
		A1505279843RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	362	J	µg/Kg
		A1505279845RE	Re-extraction/Re-analysis	Soil	Low	2	1,000	166	J	µg/Kg
		A1505279848	Site Sample	Soil	Low	2	1,600	331	J	µg/Kg
		A1505279847	Site Sample	Soil	Low	2	1,300	564	J	µg/Kg
		A1505279848	Site Sample	Soil	Low	4	2,200	587	DJ	µg/Kg
		A1505279849	Site Sample	Soil	Low	2	990	322	J	µg/Kg
		A1505279852RE	Re-extraction/Re-analysis	Soil	Low	2	1,600	230	J	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(g,h,i)perylene									
		A1505279853RE	Re-extraction/Re-analysis	Soil	Low	2	1,500	224	J	µg/Kg
		A1505279855	Site Sample	Soil	Low	2	1,400	356	J	µg/Kg
		A1505279856	Site Sample	Soil	Low	2	1,400	369	J	µg/Kg
		A1505279857RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	196	J	µg/Kg
		A1505279860	Site Sample	Soil	Low	2	1,400	392	J	µg/Kg
	Benzo(k)fluoranthene									
		A1505279842RE	Re-extraction/Re-analysis	Soil	Low	2	1,400	1,079	J	µg/Kg
		A1505279843RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	1,349	J	µg/Kg
		A1505279844RE	Re-extraction/Re-analysis	Soil	Low	2	1,000	660	J	µg/Kg
		A1505279845RE	Re-extraction/Re-analysis	Soil	Low	2	1,000	511	J	µg/Kg
		A1505279846	Site Sample	Soil	Low	2	1,600	1,230	J	µg/Kg
		A1505279847	Site Sample	Soil	Low	2	1,300	2,462	J	µg/Kg
		A1505279846	Site Sample	Soil	Low	4	2,200	2,113	DJ	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(k)fluoranthene									
		A1505279849	Site Sample	Soil	Low	2	990	939	J	µg/Kg
		A1505279850RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	398	J	µg/Kg
		A1505279852RE	Re-extraction/Re-analysis	Soil	Low	2	1,600	660	J	µg/Kg
		A1505279853RE	Re-extraction/Re-analysis	Soil	Low	2	1,500	748	J	µg/Kg
		A1505279854RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	345	J	µg/Kg
		A1505279855	Site Sample	Soil	Low	2	1,400	1,093	J	µg/Kg
		A1505279856	Site Sample	Soil	Low	2	1,400	814	J	µg/Kg
		A1505279857RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	713	J	µg/Kg
		A1505279858RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	603	J	µg/Kg
		A1505279859	Site Sample	Soil	Low	2	1,000	324	J	µg/Kg
		A1505279860	Site Sample	Soil	Low	2	1,400	1,521	J	µg/Kg
	bis(2-Ethylhexyl)phthalate									
		A1505279842RE	Re-extraction/Re-analysis	Soil	Low	2	1,400	4,456	B	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	bis(2-Ethylhexyl)phthalate									
		A1505279843RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	3,617	B	µg/Kg
		A1505279844RE	Re-extraction/Re-analysis	Soil	Low	2	1,000	1,758	B	µg/Kg
		A1505279845RE	Re-extraction/Re-analysis	Soil	Low	2	1,000	660	B	µg/Kg
		A1505279846	Site Sample	Soil	Low	4	3,100	14,840	BDJ	µg/Kg
		A1505279847	Site Sample	Soil	Low	2	1,300	6,156	J	µg/Kg
		A1505279848	Site Sample	Soil	Low	2	1,100	6,457	J	µg/Kg
		A1505279849	Site Sample	Soil	Low	2	990	2,684	J	µg/Kg
		A1505279850RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	226	J	µg/Kg
		A1505279852RE	Re-extraction/Re-analysis	Soil	Low	2	1,600	6,448	B	µg/Kg
		A1505279853RE	Re-extraction/Re-analysis	Soil	Low	2	1,500	6,160	J	µg/Kg
		A1505279854RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	1,540	B	µg/Kg
		A1505279855	Site Sample	Soil	Low	4	2,800	19,475	DJ	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	bis(2-Ethylhexyl)phthalate									
		A1505279856	Site Sample	Soil	Low	2	1,400	7,185	J	µg/Kg
		A1505279857RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	4,574	J	µg/Kg
		A1505279858RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	2,314	J	µg/Kg
		A1505279859	Site Sample	Soil	Low	2	1,000	522	BJ	µg/Kg
		A1505279860	Site Sample	Soil	Low	4	2,900	12,447	DJ	µg/Kg
	Butylbenzylphthalate									
		A1505279846	Site Sample	Soil	Low	2	1,600	242	J	µg/Kg
		A1505279848	Site Sample	Soil	Low	2	1,100	481	J	µg/Kg
		A1505279849	Site Sample	Soil	Low	2	990	248	J	µg/Kg
	Chrysene									
		A1505279842RE	Re-extraction/Re-analysis	Soil	Low	2	1,400	1,642		µg/Kg
		A1505279843RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	1,839		µg/Kg
		A1505279844RE	Re-extraction/Re-analysis	Soil	Low	2	1,000	599	J	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Chrysene									
		A1505279845RE	Re-extraction/Re-analysis	Soil	Low	2	1,000	537	J	µg/Kg
		A1505279846	Site Sample	Soil	Low	2	1,600	1,145	J	µg/Kg
		A1505279847	Site Sample	Soil	Low	2	1,300	1,898	J	µg/Kg
		A1505279848	Site Sample	Soil	Low	2	1,100	1,878	J	µg/Kg
		A1505279849	Site Sample	Soil	Low	2	990	1,208	J	µg/Kg
		A1505279850RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	303	J	µg/Kg
		A1505279852RE	Re-extraction/Re-analysis	Soil	Low	2	1,600	605	J	µg/Kg
		A1505279853RE	Re-extraction/Re-analysis	Soil	Low	2	1,500	704	J	µg/Kg
		A1505279854RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	400	J	µg/Kg
		A1505279855	Site Sample	Soil	Low	2	1,400	1,188	J	µg/Kg
		A1505279856	Site Sample	Soil	Low	2	1,400	1,245	J	µg/Kg
		A1505279857RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	594	J	µg/Kg

Qualifiers:

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- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Chrysene									
		A1505279858RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	487	J	µg/Kg
		A1505279859	Site Sample	Soil	Low	2	1,000	299	J	µg/Kg
		A1505279860	Site Sample	Soil	Low	2	1,400	1,245	J	µg/Kg
	Di-n-octylphthalate									
		A1505279846	Site Sample	Soil	Low	4	3,100	13,568	DJ	µg/Kg
		A1505279847	Site Sample	Soil	Low	2	1,300	872	J	µg/Kg
		A1505279848	Site Sample	Soil	Low	4	2,200	998	DJ	µg/Kg
		A1505279852RE	Re-extraction/Re-analysis	Soil	Low	2	1,600	1,048	J	µg/Kg
		A1505279853RE	Re-extraction/Re-analysis	Soil	Low	2	1,500	1,496	J	µg/Kg
		A1505279854RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	136	J	µg/Kg
		A1505279855	Site Sample	Soil	Low	4	2,800	32,775	DJ	µg/Kg
		A1505279856	Site Sample	Soil	Low	2	1,400	958	J	µg/Kg
		A1505279857RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	487	J	µg/Kg

Qualifiers:

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- B - (Organics) Found in the associated method blank
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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Di-n-octylphthalate									
		A1505279860	Site Sample	Soil	Low	2	1,400	4,241	J	µg/Kg
	Dibenz(a,h)anthracene									
		A1505279853RE	Re-extraction/Re-analysis	Soil	Low	2	1,500	660	J	µg/Kg
	Fluoranthene									
		A1505279842RE	Re-extraction/Re-analysis	Soil	Low	2	1,400	2,814		µg/Kg
		A1505279843RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	2,820		µg/Kg
		A1505279844RE	Re-extraction/Re-analysis	Soil	Low	2	1,000	1,042		µg/Kg
		A1505279845RE	Re-extraction/Re-analysis	Soil	Low	2	1,000	796		µg/Kg
		A1505279846	Site Sample	Soil	Low	2	1,600	1,611		µg/Kg
		A1505279848	Site Sample	Soil	Low	2	1,100	3,111		µg/Kg
		A1505279849	Site Sample	Soil	Low	2	990	2,080		µg/Kg
		A1505279850RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	350	J	µg/Kg
		A1505279852RE	Re-extraction/Re-analysis	Soil	Low	2	1,600	846		µg/Kg

Qualifiers:

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Fluoranthene									
		A1505279853RE	Re-extraction/Re-analysis	Soil	Low	2	1,500	1,012		µg/Kg
		A1505279854RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	499	J	µg/Kg
		A1505279855	Site Sample	Soil	Low	2	1,400	1,473		µg/Kg
		A1505279856	Site Sample	Soil	Low	2	1,400	1,629		µg/Kg
		A1505279857RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	832		µg/Kg
		A1505279858RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	597	J	µg/Kg
		A1505279859	Site Sample	Soil	Low	2	1,000	363	J	µg/Kg
		A1505279860	Site Sample	Soil	Low	2	1,400	1,752		µg/Kg
	Fluorene									
		A1505279842RE	Re-extraction/Re-analysis	Soil	Low	2	6,800	211	J	µg/Kg
		A1505279843RE	Re-extraction/Re-analysis	Soil	Low	2	5,200	172	J	µg/Kg
		A1505279847	Site Sample	Soil	Low	2	1,300	190	J	µg/Kg
		A1505279848	Site Sample	Soil	Low	2	1,100	1,057		µg/Kg

Qualifiers:

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Fluorene									
		A1505279849	Site Sample	Soil	Low	2	990	148	J	µg/Kg
		A1505279853RE	Re-extraction/Re-analysis	Soil	Low	2	1,500	251	J	µg/Kg
		A1505279855	Site Sample	Soil	Low	2	1,400	162	J	µg/Kg
		A1505279858	Site Sample	Soil	Low	2	1,400	335	J	µg/Kg
		A1505279857RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	154	J	µg/Kg
	Hexachlorobenzene									
		A1505279860	Site Sample	Soil	Low	2	1,400	337	J	µg/Kg
	Indeno(1,2,3-cd)pyrene									
		A1505279845RE	Re-extraction/Re-analysis	Soil	Low	2	1,000	172	J	µg/Kg
		A1505279848	Site Sample	Soil	Low	2	1,600	276	J	µg/Kg
		A1505279847	Site Sample	Soil	Low	2	1,300	416	J	µg/Kg
		A1505279849	Site Sample	Soil	Low	2	990	275	J	µg/Kg
		A1505279852RE	Re-extraction/Re-analysis	Soil	Low	2	1,600	214	J	µg/Kg

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Indeno(1,2,3-cd)pyrene									
		A1505279853RE	Re-extraction/Re-analysis	Soil	Low	2	1,500	202	J	µg/Kg
		A1505279855	Site Sample	Soil	Low	2	1,400	333	J	µg/Kg
		A1505279856	Site Sample	Soil	Low	2	1,400	259	J	µg/Kg
		A1505279857RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	160	J	µg/Kg
		A1505279860	Site Sample	Soil	Low	2	1,400	396	J	µg/Kg
	Phenanthrene									
		A1505279842RE	Re-extraction/Re-analysis	Soil	Low	2	1,400	1,642		µg/Kg
		A1505279843RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	1,349		µg/Kg
		A1505279844RE	Re-extraction/Re-analysis	Soil	Low	2	1,000	495	J	µg/Kg
		A1505279845RE	Re-extraction/Re-analysis	Soil	Low	2	1,000	457	J	µg/Kg
		A1505279846	Site Sample	Soil	Low	2	1,600	933		µg/Kg
		A1505279847	Site Sample	Soil	Low	2	1,300	1,590		µg/Kg
		A1505279848	Site Sample	Soil	Low	2	1,100	4,168		µg/Kg

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Phenanthrene									
		A1505279849	Site Sample	Soil	Low	2	990	1,476		µg/Kg
		A1505279850RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	255	J	µg/Kg
		A1505279852RE	Re-extraction/Re-analysis	Soil	Low	2	1,600	484	J	µg/Kg
		A1505279853RE	Re-extraction/Re-analysis	Soil	Low	2	1,500	1,012		µg/Kg
		A1505279854RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	333	J	µg/Kg
		A1505279855	Site Sample	Soil	Low	2	1,400	1,140		µg/Kg
		A1505279856	Site Sample	Soil	Low	2	1,400	1,485		µg/Kg
		A1505279857RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	772		µg/Kg
		A1505279858RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	432	J	µg/Kg
		A1505279859	Site Sample	Soil	Low	2	1,000	254	J	µg/Kg
		A1505279860	Site Sample	Soil	Low	2	1,400	1,014		µg/Kg
	Pyrene									
		A1505279842RE	Re-extraction/Re-analysis	Soil	Low	2	1,400	7,035		µg/Kg

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Pyrene									
		A1505279843RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	3,126		µg/Kg
		A1505279844RE	Re-extraction/Re-analysis	Soil	Low	2	1,000	3,450		µg/Kg
		A1505279845RE	Re-extraction/Re-analysis	Soil	Low	2	1,000	928		µg/Kg
		A1505279846	Site Sample	Soil	Low	4	3,100	2,502	DJ	µg/Kg
		A1505279847	Site Sample	Soil	Low	2	1,300	4,155	J	µg/Kg
		A1505279848	Site Sample	Soil	Low	2	1,100	5,459	J	µg/Kg
		A1505279849	Site Sample	Soil	Low	2	990	2,885	J	µg/Kg
		A1505279850RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	594	J	µg/Kg
		A1505279852RE	Re-extraction/Re-analysis	Soil	Low	2	1,600	1,169		µg/Kg
		A1505279853RE	Re-extraction/Re-analysis	Soil	Low	2	1,500	1,936	J	µg/Kg
		A1505279854RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	862		µg/Kg
		A1505279855	Site Sample	Soil	Low	2	1,400	2,945	J	µg/Kg

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Pyrene									
		A1505279856	Site Sample	Soil	Low	2	1,400	3,300	J	µg/Kg
		A1505279857RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	1,782	J	µg/Kg
		A1505279858RE	Re-extraction/Re-analysis	Soil	Low	2	1,100	1,218	J	µg/Kg
		A1505279859	Site Sample	Soil	Low	2	1,000	700		µg/Kg
		A1505279860	Site Sample	Soil	Low	2	1,400	2,812	J	µg/Kg
Pesticides/PCBs										
	Aldrin									
		A1505279842	Site Sample	Soil	Low	1	3.6	31		µg/Kg
		A1505279843	Site Sample	Soil	Low	1	2.8	28		µg/Kg
		A1505279844	Site Sample	Soil	Low	1	2.6	19		µg/Kg
		A1505279845	Site Sample	Soil	Low	1	2.6	9.9		µg/Kg
		A1505279846	Site Sample	Soil	Low	1	4.0	11		µg/Kg
		A1505279847	Site Sample	Soil	Low	1	3.0	11		µg/Kg

Qualifiers:
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- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	Aldrin								
		A1505279848	Site Sample	Soil	Low	1	2.9	14 J	µg/Kg
		A1505279849	Site Sample	Soil	Low	1	2.5	41	µg/Kg
		A1505279850	Site Sample	Soil	Low	1	2.9	5.6	µg/Kg
		A1505279852	Site Sample	Soil	Low	1	4.2	4.8	µg/Kg
		A1505279853	Site Sample	Soil	Low	1	3.9	21	µg/Kg
		A1505279854	Site Sample	Soil	Low	1	2.8	19	µg/Kg
		A1505279855	Site Sample	Soil	Low	1	3.6	7.1	µg/Kg
		A1505279856	Site Sample	Soil	Low	1	3.5	30	µg/Kg
		A1505279857	Site Sample	Soil	Low	1	2.9	12	µg/Kg
		A1505279858	Site Sample	Soil	Low	1	2.8	38	µg/Kg
		A1505279859	Site Sample	Soil	Low	1	2.7	11	µg/Kg
		A1505279860	Site Sample	Soil	Low	1	3.7	8.8	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	Aroclor-1242								
		A1505279842	Site Sample	Soil	Low	2	140	1,219	µg/Kg
		A1505279843	Site Sample	Soil	Low	1	54	797	µg/Kg
		A1505279844	Site Sample	Soil	Low	2	100	1,302	µg/Kg
		A1505279845	Site Sample	Soil	Low	1	50	239	µg/Kg
		A1505279846	Site Sample	Soil	Low	1	78	280	µg/Kg
		A1505279847	Site Sample	Soil	Low	1	59	339	µg/Kg
		A1505279848	Site Sample	Soil	Low	1	56	1,233	µg/Kg
		A1505279849	Site Sample	Soil	Low	1	49	1,409	µg/Kg
		A1505279850	Site Sample	Soil	Low	1	56	149	µg/Kg
		A1505279852	Site Sample	Soil	Low	1	62	73	µg/Kg
		A1505279853	Site Sample	Soil	Low	1	75	572	µg/Kg
		A1505279854	Site Sample	Soil	Low	1	54	616	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	Aroclor-1242									
		A1505279855	Site Sample	Soil	Low	1	69	190		µg/Kg
		A1505279856	Site Sample	Soil	Low	1	69	958		µg/Kg
		A1505279857	Site Sample	Soil	Low	2	110	1,069		µg/Kg
		A1505279858	Site Sample	Soil	Low	5	270	1,705		µg/Kg
		A1505279859	Site Sample	Soil	Low	1	52	375		µg/Kg
		A1505279860	Site Sample	Soil	Low	1	72	212		µg/Kg
	Aroclor-1260									
		A1505279842	Site Sample	Soil	Low	2	140	389		µg/Kg
		A1505279843	Site Sample	Soil	Low	1	54	343		µg/Kg
		A1505279844	Site Sample	Soil	Low	2	100	326	J	µg/Kg
		A1505279845	Site Sample	Soil	Low	1	50	179		µg/Kg
		A1505279846	Site Sample	Soil	Low	1	78	335		µg/Kg
		A1505279847	Site Sample	Soil	Low	1	59	246		µg/Kg

Qualifiers:
- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
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Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	Aroclor-1260								
		A1505279848	Site Sample	Soil	Low	1	58	252 J	µg/Kg
		A1505279849	Site Sample	Soil	Low	1	49	403	µg/Kg
		A1505279850	Site Sample	Soil	Low	1	56	143	µg/Kg
		A1505279852	Site Sample	Soil	Low	1	82	129	µg/Kg
		A1505279853	Site Sample	Soil	Low	1	75	246	µg/Kg
		A1505279854	Site Sample	Soil	Low	1	54	222	µg/Kg
		A1505279855	Site Sample	Soil	Low	1	69	261	µg/Kg
		A1505279856	Site Sample	Soil	Low	1	69	259	µg/Kg
		A1505279857	Site Sample	Soil	Low	2	110	261	µg/Kg
		A1505279858	Site Sample	Soil	Low	5	270	530	µg/Kg
		A1505279859	Site Sample	Soil	Low	1	52	165	µg/Kg
		A1505279860	Site Sample	Soil	Low	1	72	332	µg/Kg

Qualifiers:

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- **D** - Reported from a dilution
- **E** - Exceeds calibration range
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- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	alpha-BHC									
		A1505279844	Site Sample	Soil	Low	1	2.6	4.8		µg/Kg
		A1505279846	Site Sample	Soil	Low	1	4.0	3.2		µg/Kg
		A1505279847	Site Sample	Soil	Low	1	3.0	4.0		µg/Kg
		A1505279848	Site Sample	Soil	Low	1	2.9	10		µg/Kg
		A1505279853	Site Sample	Soil	Low	1	3.9	4.1		µg/Kg
		A1505279856	Site Sample	Soil	Low	1	3.5	7.2		µg/Kg
	delta-BHC									
		A1505279842	Site Sample	Soil	Low	1	3.6	22		µg/Kg
		A1505279843	Site Sample	Soil	Low	1	2.8	12		µg/Kg
		A1505279844	Site Sample	Soil	Low	1	2.6	16	J	µg/Kg
		A1505279845	Site Sample	Soil	Low	1	2.6	5.8		µg/Kg
		A1505279846	Site Sample	Soil	Low	1	4.0	4.2		µg/Kg
		A1505279847	Site Sample	Soil	Low	1	3.0	17		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	delta-BHC									
		A1505279848	Site Sample	Soil	Low	1	2.9	12	J	µg/Kg
		A1505279849	Site Sample	Soil	Low	1	2.5	13		µg/Kg
		A1505279850	Site Sample	Soil	Low	1	2.9	3.3		µg/Kg
		A1505279853	Site Sample	Soil	Low	1	3.9	7.0		µg/Kg
		A1505279854	Site Sample	Soil	Low	1	2.8	6.8		µg/Kg
		A1505279855	Site Sample	Soil	Low	1	3.6	2.8		µg/Kg
		A1505279856	Site Sample	Soil	Low	1	3.5	12		µg/Kg
		A1505279857	Site Sample	Soil	Low	1	2.9	10		µg/Kg
		A1505279858	Site Sample	Soil	Low	1	2.8	12		µg/Kg
		A1505279859	Site Sample	Soil	Low	1	2.7	7.0		µg/Kg
		A1505279860	Site Sample	Soil	Low	1	3.7	4.1		µg/Kg
	gamma-BHC									
		A1505279842	Site Sample	Soil	Low	1	3.6	19		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	gamma-BHC									
		A1505279843	Site Sample	Soil	Low	1	2.8	9.8		µg/Kg
		A1505279844	Site Sample	Soil	Low	1	2.6	16	J	µg/Kg
		A1505279846	Site Sample	Soil	Low	1	4.0	4.2		µg/Kg
		A1505279847	Site Sample	Soil	Low	1	3.0	3.8		µg/Kg
		A1505279848	Site Sample	Soil	Low	1	2.9	18		µg/Kg
		A1505279849	Site Sample	Soil	Low	1	2.5	13		µg/Kg
		A1505279853	Site Sample	Soil	Low	1	3.9	4.0		µg/Kg
		A1505279854	Site Sample	Soil	Low	1	2.8	6.8		µg/Kg
		A1505279855	Site Sample	Soil	Low	1	3.6	2.3		µg/Kg
		A1505279856	Site Sample	Soil	Low	1	3.5	15		µg/Kg
		A1505279857	Site Sample	Soil	Low	1	2.9	9.5		µg/Kg
		A1505279858	Site Sample	Soil	Low	1	2.8	12		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	gamma-BHC									
		A1505279860	Site Sample	Soil	Low	1	3.7	3.4		µg/Kg
	alpha Chlordane									
		A1505279842	Site Sample	Soil	Low	1	7.0	27		µg/Kg
		A1505279843	Site Sample	Soil	Low	1	5.4	22		µg/Kg
		A1505279844	Site Sample	Soil	Low	1	5.1	12		µg/Kg
		A1505279845	Site Sample	Soil	Low	1	5.0	5.2		µg/Kg
		A1505279846	Site Sample	Soil	Low	1	7.8	29		µg/Kg
		A1505279847	Site Sample	Soil	Low	1	5.9	27		µg/Kg
		A1505279848	Site Sample	Soil	Low	1	5.6	26	J	µg/Kg
		A1505279849	Site Sample	Soil	Low	1	4.9	15		µg/Kg
		A1505279850	Site Sample	Soil	Low	1	5.6	2.7		µg/Kg
		A1505279852	Site Sample	Soil	Low	1	8.2	9.7		µg/Kg
		A1505279853	Site Sample	Soil	Low	1	7.5	17		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	alpha Chlordane									
		A1505279854	Site Sample	Soil	Low	1	5.4	10		µg/Kg
		A1505279855	Site Sample	Soil	Low	1	6.9	13		µg/Kg
		A1505279856	Site Sample	Soil	Low	1	6.9	22		µg/Kg
		A1505279857	Site Sample	Soil	Low	1	5.6	15		µg/Kg
		A1505279858	Site Sample	Soil	Low	1	5.4	10		µg/Kg
		A1505279859	Site Sample	Soil	Low	1	5.2	5.9		µg/Kg
		A1505279860	Site Sample	Soil	Low	1	7.2	24		µg/Kg
	gamma Chlordane									
		A1505279842	Site Sample	Soil	Low	1	7.0	36		µg/Kg
		A1505279843	Site Sample	Soil	Low	1	5.4	36		µg/Kg
		A1505279844	Site Sample	Soil	Low	1	5.1	27	J	µg/Kg
		A1505279845	Site Sample	Soil	Low	1	5.0	9.3		µg/Kg
		A1505279846	Site Sample	Soil	Low	1	7.8	30		µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganic) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	gamma Chlordane									
		A1505279847	Site Sample	Soil	Low	1	5.9	32		µg/Kg
		A1505279848	Site Sample	Soil	Low	1	5.6	43	J	µg/Kg
		A1505279849	Site Sample	Soil	Low	1	4.9	26		µg/Kg
		A1505279850	Site Sample	Soil	Low	1	5.6	4.6		µg/Kg
		A1505279852	Site Sample	Soil	Low	1	8.2	16		µg/Kg
		A1505279853	Site Sample	Soil	Low	1	7.5	26		µg/Kg
		A1505279854	Site Sample	Soil	Low	1	5.4	17		µg/Kg
		A1505279855	Site Sample	Soil	Low	1	6.9	24		µg/Kg
		A1505279856	Site Sample	Soil	Low	1	6.9	37		µg/Kg
		A1505279857	Site Sample	Soil	Low	1	5.6	26		µg/Kg
		A1505279858	Site Sample	Soil	Low	1	5.4	20		µg/Kg
		A1505279859	Site Sample	Soil	Low	1	5.2	8.3		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	gamma Chlordane									
		A1505279860	Site Sample	Soil	Low	1	7.2	28		µg/Kg
	4,4'-DDD									
		A1505279842	Site Sample	Soil	Low	1	7.0	13		µg/Kg
		A1505279843	Site Sample	Soil	Low	1	5.4	34		µg/Kg
		A1505279844	Site Sample	Soil	Low	1	5.1	38		µg/Kg
		A1505279845	Site Sample	Soil	Low	1	5.0	17		µg/Kg
		A1505279846	Site Sample	Soil	Low	1	7.8	18		µg/Kg
		A1505279847	Site Sample	Soil	Low	1	5.9	13		µg/Kg
		A1505279848	Site Sample	Soil	Low	1	5.6	15	J	µg/Kg
		A1505279849	Site Sample	Soil	Low	1	4.9	21		µg/Kg
		A1505279850	Site Sample	Soil	Low	1	5.6	8.9		µg/Kg
		A1505279852	Site Sample	Soil	Low	1	8.2	8.1		µg/Kg
		A1505279853	Site Sample	Soil	Low	1	7.5	8.8		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	4,4'-DDD									
		A1505279854	Site Sample	Soil	Low	1	5.4	10		µg/Kg
		A1505279855	Site Sample	Soil	Low	1	6.9	9.0		µg/Kg
		A1505279856	Site Sample	Soil	Low	1	6.9	11		µg/Kg
		A1505279857	Site Sample	Soil	Low	1	5.6	8.9		µg/Kg
		A1505279858	Site Sample	Soil	Low	1	5.4	24		µg/Kg
		A1505279859	Site Sample	Soil	Low	1	5.2	21		µg/Kg
		A1505279860	Site Sample	Soil	Low	1	7.2	14		µg/Kg
	4,4'-DDE									
		A1505279842	Site Sample	Soil	Low	1	7.0	36		µg/Kg
		A1505279843	Site Sample	Soil	Low	1	5.4	50		µg/Kg
		A1505279844	Site Sample	Soil	Low	1	5.1	94	J	µg/Kg
		A1505279845	Site Sample	Soil	Low	1	5.0	30		µg/Kg
		A1505279846	Site Sample	Soil	Low	1	7.8	19		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	4,4'-DDE									
		A1505279847	Site Sample	Soil	Low	1	5.9	24		µg/Kg
		A1505279848	Site Sample	Soil	Low	1	5.6	37	J	µg/Kg
		A1505279849	Site Sample	Soil	Low	1	4.9	60		µg/Kg
		A1505279850	Site Sample	Soil	Low	1	5.6	15		µg/Kg
		A1505279852	Site Sample	Soil	Low	1	8.2	8.9		µg/Kg
		A1505279853	Site Sample	Soil	Low	1	7.5	32		µg/Kg
		A1505279854	Site Sample	Soil	Low	1	5.4	38		µg/Kg
		A1505279855	Site Sample	Soil	Low	1	6.9	13		µg/Kg
		A1505279856	Site Sample	Soil	Low	1	6.9	39		µg/Kg
		A1505279857	Site Sample	Soil	Low	1	5.6	39		µg/Kg
		A1505279856	Site Sample	Soil	Low	1	5.4	66		µg/Kg
		A1505279859	Site Sample	Soil	Low	1	5.2	31		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	4,4'-DDE									
		A1505279860	Site Sample	Soil	Low	1	7.2	18		µg/Kg
	4,4'-DDT									
		A1505279842	Site Sample	Soil	Low	1	7.0	24		µg/Kg
		A1505279843	Site Sample	Soil	Low	1	5.4	29		µg/Kg
		A1505279844	Site Sample	Soil	Low	1	5.1	42		µg/Kg
		A1505279845	Site Sample	Soil	Low	1	5.0	17		µg/Kg
		A1505279846	Site Sample	Soil	Low	1	7.8	16		µg/Kg
		A1505279847	Site Sample	Soil	Low	1	5.9	16		µg/Kg
		A1505279848	Site Sample	Soil	Low	1	5.6	20	J	µg/Kg
		A1505279849	Site Sample	Soil	Low	1	4.9	27		µg/Kg
		A1505279850	Site Sample	Soil	Low	1	5.6	12		µg/Kg
		A1505279852	Site Sample	Soil	Low	1	8.2	13		µg/Kg
		A1505279853	Site Sample	Soil	Low	1	7.5	24		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	4,4'-DDT									
		A1505279854	Site Sample	Soil	Low	1	5.4	17		µg/Kg
		A1505279855	Site Sample	Soil	Low	1	6.9	11		µg/Kg
		A1505279856	Site Sample	Soil	Low	1	6.9	17		µg/Kg
		A1505279857	Site Sample	Soil	Low	1	5.6	16		µg/Kg
		A1505279858	Site Sample	Soil	Low	1	5.4	52		µg/Kg
		A1505279859	Site Sample	Soil	Low	1	5.2	16		µg/Kg
		A1505279860	Site Sample	Soil	Low	1	7.2	17		µg/Kg
	Dieldrin									
		A1505279842	Site Sample	Soil	Low	1	7.0	14		µg/Kg
		A1505279843	Site Sample	Soil	Low	1	5.4	5.3		µg/Kg
		A1505279844	Site Sample	Soil	Low	1	5.1	7.2	J	µg/Kg
		A1505279845	Site Sample	Soil	Low	1	5.0	3.5		µg/Kg
		A1505279848	Site Sample	Soil	Low	1	7.8	12		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	Dieldrin									
		A1505279847	Site Sample	Soil	Low	1	5.9	7.7		µg/Kg
		A1505279848	Site Sample	Soil	Low	1	5.6	5.9	J	µg/Kg
		A1505279849	Site Sample	Soil	Low	1	4.9	5.8		µg/Kg
		A1505279852	Site Sample	Soil	Low	1	8.2	8.0		µg/Kg
		A1505279853	Site Sample	Soil	Low	1	7.5	6.6		µg/Kg
		A1505279854	Site Sample	Soil	Low	1	5.4	5.5		µg/Kg
		A1505279855	Site Sample	Soil	Low	1	6.9	11		µg/Kg
		A1505279856	Site Sample	Soil	Low	1	6.9	6.2		µg/Kg
		A1505279857	Site Sample	Soil	Low	1	5.6	6.5		µg/Kg
		A1505279858	Site Sample	Soil	Low	1	5.4	6.1		µg/Kg
		A1505279859	Site Sample	Soil	Low	1	5.2	3.5		µg/Kg
		A1505279860	Site Sample	Soil	Low	1	7.2	12		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	Endosulfan I									
		A1505279842	Site Sample	Soil	Low	1	3.6	8.9		µg/Kg
		A1505279843	Site Sample	Soil	Low	1	2.8	7.4		µg/Kg
		A1505279844	Site Sample	Soil	Low	1	2.6	9.1	J	µg/Kg
		A1505279848	Site Sample	Soil	Low	1	2.9	12	J	µg/Kg
		A1505279849	Site Sample	Soil	Low	1	2.5	6.7		µg/Kg
		A1505279853	Site Sample	Soil	Low	1	3.9	8.8		µg/Kg
		A1505279854	Site Sample	Soil	Low	1	2.8	4.1		µg/Kg
		A1505279856	Site Sample	Soil	Low	1	3.5	12		µg/Kg
		A1505279857	Site Sample	Soil	Low	1	2.9	5.9		µg/Kg
		A1505279858	Site Sample	Soil	Low	1	2.8	6.7		µg/Kg
		A1505279859	Site Sample	Soil	Low	1	2.7	2.5		µg/Kg
	Endosulfan II									
		A1505279842	Site Sample	Soil	Low	1	7.0	19		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	Endosulfan II									
		A1505279843	Site Sample	Soil	Low	1	5.4	17		µg/Kg
		A1505279844	Site Sample	Soil	Low	1	5.1	21	J	µg/Kg
		A1505279845	Site Sample	Soil	Low	1	5.0	9.9		µg/Kg
		A1505279846	Site Sample	Soil	Low	1	7.8	13		µg/Kg
		A1505279847	Site Sample	Soil	Low	1	5.9	11		µg/Kg
		A1505279848	Site Sample	Soil	Low	1	5.6	15		µg/Kg
		A1505279849	Site Sample	Soil	Low	1	4.9	20		µg/Kg
		A1505279850	Site Sample	Soil	Low	1	5.6	4.6		µg/Kg
		A1505279852	Site Sample	Soil	Low	1	8.2	7.7		µg/Kg
		A1505279853	Site Sample	Soil	Low	1	7.5	16		µg/Kg
		A1505279854	Site Sample	Soil	Low	1	5.4	13		µg/Kg
		A1505279855	Site Sample	Soil	Low	1	6.9	15		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	Endosulfan II								
		A1505279856	Site Sample	Soil	Low	1	6.9	16	µg/Kg
		A1505279857	Site Sample	Soil	Low	1	5.8	14	µg/Kg
		A1505279858	Site Sample	Soil	Low	1	5.4	18	µg/Kg
		A1505279859	Site Sample	Soil	Low	1	5.2	10	µg/Kg
		A1505279860	Site Sample	Soil	Low	1	7.2	13	µg/Kg
	Endo. Sulfate								
		A1505279846	Site Sample	Soil	Low	1	7.8	25	µg/Kg
		A1505279849	Site Sample	Soil	Low	1	4.9	5.4	µg/Kg
		A1505279850	Site Sample	Soil	Low	1	5.6	8.9	µg/Kg
		A1505279860	Site Sample	Soil	Low	1	7.2	23	µg/Kg
	Endrin								
		A1505279842	Site Sample	Soil	Low	1	7.0	7.0	µg/Kg
		A1505279843	Site Sample	Soil	Low	1	5.4	6.7	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	Endrin								
		A1505279844	Site Sample	Soil	Low	1	5.1	7.2 J	µg/Kg
		A1505279845	Site Sample	Soil	Low	1	5.0	3.8	µg/Kg
		A1505279846	Site Sample	Soil	Low	1	7.8	5.9	µg/Kg
		A1505279847	Site Sample	Soil	Low	1	5.9	7.7	µg/Kg
		A1505279848	Site Sample	Soil	Low	1	5.6	9.4 J	µg/Kg
		A1505279849	Site Sample	Soil	Low	1	4.9	6.1	µg/Kg
		A1505279853	Site Sample	Soil	Low	1	7.5	5.3	µg/Kg
		A1505279854	Site Sample	Soil	Low	1	5.4	3.4	µg/Kg
		A1505279855	Site Sample	Soil	Low	1	6.9	5.7	µg/Kg
		A1505279856	Site Sample	Soil	Low	1	6.9	7.2	µg/Kg
		A1505279857	Site Sample	Soil	Low	1	5.6	4.1	µg/Kg
		A1505279858	Site Sample	Soil	Low	1	5.4	3.7	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	Endrin									
		A1505279860	Site Sample	Soil	Low	1	7.2	7.4		µg/Kg
	Endrin Aldehyde									
		A1505279842	Site Sample	Soil	Low	1	7.0	20		µg/Kg
		A1505279843	Site Sample	Soil	Low	1	5.4	20		µg/Kg
		A1505279844	Site Sample	Soil	Low	1	5.1	61	J	µg/Kg
		A1505279845	Site Sample	Soil	Low	1	5.0	20		µg/Kg
		A1505279846	Site Sample	Soil	Low	1	7.8	20		µg/Kg
		A1505279847	Site Sample	Soil	Low	1	5.9	7.2		µg/Kg
		A1505279848	Site Sample	Soil	Low	1	5.6	12		µg/Kg
		A1505279849	Site Sample	Soil	Low	1	4.9	34		µg/Kg
		A1505279850	Site Sample	Soil	Low	1	5.6	9.5		µg/Kg
		A1505279852	Site Sample	Soil	Low	1	8.2	7.7		µg/Kg
		A1505279853	Site Sample	Soil	Low	1	7.5	16		µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) *and the MQL*

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	Endrin Aldehyde								
		A1505279854	Site Sample	Soil	Low	1	5.4	18	µg/Kg
		A1505279855	Site Sample	Soil	Low	1	6.9	20	µg/Kg
		A1505279856	Site Sample	Soil	Low	1	6.9	13	µg/Kg
		A1505279857	Site Sample	Soil	Low	1	5.6	18	µg/Kg
		A1505279858	Site Sample	Soil	Low	1	5.4	54	µg/Kg
		A1505279859	Site Sample	Soil	Low	1	5.2	22	µg/Kg
		A1505279860	Site Sample	Soil	Low	1	7.2	15	µg/Kg
	Endrin Ketone								
		A1505279842	Site Sample	Soil	Low	1	7.0	8.9	µg/Kg
		A1505279843	Site Sample	Soil	Low	1	5.4	34	µg/Kg
		A1505279858	Site Sample	Soil	Low	1	5.4	7.9	µg/Kg
	Heptachlor								
		A1505279848	Site Sample	Soil	Low	1	2.9	3.0	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	Heptachlor									
		A1505279849	Site Sample	Soil	Low	1	2.5	25		µg/Kg
		A1505279856	Site Sample	Soil	Low	1	3.5	1.9		µg/Kg
		A1505279859	Site Sample	Soil	Low	1	2.7	2.2		µg/Kg
	Hept. Epoxide									
		A1505279842	Site Sample	Soil	Low	1	3.6	13		µg/Kg
		A1505279843	Site Sample	Soil	Low	1	2.8	14		µg/Kg
		A1505279844	Site Sample	Soil	Low	1	2.6	27	J	µg/Kg
		A1505279845	Site Sample	Soil	Low	1	2.6	6.6		µg/Kg
		A1505279846	Site Sample	Soil	Low	1	4.0	6.4		µg/Kg
		A1505279847	Site Sample	Soil	Low	1	3.0	9.2		µg/Kg
		A1505279848	Site Sample	Soil	Low	1	2.9	21	J	µg/Kg
		A1505279849	Site Sample	Soil	Low	1	2.5	15		µg/Kg
		A1505279850	Site Sample	Soil	Low	1	2.9	4.2		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	Hept. Epoxide								
		A1505279852	Site Sample	Soil	Low	1	4.2	2.1	µg/Kg
		A1505279853	Site Sample	Soil	Low	1	3.9	15	µg/Kg
		A1505279854	Site Sample	Soil	Low	1	2.8	9.2	µg/Kg
		A1505279855	Site Sample	Soil	Low	1	3.6	6.2	µg/Kg
		A1505279856	Site Sample	Soil	Low	1	3.5	20	µg/Kg
		A1505279857	Site Sample	Soil	Low	1	2.9	14	µg/Kg
		A1505279858	Site Sample	Soil	Low	1	2.8	18	µg/Kg
		A1505279859	Site Sample	Soil	Low	1	2.7	6.4	µg/Kg
		A1505279860	Site Sample	Soil	Low	1	3.7	9.2	µg/Kg
	Methoxychlor								
		A1505279844	Site Sample	Soil	Low	1	26	25	µg/Kg
		A1505279849	Site Sample	Soil	Low	1	25	23	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Aluminum								
		A1505279841	Site Sample	Soil	Low	1	20	8,436	mg/Kg
		A1505279842	Site Sample	Soil	Low	1	20	4,737	mg/Kg
		A1505279843	Site Sample	Soil	Low	1	20	5,505	mg/Kg
		A1505279844	Site Sample	Soil	Low	1	20	7,487	mg/Kg
		A1505279845	Site Sample	Soil	Low	1	20	8,619	mg/Kg
		A1505279846	Site Sample	Soil	Low	1	20	2,455	mg/Kg
		A1505279847	Site Sample	Soil	Low	1	20	3,688	mg/Kg
		A1505279848	Site Sample	Soil	Low	1	20	5,260	mg/Kg
		A1505279849	Site Sample	Soil	Low	1	20	4,918	mg/Kg
		A1505279850	Site Sample	Soil	Low	1	20	11,227	mg/Kg
		A1505279852	Site Sample	Soil	Low	1	20	3,820	mg/Kg
		A1505279853	Site Sample	Soil	Low	1	20	3,793	mg/Kg

Qualifiers:

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- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Aluminum									
		A1505279854	Site Sample	Soil	Low	1	20	6,345		mg/Kg
		A1505279855	Site Sample	Soil	Low	1	20	5,273		mg/Kg
		A1505279856	Site Sample	Soil	Low	1	20	5,365		mg/Kg
		A1505279857	Site Sample	Soil	Low	1	20	7,009		mg/Kg
		A1505279858	Site Sample	Soil	Low	1	20	7,369		mg/Kg
		A1505279859	Site Sample	Soil	Low	1	20	7,060		mg/Kg
		A1505279860	Site Sample	Soil	Low	1	20	5,993		mg/Kg
	Antimony									
		A1505279844	Site Sample	Soil	Low	1	1.0	3.6	J	mg/Kg
		A1505279845	Site Sample	Soil	Low	1	1.0	13	J	mg/Kg
		A1505279850	Site Sample	Soil	Low	1	1.0	6.5	J	mg/Kg
		A1505279854	Site Sample	Soil	Low	1	1.0	6.8	J	mg/Kg
		A1505279858	Site Sample	Soil	Low	1	1.0	3.7	J	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Antimony									
		A1505279859	Site Sample	Soil	Low	1	1.0	8.9	J	mg/Kg
	Arsenic									
		A1505279841	Site Sample	Soil	Low	1	1.0	6.4		mg/Kg
		A1505279842	Site Sample	Soil	Low	1	1.0	11		mg/Kg
		A1505279843	Site Sample	Soil	Low	1	1.0	9.8		mg/Kg
		A1505279844	Site Sample	Soil	Low	1	1.0	14		mg/Kg
		A1505279845	Site Sample	Soil	Low	1	1.0	16		mg/Kg
		A1505279846	Site Sample	Soil	Low	1	1.0	3.2		mg/Kg
		A1505279847	Site Sample	Soil	Low	1	1.0	4.2		mg/Kg
		A1505279848	Site Sample	Soil	Low	1	1.0	8.8		mg/Kg
		A1505279849	Site Sample	Soil	Low	1	1.0	10		mg/Kg
		A1505279850	Site Sample	Soil	Low	1	1.0	11		mg/Kg
		A1505279852	Site Sample	Soil	Low	1	1.0	3.4		mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ

Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Arsenic								
		A1505279853	Site Sample	Soil	Low	1	1.0	7.0	mg/Kg
		A1505279854	Site Sample	Soil	Low	1	1.0	11	mg/Kg
		A1505279855	Site Sample	Soil	Low	1	1.0	4.2	mg/Kg
		A1505279856	Site Sample	Soil	Low	1	1.0	6.7	mg/Kg
		A1505279857	Site Sample	Soil	Low	1	1.0	12	mg/Kg
		A1505279858	Site Sample	Soil	Low	1	1.0	15	mg/Kg
		A1505279859	Site Sample	Soil	Low	1	1.0	14	mg/Kg
		A1505279860	Site Sample	Soil	Low	1	1.0	4.6	mg/Kg
	Barium								
		A1505279841	Site Sample	Soil	Low	1	1.0	102	mg/Kg
		A1505279842	Site Sample	Soil	Low	1	1.0	168	mg/Kg
		A1505279843	Site Sample	Soil	Low	1	1.0	156	mg/Kg
		A1505279844	Site Sample	Soil	Low	1	1.0	182	mg/Kg

Qualifiers:

J - Estimated

B - (Organics) Found in the associated method blank

D - Reported from a dilution

E - Exceeds calibration range

P - (Pesticides) Difference in column concentrations > 25%

B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Barium								
		A1505279845	Site Sample	Soil	Low	1	1.0	172	mg/Kg
		A1505279846	Site Sample	Soil	Low	1	1.0	95	mg/Kg
		A1505279847	Site Sample	Soil	Low	1	1.0	150	mg/Kg
		A1505279848	Site Sample	Soil	Low	1	1.0	176	mg/Kg
		A1505279849	Site Sample	Soil	Low	1	1.0	163	mg/Kg
		A1505279850	Site Sample	Soil	Low	1	1.0	157	mg/Kg
		A1505279852	Site Sample	Soil	Low	1	1.0	99	mg/Kg
		A1505279853	Site Sample	Soil	Low	1	1.0	136	mg/Kg
		A1505279854	Site Sample	Soil	Low	1	1.0	148	mg/Kg
		A1505279855	Site Sample	Soil	Low	1	1.0	132	mg/Kg
		A1505279856	Site Sample	Soil	Low	1	1.0	176	mg/Kg
		A1505279857	Site Sample	Soil	Low	1	1.0	173	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Barium									
		A1505279858	Site Sample	Soil	Low	1	1.0	204		mg/Kg
		A1505279859	Site Sample	Soil	Low	1	1.0	176		mg/Kg
		A1505279860	Site Sample	Soil	Low	1	1.0	134		mg/Kg
	Beryllium									
		A1505279841	Site Sample	Soil	Low	1	0.20	0.24		mg/Kg
		A1505279844	Site Sample	Soil	Low	1	0.20	0.12	B	mg/Kg
		A1505279845	Site Sample	Soil	Low	1	0.20	0.16	B	mg/Kg
		A1505279850	Site Sample	Soil	Low	1	0.20	0.19	B	mg/Kg
		A1505279857	Site Sample	Soil	Low	1	0.20	0.13	B	mg/Kg
		A1505279858	Site Sample	Soil	Low	1	0.20	0.15	B	mg/Kg
		A1505279859	Site Sample	Soil	Low	1	0.20	0.14	B	mg/Kg
	Cadmium									
		A1505279841	Site Sample	Soil	Low	1	0.50	0.41	B	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Cadmium								
		A1505279842	Site Sample	Soil	Low	1	0.50	1.1	mg/Kg
		A1505279843	Site Sample	Soil	Low	1	0.50	0.80	mg/Kg
		A1505279844	Site Sample	Soil	Low	1	0.50	1.1	mg/Kg
		A1505279845	Site Sample	Soil	Low	1	0.50	1.4	mg/Kg
		A1505279846	Site Sample	Soil	Low	1	0.50	0.81	mg/Kg
		A1505279847	Site Sample	Soil	Low	1	0.50	1.1	mg/Kg
		A1505279848	Site Sample	Soil	Low	1	0.50	1.2	mg/Kg
		A1505279849	Site Sample	Soil	Low	1	0.50	0.87	mg/Kg
		A1505279850	Site Sample	Soil	Low	1	0.50	1.2	mg/Kg
		A1505279852	Site Sample	Soil	Low	1	0.50	0.85	mg/Kg
		A1505279853	Site Sample	Soil	Low	1	0.50	1.0	mg/Kg
		A1505279854	Site Sample	Soil	Low	1	0.50	1.6	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Cadmium								
		A1505279855	Site Sample	Soil	Low	1	0.50	1.0	mg/Kg
		A1505279856	Site Sample	Soil	Low	1	0.50	1.3	mg/Kg
		A1505279857	Site Sample	Soil	Low	1	0.50	1.0	mg/Kg
		A1505279858	Site Sample	Soil	Low	1	0.50	1.3	mg/Kg
		A1505279859	Site Sample	Soil	Low	1	0.50	1.5	mg/Kg
		A1505279860	Site Sample	Soil	Low	1	0.50	1.0	mg/Kg
	Calcium								
		A1505279841	Site Sample	Soil	Low	1	30	1,230	mg/Kg
		A1505279842	Site Sample	Soil	Low	1	30	3,836	mg/Kg
		A1505279843	Site Sample	Soil	Low	1	30	2,679	mg/Kg
		A1505279844	Site Sample	Soil	Low	1	30	2,324	mg/Kg
		A1505279845	Site Sample	Soil	Low	1	30	2,102	mg/Kg
		A1505279846	Site Sample	Soil	Low	1	30	2,654	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Calcium								
		A1505279847	Site Sample	Soil	Low	1	30	3,006	mg/Kg
		A1505279848	Site Sample	Soil	Low	1	30	2,501	mg/Kg
		A1505279849	Site Sample	Soil	Low	1	30	2,322	mg/Kg
		A1505279850	Site Sample	Soil	Low	1	30	1,835	mg/Kg
		A1505279852	Site Sample	Soil	Low	1	30	3,006	mg/Kg
		A1505279853	Site Sample	Soil	Low	1	30	1,967	mg/Kg
		A1505279854	Site Sample	Soil	Low	1	30	1,626	mg/Kg
		A1505279855	Site Sample	Soil	Low	1	30	2,850	mg/Kg
		A1505279856	Site Sample	Soil	Low	1	30	2,472	mg/Kg
		A1505279857	Site Sample	Soil	Low	1	30	2,554	mg/Kg
		A1505279858	Site Sample	Soil	Low	1	30	2,284	mg/Kg
		A1505279859	Site Sample	Soil	Low	1	30	2,207	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Calcium								
		A1505279860	Site Sample	Soil	Low	1	30	2,743	mg/Kg
	Chromium								
		A1505279841	Site Sample	Soil	Low	1	1.0	9.0	mg/Kg
		A1505279842	Site Sample	Soil	Low	1	1.0	25	mg/Kg
		A1505279843	Site Sample	Soil	Low	1	1.0	20	mg/Kg
		A1505279844	Site Sample	Soil	Low	1	1.0	23	mg/Kg
		A1505279845	Site Sample	Soil	Low	1	1.0	15	mg/Kg
		A1505279846	Site Sample	Soil	Low	1	1.0	9.3	mg/Kg
		A1505279847	Site Sample	Soil	Low	1	1.0	14	mg/Kg
		A1505279848	Site Sample	Soil	Low	1	1.0	21	mg/Kg
		A1505279849	Site Sample	Soil	Low	1	1.0	21	mg/Kg
		A1505279850	Site Sample	Soil	Low	1	1.0	15	mg/Kg
		A1505279852	Site Sample	Soil	Low	1	1.0	10	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Chromium								
		A1505279853	Site Sample	Soil	Low	1	1.0	15	mg/Kg
		A1505279854	Site Sample	Soil	Low	1	1.0	23	mg/Kg
		A1505279855	Site Sample	Soil	Low	1	1.0	15	mg/Kg
		A1505279856	Site Sample	Soil	Low	1	1.0	18	mg/Kg
		A1505279857	Site Sample	Soil	Low	1	1.0	26	mg/Kg
		A1505279858	Site Sample	Soil	Low	1	1.0	27	mg/Kg
		A1505279859	Site Sample	Soil	Low	1	1.0	14	mg/Kg
		A1505279860	Site Sample	Soil	Low	1	1.0	14	mg/Kg
	Cobalt								
		A1505279841	Site Sample	Soil	Low	1	0.50	4.1	mg/Kg
		A1505279842	Site Sample	Soil	Low	1	0.50	3.9	mg/Kg
		A1505279843	Site Sample	Soil	Low	1	0.50	3.6	mg/Kg
		A1505279844	Site Sample	Soil	Low	1	0.50	4.3	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79941**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Cobalt								
		A1505279845	Site Sample	Soil	Low	1	0.50	4.7	mg/Kg
		A1505279846	Site Sample	Soil	Low	1	0.50	2.3	mg/Kg
		A1505279847	Site Sample	Soil	Low	1	0.50	2.8	mg/Kg
		A1505279848	Site Sample	Soil	Low	1	0.50	3.3	mg/Kg
		A1505279849	Site Sample	Soil	Low	1	0.50	3.4	mg/Kg
		A1505279850	Site Sample	Soil	Low	1	0.50	5.6	mg/Kg
		A1505279852	Site Sample	Soil	Low	1	0.50	2.5	mg/Kg
		A1505279853	Site Sample	Soil	Low	1	0.50	2.8	mg/Kg
		A1505279854	Site Sample	Soil	Low	1	0.50	3.9	mg/Kg
		A1505279855	Site Sample	Soil	Low	1	0.50	3.8	mg/Kg
		A1505279856	Site Sample	Soil	Low	1	0.50	3.4	mg/Kg
		A1505279857	Site Sample	Soil	Low	1	0.50	4.1	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Cobalt								
		A1505279858	Site Sample	Soil	Low	1	0.50	4.3	mg/Kg
		A1505279859	Site Sample	Soil	Low	1	0.50	5.1	mg/Kg
		A1505279860	Site Sample	Soil	Low	1	0.50	3.5	mg/Kg
	Copper								
		A1505279841	Site Sample	Soil	Low	1	0.50	12	mg/Kg
		A1505279842	Site Sample	Soil	Low	1	0.50	35	mg/Kg
		A1505279843	Site Sample	Soil	Low	1	0.50	26	mg/Kg
		A1505279844	Site Sample	Soil	Low	1	0.50	33	mg/Kg
		A1505279845	Site Sample	Soil	Low	1	0.50	22	mg/Kg
		A1505279846	Site Sample	Soil	Low	1	0.50	25	mg/Kg
		A1505279847	Site Sample	Soil	Low	1	0.50	36	mg/Kg
		A1505279848	Site Sample	Soil	Low	1	0.50	34	mg/Kg
		A1505279849	Site Sample	Soil	Low	1	0.50	30	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Copper								
		A1505279850	Site Sample	Soil	Low	1	0.50	22	mg/Kg
		A1505279852	Site Sample	Soil	Low	1	0.50	29	mg/Kg
		A1505279853	Site Sample	Soil	Low	1	0.50	32	mg/Kg
		A1505279854	Site Sample	Soil	Low	1	0.50	24	mg/Kg
		A1505279855	Site Sample	Soil	Low	1	0.50	32	mg/Kg
		A1505279856	Site Sample	Soil	Low	1	0.50	38	mg/Kg
		A1505279857	Site Sample	Soil	Low	1	0.50	33	mg/Kg
		A1505279858	Site Sample	Soil	Low	1	0.50	39	mg/Kg
		A1505279859	Site Sample	Soil	Low	1	0.50	24	mg/Kg
		A1505279860	Site Sample	Soil	Low	1	0.50	33	mg/Kg
	Iron								
		A1505279841	Site Sample	Soil	Low	1	10	10,497	mg/Kg
		A1505279842	Site Sample	Soil	Low	1	10	7,785	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Iron								
		A1505279843	Site Sample	Soil	Low	1	10	8,092	mg/Kg
		A1505279844	Site Sample	Soil	Low	1	10	10,286	mg/Kg
		A1505279845	Site Sample	Soil	Low	1	10	11,404	mg/Kg
		A1505279846	Site Sample	Soil	Low	1	10	4,537	mg/Kg
		A1505279847	Site Sample	Soil	Low	1	10	6,158	mg/Kg
		A1505279848	Site Sample	Soil	Low	1	10	7,455	mg/Kg
		A1505279849	Site Sample	Soil	Low	1	10	7,784	mg/Kg
		A1505279850	Site Sample	Soil	Low	1	10	14,434	mg/Kg
		A1505279852	Site Sample	Soil	Low	1	10	6,247	mg/Kg
		A1505279853	Site Sample	Soil	Low	1	10	6,248	mg/Kg
		A1505279854	Site Sample	Soil	Low	1	10	8,686	mg/Kg
		A1505279855	Site Sample	Soil	Low	1	10	7,458	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Iron								
		A1505279856	Site Sample	Soil	Low	1	10	7,951	mg/Kg
		A1505279857	Site Sample	Soil	Low	1	10	9,920	mg/Kg
		A1505279858	Site Sample	Soil	Low	1	10	10,658	mg/Kg
		A1505279859	Site Sample	Soil	Low	1	10	11,321	mg/Kg
		A1505279860	Site Sample	Soil	Low	1	10	7,422	mg/Kg
	Lead								
		A1505279841	Site Sample	Soil	Low	1	0.50	12	mg/Kg
		A1505279842	Site Sample	Soil	Low	1	0.50	346	mg/Kg
		A1505279843	Site Sample	Soil	Low	1	0.50	233	mg/Kg
		A1505279844	Site Sample	Soil	Low	1	0.50	231	mg/Kg
		A1505279845	Site Sample	Soil	Low	1	0.50	158	mg/Kg
		A1505279846	Site Sample	Soil	Low	1	0.50	98	mg/Kg
		A1505279847	Site Sample	Soil	Low	1	0.50	189	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Lead								
		A1505279848	Site Sample	Soil	Low	1	0.50	373	mg/Kg
		A1505279849	Site Sample	Soil	Low	1	0.50	245	mg/Kg
		A1505279850	Site Sample	Soil	Low	1	0.50	119	mg/Kg
		A1505279852	Site Sample	Soil	Low	1	0.50	102	mg/Kg
		A1505279853	Site Sample	Soil	Low	1	0.50	247	mg/Kg
		A1505279854	Site Sample	Soil	Low	1	0.50	202	mg/Kg
		A1505279855	Site Sample	Soil	Low	1	0.50	144	mg/Kg
		A1505279856	Site Sample	Soil	Low	1	0.50	318	mg/Kg
		A1505279857	Site Sample	Soil	Low	1	0.50	304	mg/Kg
		A1505279858	Site Sample	Soil	Low	1	0.50	267	mg/Kg
		A1505279859	Site Sample	Soil	Low	1	0.50	172	mg/Kg
		A1505279860	Site Sample	Soil	Low	1	0.50	154	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Magnesium								
		A1505279841	Site Sample	Soil	Low	1	20	1,204	mg/Kg
		A1505279842	Site Sample	Soil	Low	1	20	872	mg/Kg
		A1505279843	Site Sample	Soil	Low	1	20	969	mg/Kg
		A1505279844	Site Sample	Soil	Low	1	20	1,126	mg/Kg
		A1505279845	Site Sample	Soil	Low	1	20	1,346	mg/Kg
		A1505279846	Site Sample	Soil	Low	1	20	594	mg/Kg
		A1505279847	Site Sample	Soil	Low	1	20	754	mg/Kg
		A1505279848	Site Sample	Soil	Low	1	20	839	mg/Kg
		A1505279849	Site Sample	Soil	Low	1	20	872	mg/Kg
		A1505279850	Site Sample	Soil	Low	1	20	1,527	mg/Kg
		A1505279852	Site Sample	Soil	Low	1	20	866	mg/Kg
		A1505279853	Site Sample	Soil	Low	1	20	766	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Magnesium								
		A1505279854	Site Sample	Soil	Low	1	20	1,047	mg/Kg
		A1505279855	Site Sample	Soil	Low	1	20	945	mg/Kg
		A1505279856	Site Sample	Soil	Low	1	20	905	mg/Kg
		A1505279857	Site Sample	Soil	Low	1	20	1,129	mg/Kg
		A1505279858	Site Sample	Soil	Low	1	20	1,145	mg/Kg
		A1505279859	Site Sample	Soil	Low	1	20	1,202	mg/Kg
		A1505279860	Site Sample	Soil	Low	1	20	991	mg/Kg
	Manganese								
		A1505279841	Site Sample	Soil	Low	1	0.50	277	mg/Kg
		A1505279842	Site Sample	Soil	Low	1	0.50	185	mg/Kg
		A1505279843	Site Sample	Soil	Low	1	0.50	194	mg/Kg
		A1505279844	Site Sample	Soil	Low	1	0.50	254	mg/Kg
		A1505279845	Site Sample	Soil	Low	1	0.50	292	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Manganese								
		A1505279846	Site Sample	Soil	Low	1	0.50	99	mg/Kg
		A1505279847	Site Sample	Soil	Low	1	0.50	126	mg/Kg
		A1505279848	Site Sample	Soil	Low	1	0.50	177	mg/Kg
		A1505279849	Site Sample	Soil	Low	1	0.50	198	mg/Kg
		A1505279850	Site Sample	Soil	Low	1	0.50	413	mg/Kg
		A1505279852	Site Sample	Soil	Low	1	0.50	142	mg/Kg
		A1505279853	Site Sample	Soil	Low	1	0.50	148	mg/Kg
		A1505279854	Site Sample	Soil	Low	1	0.50	224	mg/Kg
		A1505279855	Site Sample	Soil	Low	1	0.50	137	mg/Kg
		A1505279856	Site Sample	Soil	Low	1	0.50	165	mg/Kg
		A1505279857	Site Sample	Soil	Low	1	0.50	237	mg/Kg
		A1505279858	Site Sample	Soil	Low	1	0.50	253	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Manganese								
		A1505279859	Site Sample	Soil	Low	1	0.50	398	mg/Kg
		A1505279860	Site Sample	Soil	Low	1	0.50	139	mg/Kg
	Mercury								
		A1505279844	Site Sample	Soil	Low	1	0.10	0.29	mg/Kg
		A1505279845	Site Sample	Soil	Low	1	0.10	0.52	mg/Kg
		A1505279858	Site Sample	Soil	Low	1	0.10	0.32	mg/Kg
	Nickel								
		A1505279841	Site Sample	Soil	Low	1	1.0	11	mg/Kg
		A1505279842	Site Sample	Soil	Low	1	1.0	9.8	mg/Kg
		A1505279843	Site Sample	Soil	Low	1	1.0	9.8	mg/Kg
		A1505279844	Site Sample	Soil	Low	1	1.0	10	mg/Kg
		A1505279845	Site Sample	Soil	Low	1	1.0	11	mg/Kg
		A1505279846	Site Sample	Soil	Low	1	1.0	6.8	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Nickel								
		A1505279847	Site Sample	Soil	Low	1	1.0	11	mg/Kg
		A1505279848	Site Sample	Soil	Low	1	1.0	8.8	mg/Kg
		A1505279849	Site Sample	Soil	Low	1	1.0	11	mg/Kg
		A1505279850	Site Sample	Soil	Low	1	1.0	14	mg/Kg
		A1505279852	Site Sample	Soil	Low	1	1.0	7.7	mg/Kg
		A1505279853	Site Sample	Soil	Low	1	1.0	7.9	mg/Kg
		A1505279854	Site Sample	Soil	Low	1	1.0	9.2	mg/Kg
		A1505279855	Site Sample	Soil	Low	1	1.0	11	mg/Kg
		A1505279856	Site Sample	Soil	Low	1	1.0	11	mg/Kg
		A1505279857	Site Sample	Soil	Low	1	1.0	12	mg/Kg
		A1505279858	Site Sample	Soil	Low	1	1.0	10	mg/Kg
		A1505279859	Site Sample	Soil	Low	1	1.0	11	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Nickel								
		A1505279860	Site Sample	Soil	Low	1	1.0	11	mg/Kg
	Potassium								
		A1505279841	Site Sample	Soil	Low	1	50	543	mg/Kg
		A1505279842	Site Sample	Soil	Low	1	50	359	mg/Kg
		A1505279843	Site Sample	Soil	Low	1	50	408	mg/Kg
		A1505279844	Site Sample	Soil	Low	1	50	544	mg/Kg
		A1505279845	Site Sample	Soil	Low	1	50	660	mg/Kg
		A1505279846	Site Sample	Soil	Low	1	50	180	mg/Kg
		A1505279847	Site Sample	Soil	Low	1	50	269	mg/Kg
		A1505279848	Site Sample	Soil	Low	1	50	400	mg/Kg
		A1505279849	Site Sample	Soil	Low	1	50	370	mg/Kg
		A1505279850	Site Sample	Soil	Low	1	50	849	mg/Kg
		A1505279852	Site Sample	Soil	Low	1	50	271	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Potassium									
		A1505279853	Site Sample	Soil	Low	1	50	269		mg/Kg
		A1505279854	Site Sample	Soil	Low	1	50	448		mg/Kg
		A1505279855	Site Sample	Soil	Low	1	50	377		mg/Kg
		A1505279856	Site Sample	Soil	Low	1	50	404		mg/Kg
		A1505279857	Site Sample	Soil	Low	1	50	495		mg/Kg
		A1505279858	Site Sample	Soil	Low	1	50	516		mg/Kg
		A1505279859	Site Sample	Soil	Low	1	50	504		mg/Kg
		A1505279860	Site Sample	Soil	Low	1	50	431		mg/Kg
	Selenium									
		A1505279850	Site Sample	Soil	Low	1	0.50	0.65		mg/Kg
	Silver									
		A1505279842	Site Sample	Soil	Low	1	1.0	0.98	B	mg/Kg
		A1505279844	Site Sample	Soil	Low	1	1.0	0.98	B	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Silver									
		A1505279845	Site Sample	Soil	Low	1	1.0	1.1		mg/Kg
		A1505279847	Site Sample	Soil	Low	1	1.0	1.8		mg/Kg
		A1505279848	Site Sample	Soil	Low	1	1.0	1.2		mg/Kg
		A1505279853	Site Sample	Soil	Low	1	1.0	1.2		mg/Kg
		A1505279854	Site Sample	Soil	Low	1	1.0	2.9		mg/Kg
		A1505279855	Site Sample	Soil	Low	1	1.0	1.5		mg/Kg
		A1505279856	Site Sample	Soil	Low	1	1.0	1.8		mg/Kg
		A1505279858	Site Sample	Soil	Low	1	1.0	1.1		mg/Kg
		A1505279859	Site Sample	Soil	Low	1	1.0	0.83	B	mg/Kg
		A1505279860	Site Sample	Soil	Low	1	1.0	1.1		mg/Kg
	Sodium									
		A1505279841	Site Sample	Soil	Low	1	100	105		mg/Kg
		A1505279842	Site Sample	Soil	Low	1	100	72	B	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Sodium									
		A1505279843	Site Sample	Soil	Low	1	100	80	B	mg/Kg
		A1505279844	Site Sample	Soil	Low	1	100	89	B	mg/Kg
		A1505279845	Site Sample	Soil	Low	1	100	96	B	mg/Kg
		A1505279847	Site Sample	Soil	Low	1	100	55	B	mg/Kg
		A1505279848	Site Sample	Soil	Low	1	100	65	B	mg/Kg
		A1505279849	Site Sample	Soil	Low	1	100	62	B	mg/Kg
		A1505279850	Site Sample	Soil	Low	1	100	90	B	mg/Kg
		A1505279852	Site Sample	Soil	Low	1	100	91	B	mg/Kg
		A1505279853	Site Sample	Soil	Low	1	100	104		mg/Kg
		A1505279854	Site Sample	Soil	Low	1	100	100	B	mg/Kg
		A1505279855	Site Sample	Soil	Low	1	100	55	B	mg/Kg
		A1505279856	Site Sample	Soil	Low	1	100	59	B	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Sodium									
		A1505279857	Site Sample	Soil	Low	1	100	74	B	mg/Kg
		A1505279858	Site Sample	Soil	Low	1	100	77	B	mg/Kg
		A1505279859	Site Sample	Soil	Low	1	100	75	B	mg/Kg
	Vanadium									
		A1505279841	Site Sample	Soil	Low	1	0.50	17		mg/Kg
		A1505279842	Site Sample	Soil	Low	1	0.50	12		mg/Kg
		A1505279843	Site Sample	Soil	Low	1	0.50	12		mg/Kg
		A1505279844	Site Sample	Soil	Low	1	0.50	15		mg/Kg
		A1505279845	Site Sample	Soil	Low	1	0.50	17		mg/Kg
		A1505279846	Site Sample	Soil	Low	1	0.50	6.8		mg/Kg
		A1505279847	Site Sample	Soil	Low	1	0.50	8.7		mg/Kg
		A1505279848	Site Sample	Soil	Low	1	0.50	11		mg/Kg
		A1505279849	Site Sample	Soil	Low	1	0.50	11		mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Vanadium								
		A1505279850	Site Sample	Soil	Low	1	0.50	23	mg/Kg
		A1505279852	Site Sample	Soil	Low	1	0.50	8.9	mg/Kg
		A1505279853	Site Sample	Soil	Low	1	0.50	8.8	mg/Kg
		A1505279854	Site Sample	Soil	Low	1	0.50	14	mg/Kg
		A1505279855	Site Sample	Soil	Low	1	0.50	11	mg/Kg
		A1505279856	Site Sample	Soil	Low	1	0.50	11	mg/Kg
		A1505279857	Site Sample	Soil	Low	1	0.50	14	mg/Kg
		A1505279858	Site Sample	Soil	Low	1	0.50	16	mg/Kg
		A1505279859	Site Sample	Soil	Low	1	0.50	17	mg/Kg
		A1505279860	Site Sample	Soil	Low	1	0.50	12	mg/Kg
	Zinc								
		A1505279841	Site Sample	Soil	Low	1	1.0	44	mg/Kg
		A1505279842	Site Sample	Soil	Low	1	1.0	230	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

00000099

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Zinc								
		A1505279843	Site Sample	Soil	Low	1	1.0	140	mg/Kg
		A1505279844	Site Sample	Soil	Low	1	1.0	161	mg/Kg
		A1505279845	Site Sample	Soil	Low	1	1.0	119	mg/Kg
		A1505279846	Site Sample	Soil	Low	1	1.0	174	mg/Kg
		A1505279847	Site Sample	Soil	Low	1	1.0	237	mg/Kg
		A1505279848	Site Sample	Soil	Low	1	1.0	201	mg/Kg
		A1505279849	Site Sample	Soil	Low	1	1.0	143	mg/Kg
		A1505279850	Site Sample	Soil	Low	1	1.0	132	mg/Kg
		A1505279852	Site Sample	Soil	Low	1	1.0	203	mg/Kg
		A1505279853	Site Sample	Soil	Low	1	1.0	200	mg/Kg
		A1505279854	Site Sample	Soil	Low	1	1.0	140	mg/Kg
		A1505279855	Site Sample	Soil	Low	1	1.0	233	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79841**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Zinc								
		A1505279856	Site Sample	Soil	Low	1	1.0	252	mg/Kg
		A1505279857	Site Sample	Soil	Low	1	1.0	180	mg/Kg
		A1505279858	Site Sample	Soil	Low	1	1.0	181	mg/Kg
		A1505279859	Site Sample	Soil	Low	1	1.0	135	mg/Kg
		A1505279860	Site Sample	Soil	Low	1	1.0	239	mg/Kg
Conventionals									
	Total Organic Carbon (TOC)								
		A1505279847	Site Sample	Soil	Low	1	100	38,860	mg/Kg
		A1505279847	Site Sample	Soil	Low	1	100	730	mg/Kg
		A1505279847	Site Sample	Soil	Low	1	0.10	49	%
		A1505279849	Site Sample	Soil	Low	1	100	2,077	mg/Kg
		A1505279849	Site Sample	Soil	Low	1	100	750	mg/Kg
		A1505279849	Site Sample	Soil	Low	1	0.10	33	%
		A1505279854	Site Sample	Soil	Low	1	100	2,490	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 79841

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Conventionals									
	Total Organic Carbon (TOC)								
		A1505279854	Site Sample	Soil	Low	1	0.10	38	%
		A1505279854	Site Sample	Soil	Low	1	160	9,920	mg/Kg
		A1505279855	Site Sample	Soil	Low	1	100	22,560	mg/Kg
		A1505279855	Site Sample	Soil	Low	1	100	5,530	mg/Kg
		A1505279855	Site Sample	Soil	Low	1	0.10	53	%
		A1505279858	Site Sample	Soil	Low	1	0.10	39	%
		A1505279858	Site Sample	Soil	Low	1	100	17,690	mg/Kg
		A1505279858	Site Sample	Soil	Low	1	100	779	mg/Kg
		A1505279859	Site Sample	Soil	Low	1	100	569	mg/Kg
		A1505279859	Site Sample	Soil	Low	1	0.10	36	%
		A1505279859	Site Sample	Soil	Low	1	160	12,800	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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Capitol Lakes Sediment Project
Validated Data Summary Tables
SDG: 79861
October 1998
Sample I.D.
A1505289861 – A1505289880

DCM GROUP WALK HAYDEL A DAMES & MOORE GROUP COMPANY

CAPITOL LAKES SEDIMENT PROJECT

DATA VALIDATION REPORT

SDG: 79861

Prepared for:

Louisiana DEQ
Baton Rouge, Louisiana

Integrate Project Number: 269
October 1998

Purpose of the Validation Report

Analytical data validation is a confirmatory procedure that evaluates client-generated laboratory data in accordance with definitive regulatory performance standards set forth by the USEPA.[1,2] Integrate, Incorporated (Integrate) provides client assistance with data validation to ensure that analytical data are complete, in compliance with laboratory protocols, in agreement with the project data quality objectives, and are technically valid and legally defensible.

Format of the Introduction Section

The introduction contains summary tables that permit the reader easy access to the validated detected results. The tables are identified as: 1) ***Table E 1*** *Sample Identification Cross-Reference Table*, 2) ***Table E 2*** *Summary of Validated Sample Detects Sorted by Client Sample and Fraction* and 3) ***Table E 3*** *Summary of Validated Analyte Detects Sorted by Fraction, Analyte and Client Sample.* A brief description of the contents of each table is presented below.

Executive Summaries:

1) ***Table E 1*** *Sample Identification Cross-Reference Table:* This table is a cross-reference of client sample names and laboratory names. It also references any consultants sample names, if they are available.

2) ***Table E 2*** *Summary of Validated Sample Detects Sorted by Client Sample and Fraction:* Identification of all post-validation detected analytes by client or site sample location, fraction and analyte. The order of the analytical fractions appearing in this report follows the typical order found in a laboratory data package. That is, volatiles appear first, followed by semivolatiles, pesticides, metals and conventionals. The detected analytes of each fraction are also displayed according to their order of appearance in the data package. This table also shows the sample type, sample matrix, extraction level, dilution factor and the method quantitation limits (MQL).

3) ***Table E 3*** *Summary of Validated Analyte Detects Sorted by Fraction, Analyte and Client Sample:* Identification of all post-validation detected analytes by fraction,

[1]National Functional Guidelines For Organic Data Review, USEPA, February 1994.
[2]National Functional Guidelines For Inorganic Data Review, USEPA, February 1994.

analyte and client site/sample location. The fractions follow the same order described above: volatiles, semivolatiles, pesticides, metals and conventionals. All detected analytes are sorted alphabetically.

Qualifier Definitions

- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J - The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
- N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."
- NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated value represents its approximate concentration.
- UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

NOTE:

All dilution results were combined onto one form four for the various fractions. If results from a dilution were used they are given a "D" qualifier as per CLP guidelines.

E1 - Sample Identification Cross-Reference Table

Site Samples Sorted by Fractio

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: 79861

Fraction	Client Sample	EPA Sample Number	Sample Type	Matrix	Level	Sampling Date/Time
Semivolatiles						
	A1505279861	279861	Site Sample	Soil	Low	05/27/98 15:44
	A1505279861RE	279861RR	Re-extraction/Re-analysis	Soil	Low	05/27/98 15:44
	A1505279862	279862	Site Sample	Soil	Low	05/27/98 15:50
	A1505279862RE	279862RR	Re-extraction/Re-analysis	Soil	Low	05/27/98 15:50
	A1505279863	279863	Site Sample	Soil	Low	05/27/98 15:55
	A1505279863RE	279863RR	Re-extraction/Re-analysis	Soil	Low	05/27/98 15:55
	A1505279864	279864	Site Sample	Soil	Low	05/27/98 15:58
	A1505279864RE	279864RR	Re-extraction/Re-analysis	Soil	Low	05/27/98 15:58
	A1505279865	279865	Field Blank	Water	Low	05/27/98 16:00
	A1505289871	289871	Equipment Rinsate	Water	Low	05/28/98 09:15
	A1505289866	289866	Site Sample	Soil	Low	05/28/98 08:55
	A1505289866RE	289866RE	Re-extraction/Re-analysis	Soil	Low	05/28/98 08:55
	A1505289867	289867	Site Sample	Soil	Low	05/28/98 09:06
	A1505289868	289868	Site Sample	Soil	Low	05/28/98 09:23
	A1505289869	289869	Site Sample	Soil	Low	05/28/98 09:23
	A1505289870	289870	Site Sample	Soil	Low	05/28/98 09:19
	A1505289872	289872	Site Sample	Soil	Low	05/28/98 09:35
	A1505289872RE	289872RE	Re-extraction/Re-analysis	Soil	Low	05/28/98 09:35
	A1505289873	289873	Site Sample	Soil	Low	05/28/98 09:38
	A1505289873RE	289873RE	Re-extraction/Re-analysis	Soil	Low	05/28/98 09:38
	A1505289874	289874	Site Sample	Soil	Low	05/28/98 09:45
	A1505289875	289875	Site Sample	Soil	Low	05/28/98 09:50
	A1505289876	289876	Site Sample	Soil	Low	05/28/98 10:05
	A1505289876RE	289876RE	Re-extraction/Re-analysis	Soil	Low	05/28/98 10:05
	A1505289877	289877	Site Sample	Soil	Low	05/28/98 10:08
	A1505289877RE	289877RE	Re-extraction/Re-analysis	Soil	Low	05/28/98 10:08
	A1505289878	289878	Site Sample	Soil	Low	05/28/98 10:06
	A1505289878RE	289878RE	Re-extraction/Re-analysis	Soil	Low	05/28/98 10:06
	A1505289879	289879	Site Sample	Soil	Low	05/28/98 10:09
	A1505289879RE	289879RE	Re-extraction/Re-analysis	Soil	Low	05/28/98 10:09
	A1505289880	289880	Site Sample	Soil	Low	05/28/98 10:12
	A1505289880RE	289880RE	Re-extraction/Re-analysis	Soil	Low	05/28/98 10:12
	SBLKDC	SBLKDC	Method Blank	Water	Low	-
	SBLKFV	SBLKFV	Method Blank	Soil	Low	-
	SBLKDV	SBLKDV	Method Blank	Soil	Low	-
	A1505289867MS	289867MS	Matrix Spike	Soil	Low	05/28/98 09:08
	A1505289867MSD	289867MSD	Matrix Spike Duplicate	Soil	Low	05/28/98 09:08
Pesticides/PCBs						
	A1505289866	289866	Site Sample	Soil	Low	05/28/98 08:55
	A1505289867	289867	Site Sample	Soil	Low	05/28/98 09:06
	A1505289867MS	289867MS	Matrix Spike	Soil	Low	05/28/98 09:06
	A1505289867MSD	289867MSD	Matrix Spike Duplicate	Soil	Low	05/28/98 09:06
	A1505289868	289868	Site Sample	Soil	Low	05/28/98 09:23
	A1505289869	289869	Site Sample	Soil	Low	05/28/98 09:23
	A1505289870	289870	Site Sample	Soil	Low	05/28/98 09:19
	A1505289871	289871	Equipment Rinsate	Water	Low	05/28/98 09:15
	A1505289872	289872	Site Sample	Soil	Low	05/28/98 09:35
	A1505289873	289873	Site Sample	Soil	Low	05/28/98 09:38
	A1505289874	289874	Site Sample	Soil	Low	05/28/98 09:45
	A1505289875	289875	Site Sample	Soil	Low	05/28/98 09:50
	A1505289876	289876	Site Sample	Soil	Low	05/28/98 10:05
	A1505289877	289877	Site Sample	Soil	Low	05/28/98 10:08
	A1505289878	289878	Site Sample	Soil	Low	05/28/98 10:06
	A1505289879	289879	Site Sample	Soil	Low	05/28/98 10:09
	A1505289880	289880	Site Sample	Soil	Low	05/28/98 10:12

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E1 - Sample Identification Cross-Reference Table | **LDEQ**

Site Samples Sorted by Fractio | **Capitol Lakes Sedimen**

Lab: **AATSLA / American Analytical & Technical Services, Inc.** | SDG ID: **79861**

Fraction	Client Sample	EPA Sample Number	Sample Type	Matrix	Level	Sampling Date/Time
	METHOD BLANK	METHOD BLANK	Method Blank	Water	Low	-
	METHOD BLANK	METHOD BLANK	Method Blank	Soil	Low	-
Metals						
	A1505289866	289866	Site Sample	Soil	Low	05/28/98 08:55
	A1505289867	289867	Site Sample	Soil	Low	05/28/98 09:06
	A1505289868	289868	Site Sample	Soil	Low	05/28/98 09:23
	A1505289869	289869	Site Sample	Soil	Low	05/23/98 09:23
	A1505289870	289870	Site Sample	Soil	Low	05/28/98 09:19
	A1505289871	289871	Equipment Rinsate	Water	Low	05/28/98 09:15
	A1505289872	289872	Site Sample	Soil	Low	05/28/98 09:35
	A1505289873	289873	Site Sample	Soil	Low	05/28/98 09:38
	A1505289874	289874	Site Sample	Soil	Low	05/28/98 09:45
	A1505289875	289875	Site Sample	Soil	Low	05/28/98 09:50
	A1505289876	289876	Site Sample	Soil	Low	05/28/98 10:05
	A1505289877	289877	Site Sample	Soil	Low	05/28/98 10:08
	A1505289878	289878	Site Sample	Soil	Low	05/28/98 10:06
	A1505289879	289879	Site Sample	Soil	Low	05/28/98 10:09
	A1505289880	289880	Site Sample	Soil	Low	05/28/98 10:12
Conventionals						
	A1505289866	289866	Site Sample	Soil	Low	05/28/98 08:55
	A1505289874	289874	Site Sample	Soil	Low	05/28/98 09:45
	A1505289877	289877	Site Sample	Soil	Low	05/28/98 10:08
	A1505289880	289880	Site Sample	Soil	Low	05/28/98 10:12

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E2 - Summary of Validated Sample Detects
Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: **79861**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279861										
	Semivolatiles									
		Acenaphthene	Site Sample	Soil	Low	2	660	195	J	µg/Kg
		Fluorene	Site Sample	Soil	Low	2	660	336	J	µg/Kg
		Phenanthrene	Site Sample	Soil	Low	2	660	1,607		µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	660	1,594		µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	2,873	J	µg/Kg
		Butylbenzylphthalate	Site Sample	Soil	Low	2	660	209	J	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	1,023	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	1,023	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Site Sample	Soil	Low	2	660	4,870	J	µg/Kg
		Di-n-octylphthalate	Site Sample	Soil	Low	2	660	341	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	1,120	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	633	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	828	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	660	925	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	1,315	J	µg/Kg
A1505279862										
	Semivolatiles									
		bis(2-Chloroethyl)ether	Site Sample	Soil	Low	2	660	6.9	J	µg/Kg
		2-Chlorophenol	Site Sample	Soil	Low	2	660	1.9	J	µg/Kg
		1,3-Dichlorobenzene	Site Sample	Soil	Low	2	660	38	J	µg/Kg
		1,4-Dichlorobenzene	Site Sample	Soil	Low	2	660	13	J	µg/Kg
		Benzyl Alcohol	Site Sample	Soil	Low	2	660	100	J	µg/Kg
		1,2-Dichlorobenzene	Site Sample	Soil	Low	2	660	10	J	µg/Kg
		2-Methylphenol	Site Sample	Soil	Low	2	660	16	J	µg/Kg
		2,2'-oxybis(1-Chloropropane)	Site Sample	Soil	Low	2	660	3.1	J	µg/Kg
		4-Methylphenol	Site Sample	Soil	Low	2	660	16	J	µg/Kg
		N-Nitroso-di-n-propylamine	Site Sample	Soil	Low	2	660	100	J	µg/Kg
		Hexachloroethane	Site Sample	Soil	Low	2	660	63	J	µg/Kg
		Nitrobenzene	Site Sample	Soil	Low	2	660	57	J	µg/Kg
		2-Nitrophenol	Site Sample	Soil	Low	2	660	38	J	µg/Kg
		2,4-Dimethylphenol	Site Sample	Soil	Low	2	660	16	J	µg/Kg
		Benzoic Acid	Site Sample	Soil	Low	2	3,300	23	J	µg/Kg
		bis(2-Chloroethoxy)methane	Site Sample	Soil	Low	2	660	11	J	µg/Kg
		2,4-Dichlorophenol	Site Sample	Soil	Low	2	660	6.9	J	µg/Kg
		1,2,4-Trichlorobenzene	Site Sample	Soil	Low	2	660	6.3	J	µg/Kg
		Naphthalene	Site Sample	Soil	Low	2	660	33	J	µg/Kg
		4-Chloroaniline	Site Sample	Soil	Low	2	660	8.2	J	µg/Kg
		4-Chloro-3-methylphenol	Site Sample	Soil	Low	2	660	113	J	µg/Kg
		2-Methylnaphthalene	Site Sample	Soil	Low	2	660	38	J	µg/Kg
		2,4,6-Trichlorophenol	Site Sample	Soil	Low	2	660	35	J	µg/Kg
		2,4,5-Trichlorophenol	Site Sample	Soil	Low	2	3,300	31	J	µg/Kg
		2-Chloronaphthalene	Site Sample	Soil	Low	2	660	4.4	J	µg/Kg
		2-Nitroaniline	Site Sample	Soil	Low	2	3,300	17	J	µg/Kg
		Dimethylphthalate	Site Sample	Soil	Low	2	660	12	J	µg/Kg
		Acenaphthylene	Site Sample	Soil	Low	2	660	45	J	µg/Kg
		2,6-Dinitrotoluene	Site Sample	Soil	Low	2	660	75	J	µg/Kg
		3-Nitroaniline	Site Sample	Soil	Low	2	3,300	34	J	µg/Kg
		Acenaphthene	Site Sample	Soil	Low	2	660	82	J	µg/Kg

Qualifiers:

J - Estimated

B - (Organics) Found in the associated method

D - Reported from a dilutio

E - Exceeds calibration rang

P - (Pesticides) Difference in column concentrations > 25%

B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

00000008

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E2 - Summary of Validated Sample Detects
Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279862										
	Semivolatiles									
		Dibenzofuran	Site Sample	Soil	Low	2	660	21	J	µg/Kg
		2,4-Dinitrotoluene	Site Sample	Soil	Low	2	660	38	J	µg/Kg
		Diethylphthalate	Site Sample	Soil	Low	2	660	3.8	J	µg/Kg
		4-Chlorophenyl-phenylether	Site Sample	Soil	Low	2	660	58	J	µg/Kg
		Fluorene	Site Sample	Soil	Low	2	660	100	J	µg/Kg
		4-Nitroaniline	Site Sample	Soil	Low	2	3,300	5.0	J	µg/Kg
		4,6-Dinitro-2-methylphenol	Site Sample	Soil	Low	2	3,300	5.8	J	µg/Kg
		4-Bromophenyl-phenylether	Site Sample	Soil	Low	2	660	22	J	µg/Kg
		Pentachlorophenol	Site Sample	Soil	Low	2	3,300	24	J	µg/Kg
		Phenanthrene	Site Sample	Soil	Low	2	660	752		µg/Kg
		Anthracene	Site Sample	Soil	Low	2	660	270	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	660	1,129		µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	2,947	J	µg/Kg
		Butylbenzylphthalate	Site Sample	Soil	Low	2	660	188	J	µg/Kg
		3,3'-Dichlorobenzidine	Site Sample	Soil	Low	2	1,300	58	J	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	477	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	1,003	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Site Sample	Soil	Low	2	660	2,822	J	µg/Kg
		Di-n-octylphthalate	Site Sample	Soil	Low	2	660	63	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	627	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	690	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	589	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	660	100	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	815	J	µg/Kg
A1505279863										
	Semivolatiles									
		bis(2-Chloroethyl)ether	Site Sample	Soil	Low	2	660	12	J	µg/Kg
		1,3-Dichlorobenzene	Site Sample	Soil	Low	2	660	11	J	µg/Kg
		1,4-Dichlorobenzene	Site Sample	Soil	Low	2	660	10	J	µg/Kg
		Benzyl Alcohol	Site Sample	Soil	Low	2	660	123	J	µg/Kg
		1,2-Dichlorobenzene	Site Sample	Soil	Low	2	660	15	J	µg/Kg
		2-Methylphenol	Site Sample	Soil	Low	2	660	2.6	J	µg/Kg
		2,2'-oxybis(1-Chloropropane)	Site Sample	Soil	Low	2	660	4.5	J	µg/Kg
		4-Methylphenol	Site Sample	Soil	Low	2	660	37	J	µg/Kg
		N-Nitroso-di-n-propylamine	Site Sample	Soil	Low	2	660	37	J	µg/Kg
		Hexachloroethane	Site Sample	Soil	Low	2	660	123	J	µg/Kg
		Nitrobenzene	Site Sample	Soil	Low	2	660	71	J	µg/Kg
		Isophorone	Site Sample	Soil	Low	2	660	91	J	µg/Kg
		2-Nitrophenol	Site Sample	Soil	Low	2	660	45	J	µg/Kg
		2,4-Dimethylphenol	Site Sample	Soil	Low	2	660	12	J	µg/Kg
		Benzoic Acid	Site Sample	Soil	Low	2	3,300	41	J	µg/Kg
		bis(2-Chloroethoxy)methane	Site Sample	Soil	Low	2	660	12	J	µg/Kg
		2,4-Dichlorophenol	Site Sample	Soil	Low	2	660	5.8	J	µg/Kg
		Naphthalene	Site Sample	Soil	Low	2	660	54	J	µg/Kg
		4-Chloroaniline	Site Sample	Soil	Low	2	660	9.7	J	µg/Kg
		4-Chloro-3-methylphenol	Site Sample	Soil	Low	2	660	21	J	µg/Kg
		2-Methylnaphthalene	Site Sample	Soil	Low	2	660	45	J	µg/Kg
		2,4,6-Trichlorophenol	Site Sample	Soil	Low	2	660	20	J	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ

Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279863										
	Semivolatiles									
		2,4,5-Trichlorophenol	Site Sample	Soil	Low	2	3,300	19	J	µg/Kg
		2-Chloronaphthalene	Site Sample	Soil	Low	2	660	3.9	J	µg/Kg
		2-Nitroaniline	Site Sample	Soil	Low	2	3,300	6.5	J	µg/Kg
		Dimethylphthalate	Site Sample	Soil	Low	2	660	5.2	J	µg/Kg
		Acenaphthylene	Site Sample	Soil	Low	2	660	43	J	µg/Kg
		2,6-Dinitrotoluene	Site Sample	Soil	Low	2	660	41	J	µg/Kg
		3-Nitroaniline	Site Sample	Soil	Low	2	3,300	21	J	µg/Kg
		Acenaphthene	Site Sample	Soil	Low	2	660	156	J	µg/Kg
		4-Nitrophenol	Site Sample	Soil	Low	2	3,300	117	J	µg/Kg
		Dibenzofuran	Site Sample	Soil	Low	2	660	44	J	µg/Kg
		2,4-Dinitrotoluene	Site Sample	Soil	Low	2	660	34	J	µg/Kg
		Diethylphthalate	Site Sample	Soil	Low	2	660	13	J	µg/Kg
		4-Chlorophenyl-phenylether	Site Sample	Soil	Low	2	660	12	J	µg/Kg
		Fluorene	Site Sample	Soil	Low	2	660	194	J	µg/Kg
		4-Nitroaniline	Site Sample	Soil	Low	2	3,300	16	J	µg/Kg
		4,6-Dinitro-2-methylphenol	Site Sample	Soil	Low	2	3,300	12	J	µg/Kg
		N-Nitrosodiphenylamine	Site Sample	Soil	Low	2	660	104	J	µg/Kg
		4-Bromophenyl-phenylether	Site Sample	Soil	Low	2	660	26	J	µg/Kg
		Pentachlorophenol	Site Sample	Soil	Low	2	3,300	71	J	µg/Kg
		Phenanthrene	Site Sample	Soil	Low	2	660	1,555		µg/Kg
		Anthracene	Site Sample	Soil	Low	2	660	337	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	660	1,814		µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	3,629	J	µg/Kg
		Butylbenzylphthalate	Site Sample	Soil	Low	2	660	1,944	J	µg/Kg
		3,3'-Dichlorobenzidine	Site Sample	Soil	Low	2	1,300	25	J	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	1,037	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	1,166	J	µg/Kg
		Di-n-octylphthalate	Site Sample	Soil	Low	2	660	44	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	1,037	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	778	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	778	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	660	130	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	972	J	µg/Kg
A1505279864										
	Semivolatiles									
		Phenanthrene	Site Sample	Soil	Low	2	660	592	J	µg/Kg
		Anthracene	Site Sample	Soil	Low	2	660	148	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	660	902		µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	1,932	J	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	489	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	644	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	457	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	586	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	477	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	464	J	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects
Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sedimen

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505289866										
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	1.7	9.9		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	2.7	J	µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	6.5		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	3.7		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	10	33	279		µg/Kg
		Endrin	Site Sample	Soil	Low	1	33	5.4	J	µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	9.8		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	177		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	27		µg/Kg
		Endrin ketone	Site Sample	Soil	Low	1	3.3	5.4		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	4.8		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	1.7	14		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	1.7	27		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	3,502		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	4.1		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	343		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.17	B	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	3.4		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	18,456		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	14		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	2.4		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	43		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	6,426		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	67	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,204	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	179		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	8.8	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	267		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	0.99	B	mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	75	B	mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	8.2		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	384		mg/Kg
	Conventionals									
		Total Organic Carbon (TOC)	Site Sample	Soil	Low	1	100	11,900		mg/Kg
		Oil and Grease	Site Sample	Soil	Low	1	100	130		mg/Kg
		Percent Moisture	Site Sample	Soil	Low	1	0.10	66		%
A1505289866RE										
	Semivolatiles									
		Phenanthrene	Re-extraction/Re-analysis	Soil	Low	2	660	146	J	µg/Kg
		Anthracene	Re-extraction/Re-analysis	Soil	Low	2	660	408	J	µg/Kg
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	1,598		µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	2,720		µg/Kg
		Benzo(a)anthracene	Re-extraction/Re-analysis	Soil	Low	2	660	1,088		µg/Kg
		Chrysene	Re-extraction/Re-analysis	Soil	Low	2	660	1,598		µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	1,980	J	µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	1,088	J	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects
Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sedimen

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79861**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505289866RE										
	Semivolatiles									
		Benzo(a)pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	1,326	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	1,734	J	µg/Kg
		Dibenz(a,h)anthracene	Re-extraction/Re-analysis	Soil	Low	2	660	846	J	µg/Kg
		Benzo(g,h,i)perylene	Re-extraction/Re-analysis	Soil	Low	2	660	2,414	J	µg/Kg
A1505289867										
	Semivolatiles									
		Phenanthrene	Site Sample	Soil	Low	2	660	243	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	660	660	J	µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	1,537	J	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	397	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	555	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	470	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	427	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	470	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	660	J	µg/Kg
	Pesticides/PCBs									
		alpha-BHC	Site Sample	Soil	Low	1	1.7	2.7		µg/Kg
		beta-BHC	Site Sample	Soil	Low	1	1.7	9.4		µg/Kg
		delta-BHC	Site Sample	Soil	Low	1	1.7	47		µg/Kg
		gamma-BHC (Lindane) (Lindane)	Site Sample	Soil	Low	1	1.7	8.1		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	16	J	µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	33		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	10	33	1,324		µg/Kg
		Endrin	Site Sample	Soil	Low	1	33	17	J	µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	23		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	10	3.3	982		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	56		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	15		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	1.7	14		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	1.7	58		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	7,942		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	7.3		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	301		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.28		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.1		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	10,035		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	15		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	3.5		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	34		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	10,248		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	88	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,102	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	303		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	12	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	572		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	13		mg/Kg

Qualifiers:

J - Estimated

B - (Organics) Found in the associated method

D - Reported from a dilutio

E - Exceeds calibration rang

P - (Pesticides) Difference in column concentrations > 25%

B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects | **LDEQ**

Sorted by Client Sample, Fraction, and Elution Order | **Capitol Lakes Sediment**

Lab: **AATSLA / American Analytical & Technical Services, Inc.** | SDG ID: **79861**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505289867										
	Metals									
		Sodium	Site Sample	Soil	Low	1	100	127		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	14		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	215		mg/Kg
A1505289868										
	Semivolatiles									
		bis(2-Chloroethyl)ether	Site Sample	Soil	Low	2	660	8.4	J	µg/Kg
		1,3-Dichlorobenzene	Site Sample	Soil	Low	2	660	11	J	µg/Kg
		1,4-Dichlorobenzene	Site Sample	Soil	Low	2	660	9.7	J	µg/Kg
		Benzyl Alcohol	Site Sample	Soil	Low	2	660	78	J	µg/Kg
		2,2'-oxybis(1-Chloropropane)	Site Sample	Soil	Low	2	660	3.2	J	µg/Kg
		Nitrobenzene	Site Sample	Soil	Low	2	660	22	J	µg/Kg
		2,4-Dimethylphenol	Site Sample	Soil	Low	2	660	9.7	J	µg/Kg
		Benzoic Acid	Site Sample	Soil	Low	2	3,300	5.8	J	µg/Kg
		bis(2-Chloroethoxy)methane	Site Sample	Soil	Low	2	660	1.9	J	µg/Kg
		Naphthalene	Site Sample	Soil	Low	2	660	16	J	µg/Kg
		4-Chloroaniline	Site Sample	Soil	Low	2	660	3.2	J	µg/Kg
		4-Chloro-3-methylphenol	Site Sample	Soil	Low	2	660	43	J	µg/Kg
		2-Methylnaphthalene	Site Sample	Soil	Low	2	660	16	J	µg/Kg
		2-Nitroaniline	Site Sample	Soil	Low	2	3,300	3.9	J	µg/Kg
		Dimethylphthalate	Site Sample	Soil	Low	2	660	6.5	J	µg/Kg
		Acenaphthylene	Site Sample	Soil	Low	2	660	38	J	µg/Kg
		2,6-Dinitrotoluene	Site Sample	Soil	Low	2	660	49	J	µg/Kg
		3-Nitroaniline	Site Sample	Soil	Low	2	3,300	25	J	µg/Kg
		Acenaphthene	Site Sample	Soil	Low	2	660	17	J	µg/Kg
		4-Nitrophenol	Site Sample	Soil	Low	2	3,300	47	J	µg/Kg
		Dibenzofuran	Site Sample	Soil	Low	2	660	7.1	J	µg/Kg
		2,4-Dinitrotoluene	Site Sample	Soil	Low	2	660	32	J	µg/Kg
		Diethylphthalate	Site Sample	Soil	Low	2	660	5.2	J	µg/Kg
		Fluorene	Site Sample	Soil	Low	2	660	32	J	µg/Kg
		4-Nitroaniline	Site Sample	Soil	Low	2	3,300	24	J	µg/Kg
		N-Nitrosodiphenylamine	Site Sample	Soil	Low	2	660	13	J	µg/Kg
		Phenanthrene	Site Sample	Soil	Low	2	660	104	J	µg/Kg
		Anthracene	Site Sample	Soil	Low	2	660	91	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	660	401	J	µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	712		µg/Kg
		Butylbenzylphthalate	Site Sample	Soil	Low	2	660	53	J	µg/Kg
		3,3'-Dichlorobenzidine	Site Sample	Soil	Low	2	1,300	8.4	J	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	343	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	479	J	µg/Kg
		Di-n-octylphthalate	Site Sample	Soil	Low	2	660	33	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	446	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	330	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	362	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	660	58	J	µg/Kg
		Dibenz(a,h)anthracene	Site Sample	Soil	Low	2	660	123	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	349	J	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method
- **D** - Reported from a dilutio
- **E** - Exceeds calibration rang
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects
Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79861**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505289868										
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	1.7	3.6		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	1.7	J	µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	21		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	23		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	21		µg/Kg
		Endrin ketone	Site Sample	Soil	Low	1	3.3	3.4		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	3.3		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	1.7	2.0		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	9,511		mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	7.1	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	7.1		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	172		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.47		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.9		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	1,695		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	14		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	4.8		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	21		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	11,517		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	137	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,333	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	253		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	12	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	653		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	140		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	18		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	106		mg/Kg
A1505289869										
	Semivolatiles									
		Fluoranthene	Site Sample	Soil	Low	2	660	416	J	µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	780		µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	319	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	475	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	410	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	384	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	371	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	660	293	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	345	J	µg/Kg
	Pesticides/PCBs									
		alpha-BHC	Site Sample	Soil	Low	1	1.7	3.3		µg/Kg
		Heptachlor	Site Sample	Soil	Low	1	1.7	2.3	J	µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	18		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	7.2		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	10		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	4.7		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	1.7	3.7		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects
Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: **79861**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505289869										
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	10,465		mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	6.4	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	6.5		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	159		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.46		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	2.0		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	1,723		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	14		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	4.4		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	19		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	11,570		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	120	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,372	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	218		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	12	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	715		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	138		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	19		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	104		mg/Kg
A1505289870										
	Semivolatiles									
		Phenanthrene	Site Sample	Soil	Low	2	660	351	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	660	751		µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	1,002		µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	570	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	660	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	582	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	545	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	438	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	660	275	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	288	J	µg/Kg
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	1.7	1.9		µg/Kg
		Heptachlor	Site Sample	Soil	Low	1	1.7	2.0	J	µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	1.8		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	42		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	19		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	16		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	3.3		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	1.7	6.3		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	8,639		mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	4.7	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	8.1		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	167		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.46		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.7		mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects
Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505289870										
	Metals									
		Calcium	Site Sample	Soil	Low	1	30	1,671		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	13		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	5.2		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	21		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	12,332		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	130	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,308	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	453		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	13	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	632		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	208		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	19		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	128		mg/Kg
A1505289872										
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	1.7	13		µg/Kg
		gamma-BHC (Lindane) (Lindane)	Site Sample	Soil	Low	1	1.7	1.8		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	9.4	J	µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	8.2		µg/Kg
		Endosulfan I	Site Sample	Soil	Low	1	1.7	12		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	4.1		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	283		µg/Kg
		Endrin	Site Sample	Soil	Low	1	33	5.7	J	µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	6.8		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	10	33	230		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	21		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	3.6		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	1.7	18		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	1.7	36		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	4,428		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	4.9		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	484		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.20		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	3.7		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	22,345		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	18		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	2.7		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	57		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	7,626		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	82	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,505	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	265		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	13	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	330		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	2.1		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	92	B	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

00000016

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E2 - Summary of Validated Sample Detects
Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: **79861**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505289872										
	Metals									
		Vanadium	Site Sample	Soil	Low	1	0.50	9.4		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	409		mg/Kg
A1505289872RE										
	Semivolatiles									
		Acenaphthene	Re-extraction/Re-analysis	Soil	Low	2	660	148	J	µg/Kg
		N-Nitrosodiphenylamine	Re-extraction/Re-analysis	Soil	Low	2	660	183	J	µg/Kg
		Phenanthrene	Re-extraction/Re-analysis	Soil	Low	2	660	738		µg/Kg
		Anthracene	Re-extraction/Re-analysis	Soil	Low	2	660	180	J	µg/Kg
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	1,476		µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	3,485		µg/Kg
		Benzo(a)anthracene	Re-extraction/Re-analysis	Soil	Low	2	660	943		µg/Kg
		Chrysene	Re-extraction/Re-analysis	Soil	Low	2	660	1,353		µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	1,148	J	µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	1,066	J	µg/Kg
		Benzo(a)pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	984	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	1,066	J	µg/Kg
		Dibenz(a,h)anthracene	Re-extraction/Re-analysis	Soil	Low	2	660	394	J	µg/Kg
		Benzo(g,h,i)perylene	Re-extraction/Re-analysis	Soil	Low	2	660	1,558	J	µg/Kg
A1505289873										
	Pesticides/PCBs									
		alpha-BHC	Site Sample	Soil	Low	1	1.7	4.0		µg/Kg
		beta-BHC	Site Sample	Soil	Low	1	1.7	16		µg/Kg
		delta-BHC	Site Sample	Soil	Low	1	1.7	74		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	216	J	µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	64		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	14		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	10	33	51		µg/Kg
		Endrin	Site Sample	Soil	Low	1	33	66	J	µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	10	33	552		µg/Kg
		Endosulfan sulfate	Site Sample	Soil	Low	1	3.3	35		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	10	33	35		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	41		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	1.7	110		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	1.7	221		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	6,394		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	7.4		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	408		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.24		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.2		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	10,074		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	17		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	3.3		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	43		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	9,248		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	113	J	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects
Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79861**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505289873										
	Metals									
		Magnesium	Site Sample	Soil	Low	1	20	957	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	283		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	12	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	431		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	19		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	130		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	12		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	273		mg/Kg
A1505289873RE										
	Semivolatiles									
		Phenanthrene	Re-extraction/Re-analysis	Soil	Low	2	660	442	J	µg/Kg
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	966		µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	1,932	J	µg/Kg
		Benzo(a)anthracene	Re-extraction/Re-analysis	Soil	Low	2	660	552	J	µg/Kg
		Chrysene	Re-extraction/Re-analysis	Soil	Low	2	660	736	J	µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	460	J	µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	451	J	µg/Kg
		Benzo(a)pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	400	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	552	J	µg/Kg
		Dibenz(a,h)anthracene	Re-extraction/Re-analysis	Soil	Low	2	660	193	J	µg/Kg
		Benzo(g,h,i)perylene	Re-extraction/Re-analysis	Soil	Low	2	660	690	J	µg/Kg
A1505289874										
	Semivolatiles									
		Phenanthrene	Site Sample	Soil	Low	2	660	149	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	660	477	J	µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	743		µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	371	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	477	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	402	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	359	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	378	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	660	210	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	254	J	µg/Kg
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	1.7	6.8		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	8.0	J	µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	3.2		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	3.3		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	34		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	4.2		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	80		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	6.8		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	3.7		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	1.7	3.7		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	1.7	9.9		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects
Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505289874										
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	10,214		mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	17	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	12		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	201		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.52		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	3.3		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	2,061		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	15		mg/Kg
		Cobalt	*Site Sample*	*Soil*	Low	1	*0.50*	*6.2*		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	25		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	13,556		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	155	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,467	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	305		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	14	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	730		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	0.68	B	mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	189		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	21		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	152		mg/Kg
	Conventionals									
		Total Organic Carbon (TOC)	Site Sample	Soil	Low	1	160	10,540		mg/Kg
		Oil and Grease	Site Sample	Soil	Low	1	100	320		mg/Kg
		Percent Moisture	Site Sample	Soil	Low	1	0.10	38		%
A1505289875										
	Semivolatiles									
		bis(2-Chloroethyl)ether	Site Sample	Soil	Low	2	660	6.3	J	µg/Kg
		Benzyl Alcohol	Site Sample	Soil	Low	2	660	76	J	µg/Kg
		2-Methylphenol	Site Sample	Soil	Low	2	660	1.9	J	µg/Kg
		2,2'-oxybis(1-Chloropropane)	Site Sample	Soil	Low	2	660	6.3	J	µg/Kg
		4-Methylphenol	Site Sample	Soil	Low	2	660	1.9	J	µg/Kg
		N-Nitroso-di-n-propylamine	Site Sample	Soil	Low	2	660	37	J	µg/Kg
		Hexachloroethane	Site Sample	Soil	Low	2	660	28	J	µg/Kg
		Nitrobenzene	Site Sample	Soil	Low	2	660	25	J	µg/Kg
		Isophorone	Site Sample	Soil	Low	2	660	69	J	µg/Kg
		2,4-Dimethylphenol	Site Sample	Soil	Low	2	660	1.9	J	µg/Kg
		Benzoic Acid	Site Sample	Soil	Low	2	3,300	14	J	µg/Kg
		bis(2-Chloroethoxy)methane	Site Sample	Soil	Low	2	660	1.3	J	µg/Kg
		Naphthalene	Site Sample	Soil	Low	2	660	31	J	µg/Kg
		4-Chloroaniline	Site Sample	Soil	Low	2	660	14	J	µg/Kg
		4-Chloro-3-methylphenol	Site Sample	Soil	Low	2	660	52	J	µg/Kg
		2-Methylnaphthalene	Site Sample	Soil	Low	2	660	25	J	µg/Kg
		2-Chloronaphthalene	Site Sample	Soil	Low	2	660	5.0	J	µg/Kg
		2-Nitroaniline	Site Sample	Soil	Low	2	3,300	5.0	J	µg/Kg
		Dimethylphthalate	Site Sample	Soil	Low	2	660	13	J	µg/Kg
		Acenaphthylene	Site Sample	Soil	Low	2	660	52	J	µg/Kg
		2,6-Dinitrotoluene	Site Sample	Soil	Low	2	660	69	J	µg/Kg

Qualifiers:

J - Estimated

B - (Organics) Found in the associated method

D - Reported from a dilutio

E - Exceeds calibration rang

P - (Pesticides) Difference in column concentrations > 25%

B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects
Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505289875										
	Semivolatiles									
		3-Nitroaniline	Site Sample	Soil	Low	2	3,300	20	J	µg/Kg
		Acenaphthene	Site Sample	Soil	Low	2	660	107	J	µg/Kg
		4-Nitrophenol	Site Sample	Soil	Low	2	3,300	29	J	µg/Kg
		Dibenzofuran	Site Sample	Soil	Low	2	660	11	J	µg/Kg
		2,4-Dinitrotoluene	Site Sample	Soil	Low	2	660	9.5	J	µg/Kg
		Diethylphthalate	Site Sample	Soil	Low	2	660	3.1	J	µg/Kg
		Fluorene	Site Sample	Soil	Low	2	660	62	J	µg/Kg
		4-Nitroaniline	Site Sample	Soil	Low	2	3,300	8.2	J	µg/Kg
		N-Nitrosodiphenylamine	Site Sample	Soil	Low	2	660	26	J	µg/Kg
		Phenanthrene	Site Sample	Soil	Low	2	660	328	J	µg/Kg
		Anthracene	Site Sample	Soil	Low	2	660	113	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	660	756		µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	945		µg/Kg
		Butylbenzylphthalate	Site Sample	Soil	Low	2	660	14	J	µg/Kg
		3,3'-Dichlorobenzidine	Site Sample	Soil	Low	2	1,300	8.8	J	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	561	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	617	J	µg/Kg
		Di-n-octylphthalate	Site Sample	Soil	Low	2	660	13	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	523	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	536	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	435	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	660	52	J	µg/Kg
		Dibenz(a,h)anthracene	Site Sample	Soil	Low	2	660	107	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	277	J	µg/Kg
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	1.7	2.4		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	2.1	J	µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	7.8		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	4.0		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	13		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	13		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	8,253		mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	3.0	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	6.9		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	149		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.43		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.3		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	1,518		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	11		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	5.2		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	19		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	11,277		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	101	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,254	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	440		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	12	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	590		mg/Kg

Qualifiers:

J - Estimated

B - (Organics) Found in the associated method

D - Reported from a dilutio

E - Exceeds calibration rang

P - (Pesticides) Difference in column concentrations > 25%

B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

00000020

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E2 - Summary of Validated Sample Detects
Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: 79861

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505289875										
	Metals									
		Sodium	Site Sample	Soil	Low	1	100	234		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	17		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	100		mg/Kg
A1505289876										
	Semivolatiles									
		Acenaphthene	Site Sample	Soil	Low	2	660	198	J	µg/Kg
		Fluorene	Site Sample	Soil	Low	2	660	289	J	µg/Kg
		Phenanthrene	Site Sample	Soil	Low	2	660	1,941		µg/Kg
		Anthracene	Site Sample	Soil	Low	2	660	409	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	660	2,726		µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	4,543	J	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	1,982	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	2,395	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Site Sample	Soil	Low	2	660	4,543	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	2,313	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	1,611	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	1,817	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	660	1,115	J	µg/Kg
		Dibenz(a,h)anthracene	Site Sample	Soil	Low	2	660	409	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	1,074	J	µg/Kg
	Pesticides/PCBs									
		alpha-BHC	Site Sample	Soil	Low	1	1.7	4.1		µg/Kg
		beta-BHC	Site Sample	Soil	Low	1	1.7	9.9		µg/Kg
		delta-BHC	Site Sample	Soil	Low	1	1.7	9.9		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	5.0	J	µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	19		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	16		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	10	3.3	215		µg/Kg
		Endrin	Site Sample	Soil	Low	1	33	25	J	µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	10	3.3	743		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	10	3.3	384		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	16		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	1.7	29		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	10	1.7	87		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	4,502		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	4.1		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	364		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.19	B	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	3.1		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	29,199		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	20		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	2.1		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	36		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	7,269		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	63	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,772	J	mg/Kg

Qualifiers:

J - Estimated

S - (Organics) Found in the associated method

D - Reported from a dilutio

E - Exceeds calibration rang

P - (Pesticides) Difference in column concentrations > 25%

B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

00000021

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505289876										
	Metals									
		Manganese	Site Sample	Soil	Low	1	0.50	223		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	9.9	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	271		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	2.4		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	104		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	8.7		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	377		mg/Kg
A1505289877										
	Semivolatiles									
		Acenaphthene	Site Sample	Soil	Low	2	660	467	J	µg/Kg
		Fluorene	Site Sample	Soil	Low	2	660	212	J	µg/Kg
		N-Nitrosodiphenylamine	Site Sample	Soil	Low	2	660	256	J	µg/Kg
		Phenanthrene	Site Sample	Soil	Low	2	660	1,820		µg/Kg
		Anthracene	Site Sample	Soil	Low	2	660	453	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	660	2,657		µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	4,625	J	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	1,722	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	2,214	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	2,116	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	1,230	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	1,427	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	660	1,082	J	µg/Kg
		Dibenz(a,h)anthracene	Site Sample	Soil	Low	2	660	418	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	1,082	J	µg/Kg
	Pesticides/PCBs									
		alpha-BHC	Site Sample	Soil	Low	1	1.7	3.0		µg/Kg
		delta-BHC	Site Sample	Soil	Low	1	1.7	32		µg/Kg
		gamma-BHC (Lindane) (Lindane)	Site Sample	Soil	Low	1	1.7	5.9		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	7.4	J	µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	24		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	19		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	6.4		µg/Kg
		Endrin	Site Sample	Soil	Low	1	33	14	J	µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	23		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	10	33	482		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	98		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	1	3.3	14		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	1.7	43		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	10	17	84		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	4,822		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	4.9		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	556		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.21		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	3.3		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	22,976		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	18		mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

00000022

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E2 - Summary of Validated Sample Detects
Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79881

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505289877										
	Metals									
		Cobalt	Site Sample	Soil	Low	1	0.50	2.9		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	59		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	7,970		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	85	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,501	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	290		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	13	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	354		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	2.2		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	107		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	10		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	373		mg/Kg
	Conventionals									
		Total Organic Carbon (TOC)	Site Sample	Soil	Low	1	100	22,050		mg/Kg
		Oil and Grease	Site Sample	Soil	Low	1	100	419		mg/Kg
		Percent Moisture	Site Sample	Soil	Low	1	0.10	51		%
A1505289878										
	Semivolatiles									
		2-Methylnaphthalene	Site Sample	Soil	Low	2	660	557	J	µg/Kg
		N-Nitrosodiphenylamine	Site Sample	Soil	Low	2	660	162	J	µg/Kg
		Phenanthrene	Site Sample	Soil	Low	2	660	491	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	660	961		µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	2,228	J	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	506	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	708	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	660	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	607	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	476	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	557	J	µg/Kg
	Pesticides/PCBs									
		alpha-BHC	Site Sample	Soil	Low	10	17	26		µg/Kg
		beta-BHC	Site Sample	Soil	Low	10	17	61		µg/Kg
		delta-BHC	Site Sample	Soil	Low	10	17	86		µg/Kg
		Aldrin	Site Sample	Soil	Low	10	17	496	J	µg/Kg
		Dieldrin	Site Sample	Soil	Low	10	33	293		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	100	330	3,137		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	10	33	86		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	10	33	4,756		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	10	33	233		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	10	17	319		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	10	17	810		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	9,260		mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	7.1	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	9.6		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	420		mg/Kg

Qualifiers:

J - Estimated

B - (Organics) Found in the associated method

D - Reported from a dilutio

E - Exceeds calibration rang

P - (Pesticides) Difference in column concentrations > 25%

B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

00000023

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E2 - Summary of Validated Sample Detects
Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 79861

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505289878										
	Metals									
		Beryllium	Site Sample	Soil	Low	1	0.20	0.28		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	2.3		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	11,132		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	19		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	3.9		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	43		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	11,132		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	136	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,240	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	318		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	14	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	668		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	18		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	173		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	16		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	282		mg/Kg
A1505289879										
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	1.7	6.7		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	7.3	J	µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	2.3		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	67		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	11		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	1.7	3.1		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	1.7	9.7		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	8,908		mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	4.0	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	9.1		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	152		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.42		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.3		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	1,818		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	12		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	4.8		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	20		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	11,635		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	116	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,248	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	422		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	12	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	636		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	0.43	B	mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	205		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	18		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	111		mg/Kg

Qualifiers:

J - Estimated

B - (Organics) Found in the associated method

D - Reported from a dilutio

E - Exceeds calibration rang

P - (Pesticides) Difference in column concentrations > 25%

B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

00000024

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E2 - Summary of Validated Sample Detects
Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: **79861**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505289879RE										
	Semivolatiles									
		Phenanthrene	Re-extraction/Re-analysis	Soil	Low	1	330	206	J	µg/Kg
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	1	330	321	J	µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	1	330	418	J	µg/Kg
		Benzo(a)anthracene	Re-extraction/Re-analysis	Soil	Low	1	330	212	J	µg/Kg
		Chrysene	Re-extraction/Re-analysis	Soil	Low	1	330	267	J	µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	1	330	188	J	µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	1	330	261	J	µg/Kg
		Benzo(a)pyrene	Re-extraction/Re-analysis	Soil	Low	1	330	212	J	µg/Kg
		Indano(1,2,3-cd)pyrene	Re-extraction/Re-analysis	Soil	Low	1	330	73	J	µg/Kg
A1505289880										
	Semivolatiles									
		Fluorene	Site Sample	Soil	Low	2	660	140	J	µg/Kg
		Phenanthrene	Site Sample	Soil	Low	2	660	208	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	660	223	J	µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	332	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	218	J	µg/Kg
	Pesticides/PCBs									
		beta-BHC	Site Sample	Soil	Low	1	1.7	4.0		µg/Kg
		delta-BHC	Site Sample	Soil	Low	1	1.7	10		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	6.7	J	µg/Kg
		Heptachlor epoxide	Site Sample	Soil	Low	1	1.7	6.2		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	11		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	52		µg/Kg
		Endrin	Site Sample	Soil	Low	1	33	57	J	µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	57		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	99		µg/Kg
		Endosulfan sulfate	Site Sample	Soil	Low	1	3.3	83		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	10	3.3	374		µg/Kg
		Endrin ketone	Site Sample	Soil	Low	1	3.3	22		µg/Kg
		Endrin aldehyde	Site Sample	Soil	Low	10	3.3	114		µg/Kg
		Methoxychlor	Site Sample	Soil	Low	1	17	62		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	1.7	13		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	11,003		mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	94	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	39		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	133		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.43		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	7.3		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	1,469		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	11		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	5.7		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	21		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	14,688		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	2,486	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,469	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	268		mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects
Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505289880										
	Metals									
		Nickel	Site Sample	Soil	Low	1	1.0	14	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	815		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	0.13	B	mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	301		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	19		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	201		mg/Kg
	Conventionals									
		Total Organic Carbon (TOC)	Site Sample	Soil	Low	1	100	15,600		mg/Kg
		Oil and Grease	Site Sample	Soil	Low	1	100	769		mg/Kg
		Percent Moisture	Site Sample	Soil	Low	1	0.10	48		%

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: **79861**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Acenaphthene									
		A1505279861	Site Sample	Soil	Low	2	660	195	J	µg/Kg
		A1505279862	Site Sample	Soil	Low	2	660	82	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	156	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	17	J	µg/Kg
		A1505289872RE	Re-extraction/Re-analysis	Soil	Low	2	660	148	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	107	J	µg/Kg
		A1505289876	Site Sample	Soil	Low	2	660	198	J	µg/Kg
		A1505289877	Site Sample	Soil	Low	2	660	467	J	µg/Kg
	Acenaphthylene									
		A1505279862	Site Sample	Soil	Low	2	660	45	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	43	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	38	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	52	J	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sedimen

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Anthracene									
		A1505279862	Site Sample	Soil	Low	2	660	270	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	337	J	µg/Kg
		A1505279864	Site Sample	Soil	Low	2	660	148	J	µg/Kg
		A1505289866RE	Re-extraction/Re-analysis	Soil	Low	2	660	408	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	91	J	µg/Kg
		A1505289872RE	Re-extraction/Re-analysis	Soil	Low	2	660	180	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	113	J	µg/Kg
		A1505289876	Site Sample	Soil	Low	2	660	409	J	µg/Kg
		A1505289877	Site Sample	Soil	Low	2	660	453	J	µg/Kg
	Benzo(a)anthracene									
		A1505279861	Site Sample	Soil	Low	2	660	1,023	J	µg/Kg
		A1505279862	Site Sample	Soil	Low	2	660	477	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	1,037	J	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(a)anthracene									
		A1505279864	Site Sample	Soil	Low	2	660	489	J	µg/Kg
		A1505289866RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,088		µg/Kg
		A1505289867	Site Sample	Soil	Low	2	660	397	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	343	J	µg/Kg
		A1505289869	Site Sample	Soil	Low	2	660	319	J	µg/Kg
		A1505289870	Site Sample	Soil	Low	2	660	570	J	µg/Kg
		A1505289872RE	Re-extraction/Re-analysis	Soil	Low	2	660	943		µg/Kg
		A1505289873RE	Re-extraction/Re-analysis	Soil	Low	2	660	552	J	µg/Kg
		A1505289874	Site Sample	Soil	Low	2	660	371	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	561	J	µg/Kg
		A1505289876	Site Sample	Soil	Low	2	660	1,982	J	µg/Kg
		A1505289877	Site Sample	Soil	Low	2	660	1,722	J	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sedimen

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(a)anthracene									
		A1505289878	Site Sample	Soil	Low	2	660	506	J	µg/Kg
		A1505289879RE	Re-extraction/Re-analysis	Soil	Low	1	330	212	J	µg/Kg
	Benzo(a)pyrene									
		A1505279861	Site Sample	Soil	Low	2	660	828	J	µg/Kg
		A1505279862	Site Sample	Soil	Low	2	660	589	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	778	J	µg/Kg
		A1505279864	Site Sample	Soil	Low	2	660	477	J	µg/Kg
		A1505289866RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,328	J	µg/Kg
		A1505289867	Site Sample	Soil	Low	2	660	470	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	362	J	µg/Kg
		A1505289869	Site Sample	Soil	Low	2	660	371	J	µg/Kg
		A1505289870	Site Sample	Soil	Low	2	660	438	J	µg/Kg
		A1505289872RE	Re-extraction/Re-analysis	Soil	Low	2	660	984	J	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(a)pyrene									
		A1505289873RE	Re-extraction/Re-analysis	Soil	Low	2	660	400	J	µg/Kg
		A1505289874	Site Sample	Soil	Low	2	660	378	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	435	J	µg/Kg
		A1505289876	Site Sample	Soil	Low	2	660	1,817	J	µg/Kg
		A1505289877	Site Sample	Soil	Low	2	660	1,427	J	µg/Kg
		A1505289878	Site Sample	Soil	Low	2	660	478	J	µg/Kg
		A1505289879RE	Re-extraction/Re-analysis	Soil	Low	1	330	212	J	µg/Kg
	Benzo(b)fluoranthene									
		A1505279861	Site Sample	Soil	Low	2	660	1,120	J	µg/Kg
		A1505279862	Site Sample	Soil	Low	2	660	627	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	1,037	J	µg/Kg
		A1505279864	Site Sample	Soil	Low	2	660	457	J	µg/Kg
		A1505289866RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,980	J	µg/Kg

Qualifiers:
J - Estimated
B - (Organics) Found in the associated method
D - Reported from a dilutio
E - Exceeds calibration rang
P - (Pesticides) Difference in column concentrations > 25%
B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(b)fluoranthene									
		A1505289867	Site Sample	Soil	Low	2	660	470	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	446	J	µg/Kg
		A1505289869	Site Sample	Soil	Low	2	660	410	J	µg/Kg
		A1505289870	Site Sample	Soil	Low	2	660	582	J	µg/Kg
		A1505289872RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,148	J	µg/Kg
		A1505289873RE	Re-extraction/Re-analysis	Soil	Low	2	660	460	J	µg/Kg
		A1505289874	Site Sample	Soil	Low	2	660	402	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	523	J	µg/Kg
		A1505289876	Site Sample	Soil	Low	2	660	2,313	J	µg/Kg
		A1505289877	Site Sample	Soil	Low	2	660	2,116	J	µg/Kg
		A1505289878	Site Sample	Soil	Low	2	660	660	J	µg/Kg
		A1505289879RE	Re-extraction/Re-analysis	Soil	Low	1	330	188	J	µg/Kg

Qualifiers:
- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(g,h,i)perylene									
		A1505279861	Site Sample	Soil	Low	2	660	1,315	J	µg/Kg
		A1505279862	Site Sample	Soil	Low	2	660	815	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	972	J	µg/Kg
		A1505279864	Site Sample	Soil	Low	2	660	484	J	µg/Kg
		A1505289866RE	Re-extraction/Re-analysis	Soil	Low	2	660	2,414	J	µg/Kg
		A1505289867	Site Sample	Soil	Low	2	660	660	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	349	J	µg/Kg
		A1505289869	Site Sample	Soil	Low	2	660	345	J	µg/Kg
		A1505289870	Site Sample	Soil	Low	2	660	288	J	µg/Kg
		A1505289872RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,558	J	µg/Kg
		A1505289873RE	Re-extraction/Re-analysis	Soil	Low	2	660	690	J	µg/Kg
		A1505289874	Site Sample	Soil	Low	2	660	254	J	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(g,h,i)perylene									
		A1505289875	Site Sample	Soil	Low	2	660	277	J	µg/Kg
		A1505289876	Site Sample	Soil	Low	2	660	1,074	J	µg/Kg
		A1505289877	Site Sample	Soil	Low	2	660	1,082	J	µg/Kg
		A1505289878	Site Sample	Soil	Low	2	660	557	J	µg/Kg
	Benzo(k)fluoranthene									
		A1505279861	Site Sample	Soil	Low	2	660	633	J	µg/Kg
		A1505279862	Site Sample	Soil	Low	2	660	690	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	778	J	µg/Kg
		A1505279864	Site Sample	Soil	Low	2	660	586	J	µg/Kg
		A1505289866RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,088	J	µg/Kg
		A1505289867	Site Sample	Soil	Low	2	660	427	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	330	J	µg/Kg
		A1505289869	Site Sample	Soil	Low	2	660	384	J	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sedimen

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: **79861**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(k)fluoranthene									
		A1505289870	Site Sample	Soil	Low	2	660	545	J	µg/Kg
		A1505289872RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,066	J	µg/Kg
		A1505289873RE	Re-extraction/Re-analysis	Soil	Low	2	660	451	J	µg/Kg
		A1505289874	Site Sample	Soil	Low	2	660	359	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	536	J	µg/Kg
		A1505289876	Site Sample	Soil	Low	2	660	1,611	J	µg/Kg
		A1505289877	Site Sample	Soil	Low	2	660	1,230	J	µg/Kg
		A1505289878	Site Sample	Soil	Low	2	660	607	J	µg/Kg
		A1505289879RE	Re-extraction/Re-analysis	Soil	Low	1	330	261	J	µg/Kg
	Benzoic Acid									
		A1505279862	Site Sample	Soil	Low	2	3,300	23	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	3,300	41	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	3,300	5.8	J	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzoic Acid									
		A1505289875	Site Sample	Soil	Low	2	3,300	14	J	µg/Kg
	Benzyl Alcohol									
		A1505279862	Site Sample	Soil	Low	2	660	100	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	123	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	76	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	76	J	µg/Kg
	bis(2-Chloroethoxy)methane									
		A1505279862	Site Sample	Soil	Low	2	660	11	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	12	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	1.9	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	1.3	J	µg/Kg
	bis(2-Chloroethyl)ether									
		A1505279862	Site Sample	Soil	Low	2	660	6.9	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	12	J	µg/Kg

Qualifiers:
- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects LDEQ

Sorted by Fraction, Analyte and Client Sample Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	bis(2-Chloroethyl)ether									
		A1505289868	Site Sample	Soil	Low	2	660	8.4	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	6.3	J	µg/Kg
	bis(2-Ethylhexyl)phthalate									
		A1505279861	Site Sample	Soil	Low	2	660	4,870	J	µg/Kg
		A1505279862	Site Sample	Soil	Low	2	660	2,822	J	µg/Kg
		A1505289876	Site Sample	Soil	Low	2	660	4,543	J	µg/Kg
	4-Bromophenyl-phenylether									
		A1505279862	Site Sample	Soil	Low	2	660	22	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	26	J	µg/Kg
	Butylbenzylphthalate									
		A1505279861	Site Sample	Soil	Low	2	660	209	J	µg/Kg
		A1505279862	Site Sample	Soil	Low	2	660	188	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	1,944	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	53	J	µg/Kg

Qualifiers:

J - Estimated

B - (Organics) Found in the associated method

D - Reported from a dilutio

E - Exceeds calibration rang

P - (Pesticides) Difference in column concentrations > 25%

B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects | **LDEQ**

Sorted by Fraction, Analyte and Client Sample | **Capitol Lakes Sediment**

Lab: **AATSLA / American Analytical & Technical Services, Inc.** | SDG ID: **79861**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Butylbenzylphthalate									
		A1505289875	Site Sample	Soil	Low	2	660	14	J	µg/Kg
	4-Chloro-3-methylphenol									
		A1505279862	Site Sample	Soil	Low	2	660	113	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	21	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	43	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	52	J	µg/Kg
	4-Chloroaniline									
		A1505279862	Site Sample	Soil	Low	2	660	8.2	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	9.7	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	3.2	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	14	J	µg/Kg
	2-Chloronaphthalene									
		A1505279862	Site Sample	Soil	Low	2	660	4.4	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	3.9	J	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method
- **D** - Reported from a dilutio
- **E** - Exceeds calibration rang
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects | **LDEQ**
Sorted by Fraction, Analyte and Client Sample | **Capitol Lakes Sediment**

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79861**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	2-Chloronaphthalene									
		A1505289875	Site Sample	Soil	Low	2	660	5.0	J	µg/Kg
	2-Chlorophenol									
		A1505279862	Site Sample	Soil	Low	2	660	1.9	J	µg/Kg
	4-Chlorophenyl-phenylether									
		A1505279862	Site Sample	Soil	Low	2	660	58	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	12	J	µg/Kg
	Chrysene									
		A1505279861	Site Sample	Soil	Low	2	660	1,023	J	µg/Kg
		A1505279862	Site Sample	Soil	Low	2	660	1,003	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	1,166	J	µg/Kg
		A1505279864	Site Sample	Soil	Low	2	660	644	J	µg/Kg
		A1505289866RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,598		µg/Kg
		A1505289867	Site Sample	Soil	Low	2	660	555	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	479	J	µg/Kg

Qualifiers:
- **J** - Estimated
- **B** - (Organics) Found in the associated method
- **D** - Reported from a dilutio
- **E** - Exceeds calibration rang
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects LDEQ
Sorted by Fraction, Analyte and Client Sample Capitol Lakes Sedimen

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Chrysene									
		A1505289869	Site Sample	Soil	Low	2	660	475	J	µg/Kg
		A1505289870	Site Sample	Soil	Low	2	660	660	J	µg/Kg
		A1505289872RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,353		µg/Kg
		A1505289873RE	Re-extraction/Re-analysis	Soil	Low	2	660	736	J	µg/Kg
		A1505289874	Site Sample	Soil	Low	2	660	477	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	617	J	µg/Kg
		A1505289876	Site Sample	Soil	Low	2	660	2,395	J	µg/Kg
		A1505289877	Site Sample	Soil	Low	2	660	2,214	J	µg/Kg
		A1505289878	Site Sample	Soil	Low	2	660	708	J	µg/Kg
		A1505289879RE	Re-extraction/Re-analysis	Soil	Low	1	330	267	J	µg/Kg
		A1505289880	Site Sample	Soil	Low	2	660	218	J	µg/Kg
	Di-n-octylphthalate									
		A1505279861	Site Sample	Soil	Low	2	660	341	J	µg/Kg

Qualifiers:
J - Estimated
B - (Organics) Found in the associated method
D - Reported from a dilutio
E - Exceeds calibration rang
P - (Pesticides) Difference in column concentrations > 25%
B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: **79861**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Di-n-octylphthalate									
		A1505279862	Site Sample	Soil	Low	2	660	63	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	44	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	33	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	13	J	µg/Kg
	Dibenz(a,h)anthracene									
		A1505289866RE	Re-extraction/Re-analysis	Soil	Low	2	660	646	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	123	J	µg/Kg
		A1505289872RE	Re-extraction/Re-analysis	Soil	Low	2	660	394	J	µg/Kg
		A1505289873RE	Re-extraction/Re-analysis	Soil	Low	2	660	193	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	107	J	µg/Kg
		A1505289876	Site Sample	Soil	Low	2	660	409	J	µg/Kg
		A1505289877	Site Sample	Soil	Low	2	660	418	J	µg/Kg

Qualifiers:

J - Estimated

B - (Organics) Found in the associated method

D - Reported from a dilutio

E - Exceeds calibration rang

P - (Pesticides) Difference in column concentrations > 25%

B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sedimen

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Dibenzofuran									
		A1505279862	Site Sample	Soil	Low	2	660	21	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	44	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	7.1	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	11	J	µg/Kg
	1,2-Dichlorobenzene									
		A1505279862	Site Sample	Soil	Low	2	660	10	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	15	J	µg/Kg
	1,3-Dichlorobenzene									
		A1505279862	Site Sample	Soil	Low	2	660	36	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	11	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	11	J	µg/Kg
	1,4-Dichlorobenzene									
		A1505279862	Site Sample	Soil	Low	2	660	13	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	10	J	µg/Kg

Qualifiers:
- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects — **LDEQ**

Sorted by Fraction, Analyte and Client Sample — **Capitol Lakes Sediment**

Lab: **AATSLA / American Analytical & Technical Services, Inc.** — SDG ID: **79861**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	1,4-Dichlorobenzene									
		A1505289868	Site Sample	Soil	Low	2	660	9.7	J	µg/Kg
	3,3'-Dichlorobenzidine									
		A1505279862	Site Sample	Soil	Low	2	1,300	58	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	1,300	25	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	1,300	8.4	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	1,300	8.8	J	µg/Kg
	2,4-Dichlorophenol									
		A1505279862	Site Sample	Soil	Low	2	660	6.9	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	5.8	J	µg/Kg
	Diethylphthalate									
		A1505279862	Site Sample	Soil	Low	2	660	3.8	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	13	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	5.2	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	3.1	J	µg/Kg

Qualifiers:

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: **79861**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	2,4-Dimethylphenol									
		A1505279862	Site Sample	Soil	Low	2	660	16	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	12	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	9.7	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	1.9	J	µg/Kg
	Dimethylphthalate									
		A1505279862	Site Sample	Soil	Low	2	660	12	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	5.2	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	6.5	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	13	J	µg/Kg
	4,6-Dinitro-2-methylphenol									
		A1505279862	Site Sample	Soil	Low	2	3,300	5.6	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	3,300	12	J	µg/Kg
	2,4-Dinitrotoluene									
		A1505279862	Site Sample	Soil	Low	2	660	38	J	µg/Kg

Qualifiers:

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- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: **79861**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	2,4-Dinitrotoluene									
		A1505279863	Site Sample	Soil	Low	2	660	34	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	32	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	9.5	J	µg/Kg
	2,6-Dinitrotoluene									
		A1505279862	Site Sample	Soil	Low	2	660	75	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	41	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	49	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	59	J	µg/Kg
	Fluoranthene									
		A1505279861	Site Sample	Soil	Low	2	660	1,594		µg/Kg
		A1505279862	Site Sample	Soil	Low	2	660	1,129		µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	1,814		µg/Kg
		A1505279864	Site Sample	Soil	Low	2	660	902		µg/Kg

Qualifiers:

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- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79881

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Fluoranthene									
		A1505289866RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,598		µg/Kg
		A1505289867	Site Sample	Soil	Low	2	660	660	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	401	J	µg/Kg
		A1505289869	Site Sample	Soil	Low	2	660	416	J	µg/Kg
		A1505289870	Site Sample	Soil	Low	2	660	751		µg/Kg
		A1505289872RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,476		µg/Kg
		A1505289873RE	Re-extraction/Re-analysis	Soil	Low	2	660	966		µg/Kg
		A1505289874	Site Sample	Soil	Low	2	660	477	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	756		µg/Kg
		A1505289876	Site Sample	Soil	Low	2	660	2,726		µg/Kg
		A1505289877	Site Sample	Soil	Low	2	660	2,657		µg/Kg
		A1505289878	Site Sample	Soil	Low	2	660	961		µg/Kg

Qualifiers:

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- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Fluoranthene									
		A1505289879RE	Re-extraction/Re-analysis	Soil	Low	1	330	321	J	µg/Kg
		A1505289880	Site Sample	Soil	Low	2	660	223	J	µg/Kg
	Fluorene									
		A1505279861	Site Sample	Soil	Low	2	660	336	J	µg/Kg
		A1505279862	Site Sample	Soil	Low	2	660	100	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	194	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	32	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	62	J	µg/Kg
		A1505289876	Site Sample	Soil	Low	2	660	289	J	µg/Kg
		A1505289877	Site Sample	Soil	Low	2	660	212	J	µg/Kg
		A1505289880	Site Sample	Soil	Low	2	660	140	J	µg/Kg
	Hexachloroethane									
		A1505279862	Site Sample	Soil	Low	2	660	63	J	µg/Kg

Qualifiers:

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- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Hexachloroethane									
		A1505279863	Site Sample	Soil	Low	2	660	123	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	26	J	µg/Kg
	Indeno(1,2,3-cd)pyrene									
		A1505279861	Site Sample	Soil	Low	2	660	925	J	µg/Kg
		A1505279862	Site Sample	Soil	Low	2	660	100	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	130	J	µg/Kg
		A1505289866RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,734	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	58	J	µg/Kg
		A1505289869	Site Sample	Soil	Low	2	660	293	J	µg/Kg
		A1505289870	Site Sample	Soil	Low	2	660	275	J	µg/Kg
		A1505289872RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,066	J	µg/Kg
		A1505289873RE	Re-extraction/Re-analysis	Soil	Low	2	660	552	J	µg/Kg
		A1505289874	Site Sample	Soil	Low	2	660	210	J	µg/Kg

Qualifiers:
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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: **79861**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Indeno(1,2,3-cd)pyrene									
		A1505289875	Site Sample	Soil	Low	2	660	52	J	µg/Kg
		A1505289876	Site Sample	Soil	Low	2	660	1,115	J	µg/Kg
		A1505289877	Site Sample	Soil	Low	2	660	1,082	J	µg/Kg
		A1505289879RE	Re-extraction/Re-analysis	Soil	Low	1	330	73	J	µg/Kg
	Isophorone									
		A1505279863	Site Sample	Soil	Low	2	660	91	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	69	J	µg/Kg
	2-Methylnaphthalene									
		A1505279862	Site Sample	Soil	Low	2	660	36	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	45	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	18	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	25	J	µg/Kg
		A1505289876	Site Sample	Soil	Low	2	660	557	J	µg/Kg

Qualifiers:

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- **D** - Reported from a dilutio
- **E** - Exceeds calibration rang
- **P** - (Pesticides) Difference in column concentrations > 25%
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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: **79861**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	2-Methylphenol									
		A1505279862	Site Sample	Soil	Low	2	660	16	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	2.6	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	1.9	J	µg/Kg
	4-Methylphenol									
		A1505279862	Site Sample	Soil	Low	2	660	16	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	37	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	1.9	J	µg/Kg
	N-Nitroso-di-n-propylamine									
		A1505279862	Site Sample	Soil	Low	2	660	100	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	37	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	37	J	µg/Kg
	N-Nitrosodiphenylamine									
		A1505279863	Site Sample	Soil	Low	2	660	104	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	13	J	µg/Kg

Qualifiers:
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- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sedimen

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	N-Nitrosodiphenylamine									
		A1505289872RE	Re-extraction/Re-analysis	Soil	Low	2	660	193	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	26	J	µg/Kg
		A1505289877	Site Sample	Soil	Low	2	660	256	J	µg/Kg
		A1505289878	Site Sample	Soil	Low	2	660	162	J	µg/Kg
	Naphthalene									
		A1505279862	Site Sample	Soil	Low	2	660	33	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	54	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	18	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	31	J	µg/Kg
	2-Nitroaniline									
		A1505279862	Site Sample	Soil	Low	2	3,300	17	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	3,300	6.5	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	3,300	3.9	J	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	2-Nitroaniline									
		A1505289875	Site Sample	Soil	Low	2	3,300	5.0	J	µg/Kg
	3-Nitroaniline									
		A1505279862	Site Sample	Soil	Low	2	3,300	34	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	3,300	21	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	3,300	25	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	3,300	20	J	µg/Kg
	4-Nitroaniline									
		A1505279862	Site Sample	Soil	Low	2	3,300	5.0	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	3,300	16	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	3,300	24	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	3,300	8.2	J	µg/Kg
	Nitrobenzene									
		A1505279862	Site Sample	Soil	Low	2	660	57	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	71	J	µg/Kg

Qualifiers:
- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Nitrobenzene									
		A1505289868	Site Sample	Soil	Low	2	660	22	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	25	J	µg/Kg
	2-Nitrophenol									
		A1505279862	Site Sample	Soil	Low	2	660	36	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	45	J	µg/Kg
	4-Nitrophenol									
		A1505279863	Site Sample	Soil	Low	2	3,300	117	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	3,300	47	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	3,300	29	J	µg/Kg
	2,2'-oxybis(1-Chloropropane)									
		A1505279862	Site Sample	Soil	Low	2	660	3.1	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	4.5	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	3.2	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	6.3	J	µg/Kg

Qualifiers:
- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Pentachlorophenol									
		A1505279862	Site Sample	Soil	Low	2	3,300	24	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	3,300	71	J	µg/Kg
	Phenanthrene									
		A1505279861	Site Sample	Soil	Low	2	660	1,607		µg/Kg
		A1505279862	Site Sample	Soil	Low	2	660	752		µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	1,555		µg/Kg
		A1505279864	Site Sample	Soil	Low	2	660	592	J	µg/Kg
		A1505289866RE	Re-extraction/Re-analysis	Soil	Low	2	660	146	J	µg/Kg
		A1505289867	Site Sample	Soil	Low	2	660	243	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	104	J	µg/Kg
		A1505289870	Site Sample	Soil	Low	2	660	351	J	µg/Kg
		A1505289872RE	Re-extraction/Re-analysis	Soil	Low	2	660	738		µg/Kg
		A1505289873RE	Re-extraction/Re-analysis	Soil	Low	2	660	442	J	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects | **LDEQ**

Sorted by Fraction, Analyte and Client Sample | **Capitol Lakes Sediment**

Lab: **AATSLA / American Analytical & Technical Services, Inc.** | SDG ID: **79861**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Phenanthrene									
		A1505289874	Site Sample	Soil	Low	2	660	149	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	328	J	µg/Kg
		A1505289876	Site Sample	Soil	Low	2	660	1,941		µg/Kg
		A1505289877	Site Sample	Soil	Low	2	660	1,820		µg/Kg
		A1505289878	Site Sample	Soil	Low	2	660	491	J	µg/Kg
		A1505289879RE	Re-extraction/Re-analysis	Soil	Low	1	330	206	J	µg/Kg
		A1505289880	Site Sample	Soil	Low	2	660	208	J	µg/Kg
	Pyrene									
		A1505279861	Site Sample	Soil	Low	2	660	2,873	J	µg/Kg
		A1505279862	Site Sample	Soil	Low	2	660	2,947	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	3,629	J	µg/Kg
		A1505279864	Site Sample	Soil	Low	2	660	1,932	J	µg/Kg
		A1505289866RE	Re-extraction/Re-analysis	Soil	Low	2	660	2,720		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects LDEQ
Sorted by Fraction, Analyte and Client Sample Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Pyrene									
		A1505289867	Site Sample	Soil	Low	2	660	1,537	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	2	660	712		µg/Kg
		A1505289869	Site Sample	Soil	Low	2	660	780		µg/Kg
		A1505289870	Site Sample	Soil	Low	2	660	1,002		µg/Kg
		A1505289872RE	Re-extraction/Re-analysis	Soil	Low	2	660	3,485		µg/Kg
		A1505289873RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,932	J	µg/Kg
		A1505289874	Site Sample	Soil	Low	2	660	743		µg/Kg
		A1505289875	Site Sample	Soil	Low	2	660	945		µg/Kg
		A1505289876	Site Sample	Soil	Low	2	660	4,543	J	µg/Kg
		A1505289877	Site Sample	Soil	Low	2	660	4,625	J	µg/Kg
		A1505289878	Site Sample	Soil	Low	2	660	2,226	J	µg/Kg
		A1505289879RE	Re-extraction/Re-analysis	Soil	Low	1	330	418	J	µg/Kg

Qualifiers:
J - Estimated
B - (Organics) Found in the associated method
D - Reported from a dilutio
E - Exceeds calibration rang
P - (Pesticides) Difference in column concentrations > 25%
B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Pyrene									
		A1505289880	Site Sample	Soil	Low	2	660	332	J	µg/Kg
	1,2,4-Trichlorobenzene									
		A1505279862	Site Sample	Soil	Low	2	660	6.3	J	µg/Kg
	2,4,5-Trichlorophenol									
		A1505279862	Site Sample	Soil	Low	2	3,300	31	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	3,300	19	J	µg/Kg
	2,4,6-Trichlorophenol									
		A1505279862	Site Sample	Soil	Low	2	660	35	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	2	660	20	J	µg/Kg
Pesticides/PCBs										
	Aldrin									
		A1505289866	Site Sample	Soil	Low	1	1.7	2.7	J	µg/Kg
		A1505289867	Site Sample	Soil	Low	1	1.7	16	J	µg/Kg
		A1505289868	Site Sample	Soil	Low	1	1.7	1.7	J	µg/Kg
		A1505289872	Site Sample	Soil	Low	1	1.7	9.4	J	µg/Kg

Qualifiers:
- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects | **LDEQ**

Sorted by Fraction, Analyte and Client Sample | **Capitol Lakes Sediment**

Lab: **AATSLA / American Analytical & Technical Services, Inc.** | SDG ID: **79861**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	Aldrin									
		A1505289873	Site Sample	Soil	Low	1	1.7	216	J	µg/Kg
		A1505289874	Site Sample	Soil	Low	1	1.7	8.0	J	µg/Kg
		A1505289875	Site Sample	Soil	Low	1	1.7	2.1	J	µg/Kg
		A1505289876	Site Sample	Soil	Low	1	1.7	5.0	J	µg/Kg
		A1505289877	Site Sample	Soil	Low	1	1.7	7.4	J	µg/Kg
		A1505289878	Site Sample	Soil	Low	10	17	496	J	µg/Kg
		A1505289879	Site Sample	Soil	Low	1	1.7	7.3	J	µg/Kg
		A1505289880	Site Sample	Soil	Low	1	1.7	6.7	J	µg/Kg
	alpha-BHC									
		A1505289867	Site Sample	Soil	Low	1	1.7	2.7		µg/Kg
		A1505289869	Site Sample	Soil	Low	1	1.7	3.3		µg/Kg
		A1505289873	Site Sample	Soil	Low	1	1.7	4.0		µg/Kg
		A1505289876	Site Sample	Soil	Low	1	1.7	4.1		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sedimen

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	alpha-BHC								
		A1505289877	Site Sample	Soil	Low	1	1.7	3.0	µg/Kg
		A1505289878	Site Sample	Soil	Low	10	17	26	µg/Kg
	beta-BHC								
		A1505289867	Site Sample	Soil	Low	1	1.7	9.4	µg/Kg
		A1505289873	Site Sample	Soil	Low	1	1.7	16	µg/Kg
		A1505289876	Site Sample	Soil	Low	1	1.7	9.9	µg/Kg
		A1505289878	Site Sample	Soil	Low	10	17	61	µg/Kg
		A1505289880	Site Sample	Soil	Low	1	1.7	4.0	µg/Kg
	delta-BHC								
		A1505289866	Site Sample	Soil	Low	1	1.7	9.9	µg/Kg
		A1505289867	Site Sample	Soil	Low	1	1.7	47	µg/Kg
		A1505289868	Site Sample	Soil	Low	1	1.7	3.6	µg/Kg
		A1505289870	Site Sample	Soil	Low	1	1.7	1.9	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method
- **D** - Reported from a dilutio
- **E** - Exceeds calibration rang
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79861**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	delta-BHC								
		A1505289872	Site Sample	Soil	Low	1	1.7	13	µg/Kg
		A1505289873	Site Sample	Soil	Low	1	1.7	74	µg/Kg
		A1505289874	Site Sample	Soil	Low	1	1.7	6.8	µg/Kg
		A1505289875	Site Sample	Soil	Low	1	1.7	2.4	µg/Kg
		A1505289876	Site Sample	Soil	Low	1	1.7	9.9	µg/Kg
		A1505289877	Site Sample	Soil	Low	1	1.7	32	µg/Kg
		A1505289878	Site Sample	Soil	Low	10	17	88	µg/Kg
		A1505289879	Site Sample	Soil	Low	1	1.7	6.7	µg/Kg
		A1505289880	Site Sample	Soil	Low	1	1.7	10	µg/Kg
	gamma-BHC (Lindane) (Lindane)								
		A1505289867	Site Sample	Soil	Low	1	1.7	8.1	µg/Kg
		A1505289872	Site Sample	Soil	Low	1	1.7	1.8	µg/Kg
		A1505289877	Site Sample	Soil	Low	1	1.7	5.9	µg/Kg

Qualifiers:
- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects | **LDEQ**

Sorted by Fraction, Analyte and Client Sample | **Capitol Lakes Sediment**

Lab: **AATSLA / American Analytical & Technical Services, Inc.** | SDG ID: **79861**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	alpha Chlordane								
		A1505289866	Site Sample	Soil	Low	1	1.7	14	µg/Kg
		A1505289867	Site Sample	Soil	Low	1	1.7	14	µg/Kg
		A1505289872	Site Sample	Soil	Low	1	1.7	16	µg/Kg
		A1505289873	Site Sample	Soil	Low	1	1.7	110	µg/Kg
		A1505289874	Site Sample	Soil	Low	1	1.7	3.7	µg/Kg
		A1505289876	Site Sample	Soil	Low	1	1.7	29	µg/Kg
		A1505289877	Site Sample	Soil	Low	1	1.7	43	µg/Kg
		A1505289878	Site Sample	Soil	Low	10	17	319	µg/Kg
		A1505289879	Site Sample	Soil	Low	1	1.7	3.1	µg/Kg
		A1505289880	Site Sample	Soil	Low	1	1.7	13	µg/Kg
	gamma Chlordane								
		A1505289866	Site Sample	Soil	Low	1	1.7	27	µg/Kg
		A1505289867	Site Sample	Soil	Low	1	1.7	58	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	gamma Chlordane								
		A1505289868	Site Sample	Soil	Low	1	1.7	2.0	µg/Kg
		A1505289869	Site Sample	Soil	Low	1	1.7	3.7	µg/Kg
		A1505289870	Site Sample	Soil	Low	1	1.7	6.3	µg/Kg
		A1505289872	Site Sample	Soil	Low	1	1.7	36	µg/Kg
		A1505289873	Site Sample	Soil	Low	1	1.7	221	µg/Kg
		A1505289874	Site Sample	Soil	Low	1	1.7	9.9	µg/Kg
		A1505289876	Site Sample	Soil	Low	10	1.7	87	µg/Kg
		A1505289877	Site Sample	Soil	Low	10	17	84	µg/Kg
		A1505289878	Site Sample	Soil	Low	10	17	810	µg/Kg
		A1505289879	Site Sample	Soil	Low	1	1.7	9.7	µg/Kg
	4,4'-DDD								
		A1505289866	Site Sample	Soil	Low	1	3.3	177	µg/Kg
		A1505289867	Site Sample	Soil	Low	10	3.3	882	µg/Kg

Qualifiers:
- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: 79861

Fraction	Analyte	Client Sample		Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs										
	4,4'-DDD									
		A1505289868		Site Sample	Soil	Low	1	3.3	23	µg/Kg
		A1505289869		Site Sample	Soil	Low	1	3.3	7.2	µg/Kg
		A1505289870		Site Sample	Soil	Low	1	3.3	19	µg/Kg
		A1505289872		Site Sample	Soil	Low	10	33	230	µg/Kg
		A1505289873		Site Sample	Soil	Low	10	33	552	µg/Kg
		A1505289874	J	Site Sample	Soil	Low	1	3.3	80	µg/Kg
		A1505289875		Site Sample	Soil	Low	1	3.3	13	µg/Kg
		A1505289876		Site Sample	Soil	Low	10	3.3	743	µg/Kg
		A1505289877		Site Sample	Soil	Low	10	33	462	µg/Kg
		A1505289878		Site Sample	Soil	Low	10	33	4,756	µg/Kg
		A1505289879		Site Sample	Soil	Low	1	3.3	67	µg/Kg
		A1505289880		Site Sample	Soil	Low	1	3.3	99	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sedimen

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	4,4'-DDE								
		A1505289866	Site Sample	Soil	Low	10	33	279	µg/Kg
		A1505289867	Site Sample	Soil	Low	10	33	1,324	µg/Kg
		A1505289868	Site Sample	Soil	Low	1	3.3	21	µg/Kg
		A1505289869	Site Sample	Soil	Low	1	3.3	18	µg/Kg
		A1505289870	Site Sample	Soil	Low	1	3.3	42	µg/Kg
		A1505289872	Site Sample	Soil	Low	1	3.3	283	µg/Kg
		A1505289873	Site Sample	Soil	Low	10	33	51	µg/Kg
		A1505289874	Site Sample	Soil	Low	1	3.3	34	µg/Kg
		A1505289875	Site Sample	Soil	Low	1	3.3	7.6	µg/Kg
		A1505289876	Site Sample	Soil	Low	10	3.3	215	µg/Kg
		A1505289877	Site Sample	Soil	Low	1	3.3	6.4	µg/Kg
		A1505289878	Site Sample	Soil	Low	100	330	3,137	µg/Kg

Qualifiers:
- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79881

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	4,4'-DDE								
		A1505289880	Site Sample	Soil	Low	1	3.3	52	µg/Kg
	4,4'-DDT								
		A1505289866	Site Sample	Soil	Low	1	3.3	27	µg/Kg
		A1505289867	Site Sample	Soil	Low	1	3.3	56	µg/Kg
		A1505289868	Site Sample	Soil	Low	1	3.3	21	µg/Kg
		A1505289869	Site Sample	Soil	Low	1	3.3	10	µg/Kg
		A1505289870	Site Sample	Soil	Low	1	3.3	18	µg/Kg
		A1505289872	Site Sample	Soil	Low	1	3.3	21	µg/Kg
		A1505289873	Site Sample	Soil	Low	10	33	35	µg/Kg
		A1505289874	Site Sample	Soil	Low	1	3.3	6.8	µg/Kg
		A1505289875	Site Sample	Soil	Low	1	3.3	13	µg/Kg
		A1505289876	Site Sample	Soil	Low	10	3.3	384	µg/Kg
		A1505289877	Site Sample	Soil	Low	1	3.3	98	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: **79861**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	4,4'-DDT								
		A1505289878	Site Sample	Soil	Low	10	33	233	µg/Kg
		A1505289879	Site Sample	Soil	Low	1	3.3	11	µg/Kg
		A1505289880	Site Sample	Soil	Low	10	3.3	374	µg/Kg
	Dieldrin								
		A1505289866	Site Sample	Soil	Low	1	3.3	3.7	µg/Kg
		A1505289872	Site Sample	Soil	Low	1	3.3	4.1	µg/Kg
		A1505289873	Site Sample	Soil	Low	1	3.3	14	µg/Kg
		A1505289874	Site Sample	Soil	Low	1	3.3	3.3	µg/Kg
		A1505289876	Site Sample	Soil	Low	1	3.3	16	µg/Kg
		A1505289877	Site Sample	Soil	Low	1	3.3	19	µg/Kg
		A1505289878	Site Sample	Soil	Low	10	33	293	µg/Kg
		A1505289880	Site Sample	Soil	Low	1	3.3	11	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method
- **D** - Reported from a dilutio
- **E** - Exceeds calibration rang
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects LDEQ
Sorted by Fraction, Analyte and Client Sample Capitol Lakes Sedimen

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	Endosulfan I								
		A1505289872	Site Sample	Soil	Low	1	1.7	12	µg/Kg
	Endosulfan II								
		A1505289866	Site Sample	Soil	Low	1	3.3	8.8	µg/Kg
		A1505289867	Site Sample	Soil	Low	1	3.3	23	µg/Kg
		A1505289872	Site Sample	Soil	Low	1	3.3	6.6	µg/Kg
		A1505289874	Site Sample	Soil	Low	1	3.3	4.2	µg/Kg
		A1505289875	Site Sample	Soil	Low	1	3.3	4.0	µg/Kg
		A1505289877	Site Sample	Soil	Low	1	3.3	23	µg/Kg
		A1505289878	Site Sample	Soil	Low	10	33	86	µg/Kg
		A1505289880	Site Sample	Soil	Low	1	3.3	57	µg/Kg
	Endosulfan sulfate								
		A1505289873	Site Sample	Soil	Low	1	3.3	35	µg/Kg
		A1505289880	Site Sample	Soil	Low	1	3.3	83	µg/Kg

Qualifiers:
J - Estimated
B - (Organics) Found in the associated method
D - Reported from a dilutio
E - Exceeds calibration rang
P - (Pesticides) Difference in column concentrations > 25%
B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	Endrin									
		A1505289866	Site Sample	Soil	Low	1	33	5.4	J	µg/Kg
		A1505289867	Site Sample	Soil	Low	1	33	17	J	µg/Kg
		A1505289872	Site Sample	Soil	Low	1	33	5.7	J	µg/Kg
		A1505289873	Site Sample	Soil	Low	1	33	66	J	µg/Kg
		A1505289876	Site Sample	Soil	Low	1	33	25	J	µg/Kg
		A1505289877	Site Sample	Soil	Low	1	33	14	J	µg/Kg
		A1505289880	Site Sample	Soil	Low	1	33	57	J	µg/Kg
	Endrin aldehyde									
		A1505289866	Site Sample	Soil	Low	1	3.3	4.8		µg/Kg
		A1505289867	Site Sample	Soil	Low	1	3.3	15		µg/Kg
		A1505289868	Site Sample	Soil	Low	1	3.3	3.3		µg/Kg
		A1505289869	Site Sample	Soil	Low	1	3.3	4.7		µg/Kg
		A1505289870	Site Sample	Soil	Low	1	3.3	3.3		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	Endrin aldehyde									
		A1505289872	Site Sample	Soil	Low	1	3.3	3.6		µg/Kg
		A1505289873	Site Sample	Soil	Low	1	3.3	41		µg/Kg
		A1505289874	Site Sample	Soil	Low	1	3.3	3.7		µg/Kg
		A1505289876	Site Sample	Soil	Low	1	3.3	16		µg/Kg
		A1505289877	Site Sample	Soil	Low	1	3.3	14		µg/Kg
		A1505289880	Site Sample	Soil	Low	10	3.3	114		µg/Kg
	Endrin ketone									
		A1505289866	Site Sample	Soil	Low	1	3.3	5.4		µg/Kg
		A1505289868	Site Sample	Soil	Low	1	3.3	3.4		µg/Kg
		A1505289880	Site Sample	Soil	Low	1	3.3	22		µg/Kg
	Heptachlor									
		A1505289869	Site Sample	Soil	Low	1	1.7	2.3	J	µg/Kg
		A1505289870	Site Sample	Soil	Low	1	1.7	2.0	J	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	Heptachlor epoxide								
		A1505289866	Site Sample	Soil	Low	1	1.7	6.5	µg/Kg
		A1505289867	Site Sample	Soil	Low	1	1.7	33	µg/Kg
		A1505289870	Site Sample	Soil	Low	1	1.7	1.8	µg/Kg
		A1505289872	Site Sample	Soil	Low	1	1.7	8.2	µg/Kg
		A1505289873	Site Sample	Soil	Low	1	1.7	64	µg/Kg
		A1505289874	Site Sample	Soil	Low	1	1.7	3.2	µg/Kg
		A1505289876	Site Sample	Soil	Low	1	1.7	19	µg/Kg
		A1505289877	Site Sample	Soil	Low	1	1.7	24	µg/Kg
		A1505289879	Site Sample	Soil	Low	1	1.7	2.3	µg/Kg
		A1505289880	Site Sample	Soil	Low	1	1.7	6.2	µg/Kg
	Methoxychlor								
		A1505289880	Site Sample	Soil	Low	1	17	62	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects LDEQ
Sorted by Fraction, Analyte and Client Sample Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Aluminum								
		A1505289866	Site Sample	Soil	Low	1	20	3,502	mg/Kg
		A1505289867	Site Sample	Soil	Low	1	20	7,942	mg/Kg
		A1505289868	Site Sample	Soil	Low	1	20	9,511	mg/Kg
		A1505289869	Site Sample	Soil	Low	1	20	10,465	mg/Kg
		A1505289870	Site Sample	Soil	Low	1	20	8,639	mg/Kg
		A1505289872	Site Sample	Soil	Low	1	20	4,428	mg/Kg
		A1505289873	Site Sample	Soil	Low	1	20	6,394	mg/Kg
		A1505289874	Site Sample	Soil	Low	1	20	10,214	mg/Kg
		A1505289875	Site Sample	Soil	Low	1	20	8,253	mg/Kg
		A1505289876	Site Sample	Soil	Low	1	20	4,502	mg/Kg
		A1505289877	Site Sample	Soil	Low	1	20	4,822	mg/Kg
		A1505289878	Site Sample	Soil	Low	1	20	9,260	mg/Kg

Qualifiers:
J - Estimated
B - (Organics) Found in the associated method
D - Reported from a dilutio
E - Exceeds calibration rang
P - (Pesticides) Difference in column concentrations > 25%
B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects | **LDEQ**

Sorted by Fraction, Analyte and Client Sample | **Capitol Lakes Sediment**

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Aluminum									
		A1505289879	Site Sample	Soil	Low	1	20	8,908		mg/Kg
		A1505289880	Site Sample	Soil	Low	1	20	11,003		mg/Kg
	Antimony									
		A1505289868	Site Sample	Soil	Low	1	1.0	7.1	J	mg/Kg
		A1505289869	Site Sample	Soil	Low	1	1.0	6.4	J	mg/Kg
		A1505289870	Site Sample	Soil	Low	1	1.0	4.7	J	mg/Kg
		A1505289874	Site Sample	Soil	Low	1	1.0	17	J	mg/Kg
		A1505289875	Site Sample	Soil	Low	1	1.0	3.0	J	mg/Kg
		A1505289878	Site Sample	Soil	Low	1	1.0	7.1	J	mg/Kg
		A1505289879	Site Sample	Soil	Low	1	1.0	4.0	J	mg/Kg
		A1505289880	Site Sample	Soil	Low	1	1.0	94	J	mg/Kg
	Arsenic									
		A1505289866	Site Sample	Soil	Low	1	1.0	4.1		mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects | **LDEQ**

Sorted by Fraction, Analyte and Client Sample | **Capitol Lakes Sediment**

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79861**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Arsenic								
		A1505289867	Site Sample	Soil	Low	1	1.0	7.3	mg/Kg
		A1505289868	Site Sample	Soil	Low	1	1.0	7.1	mg/Kg
		A1505289869	Site Sample	Soil	Low	1	1.0	6.5	mg/Kg
		A1505289870	Site Sample	Soil	Low	1	1.0	8.1	mg/Kg
		A1505289872	Site Sample	Soil	Low	1	1.0	4.9	mg/Kg
		A1505289873	Site Sample	Soil	Low	1	1.0	7.4	mg/Kg
		A1505289874	Site Sample	Soil	Low	1	1.0	12	mg/Kg
		A1505289875	Site Sample	Soil	Low	1	1.0	6.9	mg/Kg
		A1505289876	Site Sample	Soil	Low	1	1.0	4.1	mg/Kg
		A1505289877	Site Sample	Soil	Low	1	1.0	4.9	mg/Kg
		A1505289878	Site Sample	Soil	Low	1	1.0	9.6	mg/Kg
		A1505289879	Site Sample	Soil	Low	1	1.0	9.1	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method
- **D** - Reported from a dilutio
- **E** - Exceeds calibration rang
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Arsenic								
		A1505289880	Site Sample	Soil	Low	1	1.0	39	mg/Kg
	Barium								
		A1505289866	Site Sample	Soil	Low	1	1.0	343	mg/Kg
		A1505289867	Site Sample	Soil	Low	1	1.0	301	mg/Kg
		A1505289868	Site Sample	Soil	Low	1	1.0	172	mg/Kg
		A1505289869	Site Sample	Soil	Low	1	1.0	159	mg/Kg
		A1505289870	Site Sample	Soil	Low	1	1.0	167	mg/Kg
		A1505289872	Site Sample	Soil	Low	1	1.0	484	mg/Kg
		A1505289873	Site Sample	Soil	Low	1	1.0	408	mg/Kg
		A1505289874	Site Sample	Soil	Low	1	1.0	201	mg/Kg
		A1505289875	Site Sample	Soil	Low	1	1.0	149	mg/Kg
		A1505289876	Site Sample	Soil	Low	1	1.0	364	mg/Kg
		A1505289877	Site Sample	Soil	Low	1	1.0	556	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects — **LDEQ**

Sorted by Fraction, Analyte and Client Sample — **Capitol Lakes Sediment**

Lab: **AATSLA / American Analytical & Technical Services, Inc.** — SDG ID: **79861**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Barium									
		A1505289878	Site Sample	Soil	Low	1	1.0	420		mg/Kg
		A1505289879	Site Sample	Soil	Low	1	1.0	152		mg/Kg
		A1505289880	Site Sample	Soil	Low	1	1.0	133		mg/Kg
	Beryllium									
		A1505289866	Site Sample	Soil	Low	1	0.20	0.17	B	mg/Kg
		A1505289867	Site Sample	Soil	Low	1	0.20	0.26		mg/Kg
		A1505289868	Site Sample	Soil	Low	1	0.20	0.47		mg/Kg
		A1505289869	Site Sample	Soil	Low	1	0.20	0.46		mg/Kg
		A1505289870	Site Sample	Soil	Low	1	0.20	0.46		mg/Kg
		A1505289872	Site Sample	Soil	Low	1	0.20	0.20		mg/Kg
		A1505289873	Site Sample	Soil	Low	1	0.20	0.24		mg/Kg
		A1505289874	Site Sample	Soil	Low	1	0.20	0.52		mg/Kg
		A1505289875	Site Sample	Soil	Low	1	0.20	0.43		mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sedimen

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Beryllium									
		A1505289876	Site Sample	Soil	Low	1	0.20	0.19	B	mg/Kg
		A1505289877	Site Sample	Soil	Low	1	0.20	0.21		mg/Kg
		A1505289878	Site Sample	Soil	Low	1	0.20	0.28		mg/Kg
		A1505289879	Site Sample	Soil	Low	1	0.20	0.42		mg/Kg
		A1505289880	Site Sample	Soil	Low	1	0.20	0.43		mg/Kg
	Cadmium									
		A1505289866	Site Sample	Soil	Low	1	0.50	3.4		mg/Kg
		A1505289867	Site Sample	Soil	Low	1	0.50	1.1		mg/Kg
		A1505289868	Site Sample	Soil	Low	1	0.50	1.9		mg/Kg
		A1505289869	Site Sample	Soil	Low	1	0.50	2.0		mg/Kg
		A1505289870	Site Sample	Soil	Low	1	0.50	1.7		mg/Kg
		A1505289872	Site Sample	Soil	Low	1	0.50	3.7		mg/Kg
		A1505289873	Site Sample	Soil	Low	1	0.50	1.2		mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Cadmium								
		A1505289874	Site Sample	Soil	Low	1	0.50	3.3	mg/Kg
		A1505289875	Site Sample	Soil	Low	1	0.50	1.3	mg/Kg
		A1505289876	Site Sample	Soil	Low	1	0.50	3.1	mg/Kg
		A1505289877	Site Sample	Soil	Low	1	0.50	3.3	mg/Kg
		A1505289878	Site Sample	Soil	Low	1	0.50	2.3	mg/Kg
		A1505289879	Site Sample	Soil	Low	1	0.50	1.3	mg/Kg
		A1505289880	Site Sample	Soil	Low	1	0.50	7.3	mg/Kg
	Calcium								
		A1505289866	Site Sample	Soil	Low	1	30	16,456	mg/Kg
		A1505289867	Site Sample	Soil	Low	1	30	10,035	mg/Kg
		A1505289868	Site Sample	Soil	Low	1	30	1,695	mg/Kg
		A1505289869	Site Sample	Soil	Low	1	30	1,723	mg/Kg
		A1505289870	Site Sample	Soil	Low	1	30	1,671	mg/Kg

Qualifiers:
J - Estimated
B - (Organics) Found in the associated method
D - Reported from a dilutio
E - Exceeds calibration rang
P - (Pesticides) Difference in column concentrations > 25%
B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects | **LDEQ**

Sorted by Fraction, Analyte and Client Sample | **Capitol Lakes Sediment**

Lab: **AATSLA / American Analytical & Technical Services, Inc.** | SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Calcium								
		A1505289872	Site Sample	Soil	Low	1	30	22,345	mg/Kg
		A1505289873	Site Sample	Soil	Low	1	30	10,074	mg/Kg
		A1505289874	Site Sample	Soil	Low	1	30	2,061	mg/Kg
		A1505289875	Site Sample	Soil	Low	1	30	1,518	mg/Kg
		A1505289876	Site Sample	Soil	Low	1	30	29,199	mg/Kg
		A1505289877	Site Sample	Soil	Low	1	30	22,976	mg/Kg
		A1505289878	Site Sample	Soil	Low	1	30	11,132	mg/Kg
		A1505289879	Site Sample	Soil	Low	1	30	1,816	mg/Kg
		A1505289880	Site Sample	Soil	Low	1	30	1,469	mg/Kg
	Chromium								
		A1505289866	Site Sample	Soil	Low	1	1.0	14	mg/Kg
		A1505289867	Site Sample	Soil	Low	1	1.0	15	mg/Kg
		A1505289868	Site Sample	Soil	Low	1	1.0	14	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sedimen

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Chromium								
		A1505289869	Site Sample	Soil	Low	1	1.0	14	mg/Kg
		A1505289870	Site Sample	Soil	Low	1	1.0	13	mg/Kg
		A1505289872	Site Sample	Soil	Low	1	1.0	18	mg/Kg
		A1505289873	Site Sample	Soil	Low	1	1.0	17	mg/Kg
		A1505289874	Site Sample	Soil	Low	1	1.0	15	mg/Kg
		A1505289875	Site Sample	Soil	Low	1	1.0	11	mg/Kg
		A1505289876	Site Sample	Soil	Low	1	1.0	20	mg/Kg
		A1505289877	Site Sample	Soil	Low	1	1.0	16	mg/Kg
		A1505289878	Site Sample	Soil	Low	1	1.0	19	mg/Kg
		A1505289879	Site Sample	Soil	Low	1	1.0	12	mg/Kg
		A1505289880	Site Sample	Soil	Low	1	1.0	11	mg/Kg
	Cobalt								
		A1505289866	Site Sample	Soil	Low	1	0.50	2.4	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79861**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Cobalt								
		A1505289867	Site Sample	Soil	Low	1	0.50	3.5	mg/Kg
		A1505289868	Site Sample	Soil	Low	1	0.50	4.8	mg/Kg
		A1505289869	Site Sample	Soil	Low	1	0.50	4.4	mg/Kg
		A1505289870	Site Sample	Soil	Low	1	0.50	5.2	mg/Kg
		A1505289872	Site Sample	Soil	Low	1	0.50	2.7	mg/Kg
		A1505289873	Site Sample	Soil	Low	1	0.50	3.3	mg/Kg
		A1505289874	Site Sample	Soil	Low	1	0.50	6.2	mg/Kg
		A1505289875	Site Sample	Soil	Low	1	0.50	5.2	mg/Kg
		A1505289876	Site Sample	Soil	Low	1	0.50	2.1	mg/Kg
		A1505289877	Site Sample	Soil	Low	1	0.50	2.9	mg/Kg
		A1505289878	Site Sample	Soil	Low	1	0.50	3.9	mg/Kg
		A1505289879	Site Sample	Soil	Low	1	0.50	4.8	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method
- **D** - Reported from a dilutio
- **E** - Exceeds calibration rang
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Cobalt								
		A1505289880	Site Sample	Soil	Low	1	0.50	5.7	mg/Kg
	Copper								
		A1505289866	Site Sample	Soil	Low	1	0.50	43	mg/Kg
		A1505289867	Site Sample	Soil	Low	1	0.50	34	mg/Kg
		A1505289868	Site Sample	Soil	Low	1	0.50	21	mg/Kg
		A1505289869	Site Sample	Soil	Low	1	0.50	19	mg/Kg
		A1505289870	Site Sample	Soil	Low	1	0.50	21	mg/Kg
		A1505289872	Site Sample	Soil	Low	1	0.50	57	mg/Kg
		A1505289873	Site Sample	Soil	Low	1	0.50	43	mg/Kg
		A1505289874	Site Sample	Soil	Low	1	0.50	25	mg/Kg
		A1505289875	Site Sample	Soil	Low	1	0.50	19	mg/Kg
		A1505289876	Site Sample	Soil	Low	1	0.50	36	mg/Kg
		A1505289877	Site Sample	Soil	Low	1	0.50	59	mg/Kg

Qualifiers:
- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sedimen

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Copper								
		A1505289878	Site Sample	Soil	Low	1	0.50	43	mg/Kg
		A1505289879	Site Sample	Soil	Low	1	0.50	20	mg/Kg
		A1505289880	Site Sample	Soil	Low	1	0.50	21	mg/Kg
	Iron								
		A1505289866	Site Sample	Soil	Low	1	10	6,426	mg/Kg
		A1505289867	Site Sample	Soil	Low	1	10	10,248	mg/Kg
		A1505289868	Site Sample	Soil	Low	1	10	11,517	mg/Kg
		A1505289869	Site Sample	Soil	Low	1	10	11,570	mg/Kg
		A1505289870	Site Sample	Soil	Low	1	10	12,332	mg/Kg
		A1505289872	Site Sample	Soil	Low	1	10	7,626	mg/Kg
		A1505289873	Site Sample	Soil	Low	1	10	9,248	mg/Kg
		A1505289874	Site Sample	Soil	Low	1	10	13,556	mg/Kg
		A1505289875	Site Sample	Soil	Low	1	10	11,277	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: **79861**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Iron									
		A1505289876	Site Sample	Soil	Low	1	10	7,269		mg/Kg
		A1505289877	Site Sample	Soil	Low	1	10	7,970		mg/Kg
		A1505289878	Site Sample	Soil	Low	1	10	11,132		mg/Kg
		A1505289879	Site Sample	Soil	Low	1	10	11,635		mg/Kg
		A1505289880	Site Sample	Soil	Low	1	10	14,688		mg/Kg
	Lead									
		A1505289866	Site Sample	Soil	Low	1	0.50	67	J	mg/Kg
		A1505289867	Site Sample	Soil	Low	1	0.50	88	J	mg/Kg
		A1505289868	Site Sample	Soil	Low	1	0.50	137	J	mg/Kg
		A1505289869	Site Sample	Soil	Low	1	0.50	120	J	mg/Kg
		A1505289870	Site Sample	Soil	Low	1	0.50	130	J	mg/Kg
		A1505289872	Site Sample	Soil	Low	1	0.50	82	J	mg/Kg
		A1505289873	Site Sample	Soil	Low	1	0.50	113	J	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method
- **D** - Reported from a dilutio
- **E** - Exceeds calibration rang
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sedimen

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Lead									
		A1505289874	Site Sample	Soil	Low	1	0.50	155	J	mg/Kg
		A1505289875	Site Sample	Soil	Low	1	0.50	101	J	mg/Kg
		A1505289876	Site Sample	Soil	Low	1	0.50	63	J	mg/Kg
		A1505289877	Site Sample	Soil	Low	1	0.50	85	J	mg/Kg
		A1505289878	Site Sample	Soil	Low	1	0.50	136	J	mg/Kg
		A1505289879	Site Sample	Soil	Low	1	0.50	116	J	mg/Kg
		A1505289880	Site Sample	Soil	Low	1	0.50	2,486	J	mg/Kg
	Magnesium									
		A1505289866	Site Sample	Soil	Low	1	20	1,204	J	mg/Kg
		A1505289867	Site Sample	Soil	Low	1	20	1,102	J	mg/Kg
		A1505289868	Site Sample	Soil	Low	1	20	1,333	J	mg/Kg
		A1505289869	Site Sample	Soil	Low	1	20	1,372	J	mg/Kg
		A1505289870	Site Sample	Soil	Low	1	20	1,308	J	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Magnesium									
		A1505289872	Site Sample	Soil	Low	1	20	1,505	J	mg/Kg
		A1505289873	Site Sample	Soil	Low	1	20	957	J	mg/Kg
		A1505289874	Site Sample	Soil	Low	1	20	1,467	J	mg/Kg
		A1505289875	Site Sample	Soil	Low	1	20	1,254	J	mg/Kg
		A1505289876	Site Sample	Soil	Low	1	20	1,772	J	mg/Kg
		A1505289877	Site Sample	Soil	Low	1	20	1,501	J	mg/Kg
		A1505289878	Site Sample	Soil	Low	1	20	1,240	J	mg/Kg
		A1505289879	Site Sample	Soil	Low	1	20	1,248	J	mg/Kg
		A1505289880	Site Sample	Soil	Low	1	20	1,469	J	mg/Kg
	Manganese									
		A1505289866	Site Sample	Soil	Low	1	0.50	179		mg/Kg
		A1505289867	Site Sample	Soil	Low	1	0.50	303		mg/Kg
		A1505289868	Site Sample	Soil	Low	1	0.50	253		mg/Kg

Qualifiers:
- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sedimen

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Manganese									
		A1505289869	Site Sample	Soil	Low	1	0.50	218		mg/Kg
		A1505289870	Site Sample	Soil	Low	1	0.50	453		mg/Kg
		A1505289872	Site Sample	Soil	Low	1	0.50	265		mg/Kg
		A1505289873	Site Sample	Soil	Low	1	0.50	283		mg/Kg
		A1505289874	Site Sample	Soil	Low	1	0.50	305		mg/Kg
		A1505289875	Site Sample	Soil	Low	1	0.50	440		mg/Kg
		A1505289876	Site Sample	Soil	Low	1	0.50	223		mg/Kg
		A1505289877	Site Sample	Soil	Low	1	0.50	290		mg/Kg
		A1505289878	Site Sample	Soil	Low	1	0.50	318		mg/Kg
		A1505289879	Site Sample	Soil	Low	1	0.50	422		mg/Kg
		A1505289880	Site Sample	Soil	Low	1	0.50	268		mg/Kg
	Nickel									
		A1505289866	Site Sample	Soil	Low	1	1.0	8.8	J	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: **79861**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Nickel									
		A1505289867	Site Sample	Soil	Low	1	1.0	12	J	mg/Kg
		A1505289868	Site Sample	Soil	Low	1	1.0	12	J	mg/Kg
		A1505289869	Site Sample	Soil	Low	1	1.0	12	J	mg/Kg
		A1505289870	Site Sample	Soil	Low	1	1.0	13	J	mg/Kg
		A1505289872	Site Sample	Soil	Low	1	1.0	13	J	mg/Kg
		A1505289873	Site Sample	Soil	Low	1	1.0	12	J	mg/Kg
		A1505289874	Site Sample	Soil	Low	1	1.0	14	J	mg/Kg
		A1505289875	Site Sample	Soil	Low	1	1.0	12	J	mg/Kg
		A1505289876	Site Sample	Soil	Low	1	1.0	9.9	J	mg/Kg
		A1505289877	Site Sample	Soil	Low	1	1.0	13	J	mg/Kg
		A1505289878	Site Sample	Soil	Low	1	1.0	14	J	mg/Kg
		A1505289879	Site Sample	Soil	Low	1	1.0	12	J	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Nickel									
		A1505289880	Site Sample	Soil	Low	1	1.0	14	J	mg/Kg
	Potassium									
		A1505289866	Site Sample	Soil	Low	1	50	267		mg/Kg
		A1505289867	Site Sample	Soil	Low	1	50	572		mg/Kg
		A1505289868	Site Sample	Soil	Low	1	50	653		mg/Kg
		A1505289869	Site Sample	Soil	Low	1	50	715		mg/Kg
		A1505289870	Site Sample	Soil	Low	1	50	632		mg/Kg
		A1505289872	Site Sample	Soil	Low	1	50	330		mg/Kg
		A1505289873	Site Sample	Soil	Low	1	50	431		mg/Kg
		A1505289874	Site Sample	Soil	Low	1	50	730		mg/Kg
		A1505289875	Site Sample	Soil	Low	1	50	590		mg/Kg
		A1505289876	Site Sample	Soil	Low	1	50	271		mg/Kg
		A1505289877	Site Sample	Soil	Low	1	50	354		mg/Kg

Qualifiers:
- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects | **LDEQ**

Sorted by Fraction, Analyte and Client Sample | **Capitol Lakes Sedimen**

Lab: **AATSLA / American Analytical & Technical Services, Inc.** | SDG ID: **79861**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Potassium									
		A1505289878	Site Sample	Soil	Low	1	50	668		mg/Kg
		A1505289879	Site Sample	Soil	Low	1	50	636		mg/Kg
		A1505289880	Site Sample	Soil	Low	1	50	815		mg/Kg
	Silver									
		A1505289866	Site Sample	Soil	Low	1	1.0	0.99	B	mg/Kg
		A1505289867	Site Sample	Soil	Low	1	1.0	13		mg/Kg
		A1505289872	Site Sample	Soil	Low	1	1.0	2.1		mg/Kg
		A1505289873	Site Sample	Soil	Low	1	1.0	19		mg/Kg
		A1505289874	Site Sample	Soil	Low	1	1.0	0.68	B	mg/Kg
		A1505289876	Site Sample	Soil	Low	1	1.0	2.4		mg/Kg
		A1505289877	Site Sample	Soil	Low	1	1.0	2.2		mg/Kg
		A1505289878	Site Sample	Soil	Low	1	1.0	18		mg/Kg
		A1505289879	Site Sample	Soil	Low	1	1.0	0.43	B	mg/Kg

Qualifiers:

- **J** - *Estimated*
- **B** - (Organics) Found in the associated method
- **D** - Reported from a dilutio
- **E** - Exceeds calibration rang
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sedimen

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: **79861**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Silver									
		A1505289860	Site Sample	Soil	Low	1	1.0	0.13	B	mg/Kg
	Sodium									
		A1505289866	Site Sample	Soil	Low	1	100	75	B	mg/Kg
		A1505289867	Site Sample	Soil	Low	1	100	127		mg/Kg
		A1505289868	Site Sample	Soil	Low	1	100	140		mg/Kg
		A1505289869	Site Sample	Soil	Low	1	100	138		mg/Kg
		A1505289870	Site Sample	Soil	Low	1	100	208		mg/Kg
		A1505289872	Site Sample	Soil	Low	1	100	92	B	mg/Kg
		A1505289873	Site Sample	Soil	Low	1	100	130		mg/Kg
		A1505289874	Site Sample	Soil	Low	1	100	189		mg/Kg
		A1505289875	Site Sample	Soil	Low	1	100	234		mg/Kg
		A1505289876	Site Sample	Soil	Low	1	100	104		mg/Kg
		A1505289877	Site Sample	Soil	Low	1	100	107		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method
- **D** - Reported from a dilutio
- **E** - Exceeds calibration rang
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sedimen

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Sodium								
		A1505289878	Site Sample	Soil	Low	1	100	173	mg/Kg
		A1505289879	Site Sample	Soil	Low	1	100	205	mg/Kg
		A1505289880	Site Sample	Soil	Low	1	100	301	mg/Kg
	Vanadium								
		A1505289866	Site Sample	Soil	Low	1	0.50	8.2	mg/Kg
		A1505289867	Site Sample	Soil	Low	1	0.50	14	mg/Kg
		A1505289868	Site Sample	Soil	Low	1	0.50	18	mg/Kg
		A1505289869	Site Sample	Soil	Low	1	0.50	19	mg/Kg
		A1505289870	Site Sample	Soil	Low	1	0.50	19	mg/Kg
		A1505289872	Site Sample	Soil	Low	1	0.50	9.4	mg/Kg
		A1505289873	Site Sample	Soil	Low	1	0.50	12	mg/Kg
		A1505289874	Site Sample	Soil	Low	1	0.50	21	mg/Kg
		A1505289875	Site Sample	Soil	Low	1	0.50	17	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: **79861**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Vanadium								
		A1505289876	Site Sample	Soil	Low	1	0.50	8.7	mg/Kg
		A1505289877	Site Sample	Soil	Low	1	0.50	10	mg/Kg
		A1505289878	Site Sample	Soil	Low	1	0.50	16	mg/Kg
		A1505289879	Site Sample	Soil	Low	1	0.50	18	mg/Kg
		A1505289880	Site Sample	Soil	Low	1	0.50	19	mg/Kg
	Zinc								
		A1505289866	Site Sample	Soil	Low	1	1.0	384	mg/Kg
		A1505289867	Site Sample	Soil	Low	1	1.0	215	mg/Kg
		A1505289868	Site Sample	Soil	Low	1	1.0	106	mg/Kg
		A1505289869	Site Sample	Soil	Low	1	1.0	104	mg/Kg
		A1505289870	Site Sample	Soil	Low	1	1.0	128	mg/Kg
		A1505289872	Site Sample	Soil	Low	1	1.0	409	mg/Kg
		A1505289873	Site Sample	Soil	Low	1	1.0	273	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method
- **D** - Reported from a dilutio
- **E** - Exceeds calibration rang
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.**

SDG ID: 79861

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Zinc								
		A1505289874	Site Sample	Soil	Low	1	1.0	152	mg/Kg
		A1505289875	Site Sample	Soil	Low	1	1.0	100	mg/Kg
		A1505289876	Site Sample	Soil	Low	1	1.0	377	mg/Kg
		A1505289877	Site Sample	Soil	Low	1	1.0	373	mg/Kg
		A1505289878	Site Sample	Soil	Low	1	1.0	282	mg/Kg
		A1505289879	Site Sample	Soil	Low	1	1.0	111	mg/Kg
		A1505289880	Site Sample	Soil	Low	1	1.0	201	mg/Kg
Conventionals									
	Oil and Grease								
		A1505289866	Site Sample	Soil	Low	1	100	130	mg/Kg
		A1505289874	Site Sample	Soil	Low	1	100	320	mg/Kg
		A1505289877	Site Sample	Soil	Low	1	100	419	mg/Kg
		A1505289880	Site Sample	Soil	Low	1	100	769	mg/Kg

Qualifiers:
- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects | **LDEQ**

Sorted by Fraction, Analyte and Client Sample | **Capitol Lakes Sediment**

Lab: **AATSLA / American Analytical & Technical Services, Inc.** | SDG ID: **79861**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Conventionals									
	Percent Moisture								
		A1505289866	Site Sample	Soil	Low	1	0.10	66	%
		A1505289874	Site Sample	Soil	Low	1	0.10	38	%
		A1505289877	Site Sample	Soil	Low	1	0.10	51	%
		A1505289880	Site Sample	Soil	Low	1	0.10	48	%
	Total Organic Carbon (TOC)								
		A1505289866	Site Sample	Soil	Low	1	100	11,900	mg/Kg
		A1505289874	Site Sample	Soil	Low	1	160	10,540	mg/Kg
		A1505289877	Site Sample	Soil	Low	1	100	22,050	mg/Kg
		A1505289880	Site Sample	Soil	Low	1	100	15,600	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method
- D - Reported from a dilutio
- E - Exceeds calibration rang
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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Capitol Lakes Sediment Project
Validated Data Summary Tables
SDG: 79861A
October 1998
Sample I.D.
A1505279861 – A1505279865

DCM GROUP WALK HAYDEL A DAMES & MOORE GROUP COMPANY

CAPITOL LAKES SEDIMENT PROJECT

DATA VALIDATION REPORT

SDG: 79861A

Prepared for:

Louisiana DEQ
Baton Rouge, Louisiana

Integrate Project Number: 269
October 1998

00000002

Purpose of the Validation Report

Analytical data validation is a confirmatory procedure that evaluates client-generated laboratory data in accordance with definitive regulatory performance standards set forth by the USEPA.[1,2] Integrate, Incorporated (Integrate) provides client assistance with data validation to ensure that analytical data are complete, in compliance with laboratory protocols, in agreement with the project data quality objectives, and are technically valid and legally defensible.

Format of the Introduction Section

The introduction contains summary tables that permit the reader easy access to the validated detected results. The tables are identified as: 1) ***Table E 1*** *Sample Identification Cross-Reference Table*, 2) ***Table E 2*** *Summary of Validated Sample Detects Sorted by Client Sample and Fraction* and 3) ***Table E 3*** *Summary of Validated Analyte Detects Sorted by Fraction, Analyte and Client Sample.* A brief description of the contents of each table is presented below.

Executive Summaries:

1) ***Table E 1*** *Sample Identification Cross-Reference Table:* This table is a cross-reference of client sample names and laboratory names. It also references any consultants sample names, if they are available.

2) ***Table E 2*** *Summary of Validated Sample Detects Sorted by Client Sample and Fraction:* Identification of all post-validation detected analytes by client or site sample location, fraction and analyte. The order of the analytical fractions appearing in this report follows the typical order found in a laboratory data package. That is, volatiles appear first, followed by semivolatiles, pesticides, metals and conventionals. The detected analytes of each fraction are also displayed according to their order of appearance in the data package. This table also shows the sample type, sample matrix, extraction level, dilution factor and the method quantitation limits (MQL).

3) ***Table E 3*** *Summary of Validated Analyte Detects Sorted by Fraction, Analyte and Client Sample:* Identification of all post-validation detected analytes by fraction,

[1]National Functional Guidelines For Organic Data Review, USEPA, February 1994.
[2]National Functional Guidelines For Inorganic Data Review, USEPA, February 1994.

analyte and client site/sample location. The fractions follow the same order described above: volatiles, semivolatiles, pesticides, metals and conventionals. All detected analytes are sorted alphabetically.

Qualifier Definitions

- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J - The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
- N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."
- NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated value represents its approximate concentration.
- UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

NOTE:

All dilution results were combined onto one form four for the various fractions. If results from a dilution were used they are given a "D" qualifier as per CLP guidelines.

E1 - Sample Identification Cross-Reference Table

Site Samples Sorted by Fraction

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79861A

Fraction	Client Sample	EPA Sample Number	Sample Type	Matrix	Level	Sampling Date/Time
Pesticides/PCBs						
	A1505279861	279861	Site Sample	Soil	Low	05/27/98 15:44
	A1505279862	279862	Site Sample	Soil	Low	05/27/98 15:50
	A1505279863	279863	Site Sample	Soil	Low	05/27/98 15:55
	A1505279864	279864	Site Sample	Soil	Low	05/27/98 15:58
	A1505279865	279865	Field Blank	Water	Low	05/27/98 16:00
	METHOD BLANK	METHOD BLANK	Method Blank	Water	Low	-
	METHOD BLANK	METHOD BLANK	Method Blank	Soil	Low	-
Metals						
	A1505279861	279861	Site Sample	Soil	Low	05/27/98 15:44
	A1505279862	279862	Site Sample	Soil	Low	05/27/98 15:50
	A1505279863	279863	Site Sample	Soil	Low	05/27/98 15:55
	A1505279864	279864	Site Sample	Soil	Low	05/27/98 15:58
	A1505279865	279865	Field Blank	Water	Low	05/27/98 16:00

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 79861A

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279861										
	Pesticides/PCBs									
		alpha-BHC	Site Sample	Soil	Low	1	1.7	8.3		µg/Kg
		delta-BHC	Site Sample	Soil	Low	1	1.7	12		µg/Kg
		gamma-BHC	Site Sample	Soil	Low	1	1.7	6.8		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	12	J	µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	1.7	19		µg/Kg
		Endosulfan I	Site Sample	Soil	Low	1	1.7	12		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	9.3		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	35		µg/Kg
		Endrin	Site Sample	Soil	Low	1	3.3	7.8	J	µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	15		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	13		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	22		µg/Kg
		Endrin Ketone	Site Sample	Soil	Low	1	3.3	9.3		µg/Kg
		Endrin Aldehyde	Site Sample	Soil	Low	1	3.3	10		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	1.7	17		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	1.7	37		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	33	828		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	237		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	2,825		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	5.4		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	114		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	0.88		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	1,578		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	12		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	2.2		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	25		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	4,851		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	248	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	545	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	101		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.14		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	6.3	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	219		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	1.0		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	8.3		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	159		mg/Kg
A1505279862										
	Pesticides/PCBs									
		alpha-BHC	Site Sample	Soil	Low	1	1.7	1.9		µg/Kg
		delta-BHC	Site Sample	Soil	Low	1	1.7	14		µg/Kg
		gamma-BHC	Site Sample	Soil	Low	1	1.7	1.9		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	44	J	µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	1.7	16		µg/Kg
		Endosulfan I	Site Sample	Soil	Low	1	1.7	6.3		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	16		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	56		µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79861A**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279862										
	Pesticides/PCBs									
		Endrin	Site Sample	Soil	Low	1	3.3	4.3	J	µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	19		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	11		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	19		µg/Kg
		Endrin Ketone	Site Sample	Soil	Low	1	3.3	3.4		µg/Kg
		Endrin Aldehyde	Site Sample	Soil	Low	1	3.3	27		µg/Kg
		Methoxychlor	Site Sample	Soil	Low	1	17	19		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	1.7	26		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	1.7	27		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	33	1,254		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	295		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	4,797		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	11		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	171		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	0.84		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	2,564		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	23		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	3.5		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	30		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	8,841		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	268	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	953	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	219		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.22		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	11	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	367		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	11		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	154		mg/Kg
A1505279863										
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	1.7	10		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	9.7	J	µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	1.7	13		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	9.1		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	54		µg/Kg
		Endrin	Site Sample	Soil	Low	1	3.3	6.5	J	µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	12		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	25		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	16		µg/Kg
		Endrin Aldehyde	Site Sample	Soil	Low	1	3.3	44		µg/Kg
		Methoxychlor	Site Sample	Soil	Low	1	17	20		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	1.7	14		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	1.7	22		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	33	648		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	201		µg/Kg

Qualifiers:

J - Estimated

B - (Organics) Found in the associated method blank

D - Reported from a dilution

E - Exceeds calibration range

P - (Pesticides) Difference in column concentrations > 25%

B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79861A

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279863										
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	5,093		mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	4.2	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	10		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	185		mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.2		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	2,994		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	15		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	4.1		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	27		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	9,201		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	235	J	mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	991	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	236		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.25		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	9.1	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	397		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	13		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	156		mg/Kg
A1505279864										
	Pesticides/PCBs									
		delta-BHC	Site Sample	Soil	Low	1	1.7	5.3		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	7.1	J	µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	1.7	5.3		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	5.9		µg/Kg
		Endrin	Site Sample	Soil	Low	1	3.3	4.4	J	µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	11		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	26		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	14		µg/Kg
		Endrin Aldehyde	Site Sample	Soil	Low	1	3.3	23		µg/Kg
		Methoxychlor	Site Sample	Soil	Low	1	17	22		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	1.7	5.5		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	1.7	7.7		µg/Kg
		Aroclor-1242	Site Sample	Soil	Low	1	33	180		µg/Kg
		Aroclor-1260	Site Sample	Soil	Low	1	33	155		µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	20	5,854		mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	24	J	mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	19		mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	226		mg/Kg
		Beryllium	Site Sample	Soil	Low	1	0.20	0.18	B	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	3.0		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	2,454		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	18		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	4.4		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	29		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	10,175		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	280	J	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 79861A

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505279864										
	Metals									
		Magnesium	Site Sample	Soil	Low	1	20	1,166	J	mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	231		mg/Kg
		Mercury	Site Sample	Soil	Low	1	0.10	0.21		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	10	J	mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	436		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	2.3		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	0.50	15		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	185		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79861A**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	Aldrin									
		A1505279861	Site Sample	Soil	Low	1	1.7	12	J	µg/Kg
		A1505279862	Site Sample	Soil	Low	1	1.7	44	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	1	1.7	9.7	J	µg/Kg
		A1505279864	Site Sample	Soil	Low	1	1.7	7.1	J	µg/Kg
	Aroclor-1242									
		A1505279861	Site Sample	Soil	Low	1	33	828		µg/Kg
		A1505279862	Site Sample	Soil	Low	1	33	1,254		µg/Kg
		A1505279863	Site Sample	Soil	Low	1	33	648		µg/Kg
		A1505279864	Site Sample	Soil	Low	1	33	180		µg/Kg
	Aroclor-1260									
		A1505279861	Site Sample	Soil	Low	1	33	237		µg/Kg
		A1505279862	Site Sample	Soil	Low	1	33	295		µg/Kg
		A1505279863	Site Sample	Soil	Low	1	33	201		µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79861A**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	Aroclor-1260								
		A1505279864	Site Sample	Soil	Low	1	33	155	µg/Kg
	alpha-BHC								
		A1505279861	Site Sample	Soil	Low	1	1.7	8.3	µg/Kg
		A1505279862	Site Sample	Soil	Low	1	1.7	1.9	µg/Kg
	delta-BHC								
		A1505279861	Site Sample	Soil	Low	1	1.7	12	µg/Kg
		A1505279862	Site Sample	Soil	Low	1	1.7	14	µg/Kg
		A1505279863	Site Sample	Soil	Low	1	1.7	10	µg/Kg
		A1505279864	Site Sample	Soil	Low	1	1.7	5.3	µg/Kg
	gamma-BHC								
		A1505279861	Site Sample	Soil	Low	1	1.7	8.8	µg/Kg
		A1505279862	Site Sample	Soil	Low	1	1.7	1.9	µg/Kg
	alpha Chlordane								
		A1505279861	Site Sample	Soil	Low	1	1.7	17	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79861A**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	alpha Chlordane								
		A1505279862	Site Sample	Soil	Low	1	1.7	26	µg/Kg
		A1505279863	Site Sample	Soil	Low	1	1.7	14	µg/Kg
		A1505279864	Site Sample	Soil	Low	1	1.7	5.5	µg/Kg
	gamma Chlordane								
		A1505279861	Site Sample	Soil	Low	1	1.7	37	µg/Kg
		A1505279862	Site Sample	Soil	Low	1	1.7	27	µg/Kg
		A1505279863	Site Sample	Soil	Low	1	1.7	22	µg/Kg
		A1505279864	Site Sample	Soil	Low	1	1.7	7.7	µg/Kg
	4,4'-DDD								
		A1505279861	Site Sample	Soil	Low	1	3.3	13	µg/Kg
		A1505279862	Site Sample	Soil	Low	1	3.3	11	µg/Kg
		A1505279863	Site Sample	Soil	Low	1	3.3	25	µg/Kg
		A1505279864	Site Sample	Soil	Low	1	3.3	26	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79881A**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	4,4'-DDE								
		A1505279861	Site Sample	Soil	Low	1	3.3	35	µg/Kg
		A1505279862	Site Sample	Soil	Low	1	3.3	56	µg/Kg
		A1505279863	Site Sample	Soil	Low	1	3.3	54	µg/Kg
	4,4'-DDT								
		A1505279861	Site Sample	Soil	Low	1	3.3	22	µg/Kg
		A1505279862	Site Sample	Soil	Low	1	3.3	19	µg/Kg
		A1505279863	Site Sample	Soil	Low	1	3.3	16	µg/Kg
		A1505279864	Site Sample	Soil	Low	1	3.3	14	µg/Kg
	Dieldrin								
		A1505279861	Site Sample	Soil	Low	1	3.3	9.3	µg/Kg
		A1505279862	Site Sample	Soil	Low	1	3.3	16	µg/Kg
		A1505279863	Site Sample	Soil	Low	1	3.3	9.1	µg/Kg
		A1505279864	Site Sample	Soil	Low	1	3.3	5.9	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - *(Organics) Found in the associated method blank*
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - *(Inorganics) Lab qualifier - analyte detected* between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79861A**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	Endosulfan I									
		A1505279861	Site Sample	Soil	Low	1	1.7	12		µg/Kg
		A1505279862	Site Sample	Soil	Low	1	1.7	6.3		µg/Kg
	Endosulfan II									
		A1505279861	Site Sample	Soil	Low	1	3.3	15		µg/Kg
		A1505279862	Site Sample	Soil	Low	1	3.3	19		µg/Kg
		A1505279863	Site Sample	Soil	Low	1	3.3	12		µg/Kg
		A1505279864	Site Sample	Soil	Low	1	3.3	11		µg/Kg
	Endrin									
		A1505279861	Site Sample	Soil	Low	1	3.3	7.8	J	µg/Kg
		A1505279862	Site Sample	Soil	Low	1	3.3	4.3	J	µg/Kg
		A1505279863	Site Sample	Soil	Low	1	3.3	6.5	J	µg/Kg
		A1505279864	Site Sample	Soil	Low	1	3.3	4.4	J	µg/Kg
	Endrin Aldehyde									
		A1505279861	Site Sample	Soil	Low	1	3.3	10		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 79861A

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	Endrin Aldehyde								
		A1505279862	Site Sample	Soil	Low	1	3.3	27	µg/Kg
		A1505279863	Site Sample	Soil	Low	1	3.3	44	µg/Kg
		A1505279864	Site Sample	Soil	Low	1	3.3	23	µg/Kg
	Endrin Ketone								
		A1505279861	Site Sample	Soil	Low	1	3.3	9.3	µg/Kg
		A1505279862	Site Sample	Soil	Low	1	3.3	3.4	µg/Kg
	Hept. Epoxide								
		A1505279861	Site Sample	Soil	Low	1	1.7	19	µg/Kg
		A1505279862	Site Sample	Soil	Low	1	1.7	16	µg/Kg
		A1505279863	Site Sample	Soil	Low	1	1.7	13	µg/Kg
		A1505279864	Site Sample	Soil	Low	1	1.7	5.3	µg/Kg
	Methoxychlor								
		A1505279862	Site Sample	Soil	Low	1	17	19	µg/Kg
		A1505279863	Site Sample	Soil	Low	1	17	20	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79861A**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	Methoxychlor									
		A1505279864	Site Sample	Soil	Low	1	17	22		µg/Kg
Metals										
	Aluminum									
		A1505279861	Site Sample	Soil	Low	1	20	2,825		mg/Kg
		A1505279862	Site Sample	Soil	Low	1	20	4,797		mg/Kg
		A1505279863	Site Sample	Soil	Low	1	20	5,093		mg/Kg
		A1505279864	Site Sample	Soil	Low	1	20	5,854		mg/Kg
	Antimony									
		A1505279863	Site Sample	Soil	Low	1	1.0	4.2	J	mg/Kg
		A1505279864	Site Sample	Soil	Low	1	1.0	24	J	mg/Kg
	Arsenic									
		A1505279861	Site Sample	Soil	Low	1	1.0	5.4		mg/Kg
		A1505279862	Site Sample	Soil	Low	1	1.0	11		mg/Kg
		A1505279863	Site Sample	Soil	Low	1	1.0	10		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79861A**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Arsenic									
		A1505279864	Site Sample	Soil	Low	1	1.0	19		mg/Kg
	Barium									
		A1505279861	Site Sample	Soil	Low	1	1.0	114		mg/Kg
		A1505279862	Site Sample	Soil	Low	1	1.0	171		mg/Kg
		A1505279863	Site Sample	Soil	Low	1	1.0	185		mg/Kg
		A1505279864	Site Sample	Soil	Low	1	1.0	226		mg/Kg
	Beryllium									
		A1505279864	Site Sample	Soil	Low	1	0.20	0.18	B	mg/Kg
	Cadmium									
		A1505279861	Site Sample	Soil	Low	1	0.50	0.88		mg/Kg
		A1505279862	Site Sample	Soil	Low	1	0.50	0.94		mg/Kg
		A1505279863	Site Sample	Soil	Low	1	0.50	1.2		mg/Kg
		A1505279864	Site Sample	Soil	Low	1	0.50	3.0		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79861A**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Calcium								
		A1505279861	Site Sample	Soil	Low	1	30	1,578	mg/Kg
		A1505279862	Site Sample	Soil	Low	1	30	2,564	mg/Kg
		A1505279863	Site Sample	Soil	Low	1	30	2,994	mg/Kg
		A1505279864	Site Sample	Soil	Low	1	30	2,454	mg/Kg
	Chromium								
		A1505279861	Site Sample	Soil	Low	1	1.0	12	mg/Kg
		A1505279862	Site Sample	Soil	Low	1	1.0	23	mg/Kg
		A1505279863	Site Sample	Soil	Low	1	1.0	15	mg/Kg
		A1505279864	Site Sample	Soil	Low	1	1.0	18	mg/Kg
	Cobalt								
		A1505279861	Site Sample	Soil	Low	1	0.50	2.2	mg/Kg
		A1505279862	Site Sample	Soil	Low	1	0.50	3.5	mg/Kg
		A1505279863	Site Sample	Soil	Low	1	0.50	4.1	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79861A**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Cobalt									
		A1505279864	Site Sample	Soil	Low	1	0.50	4.4		mg/Kg
	Copper									
		A1505279861	Site Sample	Soil	Low	1	0.50	25		mg/Kg
		A1505279862	Site Sample	Soil	Low	1	0.50	30		mg/Kg
		A1505279863	Site Sample	Soil	Low	1	0.50	27		mg/Kg
		A1505279864	Site Sample	Soil	Low	1	0.50	29		mg/Kg
	Iron									
		A1505279861	Site Sample	Soil	Low	1	10	4,851		mg/Kg
		A1505279862	Site Sample	Soil	Low	1	10	8,841		mg/Kg
		A1505279863	Site Sample	Soil	Low	1	10	9,201		mg/Kg
		A1505279864	Site Sample	Soil	Low	1	10	10,175		mg/Kg
	Lead									
		A1505279861	Site Sample	Soil	Low	1	0.50	248	J	mg/Kg
		A1505279862	Site Sample	Soil	Low	1	0.50	268	J	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79861A**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Lead									
		A1505279863	Site Sample	Soil	Low	1	0.50	235	J	mg/Kg
		A1505279864	Site Sample	Soil	Low	1	0.50	280	J	mg/Kg
	Magnesium									
		A1505279861	Site Sample	Soil	Low	1	20	545	J	mg/Kg
		A1505279862	Site Sample	Soil	Low	1	20	953	J	mg/Kg
		A1505279863	Site Sample	Soil	Low	1	20	991	J	mg/Kg
		A1505279864	Site Sample	Soil	Low	1	20	1,166	J	mg/Kg
	Manganese									
		A1505279861	Site Sample	Soil	Low	1	0.50	101		mg/Kg
		A1505279862	Site Sample	Soil	Low	1	0.50	219		mg/Kg
		A1505279863	Site Sample	Soil	Low	1	0.50	236		mg/Kg
		A1505279864	Site Sample	Soil	Low	1	0.50	231		mg/Kg
	Mercury									
		A1505279861	Site Sample	Soil	Low	1	0.10	0.14		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79861A**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Mercury									
		A1505279862	Site Sample	Soil	Low	1	0.10	0.22		mg/Kg
		A1505279863	Site Sample	Soil	Low	1	0.10	0.25		mg/Kg
		A1505279864	Site Sample	Soil	Low	1	0.10	0.21		mg/Kg
	Nickel									
		A1505279861	Site Sample	Soil	Low	1	1.0	6.3	J	mg/Kg
		A1505279862	Site Sample	Soil	Low	1	1.0	11	J	mg/Kg
		A1505279863	Site Sample	Soil	Low	1	1.0	9.1	J	mg/Kg
		A1505279864	Site Sample	Soil	Low	1	1.0	10	J	mg/Kg
	Potassium									
		A1505279861	Site Sample	Soil	Low	1	50	219		mg/Kg
		A1505279862	Site Sample	Soil	Low	1	50	367		mg/Kg
		A1505279863	Site Sample	Soil	Low	1	50	397		mg/Kg
		A1505279864	Site Sample	Soil	Low	1	50	436		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the *associated method blank*
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected *between the instrument detection limit (IDL)* and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **79861A**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Silver								
		A1505279861	Site Sample	Soil	Low	1	1.0	1.0	mg/Kg
		A1505279864	Site Sample	Soil	Low	1	1.0	2.3	mg/Kg
	Vanadium								
		A1505279861	Site Sample	Soil	Low	1	0.50	6.3	mg/Kg
		A1505279862	Site Sample	Soil	Low	1	0.50	11	mg/Kg
		A1505279863	Site Sample	Soil	Low	1	0.50	13	mg/Kg
		A1505279864	Site Sample	Soil	Low	1	0.50	15	mg/Kg
	Zinc								
		A1505279861	Site Sample	Soil	Low	1	1.0	159	mg/Kg
		A1505279862	Site Sample	Soil	Low	1	1.0	154	mg/Kg
		A1505279863	Site Sample	Soil	Low	1	1.0	156	mg/Kg
		A1505279864	Site Sample	Soil	Low	1	1.0	185	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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Capitol Lakes Sediment Project
Validated Data Summary Tables
SDG: 89881
October 1998
Sample I.D.
O1505289881 – O1505289887

DCM GROUP WALK HAYDEL A DAMES & MOORE GROUP COMPANY

CAPITOL LAKES SEDIMENT PROJECT

DATA VALIDATION REPORT

SDG: 89881

Prepared for:

Louisiana DEQ
Baton Rouge, Louisiana

Integrate Project Number: 269
October 1998

Purpose of the Validation Report

Analytical data validation is a confirmatory procedure that evaluates client-generated laboratory data in accordance with definitive regulatory performance standards set forth by the USEPA.[1,2] Integrate, Incorporated (Integrate) provides client assistance with data validation to ensure that analytical data are complete, in compliance with laboratory protocols, in agreement with the project data quality objectives, and are technically valid and legally defensible.

Format of the Introduction Section

The introduction contains summary tables that permit the reader easy access to the validated detected results. The tables are identified as: 1) ***Table E 1*** *Sample Identification Cross-Reference Table*, 2) ***Table E 2*** *Summary of Validated Sample Detects Sorted by Client Sample and Fraction* and 3) ***Table E 3*** *Summary of Validated Analyte Detects Sorted by Fraction, Analyte and Client Sample.* A brief description of the contents of each table is presented below.

Executive Summaries:

1) ***Table E 1*** *Sample Identification Cross-Reference Table:* This table is a cross-reference of client sample names and laboratory names. It also references any consultants sample names, if they are available.

2) ***Table E 2*** *Summary of Validated Sample Detects Sorted by Client Sample and Fraction:* Identification of all post-validation detected analytes by client or site sample location, fraction and analyte. The order of the analytical fractions appearing in this report follows the typical order found in a laboratory data package. That is, volatiles appear first, followed by semivolatiles, pesticides, metals and conventionals. The detected analytes of each fraction are also displayed according to their order of appearance in the data package. This table also shows the sample type, sample matrix, extraction level, dilution factor and the method quantitation limits (MQL).

3) ***Table E 3*** *Summary of Validated Analyte Detects Sorted by Fraction, Analyte and Client Sample:* Identification of all post-validation detected analytes by fraction,

[1]National Functional Guidelines For Organic Data Review, USEPA, February 1994.
[2]National Functional Guidelines For Inorganic Data Review, USEPA, February 1994.

analyte and client site/sample location. The fractions follow the same order described above: volatiles, semivolatiles, pesticides, metals and conventionals. All detected analytes are sorted alphabetically.

Qualifier Definitions

- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J - The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
- N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."
- NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated value represents its approximate concentration.
- UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

NOTES:

All dilution results were combined onto one form four for the various fractions. If results from a dilution were used they are given a "D" qualifier as per CLP guidelines.

E1 - Sample Identification Cross-Reference Table

Site Samples Sorted by Fraction

LDEQ

Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 89881

Fraction	Client Sample	EPA Sample Number	Sample Type	Matrix	Level	Sampling Date/Time
Semivolatiles						
	A1505289881	289881	Site Sample	Soil	Low	05/28/98 13:40
	A1505289881RE	289881RE	Re-extraction/Re-analysis	Soil	Low	05/28/98 13:40
	A1505289882	289882	Site Sample	Soil	Low	05/28/98 13:43
	A1505289882RE	289882RE	Re-extraction/Re-analysis	Soil	Low	05/28/98 13:43
	A1505289883	289883	Site Sample	Soil	Low	05/28/98 13:45
	A1505289883RE	289883RE	Re-extraction/Re-analysis	Soil	Low	05/28/98 13:45
	A1505289884	289884	Site Sample	Soil	Low	05/28/98 13:46
	A1505289885	289885	Site Sample	Soil	Low	05/28/98 13:51
	A1505289885RE	289885RE	Re-extraction/Re-analysis	Soil	Low	05/28/98 13:51
	A1505289886	289886	Field Blank	Water	Low	05/28/98 13:13
	A1505289887	289887	Site Sample	Soil	Low	05/28/98 13:57
	A1505289887RE	289887RE	Re-extraction/Re-analysis	Soil	Low	05/28/98 13:57
	SBLKDC	SBLKDC	Method Blank	Water	Low	-
	SBLKDV	SBLKDV	Method Blank	Soil	Low	-
	289884MS	289884MS	Matrix Spike	Soil	Low	05/28/98 13:46
	289884MSD	289884MSD	Matrix Spike Duplicate	Soil	Low	05/28/98 13:46
Pesticides/PCBs						
	A1505289881	289881	Site Sample	Soil	Low	05/28/98 13:40
	A1505289882	289882	Site Sample	Soil	Low	05/28/98 13:43
	A1505289883	289883	Site Sample	Soil	Low	05/28/98 13:45
	A1505289884	289884	Site Sample	Soil	Low	05/28/98 13:46
	A1505289885	289885	Site Sample	Soil	Low	05/28/98 13:51
	A1505289886	289886	Field Blank	Water	Low	05/28/98 13:13
	A1505289887	289887	Site Sample	Soil	Low	05/28/98 13:57
	A1505289884MS	289884MS	Matrix Spike	Soil	Low	05/28/98 13:46
	A1505289884MSD	289884MSD	Matrix Spike Duplicate	Soil	Low	05/28/98 13:46
	METHOD BLANK	METHOD BLANK	Method Blank	Water	Low	-
	METHOD BLANK	METHOD BLANK	Method Blank	Soil	Low	-
Metals						
	A1505289881	289881	Site Sample	Soil	Low	05/28/98 13:40
	A1505289882	289882	Site Sample	Soil	Low	05/28/98 13:43
	A1505289883	289883	Site Sample	Soil	Low	05/28/98 13:45
	A1505289884	289884	Site Sample	Soil	Low	05/28/98 13:46
	A1505289885	289885	Site Sample	Soil	Low	05/28/98 13:51
	A1505289886	289886	Field Blank	Water	Low	05/28/98 13:13
	A1505289887	289887	Site Sample	Soil	Low	05/28/98 13:57
Conventionals						
	A1505289887	289887	Site Sample	Soil	Low	05/28/98 13:57
	A1505289884	289884	Site Sample	Soil	Low	05/28/98 13:46

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **89881**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505289881										
	Semivolatiles									
		Acenaphthene	Site Sample	Soil	Low	2	660	471	J	µg/Kg
		Fluorene	Site Sample	Soil	Low	2	660	440	J	µg/Kg
		Phenanthrene	Site Sample	Soil	Low	2	660	2,856		µg/Kg
		Anthracene	Site Sample	Soil	Low	2	660	409	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	660	2,239		µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	2,393		µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	1,312		µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	1,467		µg/Kg
		bis(2-Ethylhexyl)phthalate	Site Sample	Soil	Low	2	660	1,390		µg/Kg
		Di-n-octylphthalate	Site Sample	Soil	Low	2	660	383	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	1,235	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	1,158	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	1,158	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	660	394	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	386	J	µg/Kg
	Pesticides/PCBs									
		alpha-BHC	Site Sample	Soil	Low	1	1.7	4.5		µg/Kg
		delta-BHC	Site Sample	Soil	Low	1	1.7	49		µg/Kg
		gamma-BHC	Site Sample	Soil	Low	1	1.7	11		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	36		µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	1.7	34		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	69		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	100	330	648	D	µg/Kg
		Endrin	Site Sample	Soil	Low	1	3.3	18		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	100	330	2,779	J	µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	216		µg/Kg
		Endrin Aldehyde	Site Sample	Soil	Low	1	3.3	16		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	100	170	232	D	µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	100	170	425	D	µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	7.5	3,652		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	5.4	J	mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	411	J	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	2.4		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	32,038		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	27		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	3.9		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	43		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	10,422		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	93		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,258		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	486		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	15		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	239		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	3.7		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	141		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	1.0	15		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	337		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

00000006

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **89881**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505289882										
	Semivolatiles									
		Acenaphthene	Site Sample	Soil	Low	2	660	151	J	µg/Kg
		Phenanthrene	Site Sample	Soil	Low	2	660	984		µg/Kg
		Anthracene	Site Sample	Soil	Low	2	660	185	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	660	1,274		µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	1,679		µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	660	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	869		µg/Kg
		bis(2-Ethylhexyl)phthalate	Site Sample	Soil	Low	2	660	2,027		µg/Kg
		Di-n-octylphthalate	Site Sample	Soil	Low	2	660	400	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	562	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	869	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	695	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	660	243	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	284	J	µg/Kg
	Pesticides/PCBs									
		alpha-BHC	Site Sample	Soil	Low	1	1.7	3.7		µg/Kg
		delta-BHC	Site Sample	Soil	Low	1	1.7	28		µg/Kg
		gamma-BHC	Site Sample	Soil	Low	1	1.7	4.3		µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	1.7	19		µg/Kg
		Endosulfan I	Site Sample	Soil	Low	1	1.7	19		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	6.4		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	10	33	510	D	µg/Kg
		Endrin	Site Sample	Soil	Low	1	3.3	5.0		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	9.8		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	10	33	394	J	µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	10	33	75	D	µg/Kg
		Endrin Ketone	Site Sample	Soil	Low	1	3.3	6.4		µg/Kg
		Endrin Aldehyde	Site Sample	Soil	Low	1	3.3	5.4		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	1.7	34		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	10	17	98	D	µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	7.5	5,906		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	5.8	J	mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	468	J	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	0.93		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	15,575		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	14		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	3.7		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	31		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	9,322		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	113		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,210		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	346		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	13		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	460		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	4.8		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	135		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	1.0	12		mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

00000007

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 89881

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505289882										
	Metals									
		Zinc	Site Sample	Soil	Low	1	1.0	242		mg/Kg
A1505289883										
	Pesticides/PCBs									
		alpha-BHC	Site Sample	Soil	Low	1	1.7	5.6		µg/Kg
		delta-BHC	Site Sample	Soil	Low	1	1.7	185		µg/Kg
		gamma-BHC	Site Sample	Soil	Low	1	1.7	6.2		µg/Kg
		Heptachlor	Site Sample	Soil	Low	1	1.7	4.3		µg/Kg
		Aldrin	Site Sample	Soil	Low	100	170	264	D	µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	1.7	62		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	28		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	100	330	1,012	D	µg/Kg
		Endosulfan II	Site Sample	Soil	Low	1	3.3	32		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	100	330	1,180	J	µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	100	330	1,012	D	µg/Kg
		Endrin Ketone	Site Sample	Soil	Low	1	3.3	9.6		µg/Kg
		Endrin Aldehyde	Site Sample	Soil	Low	1	3.3	35		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	100	170	247	D	µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	100	170	731	D	µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	7.5	8,823		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	6.7	J	mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	658	J	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	1.2		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	17,085		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	26		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	3.5		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	40		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	11,858		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.60	120		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,304		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	368		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	15		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	697		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	24		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	182		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	1.0	16		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	342		mg/Kg
A1505289883RE										
	Semivolatiles									
		2-Methylnaphthalene	Re-extraction/Re-analysis	Soil	Low	2	660	219	J	µg/Kg
		Fluorene	Re-extraction/Re-analysis	Soil	Low	2	660	236	J	µg/Kg
		Phenanthrene	Re-extraction/Re-analysis	Soil	Low	2	660	1,180		µg/Kg
		Anthracene	Re-extraction/Re-analysis	Soil	Low	2	660	191	J	µg/Kg
		Fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	1,630		µg/Kg
		Pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	1,855	J	µg/Kg
		Benzo(a)anthracene	Re-extraction/Re-analysis	Soil	Low	2	660	674	J	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 89881

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505289883RE										
	Semivolatiles									
		Chrysene	Re-extraction/Re-analysis	Soil	Low	2	660	955	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Re-extraction/Re-analysis	Soil	Low	2	660	1,574	J	µg/Kg
		Di-n-octylphthalate	Re-extraction/Re-analysis	Soil	Low	2	660	354	J	µg/Kg
		Benzo(b)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	562	J	µg/Kg
		Benzo(k)fluoranthene	Re-extraction/Re-analysis	Soil	Low	2	660	551	J	µg/Kg
		Benzo(a)pyrene	Re-extraction/Re-analysis	Soil	Low	2	660	618	J	µg/Kg
A1505289884										
	Semivolatiles									
		Naphthalene	Site Sample	Soil	Low	2	660	1,198		µg/Kg
		2-Methylnaphthalene	Site Sample	Soil	Low	4	660	11,381	D	µg/Kg
		Acenaphthene	Site Sample	Soil	Low	2	660	371	J	µg/Kg
		Phenanthrene	Site Sample	Soil	Low	2	660	839		µg/Kg
		Anthracene	Site Sample	Soil	Low	2	660	150	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	660	1,138		µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	1,557		µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	557	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	839		µg/Kg
		bis(2-Ethylhexyl)phthalate	Site Sample	Soil	Low	2	660	485	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	545	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	569	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	455	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	660	186	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	186	J	µg/Kg
	Pesticides/PCBs									
		alpha-BHC	Site Sample	Soil	Low	1	1.7	13		µg/Kg
		delta-BHC	Site Sample	Soil	Low	100	170	587	D	µg/Kg
		Aldrin	Site Sample	Soil	Low	100	170	1,857	D	µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	100	170	347	D	µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	120		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	100	330	899	D	µg/Kg
		Endrin	Site Sample	Soil	Low	1	3.3	264		µg/Kg
		Endosulfan II	Site Sample	Soil	Low	100	3.3	401	D	µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	10,000	33,000	167,720	J	µg/Kg
		Endo. Sulfate	Site Sample	Soil	Low	1	3.3	21		µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	100	330	899	D	µg/Kg
		Endrin Ketone	Site Sample	Soil	Low	1	3.3	7.2		µg/Kg
		Endrin Aldehyde	Site Sample	Soil	Low	1	3.3	78		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	100	170	1,557	D	µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	100	170	2,097	D	µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	7.5	10,063		mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	350		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	65	J	mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	352	J	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	36		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	2,707		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	21		mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

00000009

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **89881**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505289884										
	Metals									
		Cobalt	Site Sample	Soil	Low	1	0.50	5.5		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	51		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	12,220		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	211		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,294		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	334		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	13		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	773		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	1.9		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	326		mg/Kg
		Thallium	Site Sample	Soil	Low	1	1.0	3.5		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	1.0	17		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	605		mg/Kg
	Conventionals									
		Total Organic Carbon (TOC)	Site Sample	Soil	Low	1	100	8,700		mg/Kg
		Oil & Grease	Site Sample	Soil	Low	1	100	770		mg/Kg
		Percent Moisture	Site Sample	Soil	Low	1	0.10	40		%
A1505289885										
	Semivolatiles									
		Naphthalene	Site Sample	Soil	Low	2	660	314	J	µg/Kg
		2-Methylnaphthalene	Site Sample	Soil	Low	2	660	1,453		µg/Kg
		Acenaphthene	Site Sample	Soil	Low	2	660	337	J	µg/Kg
		Fluorene	Site Sample	Soil	Low	2	660	1,278		µg/Kg
		Phenanthrene	Site Sample	Soil	Low	2	660	4,474		µg/Kg
		Anthracene	Site Sample	Soil	Low	2	660	529	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	660	1,801		µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	4,067	J	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	988	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	2,092	J	µg/Kg
		bis(2-Ethylhexyl)phthalate	Site Sample	Soil	Low	2	660	244	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	755	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	988	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	660	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	660	174	J	µg/Kg
		Benzo(g,h,i)perylene	Site Sample	Soil	Low	2	660	168	J	µg/Kg
	Pesticides/PCBs									
		alpha-BHC	Site Sample	Soil	Low	1	1.7	5.1		µg/Kg
		beta-BHC	Site Sample	Soil	Low	10	17	20	J	µg/Kg
		delta-BHC	Site Sample	Soil	Low	10	17	23	D	µg/Kg
		Aldrin	Site Sample	Soil	Low	10	17	58	D	µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	1.7	16		µg/Kg
		Dieldrin	Site Sample	Soil	Low	1	3.3	23		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	10	33	36	D	µg/Kg
		Endrin	Site Sample	Soil	Low	10	33	50	D	µg/Kg
		Endosulfan II	Site Sample	Soil	Low	10	33	58	J	µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	10	33	930	J	µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	10	33	81	D	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **89881**

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505289885										
	Pesticides/PCBs									
		Endrin Aldehyde	Site Sample	Soil	Low	1	3.3	42		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	10	17	64	D	µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	10	17	64	D	µg/Kg
	Metals									
		Aluminum	Site Sample	Soil	Low	1	7.5	12,956		mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	27		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	15	J	mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	279	J	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	3.4		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	10,284		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	25		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	4.6		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	51		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	13,944		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	4,137		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,586		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	294		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	16		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	1,046		mg/Kg
		Silver	Site Sample	Soil	Low	1	1.0	25		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	252		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	1.0	24		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	296		mg/Kg
A1505289887										
	Semivolatiles									
		2-Methylnaphthalene	Site Sample	Soil	Low	2	660	146	J	µg/Kg
		Fluorene	Site Sample	Soil	Low	2	660	495	J	µg/Kg
		Phenanthrene	Site Sample	Soil	Low	2	660	660		µg/Kg
		Anthracene	Site Sample	Soil	Low	2	660	90	J	µg/Kg
		Fluoranthene	Site Sample	Soil	Low	2	660	523	J	µg/Kg
		Pyrene	Site Sample	Soil	Low	2	660	618	J	µg/Kg
		Benzo(a)anthracene	Site Sample	Soil	Low	2	660	264	J	µg/Kg
		Chrysene	Site Sample	Soil	Low	2	660	388	J	µg/Kg
		Benzo(b)fluoranthene	Site Sample	Soil	Low	2	660	348	J	µg/Kg
		Benzo(k)fluoranthene	Site Sample	Soil	Low	2	660	275	J	µg/Kg
		Benzo(a)pyrene	Site Sample	Soil	Low	2	660	236	J	µg/Kg
		Indeno(1,2,3-cd)pyrene	Site Sample	Soil	Low	2	660	84	J	µg/Kg
	Pesticides/PCBs									
		beta-BHC	Site Sample	Soil	Low	1	1.7	2.1		µg/Kg
		delta-BHC	Site Sample	Soil	Low	1	1.7	6.7		µg/Kg
		Aldrin	Site Sample	Soil	Low	1	1.7	7.3		µg/Kg
		Hept. Epoxide	Site Sample	Soil	Low	1	1.7	2.1		µg/Kg
		4,4'-DDE	Site Sample	Soil	Low	1	3.3	13		µg/Kg
		4,4'-DDD	Site Sample	Soil	Low	1	3.3	101	J	µg/Kg
		4,4'-DDT	Site Sample	Soil	Low	1	3.3	5.2		µg/Kg
		alpha Chlordane	Site Sample	Soil	Low	1	1.7	7.9		µg/Kg
		gamma Chlordane	Site Sample	Soil	Low	1	1.7	10		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E2 - Summary of Validated Sample Detects

Sorted by Client Sample, Fraction, and Elution Order

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 89881

Client Sample	Fraction	Analyte	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
A1505289887										
	Metals									
		Aluminum	Site Sample	Soil	Low	1	7.5	9,104		mg/Kg
		Antimony	Site Sample	Soil	Low	1	1.0	98		mg/Kg
		Arsenic	Site Sample	Soil	Low	1	1.0	27	J	mg/Kg
		Barium	Site Sample	Soil	Low	1	1.0	153	J	mg/Kg
		Cadmium	Site Sample	Soil	Low	1	0.50	11		mg/Kg
		Calcium	Site Sample	Soil	Low	1	30	1,394		mg/Kg
		Chromium	Site Sample	Soil	Low	1	1.0	11		mg/Kg
		Cobalt	Site Sample	Soil	Low	1	0.50	4.8		mg/Kg
		Copper	Site Sample	Soil	Low	1	0.50	17		mg/Kg
		Iron	Site Sample	Soil	Low	1	10	12,308		mg/Kg
		Lead	Site Sample	Soil	Low	1	0.50	5,519		mg/Kg
		Magnesium	Site Sample	Soil	Low	1	20	1,231		mg/Kg
		Manganese	Site Sample	Soil	Low	1	0.50	319		mg/Kg
		Nickel	Site Sample	Soil	Low	1	1.0	13		mg/Kg
		Potassium	Site Sample	Soil	Low	1	50	747		mg/Kg
		Sodium	Site Sample	Soil	Low	1	100	293		mg/Kg
		Thallium	Site Sample	Soil	Low	1	1.0	1.2		mg/Kg
		Vanadium	Site Sample	Soil	Low	1	1.0	16		mg/Kg
		Zinc	Site Sample	Soil	Low	1	1.0	357		mg/Kg
	Conventionals									
		Total Organic Carbon (TOC)	Site Sample	Soil	Low	1	100	7,728		mg/Kg
		Oil & Grease	Site Sample	Soil	Low	1	100	200		mg/Kg
		Percent Moisture	Site Sample	Soil	Low	1	0.10	44		%

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **89881**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Acenaphthene									
		A1505289881	Site Sample	Soil	Low	2	660	471	J	µg/Kg
		A1505289882	Site Sample	Soil	Low	2	660	151	J	µg/Kg
		A1505289884	Site Sample	Soil	Low	2	660	371	J	µg/Kg
		A1505289885	Site Sample	Soil	Low	2	660	337	J	µg/Kg
	Anthracene									
		A1505289881	Site Sample	Soil	Low	2	660	409	J	µg/Kg
		A1505289882	Site Sample	Soil	Low	2	660	185	J	µg/Kg
		A1505289883RE	Re-extraction/Re-analysis	Soil	Low	2	660	191	J	µg/Kg
		A1505289884	Site Sample	Soil	Low	2	660	150	J	µg/Kg
		A1505289885	Site Sample	Soil	Low	2	660	529	J	µg/Kg
		A1505289887	Site Sample	Soil	Low	2	660	90	J	µg/Kg
	Benzo(a)anthracene									
		A1505289881	Site Sample	Soil	Low	2	660	1,312		µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **89881**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(a)anthracene									
		A1505289882	Site Sample	Soil	Low	2	660	660	J	µg/Kg
		A1505289883RE	Re-extraction/Re-analysis	Soil	Low	2	660	674	J	µg/Kg
		A1505289884	Site Sample	Soil	Low	2	660	557	J	µg/Kg
		A1505289885	Site Sample	Soil	Low	2	660	988	J	µg/Kg
		A1505289887	Site Sample	Soil	Low	2	660	264	J	µg/Kg
	Benzo(a)pyrene									
		A1505289881	Site Sample	Soil	Low	2	660	1,158	J	µg/Kg
		A1505289882	Site Sample	Soil	Low	2	660	695	J	µg/Kg
		A1505289883RE	Re-extraction/Re-analysis	Soil	Low	2	660	618	J	µg/Kg
		A1505289884	Site Sample	Soil	Low	2	660	455	J	µg/Kg
		A1505289885	Site Sample	Soil	Low	2	660	660	J	µg/Kg
		A1505289887	Site Sample	Soil	Low	2	660	236	J	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 99881

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(b)fluoranthene									
		A1505289881	Site Sample	Soil	Low	2	660	1,235	J	µg/Kg
		A1505289882	Site Sample	Soil	Low	2	660	562	J	µg/Kg
		A1505289883RE	Re-extraction/Re-analysis	Soil	Low	2	660	562	J	µg/Kg
		A1505289884	Site Sample	Soil	Low	2	660	545	J	µg/Kg
		A1505289885	Site Sample	Soil	Low	2	660	755	J	µg/Kg
		A1505289887	Site Sample	Soil	Low	2	660	348	J	µg/Kg
	Benzo(g,h,i)perylene									
		A1505289881	Site Sample	Soil	Low	2	660	386	J	µg/Kg
		A1505289882	Site Sample	Soil	Low	2	660	284	J	µg/Kg
		A1505289884	Site Sample	Soil	Low	2	660	186	J	µg/Kg
		A1505289885	Site Sample	Soil	Low	2	660	168	J	µg/Kg
	Benzo(k)fluoranthene									
		A1505289881	Site Sample	Soil	Low	2	660	1,158	J	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **89881**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Benzo(k)fluoranthene									
		A1505289882	Site Sample	Soil	Low	2	660	869	J	µg/Kg
		A1505289883RE	Re-extraction/Re-analysis	Soil	Low	2	660	551	J	µg/Kg
		A1505289884	Site Sample	Soil	Low	2	660	569	J	µg/Kg
		A1505289885	Site Sample	Soil	Low	2	660	988	J	µg/Kg
		A1505289887	Site Sample	Soil	Low	2	660	275	J	µg/Kg
	bis(2-Ethylhexyl)phthalate									
		A1505289881	Site Sample	Soil	Low	2	660	1,390		µg/Kg
		A1505289882	Site Sample	Soil	Low	2	660	2,027		µg/Kg
		A1505289883RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,574	J	µg/Kg
		A1505289884	Site Sample	Soil	Low	2	660	485	J	µg/Kg
		A1505289885	Site Sample	Soil	Low	2	660	244	J	µg/Kg
	Chrysene									
		A1505289881	Site Sample	Soil	Low	2	660	1,467		µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **89881**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Chrysene									
		A1505289882	Site Sample	Soil	Low	2	660	869		µg/Kg
		A1505289883RE	Re-extraction/Re-analysis	Soil	Low	2	660	955	J	µg/Kg
		A1505289884	Site Sample	Soil	Low	2	660	839		µg/Kg
		A1505289885	Site Sample	Soil	Low	2	660	2,092	J	µg/Kg
		A1505289887	Site Sample	Soil	Low	2	660	388	J	µg/Kg
	Di-n-octylphthalate									
		A1505289881	Site Sample	Soil	Low	2	660	363	J	µg/Kg
		A1505289882	Site Sample	Soil	Low	2	660	400	J	µg/Kg
		A1505289883RE	Re-extraction/Re-analysis	Soil	Low	2	660	354	J	µg/Kg
	Fluoranthene									
		A1505289881	Site Sample	Soil	Low	2	660	2,239		µg/Kg
		A1505289882	Site Sample	Soil	Low	2	660	1,274		µg/Kg
		A1505289883RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,630		µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects
Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **89881**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Fluoranthene									
		A1505289884	Site Sample	Soil	Low	2	660	1,138		µg/Kg
		A1505289885	Site Sample	Soil	Low	2	660	1,801		µg/Kg
		A1505289887	Site Sample	Soil	Low	2	660	523	J	µg/Kg
	Fluorene									
		A1505289881	Site Sample	Soil	Low	2	660	440	J	µg/Kg
		A1505289883RE	Re-extraction/Re-analysis	Soil	Low	2	660	236	J	µg/Kg
		A1505289885	Site Sample	Soil	Low	2	660	1,278		µg/Kg
		A1505289887	Site Sample	Soil	Low	2	660	495	J	µg/Kg
	Indeno(1,2,3-cd)pyrene									
		A1505289881	Site Sample	Soil	Low	2	660	394	J	µg/Kg
		A1505289882	Site Sample	Soil	Low	2	660	243	J	µg/Kg
		A1505289884	Site Sample	Soil	Low	2	660	186	J	µg/Kg
		A1505289885	Site Sample	Soil	Low	2	660	174	J	µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc.

SDG ID: 89881

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Indeno(1,2,3-cd)pyrene									
		A1505289887	Site Sample	Soil	Low	2	660	84	J	µg/Kg
	2-Methylnaphthalene									
		A1505289883RE	Re-extraction/Re-analysis	Soil	Low	2	660	219	J	µg/Kg
		A1505289884	Site Sample	Soil	Low	4	660	11,381	D	µg/Kg
		A1505289885	Site Sample	Soil	Low	2	660	1,453		µg/Kg
		A1505289887	Site Sample	Soil	Low	2	660	146	J	µg/Kg
	Naphthalene									
		A1505289884	Site Sample	Soil	Low	2	660	1,198		µg/Kg
		A1505289885	Site Sample	Soil	Low	2	660	314	J	µg/Kg
	Phenanthrene									
		A1505289881	Site Sample	Soil	Low	2	660	2,856		µg/Kg
		A1505289882	Site Sample	Soil	Low	2	660	984		µg/Kg
		A1505289883RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,180		µg/Kg
		A1505289884	Site Sample	Soil	Low	2	660	839		µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 89881

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Semivolatiles										
	Phenanthrene									
		A1505289885	Site Sample	Soil	Low	2	660	4,474		µg/Kg
		A1505289887	Site Sample	Soil	Low	2	660	660		µg/Kg
	Pyrene									
		A1505289881	Site Sample	Soil	Low	2	660	2,393		µg/Kg
		A1505289882	Site Sample	Soil	Low	2	660	1,679		µg/Kg
		A1505289883RE	Re-extraction/Re-analysis	Soil	Low	2	660	1,855	J	µg/Kg
		A1505289884	Site Sample	Soil	Low	2	660	1,557		µg/Kg
		A1505289885	Site Sample	Soil	Low	2	660	4,067	J	µg/Kg
		A1505289887	Site Sample	Soil	Low	2	660	618	J	µg/Kg
Pesticides/PCBs										
	Aldrin									
		A1505289881	Site Sample	Soil	Low	1	1.7	36		µg/Kg
		A1505289883	Site Sample	Soil	Low	100	170	264	D	µg/Kg
		A1505289884	Site Sample	Soil	Low	100	170	1,857	D	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ

Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **89881**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	Aldrin									
		A1505289885	Site Sample	Soil	Low	10	17	58	D	µg/Kg
		A1505289887	Site Sample	Soil	Low	1	1.7	7.3		µg/Kg
	alpha-BHC									
		A1505289881	Site Sample	Soil	Low	1	1.7	4.5		µg/Kg
		A1505289882	Site Sample	Soil	Low	1	1.7	3.7		µg/Kg
		A1505289883	Site Sample	Soil	Low	1	1.7	5.6		µg/Kg
		A1505289884	Site Sample	Soil	Low	1	1.7	13		µg/Kg
		A1505289885	Site Sample	Soil	Low	1	1.7	5.1		µg/Kg
	beta-BHC									
		A1505289885	Site Sample	Soil	Low	10	17	20	J	µg/Kg
		A1505289887	Site Sample	Soil	Low	1	1.7	2.1		µg/Kg
	delta-BHC									
		A1505289881	Site Sample	Soil	Low	1	1.7	49		µg/Kg
		A1505289882	Site Sample	Soil	Low	1	1.7	28		µg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated *method blank*
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected *between the instrument detection limit (IDL)* and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 89881

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	delta-BHC									
		A1505289883	Site Sample	Soil	Low	1	1.7	185		µg/Kg
		A1505289884	Site Sample	Soil	Low	100	170	587	D	µg/Kg
		A1505289885	Site Sample	Soil	Low	10	17	23	D	µg/Kg
		A1505289887	Site Sample	Soil	Low	1	1.7	6.7		µg/Kg
	gamma-BHC									
		A1505289881	Site Sample	Soil	Low	1	1.7	11		µg/Kg
		A1505289882	Site Sample	Soil	Low	1	1.7	4.3		µg/Kg
		A1505289883	Site Sample	Soil	Low	1	1.7	6.2		µg/Kg
	alpha Chlordane									
		A1505289881	Site Sample	Soil	Low	100	170	232	D	µg/Kg
		A1505289882	Site Sample	Soil	Low	1	1.7	34		µg/Kg
		A1505289883	Site Sample	Soil	Low	100	170	247	D	µg/Kg
		A1505289884	Site Sample	Soil	Low	100	170	1,557	D	µg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 89881

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	alpha Chlordane									
		A1505289885	Site Sample	Soil	Low	10	17	64	D	µg/Kg
		A1505289887	Site Sample	Soil	Low	1	1.7	7.9		µg/Kg
	gamma Chlordane									
		A1505289881	Site Sample	Soil	Low	100	170	425	D	µg/Kg
		A1505289882	Site Sample	Soil	Low	10	17	98	D	µg/Kg
		A1505289883	Site Sample	Soil	Low	100	170	731	D	µg/Kg
		A1505289884	Site Sample	Soil	Low	100	170	2,097	D	µg/Kg
		A1505289885	Site Sample	Soil	Low	10	17	64	D	µg/Kg
		A1505289887	Site Sample	Soil	Low	1	1.7	10		µg/Kg
	4,4'-DDD									
		A1505289881	Site Sample	Soil	Low	100	330	2,779	J	µg/Kg
		A1505289882	Site Sample	Soil	Low	10	33	394	J	µg/Kg
		A1505289883	Site Sample	Soil	Low	100	330	1,180	J	µg/Kg

Qualifiers:

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- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **89881**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	4,4'-DDD									
		A1505289884	Site Sample	Soil	Low	10,000	33,000	167,720	J	µg/Kg
		A1505289885	Site Sample	Soil	Low	10	33	930	J	µg/Kg
		A1505289887	Site Sample	Soil	Low	1	3.3	101	J	µg/Kg
	4,4'-DDE									
		A1505289881	Site Sample	Soil	Low	100	330	648	D	µg/Kg
		A1505289882	Site Sample	Soil	Low	10	33	510	D	µg/Kg
		A1505289883	Site Sample	Soil	Low	100	330	1,012	D	µg/Kg
		A1505289884	Site Sample	Soil	Low	100	330	899	D	µg/Kg
		A1505289885	Site Sample	Soil	Low	10	33	36	D	µg/Kg
		A1505289887	Site Sample	Soil	Low	1	3.3	13		µg/Kg
	4,4'-DDT									
		A1505289881	Site Sample	Soil	Low	1	3.3	216		µg/Kg
		A1505289882	Site Sample	Soil	Low	10	33	75	D	µg/Kg

Qualifiers:

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **89881**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	4,4'-DDT									
		A1505289883	Site Sample	Soil	Low	100	330	1,012	D	µg/Kg
		A1505289884	Site Sample	Soil	Low	100	330	899	D	µg/Kg
		A1505289885	Site Sample	Soil	Low	10	33	81	D	µg/Kg
		A1505289887	Site Sample	Soil	Low	1	3.3	5.2		µg/Kg
	Dieldrin									
		A1505289881	Site Sample	Soil	Low	1	3.3	69		µg/Kg
		A1505289882	Site Sample	Soil	Low	1	3.3	6.4		µg/Kg
		A1505289883	Site Sample	Soil	Low	1	3.3	28		µg/Kg
		A1505289884	Site Sample	Soil	Low	1	3.3	120		µg/Kg
		A1505289885	Site Sample	Soil	Low	1	3.3	23		µg/Kg
	Endosulfan I									
		A1505289882	Site Sample	Soil	Low	1	1.7	19		µg/Kg
	Endosulfan II									
		A1505289882	Site Sample	Soil	Low	1	3.3	9.8		µg/Kg

Qualifiers:

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **89881**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	Endosulfan II									
		A1505289883	Site Sample	Soil	Low	1	3.3	32		µg/Kg
		A1505289884	Site Sample	Soil	Low	100	3.3	401	D	µg/Kg
		A1505289885	Site Sample	Soil	Low	10	33	58	J	µg/Kg
	Endo. Sulfate									
		A1505289884	Site Sample	Soil	Low	1	3.3	21		µg/Kg
	Endrin									
		A1505289881	Site Sample	Soil	Low	1	3.3	18		µg/Kg
		A1505289882	Site Sample	Soil	Low	1	3.3	5.0		µg/Kg
		A1505289884	Site Sample	Soil	Low	1	3.3	264		µg/Kg
		A1505289885	Site Sample	Soil	Low	10	33	50	D	µg/Kg
	Endrin Aldehyde									
		A1505289881	Site Sample	Soil	Low	1	3.3	16		µg/Kg
		A1505289882	Site Sample	Soil	Low	1	3.3	5.4		µg/Kg
		A1505289883	Site Sample	Soil	Low	1	3.3	35		µg/Kg

Qualifiers:

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 89881

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Pesticides/PCBs										
	Endrin Aldehyde									
		A1505289884	Site Sample	Soil	Low	1	3.3	78		µg/Kg
		A1505289885	Site Sample	Soil	Low	1	3.3	42		µg/Kg
	Endrin Ketone									
		A1505289882	Site Sample	Soil	Low	1	3.3	6.4		µg/Kg
		A1505289883	Site Sample	Soil	Low	1	3.3	9.6		µg/Kg
		A1505289884	Site Sample	Soil	Low	1	3.3	7.2		µg/Kg
	Heptachlor									
		A1505289883	Site Sample	Soil	Low	1	1.7	4.3		µg/Kg
	Hept. Epoxide									
		A1505289881	Site Sample	Soil	Low	1	1.7	34		µg/Kg
		A1505289882	Site Sample	Soil	Low	1	1.7	19		µg/Kg
		A1505289883	Site Sample	Soil	Low	1	1.7	62		µg/Kg
		A1505289884	Site Sample	Soil	Low	100	170	347	D	µg/Kg
		A1505289885	Site Sample	Soil	Low	1	1.7	16		µg/Kg

Qualifiers:

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- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 89881

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Pesticides/PCBs									
	Hept. Epoxide								
		A1505289887	Site Sample	Soil	Low	1	1.7	2.1	µg/Kg
Metals									
	Aluminum								
		A1505289881	Site Sample	Soil	Low	1	7.5	3,652	mg/Kg
		A1505289882	Site Sample	Soil	Low	1	7.5	5,906	mg/Kg
		A1505289883	Site Sample	Soil	Low	1	7.5	8,823	mg/Kg
		A1505289884	Site Sample	Soil	Low	1	7.5	10,063	mg/Kg
		A1505289885	Site Sample	Soil	Low	1	7.5	12,956	mg/Kg
		A1505289887	Site Sample	Soil	Low	1	7.5	9,104	mg/Kg
	Antimony								
		A1505289884	Site Sample	Soil	Low	1	1.0	350	mg/Kg
		A1505289885	Site Sample	Soil	Low	1	1.0	27	mg/Kg
		A1505289887	Site Sample	Soil	Low	1	1.0	98	mg/Kg

Qualifiers:

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- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ

Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **89881**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result		Units
Metals										
	Arsenic									
		A1505289881	Site Sample	Soil	Low	1	1.0	5.4	J	mg/Kg
		A1505289882	Site Sample	Soil	Low	1	1.0	5.8	J	mg/Kg
		A1505289883	Site Sample	Soil	Low	1	1.0	6.7	J	mg/Kg
		A1505289884	Site Sample	Soil	Low	1	1.0	65	J	mg/Kg
		A1505289885	Site Sample	Soil	Low	1	1.0	15	J	mg/Kg
		A1505289887	Site Sample	Soil	Low	1	1.0	27	J	mg/Kg
	Barium									
		A1505289881	Site Sample	Soil	Low	1	1.0	411	J	mg/Kg
		A1505289882	Site Sample	Soil	Low	1	1.0	468	J	mg/Kg
		A1505289883	Site Sample	Soil	Low	1	1.0	658	J	mg/Kg
		A1505289884	Site Sample	Soil	Low	1	1.0	352	J	mg/Kg
		A1505289885	Site Sample	Soil	Low	1	1.0	279	J	mg/Kg
		A1505289887	Site Sample	Soil	Low	1	1.0	153	J	mg/Kg

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- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **89881**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Cadmium								
		A1505289881	Site Sample	Soil	Low	1	0.50	2.4	mg/Kg
		A1505289882	Site Sample	Soil	Low	1	0.50	0.93	mg/Kg
		A1505289883	Site Sample	Soil	Low	1	0.50	1.2	mg/Kg
		A1505289884	Site Sample	Soil	Low	1	0.50	38	mg/Kg
		A1505289885	Site Sample	Soil	Low	1	0.50	3.4	mg/Kg
		A1505289887	Site Sample	Soil	Low	1	0.50	11	mg/Kg
	Calcium								
		A1505289881	Site Sample	Soil	Low	1	30	32,038	mg/Kg
		A1505289882	Site Sample	Soil	Low	1	30	15,575	mg/Kg
		A1505289883	Site Sample	Soil	Low	1	30	17,085	mg/Kg
		A1505289884	Site Sample	Soil	Low	1	30	2,707	mg/Kg
		A1505289885	Site Sample	Soil	Low	1	30	10,284	mg/Kg
		A1505289887	Site Sample	Soil	Low	1	30	1,394	mg/Kg

Qualifiers:

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- **E** - Exceeds calibration range
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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **89881**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Chromium								
		A1505289881	Site Sample	Soil	Low	1	1.0	27	mg/Kg
		A1505289882	Site Sample	Soil	Low	1	1.0	14	mg/Kg
		A1505289883	Site Sample	Soil	Low	1	1.0	26	mg/Kg
		A1505289884	Site Sample	Soil	Low	1	1.0	21	mg/Kg
		A1505289885	Site Sample	Soil	Low	1	1.0	25	mg/Kg
		A1505289887	Site Sample	Soil	Low	1	1.0	11	mg/Kg
	Cobalt								
		A1505289881	Site Sample	Soil	Low	1	0.50	3.9	mg/Kg
		A1505289882	Site Sample	Soil	Low	1	0.50	3.7	mg/Kg
		A1505289883	Site Sample	Soil	Low	1	0.50	3.5	mg/Kg
		A1505289884	Site Sample	Soil	Low	1	0.50	5.5	mg/Kg
		A1505289885	Site Sample	Soil	Low	1	0.50	4.6	mg/Kg
		A1505289887	Site Sample	Soil	Low	1	0.50	4.8	mg/Kg

Qualifiers:

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- B - (Organics) Found in the associated method blank
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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **89881**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Copper								
		A1505289881	Site Sample	Soil	Low	1	0.50	43	mg/Kg
		A1505289882	Site Sample	Soil	Low	1	0.50	31	mg/Kg
		A1505289883	Site Sample	Soil	Low	1	0.50	40	mg/Kg
		A1505289884	Site Sample	Soil	Low	1	0.50	51	mg/Kg
		A1505289885	Site Sample	Soil	Low	1	0.50	51	mg/Kg
		A1505289887	Site Sample	Soil	Low	1	0.50	17	mg/Kg
	Iron								
		A1505289881	Site Sample	Soil	Low	1	10	10,422	mg/Kg
		A1505289882	Site Sample	Soil	Low	1	10	9,322	mg/Kg
		A1505289883	Site Sample	Soil	Low	1	10	11,858	mg/Kg
		A1505289884	Site Sample	Soil	Low	1	10	12,220	mg/Kg
		A1505289885	Site Sample	Soil	Low	1	10	13,944	mg/Kg
		A1505289887	Site Sample	Soil	Low	1	10	12,308	mg/Kg

Qualifiers:

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- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **89881**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Lead								
		A1505289881	Site Sample	Soil	Low	1	0.50	93	mg/Kg
		A1505289882	Site Sample	Soil	Low	1	0.50	113	mg/Kg
		A1505289883	Site Sample	Soil	Low	1	0.50	120	mg/Kg
		A1505289884	Site Sample	Soil	Low	1	0.50	211	mg/Kg
		A1505289885	Site Sample	Soil	Low	1	0.50	4,137	mg/Kg
		A1505289887	Site Sample	Soil	Low	1	0.50	5,519	mg/Kg
	Magnesium								
		A1505289881	Site Sample	Soil	Low	1	20	1,258	mg/Kg
		A1505289882	Site Sample	Soil	Low	1	20	1,210	mg/Kg
		A1505289883	Site Sample	Soil	Low	1	20	1,304	mg/Kg
		A1505289884	Site Sample	Soil	Low	1	20	1,294	mg/Kg
		A1505289885	Site Sample	Soil	Low	1	20	1,586	mg/Kg
		A1505289887	Site Sample	Soil	Low	1	20	1,231	mg/Kg

Qualifiers:

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- **B** - (Organics) Found in the associated method blank
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- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **89881**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Manganese								
		A1505289881	Site Sample	Soil	Low	1	0.50	486	mg/Kg
		A1505289882	Site Sample	Soil	Low	1	0.50	346	mg/Kg
		A1505289883	Site Sample	Soil	Low	1	0.50	368	mg/Kg
		A1505289884	Site Sample	Soil	Low	1	0.50	334	mg/Kg
		A1505289885	Site Sample	Soil	Low	1	0.50	294	mg/Kg
		A1505289887	Site Sample	Soil	Low	1	0.50	319	mg/Kg
	Nickel								
		A1505289881	Site Sample	Soil	Low	1	1.0	15	mg/Kg
		A1505289882	Site Sample	Soil	Low	1	1.0	13	mg/Kg
		A1505289883	Site Sample	Soil	Low	1	1.0	15	mg/Kg
		A1505289884	Site Sample	Soil	Low	1	1.0	13	mg/Kg
		A1505289885	Site Sample	Soil	Low	1	1.0	16	mg/Kg
		A1505289887	Site Sample	Soil	Low	1	1.0	13	mg/Kg

Qualifiers:

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- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **89881**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Potassium								
		A1505289881	Site Sample	Soil	Low	1	50	239	mg/Kg
		A1505289882	Site Sample	Soil	Low	1	50	460	mg/Kg
		A1505289883	Site Sample	Soil	Low	1	50	697	mg/Kg
		A1505289884	Site Sample	Soil	Low	1	50	773	mg/Kg
		A1505289885	Site Sample	Soil	Low	1	50	1,046	mg/Kg
		A1505289887	Site Sample	Soil	Low	1	50	747	mg/Kg
	Silver								
		A1505289881	Site Sample	Soil	Low	1	1.0	3.7	mg/Kg
		A1505289882	Site Sample	Soil	Low	1	1.0	4.8	mg/Kg
		A1505289883	Site Sample	Soil	Low	1	1.0	24	mg/Kg
		A1505289884	Site Sample	Soil	Low	1	1.0	1.9	mg/Kg
		A1505289885	Site Sample	Soil	Low	1	1.0	25	mg/Kg

Qualifiers:

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- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: **AATSLA / American Analytical & Technical Services, Inc.** SDG ID: **89881**

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Sodium								
		A1505289881	Site Sample	Soil	Low	1	100	141	mg/Kg
		A1505289882	Site Sample	Soil	Low	1	100	135	mg/Kg
		A1505289883	Site Sample	Soil	Low	1	100	182	mg/Kg
		A1505289884	Site Sample	Soil	Low	1	100	326	mg/Kg
		A1505289885	Site Sample	Soil	Low	1	100	252	mg/Kg
		A1505289887	Site Sample	Soil	Low	1	100	293	mg/Kg
	Thallium								
		A1505289884	Site Sample	Soil	Low	1	1.0	3.5	mg/Kg
		A1505289887	Site Sample	Soil	Low	1	1.0	1.2	mg/Kg
	Vanadium								
		A1505289881	Site Sample	Soil	Low	1	1.0	15	mg/Kg
		A1505289882	Site Sample	Soil	Low	1	1.0	12	mg/Kg
		A1505289883	Site Sample	Soil	Low	1	1.0	16	mg/Kg

Qualifiers:

- **J** - Estimated
- **B** - (Organics) Found in the associated method blank
- **D** - Reported from a dilution
- **E** - Exceeds calibration range
- **P** - (Pesticides) Difference in column concentrations > 25%
- **B** - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 89881

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Metals									
	Vanadium								
		A1505289884	Site Sample	Soil	Low	1	1.0	17	mg/Kg
		A1505289885	Site Sample	Soil	Low	1	1.0	24	mg/Kg
		A1505289887	Site Sample	Soil	Low	1	1.0	16	mg/Kg
	Zinc								
		A1505289881	Site Sample	Soil	Low	1	1.0	337	mg/Kg
		A1505289882	Site Sample	Soil	Low	1	1.0	242	mg/Kg
		A1505289883	Site Sample	Soil	Low	1	1.0	342	mg/Kg
		A1505289884	Site Sample	Soil	Low	1	1.0	605	mg/Kg
		A1505289885	Site Sample	Soil	Low	1	1.0	296	mg/Kg
		A1505289887	Site Sample	Soil	Low	1	1.0	357	mg/Kg
Conventionals									
	Total Organic Carbon (TOC)								
		A1505289884	Site Sample	Soil	Low	1	100	8,700	mg/Kg
		A1505289884	Site Sample	Soil	Low	1	0.10	40	%

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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E3 - Summary of Validated Analyte Detects

Sorted by Fraction, Analyte and Client Sample

LDEQ
Capitol Lakes Sediment

Lab: AATSLA / American Analytical & Technical Services, Inc. SDG ID: 89881

Fraction	Analyte	Client Sample	Sample Type	Matrix	Level	Dilution Factor	MQL	Validated Result	Units
Conventionals									
	Total Organic Carbon (TOC)								
		A1505289884	Site Sample	Soil	Low	1	100	770	mg/Kg
		A1505289887	Site Sample	Soil	Low	1	0.10	44	%
		A1505289887	Site Sample	Soil	Low	1	100	200	mg/Kg
		A1505289887	Site Sample	Soil	Low	1	100	7,728	mg/Kg

Qualifiers:

- J - Estimated
- B - (Organics) Found in the associated method blank
- D - Reported from a dilution
- E - Exceeds calibration range
- P - (Pesticides) Difference in column concentrations > 25%
- B - (Inorganics) Lab qualifier - analyte detected between the instrument detection limit (IDL) and the MQL

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APPENDIX F

ANALYTICAL DATA: FISH, SURFACE WATER, LAKE SEDIMENTS

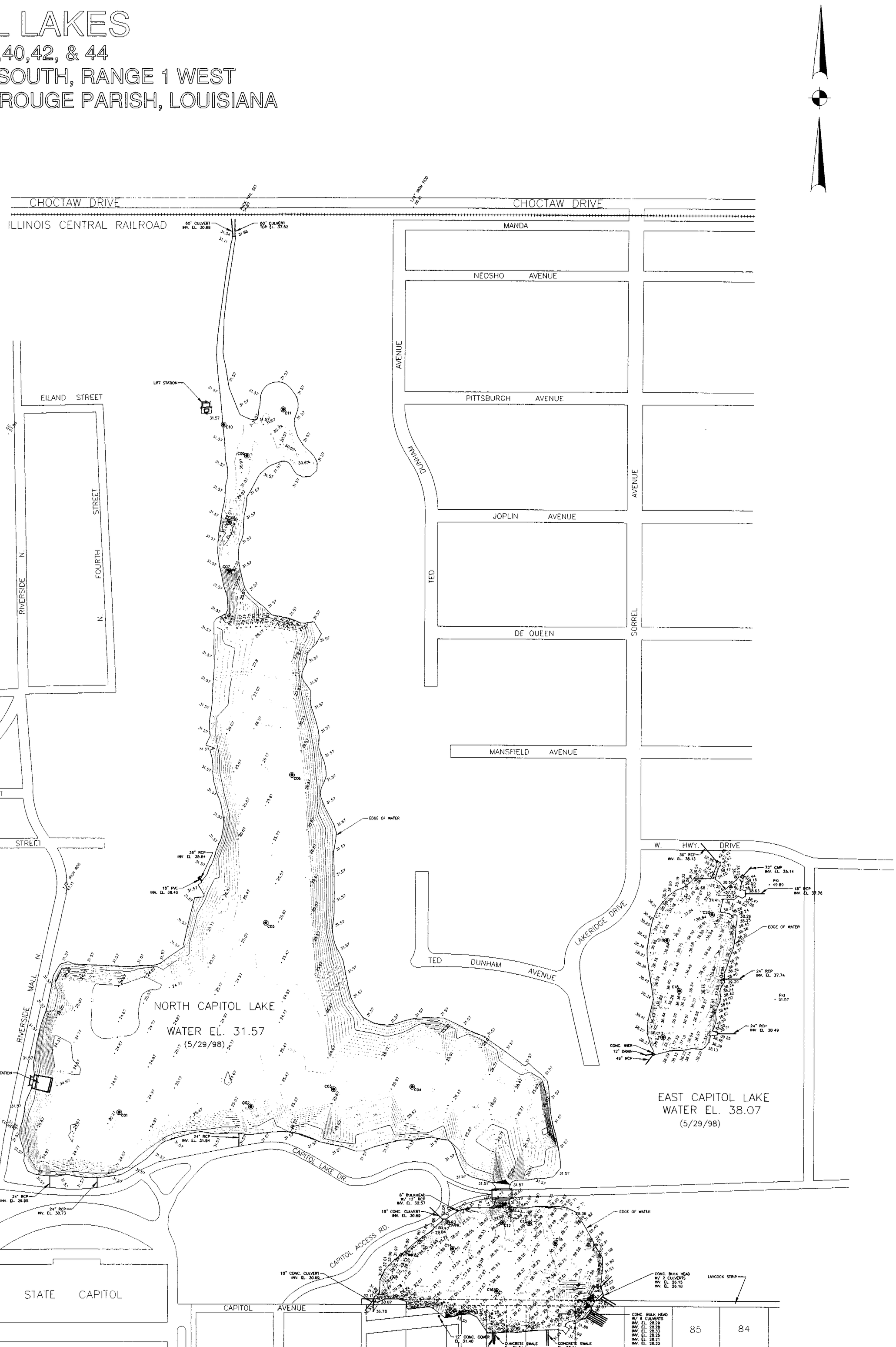
The analytical data for the media of interest is extensive and therefore is not included in this report. Persons interested in reviewing the raw analytical data should contact the LDEQ – IASD's Mr. Chuck Hunter or Ms. Toni Booker at (225) 765-0487.

APPENDIX G

HYDROGRAPHIC SURVEY MAP

LDEQ-EDMS Document 2469808, Page 613 of 717

CAPITOL LAKES
SECTIONS 38,40,42, & 44
TOWNSHIP 7 SOUTH, RANGE 1 WEST
EAST BATON ROUGE PARISH, LOUISIANA



NOTES:

1. CONTOUR INTERVAL = .5ft
2. HORIZONTAL & VERTICAL CONTROL
   LADOTD MON. "DOTD 1 1990"
   HORIZONTAL DATUM = NAD83
   VERTICAL DATUM = NAVD88
   ELEV. = 52.51
3. VERTICAL INFORMATION DERIVED FROM ELLIPSOID HEIGHT AS FURNISHED BY LADOTD AND GPS OBSERVATIONS

LEGEND:

◉ = BORING

REVISED JUNE 08, 1998. TO SHOW LOCATIONS FOR BORINGS
SURVEY FOR WALK, HAYDEL & ASSOCIATES
DATE, JULY, 28 1997

C. Randall Dixon
P.L.S.

REGISTERED PROFESSIONAL LAND SURVEYOR C. RANDALL DIXON 4974 STATE OF LOUISIANA

GRAPHIC SCALE

200 0 100 200 400 800

(IN FEET)
1 inch = 200 ft.

OFFICE OF
JOHN J. AVERY & ASSOC. INC.
5413 POWELL ST. SUITE A
HARAHAN, LA. 70123
(504) 733--2493

CAD FILES NAME - CAPITOL.DWG

T97-257

APPENDIX H

BASELINE RISK ASSESSMENT

LOUISIANA
DEPARTMENT OF
HEALTH AND HOSPITALS

COMMENTS ON

BASELINE RISK ASSESSMENT

M. J. "Mike" Foster, Jr.
GOVERNOR

STATE OF LOUISIANA
DEPARTMENT OF HEALTH AND HOSPITALS

David W. Hood
SECRETARY

MEMORANDUM

TO: Mr. Chuck Hunter, Louisiana Department of Environmental Quality, Inactive and Abandoned Sites Division

FROM: Frank Welch, M.D., Office of Public Health, Section of Environmental Epidemiology and Toxicology MCM for FW

DATE: November 24,1998

RE: Appendix H. Capitol Lakes Health Risk Assessment

The Office of Public Health, Section of Environmental Epidemiology and Toxicology has reviewed the Capitol Lakes Health Risk Assessment Draft and concurs with the primary conclusions of the report. The attached letter presents the comments on the draft of our consultant Dr. William Hartley.

Attachment

RECEIVED
NOV 2 4 1998
LA DEPT. OF ENV. QUALITY
IAS DIVISION
LOG # 146

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234 LOYOLA AVENUE • SUITE 620 • NEW ORLEANS, LOUISIANA 70112
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(504) 588-5374
FAX: (504) 584-1726

Environmental Diseases Prevention Research Center

November 23, 1998

Ms. Dianne Dugas
LOPH, SEET
New Orleans, LA

Subject: Review of Capitol Lakes Health Risk Assessment - Draft, (prepared by June Sutherlin, DVM, Ph.D.) Dated November 16, 1998

I have reviewed the above subject document for methods and conclusions in the risk assessment. It was not within the scope of this review to check the extensive risk and statistical calculations.

The document is well written and current risk assessment guidance documents from the USEPA, LADEQ, and OPH were followed in assessment of the sediment, water, and fish data from Capitol Lakes. Based on the risk calculations, I agree with the primary conclusions of the report.

The following suggestions are made for inclusicn in the final document.

a) Provide the reasons that Area 1 and Area 2 are considered as separate exposure scenarios for recreational activities. I would have combined the environmental (sediment/water) data. However, there is minimal impact since all fish data were combined and consumption of fish is the major health risk issue.

b) Where there were no USEPA(IRIS/Region) or DEQ risk-based criteria or reference doses, were ATSDR recommendations (for example chronic oral minimum risk levels (MRLs)) considered in the risk assessment? Recommend checking with ATSDR where there are gaps in risk assessment input data for contaminants.

c) Page v - line 26 - "ingestion <u>of</u> fish"

d) Page H-3 - line 2 - "by<u>0</u> the site"

e) Page H-28 - last paragraph - The document notes that some document guidance uses 15kg bw for a child and others use 10kg bw.

Since this is "guidance", it would be better to use the same bodyweight for a child throughout the risk assessment. However, this issue would not have any significant impact on the risk assessment conclusions.

f) Page H-45 - last paragraph - add correct description of cancer slope factor.
"upper 95% confidence limit on risk"
"over a 70 year lifetime"
Add: "The linearized multistage model also uses a high to low dose extrapolation procedure with considerable scientific uncertainties"

g) Page H-46 - line 27 - "class B and class C as to..."

h) Page H-46 - last paragraph - "Current models do not consider cellular repair mechanisms which may be operative at low doses of carcinogens."

i) Page H-86 - last paragraph - A hazard index (H.I) of 1.2 (chromium) is probably insignificant from the standpoint of health when one considers the uncertainties and safety factors involved in the risk assessment procedures. Recommend some critical discussion of this point in the risk assessment.

j) Page H-91 - Summary of Conclusions - Standardize the risk statements. For example: "noncarcinogenic health effects and cancer risks that exceed the acceptable range.

k) Page H-91 - next to last line - "with potential (delete) cancer risks that ...."

William R. Hartley

William R. Hartley, Sc.D.
Associate Professor and Director

APPENDIX H

CAPITOL LAKES
HEATLH RISK ASSESSMENT

Prepared for:

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

INACTIVE AND ABANDONED SITES DIVISION

Prepared by:
June Sutherlin, D.V.M., Ph.D.
9215 Interline Avenue
Baton Rouge, Louisiana 70809

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OVERVIEW

A baseline health risk assessment was conducted to assess the potential for adverse health effects associated with recreational exposure to chemicals present in the sediment in Capitol Lakes and with the ingestion of chemicals in fish obtained from Capitol Lakes. The baseline health risk assessment was conducted in accordance with the *Risk Evaluation/Corrective Action Program* (RECAP), Louisiana Department of Environmental Quality (LDEQ), 1998; *Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana*, Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife and Fisheries, 1997; and Environmental Protection Agency (EPA) risk assessment guidelines. This health risk assessment was conducted for the LDEQ Inactive and Abandoned Sites Division and was reviewed by the Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology.

To facilitate the assessment of risks associated with exposure to chemicals in the Capitol Lakes system, the system was divided into four areas which were designated as Areas 1, 2, 3, and 4. The large north lake was divided into two areas, Area 1 and Area 2. The southeastern and southwestern arms of the north lake were designated as Area 1 and the northern arm of the north lake was designated as Area 2. The south lake was designated as Area 3 and the east lake was designated as Area 4. The potential health risks associated with exposure to chemicals present in the Lakes were estimated for each Area of the Lake System.

The Chemicals of Concern for recreational exposure to sediment include polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), pesticides, and metals. The Chemicals of Concern for the ingestion of fish include PCBs and pesticides. A reasonable maximum exposure scenario was evaluated for: 1) recreational receptors swimming or wading in Capitol lakes (exposure pathways included the incidental ingestion of chemicals in sediment and dermal contact with chemicals in sediment); and 2) recreational receptors ingesting chemicals in fish obtained from Capitol Lakes. The species of fish evaluated include carp, bigmouth buffalo, green sunfish, bluegill, black bullhead, and yellow bullhead.

The results of the risk characterization indicate that: 1) recreational exposure to chemicals present in sediment (dermal contact with sediment) in Area 2 of Capitol Lakes may be associated with potential noncarcinogenic health effects and potential cancer risks that exceed the unacceptable risk range; and 2) the ingestion of chemicals present in carp, bigmouth buffalo, black bullhead, and yellow bullhead obtained from Capitol Lakes may be associated with potential cancer risks that exceed the acceptable risk range.

CAPITOL LAKES
HEALTH RISK ASSESSMENT

H1.0 INTRODUCTION

The Capitol Lakes system is located near the State Capitol in Baton Rouge, Louisiana. The Lake system consists of a large north lake and smaller south and east lakes. Over time, chemicals have entered the lake system through a combination of point source discharges such as discharges, runoff, and spills from adjacent facilities, and non-point source discharges such as urban storm water runoff. Investigations of the Lake system have indicated that a number of chemical agents are present in the sediment and fish of the Lake system. Since 1983, the Lakes have been closed to fishing due to the presence of elevated levels of polychlorinated biphenyls (PCBs) in the fish obtained from Capitol Lakes. In response to requests made by the Legislature of Louisiana, an investigation of the Capitol Lakes system was performed by the Louisiana Department of Environmental Quality (LDEQ) in 1997-1998. As a part of this investigation, a baseline health risk assessment was conducted to assess the potential for adverse health effects associated with exposure to chemicals present in the Lake system during recreational use of the Lakes. A baseline risk assessment is a risk assessment conducted under the assumption that no action will be taken at the site so that current potential health risks can be estimated.

The baseline health risk assessment was conducted in accordance with the *LDEQ Risk Evaluation/Corrective Action Program* (RECAP); *Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana*, Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife and Fisheries, 1997; and Environmental Protection Agency (EPA) risk assessment guidelines. This health risk assessment has been peer-reviewed by the Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology.

To facilitate the evaluation of the Capitol Lakes system, the system was divided into four areas which were designated as Areas 1, 2, 3, and 4. The large north lake was divided into two areas, Area 1 and Area 2. The southeastern and southwestern arms of the north lake were designated as Area 1 and the northern arm of the north lake was designated as Area 2. The south lake was designated as Area 3 and the east lake was designated as Area 4. The potential health risks associated with exposure to chemicals present in the Lakes were estimated for each Area of the Lake System.

The risk assessment report is organized as follows:

Section 2.0, Identification of the Chemicals of Concern, presents the Chemicals of Concern (COCs) for each exposure medium for each Area of the Lake System and the methods used in the identification of these chemicals.

Section 3.0, Exposure Assessment, presents the methods used in the assessment of chemical exposure at the Capitol Lakes system. This section includes a discussion of exposure areas, receptors, exposure media, exposure pathways, exposure concentrations, and the estimation of chemical intake.

Section 4.0, Toxicity Assessment, provides the toxicity values and toxicity data used in the quantitative risk assessment process.

Section 5.0, Risk Characterization, combines the outputs of the exposure assessment and toxicity assessment to quantitatively characterize health risks for recreational exposure to chemicals present in the sediment at Capitol Lakes and for the ingestion of chemicals present in fish obtained from Capitol Lakes.

Section 6.0, Conclusions, presents the results of the health risk assessment.

H2.0 IDENTIFICATION OF THE CHEMICALS OF CONCERN

The Chemicals of Concern (COCs) are the chemicals present at a site that are most likely to contribute significantly to potential health risks posed by the site. The COCs are the chemicals that are the focus of the quantitative risk assessment process. A COC list was developed for each exposure medium for each Area of the Lake System.

H2.1 Sediment

To identify the COCs for sediment, the maximum concentration detected for each chemical reported to be present in the sediment (from the surface of the lake bottom to a depth of approximately 2.5 to 3 feet; refer to Section H3.2) in each Area of the Lake System was compared to a risk-based criterion. If the maximum chemical concentration detected in the sediment was greater than the risk-based criterion, the chemical was identified as a COC for that Area and included in the quantitative risk assessment. A risk-based criterion is a chemical concentration in an exposure medium that is not expected to result in adverse health effects or pose unacceptable health risks under defined exposure conditions. Since risk-based criteria are not available for sediment, the maximum chemical concentrations detected in sediment were conservatively compared to risk-based criteria for soil for a residential scenario. The use of risk-based criteria for residential soil to identify COCs for sediment is assumed to be an acceptable approach at the Capitol Lakes System because: 1) the sediment exposure pathways associated with recreational activities at the Lakes are the same as the exposure pathways assumed for the development of the risk-based criteria for residential soil; and 2) the extent of exposure to sediment at the Capitol Lakes System is expected to be significantly less (based on frequency and duration of exposure) than the exposure level assumed for the development of the risk-based criteria for residential soil. The risk-based criteria for residential soil that were used for comparison with the sediment data were obtained from EPA Region IX *Preliminary Remediation Goals*, May 1998 (http://www.epa.gov/region09/waste/sfund/prg/intro.htm). These criteria are based on a reasonable maximum exposure scenario and address exposure to soil via ingestion, inhalation and dermal contact. These criteria represent chemical concentrations in soil that are not expected to pose unacceptable risks or result in adverse health effects in residential receptors exposed to the soil for 350 days/year for 30 years. Chemicals for which risk-based criteria were not available were not identified as COCs because EPA toxicity values (reference doses and slope factors) are not available for these chemicals. Chemicals that do not have toxicity values can not be included in the quantitative risk assessment process. The comparisons of the maximum chemical concentrations in sediment to the risk-based criteria are present for each Area in Tables H2-1 through H2-4. Table H-5 summarizes the COCs for each Area of the Lake System. The approach used to identify the COCs for sediment is consistent with the approaches presented in EPA Region IX *Preliminary Remediation Goals*, EPA 1998; EPA Region III *Risk-Based Concentration Table*, EPA 1998; and *Soil Screening Guidance*, EPA 1996.

H2.2 Surface Water

For the identification of COCs for surface water, the maximum concentration for each chemical detected in the surface water in each Area of the Lake System was compared to the Maximum Contaminant Level (MCL) (Safe Drinking Water Act) or, if an MCL was not available, a risk-based criterion for drinking water. If the maximum chemical concentration detected in the surface water was greater than the risk-based criterion, the chemical was identified as a COC for that Area and included in the quantitative risk assessment. Since risk-based criteria are not available for surface water, the maximum chemical concentrations detected in surface water were conservatively compared to the MCLs or risk-based criteria for a drinking water source. An MCL is the maximum permissible level of a chemical in water which is delivered to any user of a public water system (*Drinking Water Regulations and Health Advisories*, EPA 1996). The risk-based criteria represent chemical concentrations in tap water that are not expected to pose unacceptable risks or result in adverse health effects in receptors using the water for drinking and domestic purposes. The MCLs that were used for comparison with the surface water data were obtained from *Drinking Water Regulations and Health Advisories*, EPA 1996. The risk-based criteria for tap water that were used for comparison with the surface water data were obtained from *EPA Region IX Preliminary Remediation Goals*, May 1998 (http://www.epa.gov/region09/waste/sfund/prg/intro.htm). For each chemical detected in surface water, the maximum chemical concentration detected in the surface water column was less than or equal to the MCL or the risk-based criterion for drinking water for each Area of the Lake System. Therefore, no COCs were identified for surface water. Chemicals for which MCLs or risk-based criteria were not available were not identified as COCs because EPA toxicity values (reference doses and slope factors) are not available for these chemicals. Chemicals that do not have toxicity values can not be included in the quantitative risk assessment process. The comparisons of the maximum chemical concentrations in surface water to MCL or the risk-based criteria are present for each Area in Tables H-6 through H-9. The approach used to identify the COCs for surface water is consistent with the approaches presented in *EPA Region IX Preliminary Remediation Goals*, EPA 1998; and *EPA Region III Risk-Based Concentration Table*, EPA 1998.

H2.3 Fish

Risk-based criteria for the ingestion of fish were not available in *EPA Region IX Preliminary Remediation Goals*, May 1998. Therefore, all chemicals detected in the fish tissues were identified as COCs. A COC list was developed for each species of fish obtained from the Capitol Lakes System. The COC lists for each fish species collected and analyzed from Capitol Lakes are presented in Table H2-10.

TABLE H2-1
IDENTIFICATION OF THE CHEMICALS OF CONCERN
FOR SEDIMENT IN AREA 1[1]

Chemical	Maximum Concentration (mg/kg)	Risk-Based Criterion[2] (mg/kg)	Chemical of Concern[3]
4,4'-DDD	0.042	2.4	
4,4'-DDE	0.072	1.7	
4,4'-DDT	0.022	1.7	
Aldrin	0.024	0.026	
alpha-BHC	0.002	0.086	
alpha-Chlordane	0.0082	1.6	
Aluminum	8447	75,000	
Anthracene	0.156	14,000	
Antimony	39	30	X
Aroclor-1242	0.661	0.2	X
Aroclor-1248	0.232	0.2	X
Aroclor-1260	0.354	0.2	X
Arsenic	34	0.38	X
Barium	189	5,200	
Benzo(a)anthracene	0.854	0.56	X
Benzo(a)pyrene	0.748	0.056	X
Benzo(b)fluoranthene	1.032	0.56	X
Benzo(g,h,i)perylene	0.854	NA	
Benzo(k)fluoranthene	0.748	5.6	
Beryllium	0.54	150	
beta-BHC	0.003	0.3	
Bis(2-ethylhexyl)phthalate	8.5	32	
Bis(2-methoxyethyl) phthalate	3.74	NA	
Butylbenzylphthalate	0.146	930	
Cadmium	2.70	37	
Calcium	6,570	NA	
Chromium	27	30	
Chrysene	1.054	56	
Cobalt	7.30	3,300	
Copper	37	2,800	
delta-BHC	0.029	NA	
Di-n-octylphthalate	18.7	1,100	
Dibenz(a,h)anthracene	0.288	0.056	X
Dieldrin	0.016	0.028	
Endosulfan I	0.0052	330	
Endosulfan II	0.04	330	
Endosulfan sulfate	0.018	NA	
Endrin	0.004	16	
Endrin aldehyde	0.099	NA	
Fluoranthene	1.258	2,000	
gamma-BHC (Lindane)	0.0066	0.42	
gamma-Chlordane	0.016	1.6	
Heptachlor epoxide	0.017	0.049	

TABLE H2-1
IDENTIFICATION OF THE CHEMICALS OF CONCERN
FOR SEDIMENT IN AREA 1[1]

Chemical	Maximum Concentration (mg/kg)	Risk-Based Criterion[2] (mg/kg)	Chemical of Concern[3]
Indeno(1,2,3-cd)pyrene	0.748	0.56	X
Iron	11,905	22,000	
Lead	216	400	
Magnesium	1,838	NA	
Manganese	451	3,100	
Mercury	0.73	5.5	
Nickel	13	1,500	
Phenanthrene	0.680	NA	
Potassium	820	NA	
Pyrene	2.176	1,500	
Silver	4.30	370	
Sodium	83	NA	
Toxaphene	0.0024	0.4	
Vanadium	20	520	
Zinc	249	22,000	
(1,2'-Binaphthalene)-5,5',8,	2.974	NA[4]	
1,2-Benzenedicarboxylic acid	2.584	NA	
11H-Benzo(a)fluorene	2.314	NA	
2-Methyloctadecane	1.595	NA	
28-Nor-17.alpha.(H)-hopane	4.437	NA	
28-Nor-17.beta.(H)-hopane	16.38	NA	
Anthracene, 9-cyclohexyltetr	2.149	NA	
D:A-Friedooleanan-7-ol, (7.a	3.75	NA	
Decane, 3,8-dimethyl-	1.394	NA	
Docosane	2.058	NA	
Docosane,7-hexyl-	9.440	NA	
Docosane, 9-butyl-	1.882	NA	
Dodecane, 2,6,10-trimethyl-	1.940	NA	
Eicosane	1.707	NA	
Eicosane,2-methyl-	1.606	NA	
Eicosane, 3-methyl-	3.021	NA	
Heneicosane	1.292	NA	
Heneicosane, 11-(1-ethylprop	1.338	NA	
Heptacosane	4.272	NA	
Heptadecane	3.528	NA	
Heptadecane, 2,6,10,15-tetra	1.412	NA	
Heptadecane, 2,6-dimethyl-	4.452	NA	
Heptadecane, 3-methyl-	2.1	NA	
Heptadecane, 9-hexyl	4.081	NA	
Hexacosane	5.222	NA	
Hexadecane	2.077	NA	
Hexadecane, 2,6,10,14-tetran	2.422	NA	
Nonadecane	2.72	NA	
Octacosane	5.936	NA	

TABLE H2-1
IDENTIFICATION OF THE CHEMICALS OF CONCERN
FOR SEDIMENT IN AREA 1[1]

Chemical	Maximum Concentration (mg/kg)	Risk-Based Criterion[2] (mg/kg)	Chemical of Concern[3]
Octadecane	2.324	NA	
Octadecane, 2,6-dimethyl-	1.523	NA	
Pentacosane	2.688	NA	
Pentadecane	1.688	NA	
Pentadecane, 2,6,10,14-tetra	3.729	NA	
Pentatriacontane	1.733	NA	
Phenanthrene, 2,3,5-trimethy	3.453	NA	
Phenanthrene, 4,5-dimethyl-	6.052	NA	
Phenol, 2,5-bis(1,1-dimethyl	10.875	NA	
Phenol, 2,6-bis(1,1-dimethyl	1.768	NA	
Phenol, 3,5-bis(1,1-dimethyl	7.420	NA	
Phenol, 4-(1-methyl-1-phenyl	1.187	NA	
Tetracosane	0.948	NA	
Tetradecane	1.062	NA	
Tetradecane, 4-methyl-	2.337	NA	
Tetratriacontane	2.122	NA	
Tricosane	5.696	NA	
Tridecane, 5-propyl-	2.300	NA	

[1]The maximum chemical concentration (wet weight) detected in sediment (from of the surface of the lake bottom to a depth of approximately 2.5 to 3 feet) in Area 1 was compared to a risk-based criterion for soil for a residential exposure scenario. Chemicals with maximum concentrations exceeding the risk-based criteria were identified as Chemicals of Concern for sediment in Area 1.
[2]Risk-based criterion for soil for residential land use; *Preliminary Remediation Goals*, EPA Region IX, May 1998.
[3]This chemical was identified as a chemical of concern because the maximum concentration present in the sediment (from lake bottom to a depth of approximately 2.5 to 3 feet) in Area 1 is greater than the risk-based criterion for exposure to soil for a residential exposure scenario.
[4]Not available.

TABLE H2-2
IDENTIFICATION OF THE CHEMICALS OF CONCERN
FOR SEDIMENT IN AREA 2 [1]

Chemical	Maximum Concentration (mg/kg)	Risk-Based Criterion[2] (mg/kg)	Chemical of Concern[3]
2-Methylnaphthalene	2.505	NA	
4,4'-DDD	0.026	2.4	
4,4'-DDE	0.098	1.7	
4,4'-DDT	0.794	1.7	
4-Methylphenol	0.165	2,700	
Acenaphthene	7.943	2,600	
Aldrin	0.152	0.026	X
alpha-BHC	0.002	0.086	
alpha-Chlordane	0.032	1.6	
Aluminum	9,752	75,000	
Anthracene	25.662	14,000	
Antimony	71	30	X
Aroclor-1242	4.498	0.2	X
Aroclor-1260	5.604	0.2	X
Arsenic	86	0.38	X
Barium	273	5,200	
Benzo(j)fluoranthene	1.605	NA	
Benzo(a)anthracene	42.159	0.56	X
Benzo(a)pyrene	14.053	0.056	X
Benzo(b)fluoranthene	25.662	0.56	X
Benzo(g,h,i)perylene	5.560	NA	
Benzo(k)fluoranthene	32.994	5.6	X
Benzo(c)phenanthrene	0.299	NA	
Beryllium	0.29	150	
beta-BHC	0.0018	0.3	
Biphenyl	0.244	2,300	
bis(2-Ethylhexyl)phthalate	10.40	32	
Cadmium	8.9	37	
Calcium	28,688	NA	
Chromium	33	30	X
Chrysene	37.882	56	
Cobalt	12	3,300	
Copper	64	2,800	
delta-BHC	0.0054	NA	
Di-n-octylphthalate	29.328	1,100	
Dibenz(a,h)anthracene	12.220	0.056	X
Dibenzofuran	6.110	210	
Dieldrin	0.103	0.028	X
Endosulfan II	0.201	330	
Endosulfan sulfate	0.0062	NA	
Endrin	0.012	16	
Endrin aldehyde	0.268	NA	
Fluoranthene	73.320	2,000	

TABLE H2-2
IDENTIFICATION OF THE CHEMICALS OF CONCERN
FOR SEDIMENT IN AREA 2 [1]

Chemical	Maximum Concentration (mg/kg)	Risk-Based Criterion[2] (mg/kg)	Chemical of Concern[3]
Fluorene	12.220	1,800	
gamma-BHC (Lindane)	0.035	0.42	
gamma-Chlordane	0.022	1.6	
Heptachlor epoxide	0.0099	0.049	
Indeno(1,2,3-cd)pyrene	3.630	0.56	X
Iron	14,197	22,000	
Isoquinoline	0.281	NA	
Lead	409	400	X
Magnesium	1,689	NA	
Manganese	587	3,100	
Mercury	6.30	5.5	X
Naphthalene	0.286	55	
Nickel	18	1,500	
Phenanthrene	73.320	NA	
Potassium	630	NA	
Pyrene	61.100	1,500	
Selenium	0.75	370	
Silver	3.90	370	
Sodium	164	NA	
Thallium	0.70	6.0	
Vanadium	22	520	
Zinc	995	22,000	
11H-Benzo(a)fluorene	0.855	NA[4]	
Anthracene, 1-methyl	0.306	NA	
Anthracene, 2-methyl-	0.312	NA	
Benzo(b)naphtho(2,1-d)thioph	0.461	NA	
Decahydro-4,4,8,9,10-pentane	1.146	NA	
Docosane,7-hexyl-	0.319	NA	
Docosane, 9-butyl-	2.677	NA	
Dodecane	1.661	NA	
Dotriacontane	0.529	NA	
Eicosane	9.480	NA	
Eicosane, 10-methyl-	0.441	NA	
Heneicosane	2.685	NA	
Heptadecane	5.530	NA	
Heptadecane, 2,6-dimethyl-	3.950	NA	
Heptadecane, 9-octyl-	1.513	NA	
Hexacosane	1.364	NA	
Hexacosane, 9-octyl-	1.313	NA	
Hexadecane	2.778	NA	
Hexatriacontane	5.753	NA	
Naphthalene, 1,2-dimethyl-	0.312	NA	
Naphthalene, 1,4-dimethyl-	0.269	NA	
Naphthalene, 1,5-dimethyl-	0.532	NA	

TABLE H2-2
IDENTIFICATION OF THE CHEMICALS OF CONCERN FOR SEDIMENT IN AREA 2 [1]

Chemical	Maximum Concentration (mg/kg)	Risk-Based Criterion[2] (mg/kg)	Chemical of Concern[3]
Naphthalene, 2,3-dimethyl-	0.611	NA	
Naphthalene, 2,6-dimethyl-	0.611	NA	
Nonadecane	1.571	NA	
o-Terphenyl	0.565	NA	
Octadecane	5.135	NA	
Pentacosane	1.106	NA	
Pentadecane	1.674	NA	
Pentadecane, 2,6,10,14-tetra	3.736	NA	
Perylene	2.862	NA	
Phenanthrene, 1-methyl-	0.263	NA	
Pyrene, 1-methyl	0.607	NA	
Pyrene, 1-methyl-	0.403	NA	
Pyrene, 2-methyl-	1.589	NA	
Pyrene, 4-methyl-	0.550	NA	
Tetracosane	1.426	NA	
Tetradecane	1.111	NA	
Tetratetracontane	3.317	NA	
Tricosane	1.901	NA	
Tridecane	3.362	NA	
Undecane, 2-methyl-	0.284	NA	

[1]The maximum chemical concentration (wet weight) detected in sediment (from the surface of the lake bottom to a depth of approximately 2.5 to 3 feet) in Area 2 was compared to a risk-based criterion for soil for a residential exposure scenario. Chemicals with maximum chemical concentrations exceeding the risk-based criteria were identified as Chemicals of Concern for sediment in Area 2.
[2]Risk-based criterion for soil for residential land use; *Preliminary Remediation Goals*, EPA Region IX, May 1998.
[3]This chemical was identified as a chemical of concern because the maximum concentration present in the sediment (from lake bottom to a depth of approximately 2.5 to 3 feet) in Area 2 is greater than the risk-based criterion for exposure to soil for a residential exposure scenario.
[4]Not available.

TABLE H2-3
IDENTIFICATION OF THE CHEMICALS OF CONCERN
FOR SEDIMENT IN AREA 3 [1]

Chemical	Maximum Concentration (mg/kg)	Risk-Based Criterion[2] (mg/kg)	Chemical of Concern[3]
1,2,4-Trichlorobenzene	0.0063	480	
1,2-Dichlorobenzene	0.010	370	
1,3-Dichlorobenzene	0.036	41	
1,4-Dichlorobenzene	0.013	3	
2,4,5-Trichlorophenol	0.031	5,500	
2,4,6-Trichlorophenol	0.035	40	
2,4-Dichlorophenol	0.0069	160	
2,4-Dimethylphenol	0.016	1,100	
2,4-Dinitrotoluene	0.038	110	
2-Chloronaphthalene	0.0044	3,700	
2-Chlorophenol	0.0019	59	
2-Methylnaphthalene	0.036	NA	
2-Methylphenol	0.016	2,700	
2-Nitroaniline	0.034	3.3	
2-Nitrophenol	0.036	NA	
3,3'-Dichlorobenzidine	0.058	0.99	
3-Nitroaniline	0.005	NA	
4,4'-DDD	0.038	2.4	
4,4'-DDE	0.094	1.7	
4,4'-DDT	0.042	1.7	
4,6-Dinitro-2-methylphenol	0.0056	NA	
4-Bromophenyl-phenylether	0.022	NA	
4-Chloro-3-methylphenol	0.113	NA	
4-Chloroaniline	0.0082	220	
Acenaphthene	0.470	2,600	
Aldrin	0.044	0.026	X
alpha-BHC	0.0083	0.086	
alpha-Chlordane	0.029	1.6	
Aluminum	7,487	75,000	
Anthracene	0.558	14,000	
Antimony	6.80	30	
Aroclor-1242	1.302	0.2	X
Aroclor-1260	0.389	0.2	X
Arsenic	14	0.38	X
Barium	182	5,200	
Benzo(a)anthracene	1.410	0.56	X
Benzo(a)pyrene	1.436	0.056	X
Benzo(b)fluoranthene	3.002	0.56	X
Benzo(g,h,i)perylene	1,315	NA	
Benzo(k)fluoranthene	2.462	5.6	
Benzoic Acid	0.023	100,000	
Benzyl Alcohol	0.100	16,000	
Beryllium	0.81	150	

TABLE H2-3
IDENTIFICATION OF THE CHEMICALS OF CONCERN FOR SEDIMENT IN AREA 3 [1]

Chemical	Maximum Concentration (mg/kg)	Risk-Based Criterion[2] (mg/kg)	Chemical of Concern[3]
beta-BHC	0.01	0.3	
bis(2-Chloroethoxy)methane	0.011	NA	
bis(2-Chloroethyl)ether	0.0069	NA	
Bis(2-ethylhexyl)phthalate	19.475	32	
Butylbenzylphthalate	0.481	930	
Cadmium	1.60	37	
Calcium	3,836	NA	
Chromium	26	30	
Chrysene	1.898	56	
Cobalt	4.30	3,300	
Copper	38	2,800	
delta-BHC	0.022	NA	
Di-n-octylphthalate	32.775	1,100	
Dibenz(a,h)anthracene	0.660	0.056	X
Dibenzofuran	0.021	210	
Dieldrin	0.016	0.028	
Diethylphthalate	0.0038	44,000	
Dimethylphthalate	0.012	100,000	
Endosulfan Sulfate	0.025	NA	
Endosulfan I	0.012	330	
Endosulfan II	0.021	330	
Endrin	0.0094	16	
Endrin aldehyde	0.061	NA	
Endrin ketone	0.034	NA	
Fluoranthene	3.111	2,000	
Fluorene	1.057	1,800	
gamma-BHC	0.019	0.42	
gamma-Chlordane	0.043	1.6	
Heptachlor epoxide	0.027	0.049	
Heptachlor	0.003	0.099	
Hexachlorobenzene	0.337	0.28	X
Hexachloroethane	0.063	32	
Indeno(1,2,3-cd)pyrene	0.925	0.56	X
Iron	10,286	22,000	
Lead	373	400	
Magnesium	1,129	NA	
Manganese	254	3,100	
Mercury	0.29	5.5	
Methoxychlor	0.025	270	
N-Nitroso-di-n-propylamine	0.100	NA	
Naphthalene	0.033	55	
Nickel	12	1,500	
Nitrobenzene	0.057	16	
Pentachlorophenol	0.024	2.5	

TABLE H2-3
IDENTIFICATION OF THE CHEMICALS OF CONCERN FOR SEDIMENT IN AREA 3 [1]

Chemical	Maximum Concentration (mg/kg)	Risk-Based Criterion[2] (mg/kg)	Chemical of Concern[3]
Phenanthrene	4.168	NA	
Potassium	544	NA	
Pyrene	7.035	1,500	
Selenium	91	370	
Silver	2.90	370	
Sodium	104	NA	
Vanadium	15	520	
Zinc	252	22,000	
2,2'-oxybis(1-Chloropropane)	0.0031	NA[4]	
2-Methyloctadecane	1.614	NA	
Decane, 2-methyl-	2.719	NA	
Decane, 3,8-dimethyl-	3.928	NA	
Docosane	2.957	NA	
Docosane, 11-butyl-	2.942	NA	
Dodecane	1.330	NA	
Dodecane, 2,6,10-trimethyl-	4.403	NA	
Dodecane, 2,7,10-trimethyl-	2.033	NA	
Dotriacontane	1.848	NA	
Drometrizole	3.283	NA	
Eicosane	3.742	NA	
Eicosane,10-methyl-	1.169	NA	
Heneicosane	1.230	NA	
Heneicosane, 11-pentyl-	1.725	NA	
Heptacosane	3.784	NA	
Heptadecane	3.971	NA	
Heptadecane, 2,6,10,15-tetra	1.245	NA	
Heptadecane, 4-methyl-	3.257	NA	
Heptadecane, 9-octyl-	3.377	NA	
Hexacosane	1.760	NA	
Hexadecane	4.053	NA	
Hexadecane, 2,6,10,14-tetran	3.325	NA	
Hexadecane, 2,6,11,15-tetran	3.052	NA	
Hexadecane, 7,9-dimethyl-	1.948	NA	
Hexadecanoic acid	3.705	NA	
Nonadecane	3.065	NA	
Nonane, 3,7-dimethyl-	7.185	NA	
Octacosane	2.533	NA	
Octadecane	1.996	NA	
Octane, 2,3,6-trimethyl-	2.257	NA	
Pentacosane	2.155	NA	
Pentadecane	3.933	NA	
Pentadecane, 2,6,10,14-tetra	14.088	NA	
Pentadecane, 8-hexyl-	1.540	NA	
Perylene	2.642	NA	

TABLE H2-3
IDENTIFICATION OF THE CHEMICALS OF CONCERN
FOR SEDIMENT IN AREA 3 [1]

Chemical	Maximum Concentration (mg/kg)	Risk-Based Criterion[2] (mg/kg)	Chemical of Concern[3]
Tetradecane	8.218	NA	
Tridecane	3.652	NA	
Tridecane, 5-propyl-	3.168	NA	
Tridecane, 7-hexyl-	1.823	NA	
Undecane, 3,6-dimethyl-	1.272	NA	

[1]The maximum chemical concentration (wet weight) detected in sediment (from the surface of the lake bottom to a depth of approximately 2.5 to 3 feet) in Area 3 was compared to a risk-based criterion for soil for a residential exposure scenario. Chemicals with maximum chemical concentrations exceeding the risk-based criteria were identified as Chemicals of Concern for sediment in Area 3.
[2]Risk-based criterion for soil for residential land use; *Preliminary Remediation Goals*, EPA Region IX, May 1998.
[3]This chemical was identified as a chemical of concern because the maximum concentration present in the sediment (from lake bottom to a depth of approximately 2.5 to 3 feet) in Area 3 is greater than the risk-based criterion for exposure to soil for a residential exposure scenario.
[4]Not available.

TABLE H2-4
IDENTIFICATION OF THE CHEMICALS OF CONCERN
FOR SEDIMENT IN AREA 4 [1]

Chemical	Maximum Concentration (mg/kg)	Risk-Based Criterion[2] (mg/kg)	Chemical of Concern[3]
1,3-Dichlorobenzene	0.011	41	
1,4-Dichlorobenzene	0.0097	3	
2,4-Dichlorophenol	0.0097	160	
2,4-Dinitrotoluene	0.032	110	
2,6-Dinitrotoluene	0.049	55	
2-Methylnaphthalene	0.557	NA	
2-Nitroaniline	0.0039	3.3	
3,3'-Dichlorobenzidine	0.0084	0.99	
3-Nitroaniline	0.025	NA	
4,4'-DDD	2.779	2.4	X
4,4'-DDE	1.324	1.7	
4,4'-DDT	1.012	1.7	
4-Chloro-3-methylphenol	0.043	NA	
4-Chloroaniline	0.0032	220	
4-Nitroaniline	0.024	NA	
4-Nitrophenol	0.047	3,400	
Acenaphthene	0.471	2,600	
Acenaphthylene	0.038	NA	
Aldrin	0.264	0.026	X
alpha-BHC	0.0056	0.086	
alpha-Chlordane	0.247	1.6	
Aluminum	9,511	75,000	
Anthracene	0.453	14,000	
Antimony	7.10	30	
Arsenic	9.60	0.38	X
Barium	658	5,200	
Benzo(a)anthracene	1.982	0.56	X
Benzo(a)pyrene	1.817	0.056	X
Benzo(b)fluoranthene	2.313	0.56	X
Benzo(g,h,i)perylene	2.414	NA	
Benzo(k)fluoranthene	1.611	5.6	
Benzoic Acid	0.0058	100,000	
Benzyl Alcohol	0.078	16,000	
Beryllium	0.47	150	
beta-BHC	0.016	0.3	
bis(2-Chloroethoxy)methane	0.0019	NA	
bis(2-Chloroethyl)ether	0.0084	NA	
Bis(2-ethylhexyl)phthalate	4.543	32	
Butylbenzylphthalate	0.053	930	
Cadmium	3.70	37	
Calcium	32,038	NA	
Chromium	27	30	

TABLE H2-4
IDENTIFICATION OF THE CHEMICALS OF CONCERN
FOR SEDIMENT IN AREA 4 [1]

Chemical	Maximum Concentration (mg/kg)	Risk-Based Criterion[2] (mg/kg)	Chemical of Concern[3]
Chrysene	2.395	56	
Cobalt	4.80	3,300	
Copper	59	2,800	
delta-BHC	0.185	NA	
Di-n-octylphthalate	0.400	1,100	
Dibenz(a,h)anthracene	0.646	0.056	X
Dibenzofuran	0.0071	210	
Dieldrin	0.069	0.028	X
Diethylphthalate	0.0052	44,000	
Dimethylphthalate	0.0065	100,000	
Endosulfan Sulfate	0.035	NA	
Endosulfan I	0.019	330	
Endosulfan II	0.032	330	
Endrin	0.066	16	
Endrin aldehyde	0.041	NA	
Endrin ketone	0.096	NA	
Fluoranthene	2.726	2,000	
Fluorene	0.440	1,800	
gamma-BHC	0.011	0.42	
gamma-Chlordane	0.732	1.6	
Heptachlor epoxide	0.064	0.049	X
Heptachlor	0.0043	0.099	
Indeno(1,2,3-cd)pyrene	1.734	0.56	X
Iron	11,858	22,000	
Lead	137	400	
Magnesium	1,772	NA	
Manganese	486	3,100	
N-Nitroso-di-n-propylamine	0.256	91	
Naphthalene	0.016	55	
Nickel	15	1,500	
Nitrobenzene	0.022	16	
Phenanthrene	2.856	NA	
Potassium	697	NA	
Pyrene	4.625	1,500	
Silver	24	370	
Sodium	182	NA	
Vanadium	18	520	
Zinc	409	22,000	
1-Heptanol	3.783	NA	
1-Nonanol	2.837	NA	
2,2'-oxybis(1-Chloropropane)	0.0032	NA	
Dodecane, 2,6,10-trimethyl-	6.176	NA	
Eicosane	7.868	NA	

TABLE H2-4
IDENTIFICATION OF THE CHEMICALS OF CONCERN FOR SEDIMENT IN AREA 4 [1]

Chemical	Maximum Concentration (mg/kg)	Risk-Based Criterion[2] (mg/kg)	Chemical of Concern[3]
Heptadecane, 2,6,10,14-tetra	4.496	NA	
Hexadecane	5.037	NA	
Naphthalene, 1,4,6-trimethyl	3.937	NA	
Pentadecane, 2,6,10,14-tetra	10.808	NA	
Phenol, 4-(1-methyl-1-phenyl	5.674	NA	
Tetracosane	4.833	NA	
Tetradecane	6.253	NA	
Tridecane, 6-propyl-	4.721	NA	

[1]The maximum chemical concentration (wet weight) detected in sediment (from the surface of the lake bottom to a depth of approximately 2.5 to 3 feet) in Area 4 was compared to a risk-based criterion for soil for a residential exposure scenario. Chemicals with maximum chemical concentrations exceeding the risk-based criteria were identified as Chemicals of Concern for sediment in Area 4.
[2]Risk-based criterion for soil for residential land use; *Preliminary Remediation Goals*, EPA Region IX, May 1998.
[3]This chemical was identified as a chemical of concern because the maximum concentration present in the sediment (from lake bottom to a depth of approximately 2.5 to 3 feet) in Area 4 is greater than the risk-based criterion for exposure to soil for a residential exposure scenario.
[4]Not available.

TABLE H2-5
SUMMARY OF THE CHEMICALS OF CONCERN FOR SEDIMENT [1]

Chemical of Concern	Sediment Area 1	Sediment Area 2	Sediment Area 3	Sediment Area 4
Aldrin		X	X	X
Antimony	X	X		
Aroclor 1242	X	X	X	
Aroclor 1248	X			
Aroclor 1260	X	X	X	
Arsenic	X	X	X	X
Benzo[a]anthracene	X	X	X	X
Benzo[a]pyrene	X	X	X	X
Benzo[b]fluoranthene	X	X	X	X
Benzo[k]fluoranthene		X		
Chromium		X		
DDD				X
Dibenzo[a,h]anthracene	X	X	X	X
Dieldrin		X		X
Heptachlor epoxide				X
Hexachlorobenzene			X	
Indeno[1,2,3-cd]pyrene	X	X	X	X
Lead		X		
Mercury (inorganic)		X		

[1]Includes all chemicals present in sediment (from lake bottom to a depth of approximately 2.5 to 3 feet) at concentrations greater than acceptable (risk-based) concentrations for soil for a residential exposure scenario (refer to Tables H2-1 through H2-4).

X denotes that the chemical is a chemical of concern for sediment in the designated Area.

TABLE H2-6
IDENTIFICATION OF THE CHEMICALS OF CONCERN
FOR SURFACE WATER IN AREA 1[1]

Chemical	Maximum Concentration Area 1 (mg/l)	MCL[2] (mg/l)	Risk-Based Criterion[3] (mg/l)	Chemical of Concern[4]
Aluminum	0.142	NA[5]	37.0	
Arsenic	0.0023	0.05	--	
Barium	0.0471	2.0	--	
Calcium	27.7	NA	NA	
Copper	0.0019	1.3[6]	--	
Iron	0.272	NA	11	
Lead	0.0028	0.015[6]	--	
Magnesium	2.67	NA	NA	
Manganese	0.0691	NA	1.7	
Sodium	7.11	NA	NA	
Vanadium	0.0013	NA	0.26	
3-Buten-2-one, 3-methyl	0.01	NA	NA	
Hexadecanoic acid	0.007	NA	NA	

[1]The maximum chemical concentration detected in surface water for Area 1 was compared to the Maximum Contaminant Level (MCL), or if a MCL was not available, to a risk-based criterion for drinking water. Chemicals with maximum chemical concentrations exceeding the MCL or risk-based criterion were identified as Chemicals of Concern for surface water for Area 1.

[2]Maximum Contaminant Level, Safe Drinking Water Act; *Drinking Water Regulations and Health Advisories*, EPA 1996.

[3]*Preliminary Remediation Goals*, EPA Region IX, May 1998; value presented represents a risk-based chemical concentration for a drinking water source.

[4]The maximum chemical concentration in surface water exceeds the MCL or the risk-based criterion.

[5]Not available.

[6]Action Level; *Drinking Water Regulations and Health Advisories*, EPA 1996.

TABLE H2-7
IDENTIFICATION OF THE CHEMICALS OF CONCERN
FOR SURFACE WATER IN AREA 2 [1]

Chemical	Maximum Concentration Area 2 (mg/l)	MCL[2] (mg/l)	Risk-Based Criterion[3] (mg/l)	Chemical of Concern[4]
Aluminum	0.187	NA[5]	37.0	
Arsenic	0.0015	0.05	--	
Barium	0.0515	2.0	--	
Calcium	30.8	NA	NA	
Chromium	0.0017	0.1	--	
Copper	0.0026	1.3[6]	--	
Iron	0.354	NA	11	
Lead	0.0054	0.015[6]	--	
Magnesium	2.97	NA	NA	
Manganese	0.0843	NA	1.7	
Sodium	7.84	NA	NA	
Vanadium	0.0014	NA	0.26	
3-Buten-2-one, 3-methyl	0.008	NA	NA	
Hexadecanoic acid	0.009	NA	NA	
Decane	0.011	NA	NA	
Nonane	0.004	NA	NA	

[1]The maximum chemical concentration detected in surface water for Area 2 was compared to the Maximum Contaminant Level (MCL), or if a MCL was not available, to a risk-based criterion for drinking water. Chemicals with maximum chemical concentrations exceeding the MCL or risk-based criterion were identified as Chemicals of Concern for surface water for Area 2.

[2]Maximum Contaminant Level, Safe Drinking Water Act; *Drinking Water Regulations and Health Advisories*, EPA 1996.

[3]*Preliminary Remediation Goals*, EPA Region IX, May 1998; value presented represents an risk-based chemical concentration for a drinking water source.

[4]The maximum chemical concentration in surface water exceeds the MCL or the risk-based criterion.

[5]Not available.

[6]Action Level; *Drinking Water Regulations and Health Advisories*, EPA 1996.

TABLE H2-8
IDENTIFICATION OF THE CHEMICALS OF CONCERN
FOR SURFACE WATER IN AREA 3 [1]

Chemical	Maximum Concentration Area 3 (mg/l)	MCL[2] (mg/l)	Risk-Based Criterion[3] (mg/l)	Chemical of Concern[4]
Aluminum	0.149	NA[5]	37.0	
Arsenic	0.0024	0.05	--	
Barium	0.0481	2.0	--	
Calcium	25.0	NA	NA	
Copper	0.0023	1.3 [6]	--	
Iron	0.332	NA	11	
Lead	0.0031	0.015 [6]	--	
Magnesium	2.69	NA	NA	
Manganese	0.0729	NA	1.7	
Sodium	10.3	NA	NA	
Vanadium	0.0015	NA	0.26	
Hexadecanoic acid	0.013	NA	NA	
Decane	0.056	NA	NA	
9,12,15-Octadecatrienoic acid	0.018	NA	NA	
1,2,4,5-tetramethylbenzene	0.012	NA	NA	
2-methyl decane	0.015	NA	NA	
3-methyl decane	0.032	NA	NA	
2-methyl nonane	0.011	NA	NA	
3-methyl nonane	0.022	NA	NA	

[1]The maximum chemical concentration detected in surface water for Area 3 was compared to the Maximum Contaminant Level (MCL), or if a MCL was not available, to a risk-based criterion for drinking water. Chemicals with maximum chemical concentrations exceeding the MCL or risk-based criterion were identified as Chemicals of Concern for surface water for Area 3 .

[2]Maximum Contaminant Level, Safe Drinking Water Act; *Drinking Water Regulations and Health Advisories*, EPA 1996.

[3]*Preliminary Remediation Goals*, EPA Region IX, May 1998; value presented represents an risk-based chemical concentration for a drinking water source.

[4]The maximum chemical concentration in surface water exceeds the MCL or the risk-based criterion.

[5]Not available.

[6]Action Level; *Drinking Water Regulations and Health Advisories*, EPA 1996.

TABLE H2-9
IDENTIFICATION OF THE CHEMICALS OF CONCERN
FOR SURFACE WATER IN AREA 4 [1]

Chemical	Maximum Concentration Area 4 (mg/l)	MCL[2] (mg/l)	Risk-Based Criterion[3] (mg/l)	Chemical of Concern[4]
Aluminum	0.647	NA[5]	37.0	
Arsenic	0.0047	0.05	--	
Barium	0.120	2.0	--	
Cadmium	0.00055	0.005	--	
Calcium	50.7	NA	NA	
Chromium	0.0022	0.1	--	
Cobalt	0.0012	NA	2.2	
Copper	0.0064	1.3[6]	--	
Iron	1.56	NA	11	
Lead	0.0081	0.015[6]	--	
Magnesium	6.61	NA	NA	
Manganese	0.269	NA	1.7	
Mercury	0.0025	0.002	--	
Potassium	3.66	NA	NA	
Sodium	15.6	NA	NA	
Vanadium	0.0029	NA	0.26	
Zinc	0.0618	NA	11.0	
3-Buten-2-one, 3-methyl	0.040	NA	NA	
Hexadecanoic acid	0.011	NA	NA	
Decane	0.011	NA	NA	
3-hydroxy, 2-butanone	0.005	NA	NA	

[1]The maximum chemical concentration detected in surface water for Area 4 was compared to the Maximum Contaminant Level (MCL), or if a MCL was not available, to a risk-based criterion for drinking water. Chemicals with maximum chemical concentrations exceeding the MCL or risk-based criterion were identified as Chemicals of Concern for surface water for Area 4.

[2]Maximum Contaminant Level, Safe Drinking Water Act; *Drinking Water Regulations and Health Advisories*, EPA 1996.

[3]*Preliminary Remediation Goals*, EPA Region IX, May 1998; value presented represents an risk-based chemical concentration for a drinking water source.

[4]The maximum chemical concentration in surface water exceeds the MCL or the risk-based criterion.

[5]Not available.

[6]Action Level; *Drinking Water Regulations and Health Advisories*, EPA 1996.

TABLE H2-10
SUMMARY OF THE CHEMICALS OF CONCERN FOR FISH [1]

Chemical of Concern	Carp	Bigmouth Buffalo	Green Sunfish	Bluegill	Black Bullhead	Yellow Bullhead
Aldrin	X	X	X		X	X
Aroclor 1248 [2]	X	X	X	X	X	X
Aroclor 1260 [2]	X		X	X	X	X
β-BHC	X					
δ-BHC	X	X	X			
Chlordane	X	X			X	X
DDD	X	X	X	X	X	X
DDE	X		X	X	X	X
DDT	X	X	X	X	X	X
Dieldrin	X	X	X	X	X	X
Endrin	X	X			X	X
Endrin aldehyde	X	X	X	X	X	X
Endosulfan	X	X	X		X	X
Heptachlor	X					
Heptachlor epoxide	X	X				
Lindane		X				
Methyl mercury	X	X	X			

[1]Includes all chemicals detected in fish tissue.
[2]Polychlorinated biphenyls (PCBs).

X denotes that the chemical is a chemical of concern for the designated fish species.

H3.0 EXPOSURE ASSESSMENT

Exposure is defined as the contact of a receptor (person) with a chemical agent. Exposure to chemicals present in the Capitol Lakes system was assessed in order to estimate the level of exposure that a receptor may receive during the recreational use of the Lakes. The outcome of the exposure assessment was a quantitative estimate of exposure (chemical intake) for each pathway of exposure identified at the Capitol Lakes system. The quantitative results of the exposure assessment were combined with chemical-specific toxicity information (Section H4.0) to characterize potential health risks during the final step of the risk assessment process (Section H5.0).

H3.1 Exposure Areas

The Capitol Lake system was divided into four areas for investigation and risk assessment purposes. The large north lake was divided into two areas, Area 1 and Area 2. The southeastern and southwestern arms of the north lake were designated as Area 1 and the northern arm of the north lake was designated as Area 2. The south lake was designated as Area 3 and the east lake was designated as Area 4. Areas 1, 2, 3, and 4 were identified as potential exposure areas for the assessment of exposure to chemicals present in the Capitol Lakes system.

H3.2 Receptors, Exposure Media, and Exposure Pathways

Receptors. A receptor is an individual that is exposed or potentially exposed to a chemical agent present in the environment. Potential receptors at the Capitol Lake system include recreational users of the Lakes, i.e., individuals who consume fish caught in the Lake system and individuals who wade or swim in the Lake system.

Exposure media. An exposure medium is an environmental medium via which a receptor may be exposed to a chemical agent. The exposure media for Areas 1 and 3 include: 1) sediment (surface of lake bottom to a depth of approximately 2.5 to 3 feet); and 2) fish. Sediment present from the surface of the lake bottom to a depth of approximately 2.5 to 3 feet was identified as an exposure medium because it was felt by the site investigators that this depth interval best represents the sediment to which receptors wading or swimming in the Lake system will be exposed. The fish species included in the assessment of Areas 1 and 3 include carp, bigmouth buffalo, green sunfish, bluegill, black bullhead, and yellow bullhead. The exposure medium of concern at Capitol Lake Areas 2 and 4 included sediment (surface of lake bottom to a depth of approximately 2.5 to 3 feet) only since fish were reported to not be present in Areas 2 and 4 at the time of the site investigation. Surface water was not identified as an exposure medium because no COCs were identified for inclusion in the quantitative risk assessment (i.e., the chemical concentrations reported for surface water in each Area of the Lakes were below acceptable concentrations for a drinking water source, refer to Section H2.0).

Exposure pathways. An exposure pathway is defined as the course a chemical agent takes from a source to an exposed individual. An exposure pathway describes a unique mechanism by which an individual is exposed to chemical agents present at an area of investigation.

The potential exposure pathways identified for Areas 1 and 3 of the Lake system include:

- the ingestion of fish caught in the Lake System;
- the incidental ingestion of sediment while wading or swimming; and
- dermal contact with sediment while wading or swimming.

The potential exposure pathways identified for Areas 2 and 4 of the Lake system include:

- the incidental ingestion of sediment while wading or swimming; and
- dermal contact with sediment while wading or swimming.

A conceptual site model of the Lake system is presented in Figure 1. This model illustrates the exposure pathways identified above.

H3.3 Quantification of Exposure

Exposure was quantified for each exposure pathway identified above. The quantification of exposure was conducted in two stages: the estimation of exposure concentrations and the calculation of chemical intakes.

H3.3.1 Exposure Concentration

The exposure concentration is the concentration of the chemical agent in the exposure medium to which the receptor is exposed. An exposure concentration was determined for each COC in each exposure medium for each Area of the Lake System.

Methods. The arithmetic mean concentration was used as the exposure concentration in accordance with the guidelines presented in *Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana*, Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife and Fisheries, 1997. In the calculation of the arithmetic mean, concentrations of COCs that were below the method detection limit were assigned a value of zero and included in the mean in accordance with the guidelines set forth in *Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana*, Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife and Fisheries, 1997. The

data sets used in the calculation of the exposure concentrations are presented in the main text of the site assessment document.

Sediment. An exposure concentration was determined for sediment (surface to a depth of approximately 2.5 to 3 feet depending on the depth intervals submitted for chemical analysis) for each Area of the Lake system. The arithmetic mean of chemical concentrations detected in sediment (*Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana*, Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife and Fisheries, 1997) from the surface of the lake bottom to a depth of approximately 2.5 to 3 feet was used as the exposure concentration for the ingestion of sediment and dermal contact with sediment. The exposure concentrations for sediment are expressed as mg of chemical per kg of sediment (mg/kg) and are presented in Table H3-1.

Fish. An exposure concentration was determined for each species of fish included in the assessment. The arithmetic mean of chemical concentrations detected in the fish tissues (edible portions) was used as the exposure concentration for the ingestion of fish obtained from Capitol Lakes (*Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana*, Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife and Fisheries, 1997). The fish tissue exposure concentrations for PCBs, DDT, DDE, and DDT were adjusted to account for the reduction in chemical concentrations associated with the cooking of the fish prior to ingestion. The exposure concentrations for DDT, DDE, and DDD were reduced by 26% and the exposure concentrations for PCBs were reduced by 16% to account for the reduction in chemical concentration associated with the cooking process (*The Effect of Cooking Practices on the Concentration of DDT and PCB Compounds in the Edible Tissue of Fish*, Wilson, N.D., Shear, N.M., Paustenbach, D.J., and Price, P.S. 1998). The exposure concentrations for fish are expressed as mg of chemical per kg fish tissue (mg/kg) and are presented in Table H3-2.

H3.3.2 Chemical Intake

Exposure estimates are expressed in terms of the mass of chemical in contact with the body per unit body weight per unit time (e.g., mg of chemical per kg of body weight per day, also expressed as mg/kg-day) and are termed "chemical intakes." Chemical intakes were estimated for each exposure pathway identified at each Area of the Capitol Lakes system (Tables H3-3, H3-4, and H3-6). To estimate chemical intake, assumptions were made with regard to contact rate (amount of contaminated medium contacted per unit time or event); exposure frequency (the number of days per year the exposure occurs), exposure duration (the number of years the exposure occurs), body weight, and averaging time (the period of time over which exposure is averaged). The exposure parameters for

the Capitol Lakes exposure assessment were selected to be representative of reasonable maximum exposure (RME) scenario. The RME is defined as the highest exposure that is reasonably expected to occur at a site. The intent of the RME is to estimate a conservative exposure case (i.e., well above the average case) that is still within the range of possible exposures (*Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual*, EPA 1989).

Sediment. The methods and assumptions used in the estimation of chemical intake associated with exposure to chemicals present in sediment while swimming or wading at Capitol Lakes are consistent with the guidelines presented in *Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual (Part A)*, Chapter 6, Exposure Assessment, EPA 1989 (EPA/540/1-89/002); *Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana*, Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife and Fisheries, 1997; *Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors*; EPA 1991; *Exposure Factors Handbook*, EPA 1997; *Soil Screening Guidance*, EPA 1996; *Preliminary Remediation Goals*, EPA Region IX 1998; *Risk-Based Concentration Table*, EPA Region III, 1998; *Risk Assessment Guidance for Superfund Volume I: Human Health Evaluation Manual Supplemental Guidance Dermal Risk Assessment, Interim Guidance*, EPA 1998; and *LDEQ RECAP*, LDEQ 1998. In accordance with EPA guidelines, noncarcinogenic health effects associated with the ingestion of sediment were evaluated for a child receptor (ages 1-6 years). Children ages 1 year through 6 years are thought to have the highest soil ingestion rate coupled with the lowest body weight (i.e., the greatest exposure). To allow for the assessment of cumulative noncarcinogenic health effects associated with exposure to sediment, a child scenario was also used for the assessment of noncarcinogenic health effects associated with dermal contact with sediment. For the assessment of carcinogenic health effects, an adult receptor was evaluated. For sediment ingestion, the residential soil ingestion rates of 200 mg/day and 100 mg/day were assumed for the sediment ingestion rates for child and adult receptors, respectively since sediment ingestion rates are not available (*Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"*, EPA 1991; *Soil Screening Guidance*, EPA 1996; *EPA Region IX Preliminary Remediation Goals*, 1998; *EPA Region III Risk-Based Concentration Table*, 1998). For dermal exposure to sediment, the skin surface area assumed available for contact with sediment included the forearms, hands, legs, and feet. Surface area estimates for the adult and child receptor were obtained from *Exposure Factor Handbook*, EPA 1997. An adherence factor of 26.5 mg/cm^2 was assumed for the adherence of sediment to the skin. This is the average value for adherence of wet sediment to the arms, hands, legs, and feet of children playing on a lake shoreline (*Exposure Factor Handbook*, EPA 1997). The dermal absorption factors were obtained from *Risk Assessment Guidance for Superfund Volume I: Human Health Evaluation Manual Supplemental Guidance Dermal Risk Assessment, Interim Guidance*, EPA 1998. The recreational receptors were assumed to swim or wade at the Capitol

Lakes 12 times per year (exposure frequency). This is the recommended swimming frequency for the general population (*Exposure Factor Handbook*, EPA 1997). A recreational receptor was assumed to swim at Capitol Lakes for a duration of 70 years (*Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana*, Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife and Fisheries, 1997). An adult was assumed to have a body weight of 70 kg and a child was assumed to have a body weight of 15 kg (*Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual (Part A)*, EPA 1989; *Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"*, EPA 1991; *Soil Screening Guidance*, EPA 1996; *EPA Region IX Preliminary Remediation Goals*, 1998; *EPA Region III Risk-Based Concentration Table*, 1998). The equations and exposure assumptions used to calculate chemical intake for sediment are presented in Tables H3-1, H3-3, H3-4, and H3-5.

Fish. The methods and assumptions used in the estimation of chemical intake associated with the ingestion of fish obtained from Capitol Lakes are consistent with the guidelines presented in *Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana*, Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife and Fisheries, 1997. The fish ingestion rate was assumed to be 0.03 kg/day (one 8 ounce meal per week) for an adult and 0.0043 kg (3 grams of fish per kg of body weight per fish meal) for a child. An absorption factor of 1.0 (100% absorption) was conservatively assumed for all COCs. The receptors were assumed to ingestion fish 365 days/year (exposure frequency) for 70 years (exposure duration). The body weight for adult was assumed to be 70 kg and the body weight for a child was assumed to be 10 kg. The equations and exposure assumptions used to calculate chemical intake associated with fish ingestion are presented in Tables H3-2 and H3-6.

TABLE H3-1
EXPOSURE CONCENTRATIONS FOR SEDIMENT[1]
(mg/kg)

Chemical of Concern	Sediment Area 1	Sediment Area 2	Sediment Area 3	Sediment Area 4
Aldrin	--	0.0335	0.018	0.0620
Antimony	12.8	22.3	--	--
Aroclor 1242	0.311	1.58	0.730	--
Aroclor 1248	0.232	--	--	--
Aroclor 1260	0.203	1.38	0.276	--
Arsenic	13.6	23.2	7.75	6.12
Benzo[a]anthracene	0.401	7.88	0.814	0.925
Benzo[a]pyrene	0.449	3.34	0.816	0.885
Benzo[b]fluoranthene	0.453	3.34	1.06	1.09
Benzo[k]fluoranthene	--	4.15	--	--
Chromium	--	15.9	--	--
DDD	--	--	--	0.752
Dibenzo[a,h]anthracene	0.232	4.25	0.660	0.364
Dieldrin	--	0.0192	--	0.020
Heptachlor epoxide	--	--	--	0.030
Hexachlorobenzene	--	--	0.337	--
Indeno[1,2,3-cd]pyrene	0.396	1.46	0.328	0.781
Lead	--	156	--	--
Mercury (inorganic)	--	0.95	--	--

[1]Exposure concentrations represent the average chemical concentration detected in sediment present from the surface of the lake bottom to a depth of approximately 2.5 to 3 feet.

TABLE H3-2
EXPOSURE CONCENTRATIONS FOR FISH [1]
(mg/kg)

Chemical of Concern	Carp	Bigmouth Buffalo	Green Sunfish	Bluegill	Black Bullhead	Yellow Bullhead
Aldrin	0.0044	0.0085	0.0013	--	0.0049	0.0016
Aroclor 1248 [2]	0.14	0.40	0.054	0.077	0.13	0.082
Aroclor 1260 [2]	0.20	--	0.085	0.036	0.36	0.21
β-BHC	0.0017	--	--	--	--	--
δ-BHC	0.0018	0.0028	0.00036	--	--	--
α-Chlordane	0.0099	0.025	--	--	0.026	0.0043
DDD [3]	0.0077	0.022	0.0022	0.0011	0.032	0.014
DDE [3]	0.0080	--	0.0034	0.0012	0.037	0.016
DDT [3]	0.0015	0.033	0.0028	0.0010	0.020	0.0069
Dieldrin	0.0074	0.017	0.0014	0.0012	0.011	0.0022
Endrin	0.0019	0.0096	--	--	0.020	0.0033
Endrin aldehyde	0.0014	0.011	0.0022	0.00094	0.010	0.0089
Endosulfan	0.0012	0.0099	0.0015	--	0.013	0.0041
Heptachlor	0.00093	--	--	--	--	--
Heptachlor Epoxide	0.001	0.0032	--	--	--	--
Lindane	--	0.0019	--	--	--	--
Methyl mercury	0.03	0.027	0.0084	--	--	--

[1]Exposure concentrations represent the average chemical concentration detected in fish tissues.
[2]Exposure concentration for DDD, DDE, and DDT represent the average concentration in fish tissue adjusted downward by 26 percent to account for reduction in chemical concentrations associated with cooking (*The Effect of Cooking Practices on the Concentration of DDT and PCB Compounds in the Edible Tissue of Fish*, Wilson, N.D., Shear, N.M., Paustenbach, D.J., and Price, P.S. 1998).
[3] Exposure concentration for Aroclor 1248 and 1260 represent the average concentration in fish tissue adjusted downward by percent to account for reduction in chemical concentrations associated with cooking (*The Effect of Cooking Practices on the Concentration of DDT and PCB Compounds in the Edible Tissue of Fish*, Wilson, N.D., Shear, N.M., Paustenbach, D.J., and Price, P.S. 1998).

TABLE H3-3
CALCULATION OF CHEMICAL INTAKE FOR THE
INGESTION OF CHEMICALS IN SEDIMENT PATHWAY [1]

$$\text{Chemical Intake (mg/kg-day)} = \frac{CS \times IR \times CF \times FI \times EF \times ED}{BW \times AT}$$

Where:

CS = Chemical Concentration in Sediment (mg/kg)
IR = Ingestion Rate (mg sediment/day)
CF = Conversion Factor (10^{-6} kg/mg)
FI = Fraction Ingested from Contaminated Source (unitless)
EF = Exposure Frequency (days/year)
ED = Exposure Duration (years)
BW = Body Weight (kg)
AT = Averaging Time (period over which exposure is averaged - days)

Input values:

CS = Arithmetic mean of chemical concentrations detected in sediment [2] (mg/kg)
IR = 200 mg/day (children, 1 through 6 years old) (noncarcinogens) [3]
100 mg/day (adults) (carcinogens) [3]
CF = 10^{-6} kg/mg
FI = 1.0 (unitless)
EF = 12 events/year [4]
ED = 70 years (adults, carcinogens) [2]
= 6 years (children, noncarcinogens) [5]
BW = 70 kg (adult) [1,2,5]
= 15 kg (children 1 through 6 years old) [1,5]
AT = Pathway-specific period of exposure for noncarcinogenic effects (i.e., ED x 365 days/year), and 70 years for carcinogenic effects (i.e., 70 years x 365 days/year) [1]

Intake Factors:

$$\text{Chemical Intake} = CS \times \frac{IR \times CF \times FI \times EF \times ED}{BW \times AT} = CS \times \text{Intake Factor}$$

Adult; Carcinogens: Chemical Intake = CS x Intake Factor = CS x 4.7E-08 kg/kg-day

Child; Noncarcinogens: Chemical Intake = CS x Intake Factor = CS x 4.4E-07 kg/kg-day

[1] *Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual, Part A* (EPA 1989).

[2] *Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana*, Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife and Fisheries, 1997.

[3] Soil ingestion rates (sediment ingestion rates are not available) (*Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"*, EPA 1991; *Soil Screening Guidance*, EPA 1996; EPA Region IX *Preliminary Remediation Goals*, 1998; EPA Region III *Risk-Based Concentration Table*, 1998).

[4] Recommended swimming frequency for the general population; *Exposure Factors Handbook*, EPA 1997.

[5] *Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"*, EPA 1991; *Soil Screening Guidance*, EPA 1996; *EPA Region IX Preliminary Remediation Goals*, 1998; *EPA Region III Risk-Based Concentration Table*, 1998.

TABLE H3-4
CALCULATION OF CHEMICAL INTAKE FOR THE
DERMAL CONTACT WITH CHEMICALS IN SEDIMENT PATHWAY [1]

$$\text{Chemical Intake (absorbed dose) (mg/kg-day)} = \frac{CS \times CF \times SA \times AF \times ABS \times EF \times ED}{BW \times AT}$$

Where:

CS = Chemical Concentration in Sediment (wet weight) (mg/kg)
CF = Conversion Factor (10^{-6} kg/mg)
SA = Skin Surface Area Available for Contact with Sediment (cm^2/event)
AF = Sediment-to-Skin Adherence Factor (mg/cm^2)
ABS = Dermal Absorption Factor (unitless)
EF = Exposure Frequency (events/year)
ED = Exposure Duration (years)
BW = Body Weight (kg)
AT = Averaging Time (period over which exposure is averaged - days)

Input values:

CS = Arithmetic mean of chemical concentration in the sediment (wet weight) (mg/kg) [2]
CF = 10^{-6} kg/mg
SA = 6,170 cm^2/event (adult, includes forearms, hands, legs and feet) [3]
3,920 cm^2/event (child, includes forearms, hands, legs, and feet) [3]
AF = 26.5 mg/cm^2 (wet sediment) [4]
ABS = Chemical-specific value (this value accounts for desorption of chemical from the soil matrix and absorption of chemical across the skin) (refer to Table H3-5 for the ABS factors)
EF = 12 events/year [3]
ED = 70 years (adults, carcinogens) [2]
6 years (children ages 1 to 6 years, noncarcinogens) [5]
BW = 70 kg (adult) [1,2,5]
15 kg (child) [1,5]
AT = Pathway-specific period of exposure for noncarcinogenic effects (i.e., ED x 365 days/year) and 70 year lifetime for carcinogenic effects (i.e., 70 years x 365 days/year) [1]

Intake Factors:

$$\text{Chemical Intake} = CS \times \frac{CF \times SA \times AF \times EF \times ED}{BW \times AT} \times ABS = CS \times \text{Intake factor} \times ABS$$

Adult; Carcinogens: Chemical Intake = CS x Intake Factor x ABS = CS x 7.7E-05 kg/kg-day x ABS

Child; Noncarcinogens: Chemical Intake = CS x Intake Factor x ABS = CS x 2.3E-04 kg/kg-day x ABS

[1] *Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual, Part A* (EPA 1989).
[2] *Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana*, Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife and Fisheries, 1997.
[3] *Exposure Factors Handbook*, EPA 1997.
[4] The average value for adherence of wet sediment to the hands, arms, legs and of children playing on a lake shoreline; *Exposure Factors Handbook*, EPA 1997.
[5] *Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"*, EPA 1991; *Soil Screening Guidance*, EPA 1996; *EPA Region IX Preliminary Remediation Goals*, 1998; *EPA Region III Risk-Based Concentration Table*, 1998.

TABLE H3-5
DERMAL ABSORPTION FACTORS (ABS)

Chemical of Concern	Dermal Absorption Factors [1] (unitless)
DDD	0.03
Aldrin	0.10
Antimony	0.01
Aroclor 1242	0.14
Aroclor 1248	0.14
Aroclor 1260	0.14
Arsenic	0.03
Dieldrin	0.10
Heptachlor epoxide	0.10
Hexachlorobenzene	0.10
Chromium	0.01
Mercury (inorganic)	0.01

[1]The dermal absorption factors estimate the amount of chemical that is absorbed through the skin into the body. The dermal absorption factors were obtained from *Risk Assessment Guidance for Superfund Volume I: Human Health Evaluation Manual Supplemental Guidance Dermal Risk Assessment, Interim Guidance*, EPA 1998.

TABLE H3-6
CHEMCIAL INTAKE FOR THE INGESTION OF FISH PATHWAY [1]

$$\text{Chemical Intake (mg/kg-day)} = \frac{CT \times IR \times AF \times EF \times ED}{BW \times AT}$$

Where:

CT = Contaminant Concentration in Fish Tissue (mg/kg)
IR = Ingestion Rate (kg/meal)
AF = Absorption Factor (unitless)
EF = Exposure Frequency (days/year)
ED = Exposure Duration (years)
BW = Body Weight (kg)
AT = Averaging Time (period over which exposure is averaged - days)

Input values:

CF = Arithmetic mean of chemical concentrations detected in fish tissues (wet weight) (mg/kg)[1,2]
IR = 0.03 kg/day (adult) [1,3]; 0.0043 kg/day (child) [1,4]
BW = 70 kg (adult) [1]
10 kg (child) [1]
AF = Absorption Factor; an absorption factor of 100% (AF = 1) was assumed.
EF = 365 days/year [1]
ED = 70 years [1]
AT = Pathway-specific period of exposure for noncarcinogenic effects (i.e., ED x 365 days/year), and 70 year lifetime for carcinogenic effects (i.e., 70 years x 365 days/year)

Intake factors:

$$\text{Chemical Intake} = CT \times \text{Intake factor} \times AF = CT \times \frac{IR \times EF \times ED}{BW \times AT} \times AF$$

Adult: Chemical Intake = CT x 4.3E-04 kg/kg-day x AF

Child: Chemical Intake = CT x 4.3E-04 kg/kg-day x AF

[1] *Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana*, Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife and Fisheries, 1997.

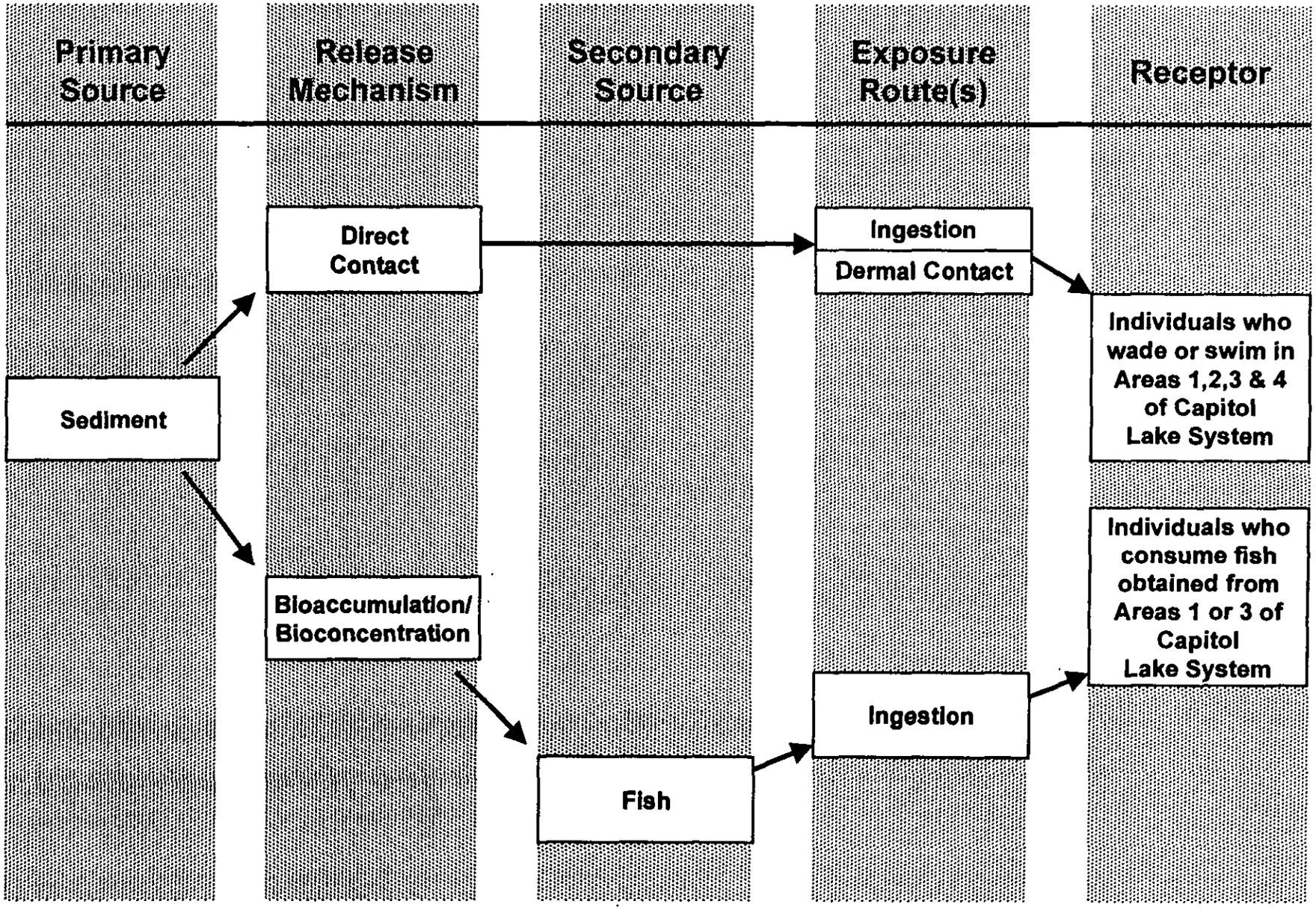
[2] The exposure concentrations for PCBs, DDT, DDE, and DDD were adjusted to account for losses in chemical mass due to cooking (*The Effect of Cooking Practices on the Concentration of DDT and PCB Compounds in the Edible Tissue of Fish*, Wilson, N.D., Shear, N.M., Paustenbach, D.J., and Price, P.S. 1998).

[3] Based on one 8 ounce meal per week.

[4] Based on 3 grams of fish/kg body weight/fish meal.

Figure 1

Capitol Lake Conceptual Site Model



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H4.0 TOXICITY ASSESSMENT

The purpose of the toxicity assessment is to weigh available evidence regarding the potential for a chemical to cause adverse health effects in exposed individuals, and to provide, where possible, a quantitative dose-response relationship (i.e., a quantitative estimate of the relationship between the extent of exposure to a chemical and the increased likelihood and/or severity of adverse health effects) (*Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual, Part A* (EPA 1989). EPA has performed toxicity assessments for numerous chemicals found in the environment. From these assessments, EPA has issued toxicity values that can be used to estimate the incidence of adverse effects occurring in humans at different exposure levels. A toxicity value is a numerical expression of a chemical's dose-response relationship [the relationship between the dose of chemical received (i.e., the chemical intake) and the incidence of adverse health effects in the exposed population] that is used in the quantitation of health risks. There are two types of toxicity values: reference doses (RfD), which are used to assess noncarcinogenic health effects (adverse health effects other than cancer), and slope factors (SF), which are used to assess carcinogenic health effects (cancer). A RfD is defined as an estimate (with an uncertainty spanning perhaps an order of magnitude or greater) of a daily exposure level for the human population, including sensitive subpopulations, that is likely so be without an appreciable risk of deleterious effects during a lifetime (*Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual, Part A* (EPA 1989). Reference doses are expressed in units of mg chemical per kg of body weight per day (mg/kg-day). The reference doses for the COCs at Capitol Lakes are presented in Table H4-1. A slope factor is defined as a plausible upper-bound estimate of the probability of a response per unit intake of a chemical over a lifetime (*Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual, Part A* (EPA 1989). The slope factor is used to estimate an upper-bound probability of an individual developing cancer as a result of a lifetime of exposure to a particular level of a potential carcinogen (cancer-causing chemical). Slope Factors are expressed in units of the probability of risk per mg of chemical per kg of body weight per day [$(mg/kg\text{-}day)^{-1}$]. The SFs for the COCs are presented in Table H4-2. Slope factors are accompanied by a weight-of-evidence classification that indicates the strength of evidence that the chemical is a human carcinogen. The EPA weight-of-evidence classifications for the COCs are presented Table H4-2. The definitions of the EPA weight-of-evidence classifications are presented in Table H4-3. The toxicity values and weight-of-evidence classifications used in the Capitol Lakes risk assessment were obtained from EPA's Integrated Risk Information System (IRIS) (http://www.epa.gov/iris/). For COCs not included in the IRIS database, toxicity values were obtained from EPA's *Health Effects Assessment Summary Tables* or *EPA Region IX Preliminary Remediation Goals*, EPA 1998.

EPA toxicity values are not issued for the dermal route of exposure. To assess toxicity by the dermal route, dermal toxicity values were developed by adjusting the oral toxicity value to account for oral absorption efficiency when absorption data were available for

the COC. To develop a dermal RfD, the oral RfD was multiplied by the oral absorption efficiency in the test species on which the oral RfD is based:

Dermal RfD = oral RfD x oral absorption efficiency

To develop a dermal SF, the oral SF was divided by the oral absorption efficiency in the test species on which the oral slope factor is based:

Dermal SF = oral SF / oral absorption efficiency

The oral absorption efficiencies used in the development of the dermal RfDs and SFs are presented in Table H4-4. This approach is consistent with the guidelines presented in *Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual (Part A),* Appendix A, Adjustments for Absorption Efficiency, EPA 1989 (EPA/540/1-89/002). When absorption data were not available for a COC, the oral unadjusted oral toxicity value was used. Dermal toxicity values were not developed for the polycyclic aromatic hydrocarbon PAHs. EPA risk assessment guidelines for conducting toxicity assessments state that it is inappropriate to use the oral slope factor to evaluate the risks associated with dermal exposure to carcinogens such as benzo[a]pyrene which cause skin cancer through a direct action at the point of application (*Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual, Part A*, Chapter 7, Toxicity Assessment, EPA 1989).

Additional information on the toxicity of the COCs present in the Capitol Lakes System may be obtained from the *Integrated Risk Information System*, EPA (http://www.epa.gov/iris/).

TABLE H4-1
REFERENCE DOSES AND TARGET ORGANS/CRITICAL EFFECTS

Chemical of Concern	Oral Reference Dose [1] (mg/kg-day)	Dermal Reference Dose [2] (mg/kg-day)	Target Organ/ Critical Effect(s) [3]
DDD	NA [4]	NA	NA
DDE	NA	NA	NA
DDT	5.0E-04	-- [5]	Liver
Aldrin	3.0E-05	3.0E-05	Liver
Chlordane	5.0E-04	-- [5]	Liver
β-BHC	NA	NA	NA
δ-BHC	NA	NA	NA
Benzo[a]anthracene	NA	NA	NA
Benzo[a]pyrene	NA	NA	NA
Benzo[b]fluoranthene	NA	NA	NA
Benzo[k]fluoranthene	NA	NA	NA
Dibenzo[a,h]anthracene	NA	NA	NA
Indeno[1,2,3-cd]pyrene	NA	NA	NA
Dieldrin	5.0E-05	5.0E-05	Liver
Endrin	3.0E-04	-- [5]	Liver, central nervous system
Endrin aldehyde	NA	NA	NA
Endosulfan	6.0E-03	-- [5]	Kidney, central nervous system, vascular system, decreased body weight gain
Lindane	3.0E-04	-- [5]	Liver, kidney
Heptachlor	5.0E-04	-- [5]	Liver
Heptachlor epoxide	1.3E-05	1.30E-05	Liver
Hexachlorobenzene	8.0E-04	5.76E-04	Liver
Antimony	4.0E-04	4.0E-04	Longevity, blood glucose/cholesterol
Arsenic	3.0E-04	2.85E-04	Skin, vascular system
Chromium (IV)	3.0E-03	3.0E-05	None reported
Lead	NA	NA	NA
Methyl mercury	1.0E-04	-- [5]	Developmental neurologic abnormalities
Mercury	3.0E-04	2.1E-05	Neurotoxicity; kidney effects
Aroclor 1242	NA	NA	NA
Aroclor 1248	NA	NA	NA
Aroclor 1260	NA	NA	NA

[1] *Integrated Risk Information System* (http://www.epa.gov/iris/), EPA 1998.
[2] The reference dose was adjusted to account for absorption efficiency from the gastrointestinal tract to develop the dermal reference dose: Dermal reference dose = oral reference dose x gastrointestinal absorption efficiency (*Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual, Part A*, Appendix A, EPA 1989). Refer to Table H4-4 for the gastrointestinal absorption efficiencies.
[3] The target organ/critical effect on which the oral reference dose is based; *Integrated Risk Information System* (http://www.epa.gov/iris/), EPA 1998.
[4] Toxicity information is not available for noncarcinogenic health effects associated with exposure to this COC in the *Integrated Risk Information System* or other EPA source.
[5] Dermal contact is not an exposure pathway at the Capitol Lakes for this COC.
[6] *Preliminary Remediation Goals*, EPA Region IX, 1998.

TABLE H4-2
SLOPE FACTORS AND CARCINOGENICITY CLASSIFICATIONS

Chemical of Concern	Oral Slope Factor [1] [(mg/kg-day)$^{-1}$]	Dermal Slope Factor [2] [(mg/kg-day)$^{-1}$]	EPA Classification [3]
DDD	2.4E-01	3.4E-01	B2
DDE	3.4E-01	-- [4]	B2
DDT	3.4E-01	-- [4]	B2
Aldrin	1.70E+01	1.7E+01	B2
Aroclor 1242	2.0E+00 [5]	2.7E+00	NA
Aroclor 1248	2.0E+00 [5]	2.7E+00	NA
Aroclor 1260	2.0E+00 [5]	2.7E+00	B2
Benzo[a]anthracene	7.3E-01 [6]	-- [7]	B2
Benzo[a]pyrene	7.3E+00	-- [7]	B2
Benzo[b]fluoranthene	7.3E-01 [6]	-- [7]	B2
Benzo[k]fluoranthene	7.3E-02 [6]	-- [7]	B2
Dibenzo[a,h]anthracene	7.3E+00 [6]	-- [7]	B2
Indeno[1,2,3-cd]pyrene	7.3E-01 [6]	-- [7]	B2
Chlordane	3.5E-01	-- [4]	B2
β-BHC	1.80E+00	-- [4]	C
δ-BHC	NA [8]	NA	D
Dieldrin	1.6E+01	1.6E+01	B2
Endosulfan	NA	NA	NA
Endrin	NA	NA	NA
Endrin aldehyde	NA	NA	NA
Lindane	1.3E+00 [9]	-- [4]	B2-C [9]
Heptachlor	4.5E+00	-- [4]	B2
Heptachlor epoxide	9.10E+00	9.1E+00	B2
Hexachlorobenzene	1.6E+00	2.2E+00	B2
Methylmercury	NA	NA	C
Mercury	NA	NA	NA
Lead	NA	NA	B2
Chromium (VI)	NA	NA	NA
Antimony	NA	NA	NA
Arsenic	1.50E+00	1.58E+00	A

[1] *Integrated Risk Information System* (http://www.epa.gov/iris/), EPA 1998.
[2] The oral slope factor was adjusted to account for absorption efficiency from the gastrointestinal tract to develop the dermal slope factor: Dermal slope factor = oral slope factor ÷ gastrointestinal absorption efficiency (*Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual, Part A*, Appendix A, EPA 1989). Refer to Table H4-4 for the gastrointestinal absorption efficiencies.
[3] *Integrated Risk Information System* (http://www.epa.gov/iris/), EPA 1998; refer to Table H4-3 for definitions of the classification categories.
[4] Dermal contact is not an exposure pathway at Capitol lakes for this COC.
[5] Upper-bound slope factor for food chain exposure, sediment ingestion, and dermal exposure.
[6] *Preliminary Remediation Goals*, EPA Region IX, 1998.
[7] It is not appropriate to develop a dermal SF from the oral slope factor for these constituents (*Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual, Part A*, EPA 1989).
[8] Toxicity information is not available for carcinogenic health effects associated with exposure to this COC in the *Integrated Risk Information System* or other EPA source.
[9] *Health Effects Assessment Summary Tables*, EPA.

TABLE H4-3
EPA WEIGHT-OF-EVIDENCE CLASSIFICATION SYSTEM FOR CARCINOGENICITY [1]

Group	Description
A	Human carcinogen.
B1	Probable human carcinogen; limited human data are available.
B2	Probable human carcinogen; sufficient evidence in animals and inadequate or no evidence in humans.
C	Possible human carcinogen
D	Not classifiable as to human carcinogenicity
E	Evidence of noncarcinogenicity for humans

[1] *Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual (Part A)*, EPA 1989.

TABLE H4-4
GASTROINTESTINAL ABSORPTION EFFICIENCIES
FOR THE DEVELOPMENT OF DERMAL TOXICITY VALUES[1]

Chemical of Concern	Gastrointestinal Absorption Efficiencies (unitless)
DDD	0.7 - 0.9 [2]
Aldrin	1.0 [3]
Aroclor 1242	0.75 - 0.95 [4]
Aroclor 1248	0.75 - 0.95 [4]
Aroclor 1260	0.75 - 0.95 [4]
Dieldrin	1.0 [3]
Heptachlor epoxide	1.0 [3]
Mercury (inorganic)	0.07 [5]
Hexachlorobenzene	0.72 - 0.82 [6]
Antimony	1.0 [3]
Arsenic	0.95 [7]
Chromium	0.01 [5]

[1]Dermal reference dose = oral reference dose x gastrointestinal absorption efficiency; Dermal slope factor = oral slope factor ÷ gastrointestinal absorption efficiency (*Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual, Part A*, Appendix A, EPA 1989).

[2]*Toxicological Profile for DDT, DDE, and DDD*, U.S. Department of Health and Human Services, Public Health Services, Agency for Toxic Substances and Disease Registry, 1992.

[3]Chemical-specific oral absorption efficiency data not available. A default absorption efficiency of 100 percent was assumed.

[4]*Toxicological Profile for Polychlorinated Biphenyls*, U.S. Department of Health and Human Services, Public Health Services, Agency for Toxic Substances and Disease Registry, 1993.

[5]*Casarett and Doull's Toxicology, The Basic Science of Poisons*, Fifth Edition, 1996, Edited by Klaassen, C.D.

[6]*Toxicological Profile for Hexachlorobenzene*, U.S. Department of Health and Human Services, Public Health Services, Agency for Toxic Substances and Disease Registry, 1994.

[7]*Toxicological Profile for Arsenic*, U.S. Department of Health and Human Services, Public Health Services, Agency for Toxic Substances and Disease Registry, 1992.

H5.0 RISK CHARACTERIZATION

During the risk characterization step of the risk assessment, the exposure and toxicity assessments were summarized and integrated into quantitative estimates of risk. The approaches used for assessing the potential for noncarcinogenic and carcinogenic health effects at Capitol Lakes are consistent with the methods contained within *Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual, Part A*, EPA 1989; *Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana*, Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife and Fisheries, 1997; and *LDEQ RECAP*, LDEQ, 1998.

H5.1 Noncarcinogenic Effects

To characterize potential noncarcinogenic health effects, the chemical intake (exposure level) was compared to the reference dose. This ratio of exposure to toxicity is called a hazard quotient (HQ). A HQ was calculated for each COC and exposure pathway identified for sediment and fish at the Capitol Lakes system as follows:

Hazard Quotient = Chemical Intake / Reference Dose

To assess the overall potential for noncarcinogenic health effects posed by exposure to multiple chemicals present in the sediment and fish, a Hazard Index (HI) approach was used. This approach assumes that simultaneous subthreshold exposures to several chemicals could result in an adverse health effect. It also assumes that the magnitude of the adverse health effect will be proportional to the sum of the ratios of the subthreshold exposures to acceptable exposures. This assumption is referred to as dose additivity. To assess dose additivity, the Hazard Quotients for individual chemicals are summed to calculate a HI. A HI was calculated for each exposure pathway identified at the Capitol Lakes system as follows:

$$\text{Hazard Index} = \text{Chemical Intake}_1/\text{Reference Dose}_1 + \text{Chemical Intake}_2/\text{Reference Dose}_2 + \ldots \text{Chemical Intake}_i/\text{Reference Dose}_i$$

where:

Chemical Intake_i = chemical intake for the i^{th} chemical
Reference Dose_i = reference dose for the i^{th} chemical

At Capitol Lakes, it is possible for a recreational receptor to be exposed to chemicals present in sediment through more than one exposure pathway (i.e, ingestion of sediment and dermal contact with sediment). Therefore, to assess the overall potential for

noncarcinogenic health effects posed by the combination of these exposure pathways, a Total HI was calculated by summing the HIs for each individual exposure pathway for sediment:

Total Hazard Index = Hazard Index $_{\text{ingestion of sediment}}$ + Hazard Index $_{\text{dermal contact with sediment}}$

The Hazard Quotient (Hazard Index) approach assumes that there is a level of exposure (i.e., RfD) below which it is unlikely for even sensitive populations to experience adverse health effects. If the chemical intake exceeds the reference dose [i.e., Chemical Intake/Reference Dose exceeds unity (1.0)] there may be concern for potential noncarcinogenic health effects. Therefore, an acceptable Total Hazard Index is defined as less than or equal to 1.0 (*Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual, Part A*, EPA 1989; *Soil Screening Guidance*, EPA 1996; and *Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana*, Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife and Fisheries, 1997). As a rule, the greater the value of Chemical Intake/Reference Dose above unity, the greater the level of concern. It is important to note that the ratio of Chemical Intake/Reference Dose should not be interpreted as a statistical probability. It is also important to note that the level of concern does not increase linearly as the RfD is exceeded because RfDs do not have equal accuracy or precision and are not based on the same severity of toxic effects.

The assumption of dose additivity is most properly applied to chemicals that affect the same target organ or have the same critical effect. However, as a screening step, the Hazard Quotients are summed for all COCs identified for a given exposure pathway to develop a Hazard Index for that pathway. If the resulting screening Hazard Index is less than or equal to the acceptable Hazard Index of 1.0, then no further evaluation of the pathway is necessary. However, if the screening Hazard Index (for all of the COCs) exceeds 1.0, the chemicals are segregated by target organ/critical effect and separate Hazard Indices are derived for each target organ/critical effect. For recreational exposure to sediment in Area 2, the screening HI exceeded 1.0. Therefore, for the ingestion of sediment and the dermal contact with sediment pathways, separate Hazard Indices were derived for each target organ/critical effect for the COCs identified for sediment in Area 2. The Hazard Indices for each target organ/critical effect were less than 1.0 for both sediment exposure pathways except for dermal exposure to chromium in sediment in Area 2. Refer to Tables H5-3 and H5-4 for the Hazard Indices for exposure to sediment in Area 2. Refer to Table H4-1 for the target organs/critical effects for the COCs in sediment in Area 2.

For the sediment exposure pathways in the other Areas of Capitol Lakes, the screening Hazard Indices were below 1.0, therefore the segregation of Hazard Indices for each target organ/critical effect was not required to characterize the potential for

noncarcinogenic health effects. Refer to Tables H5-1and H5-2 for the Hazard Index calculations for sediment in Area 1. Refer to Tables H5-5and H5-6 for the Hazard Index calculations for sediment in Area 3. Refer to Tables H5-7and H5-8 for the Hazard Index calculations for sediment in Area 4. Refer to Table H5-17 for the Hazard Index calculations for the ingestion of carp. Refer to Table H5-18 for the Hazard Index calculations for the ingestion of bigmouth buffalo. Refer to Table H5-19 for the Hazard Index calculations for the ingestion of green sunfish. Refer to Table H5-20 for the Hazard Index calculations for the ingestion of bluegill. Refer to Table H5-21 for the Hazard Index calculations for the ingestion of black bullhead. Refer to Table H5-22 for the Hazard Index calculations for the ingestion of yellow bullhead.

Refer to Table H5-29 for a summary of the Total Hazard Indices for recreational exposure to sediment in Areas 1, 2, 3, and 4. Refer to Table H5-31 for a summary of the Total Hazard Indices for the ingestion of fish obtained from Capitol Lakes.

H5.2 Carcinogenic Health Effects

To characterize potential carcinogenic health effects, probabilities that an individual will develop cancer over a lifetime of exposure to chemicals present in the Capitol Lakes were estimated from the chemical intake and the slope factor. The slope factor converts estimated daily chemical intakes averaged over a lifetime of exposure directly into incremental risk of an individual developing cancer. A cancer risk estimate was calculated for each COC and exposure pathway identified for sediment and fish at the Capitol Lakes system as follows:

Cancer Risk = Chemical Intake x Slope Factor

To assess the potential cancer risks for exposure to multiple chemicals present in the sediment and fish, the assumption of dose additivity was applied:

$$\text{Cancer Risk}_T = \sum \text{Cancer Risk}_i$$

where:

Cancer Risk_T = the total cancer risk, expressed as a unitless probability
Cancer Risk_i = the cancer risk estimate for the i^{th} chemical

Refer to Tables H5-9 and H-10 for the cancer risk estimates for recreational exposure to sediment in Area 1. Refer to Tables H5-11 and H-12 for the cancer risk estimates for recreational exposure to sediment in Area 2. Refer to Tables H5-13 and H-14 for the cancer risk estimates for recreational exposure to sediment in Area 3. Refer to Tables H5-15 and H-16 for the cancer risk estimates for recreational exposure to sediment in Area 4.

At Capitol Lakes, it is possible for a recreational receptor to be exposed to chemicals present in sediment through more than one exposure pathway (i.e, ingestion of sediment

and dermal contact with sediment). Therefore, to assess the total cancer risk posed by the combination of these exposure pathways, a total cancer risk was calculated by summing the cancer risks for each individual exposure pathway for sediment as follows:

$$\text{Total Cancer Risk} = \text{Risk}_{\text{ingestion of sediment}} + \text{Risk}_{\text{dermal contact with sediment}}$$

Cancer risk estimates are expressed using one significant figure only. An acceptable incremental or excess individual lifetime cumulative cancer risk is defined as a cancer risk estimate that is less than or within the range of 1E-06 to 1E-04 (1×10^{-6} to 1×10^{-4}) (*Soil Screening Guidance*, EPA 1996; *Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions*, EPA 1991; *Memorandum Risk-Based Clean Closure*, EPA 1998; and *Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana*, Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife and Fisheries, 1997).

Refer to Tables H5-29 and H5-30 for the Total Cancer Risk Estimates for recreational exposure to sediment in Areas 1, 2, 3, and 4. Refer to Tables H5-31 and H5-32 for the Total Cancer Risk Estimates for the ingestion of fish.

H5.3 Uncertainties in the Risk Assessment Process

Although EPA risk assessment methods provide a systematic approach for evaluating health risks, uncertainties and limitations are inherent in the risk assessment process. The risk assessment methods used to estimate cancer risk are not fully probabilistic estimates of risk, but conditional estimates given a considerable number of assumptions about exposure and toxicity. Therefore, it is important to fully specify the assumptions and uncertainties inherent in the risk assessment to place the risk estimates into proper perspective.

Uncertainties associated with site characterization, exposure assessment, toxicological assessment and risk characterization are discussed below.

Site Characterization. The sediment and fish data (with the exception of the mercury data) were validated and found to be representative of site conditions. The water data and mercury analyses for fish were not validated. Therefore these reported concentrations have not been verified as being representative of site conditions.

Exposure Assessment. In the absence of site-specific exposure data, the exposure assumptions recommended by EPA risk assessment guidelines for a recreational exposure scenario for sediment were used in the calculation of exposure for recreational receptors at Capitol Lakes. These values may or may not represent the actual RME conditions at Capitol Lakes. Ingestion rates are not available for sediment. As a conservative approach, residential soil ingestion rates were used. The use of soil ingestion rates for the

ingestion of sediment while swimming and wading may overestimate risk estimates for this pathway. An exposure frequency of 12 events/year was used for the estimation of chemical intake associated with exposure to sediment. If the actual exposure frequency at Capitol Lakes is higher or lower, then risks may be under or over estimated, respectively. Limited data are available for the adherence of sediment to skin. Only one study was available for children playing on a lake shore for a short period of time. Data were not available for adults. Therefore, the adherence factor used in the estimation of chemical intake via dermal contact may over or under estimate chemical intake associated with dermal contact with sediment. Chemical-specific data on the dermal absorption of chemicals are very limited. The use of dermal absorption factors estimated for classes of chemicals may over or under estimate chemical intake.

In the absence of site-specific exposure data, the exposure assumptions recommended by *Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana*, Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife and Fisheries, 1997 were used in the calculation of chemical intake associated with the ingestion of fish obtained from Capitol Lakes. These values may or may not represent the actual exposure conditions at Capitol Lakes. Site investigators reported that a very limited number of fish were present in the Lake System. Therefore, it may not be possible for a sufficient number of fish to be obtained from Capitol lakes to be consumed at the rate assumed in estimation of chemical intake. Therefore the fish ingestion rate used may over estimate chemical intake.

Toxicological Assessment. The human toxicity associated with a chemical is generally inferred from data in experimental animals, although substantial species variation in susceptibility to the toxic effects of some chemicals has been documented. This unavoidable extrapolation between species introduces another source of uncertainty into the risk assessment process. In addition, significant intraspecies variations may contribute further to the uncertainty associated with toxic potential. Another source of variation in the toxicity assessment of a chemical include extrapolations between routes of exposure, e.g., from the oral to the dermal route. Toxicological databases are often deficient and, consequently, toxicity values derived from these sources have inherent uncertainty. However, in the derivation of toxicity values the EPA attempts to account for the various sources of uncertainty. The reference doses developed by the EPA include the application of uncertainty and modifying factors to account for potential inter- and intraspecies variations, differences in exposure conditions, and other deficiencies in the databases. The EPA cancer slope factors represent the upper 95th percent confidence limit of the probability of a response (i.e., cancer risk) per unit intake of a chemical over a lifetime (70 years). In other words, there is only a five (5) percent chance that the probability of a response could be greater than the estimated cancer slope factor. The linearized multistage model also uses a high to low dose extrapolation procedure with considerable scientific uncertainties. Therefore, the EPA toxicity values represent

conservative rather than liberal estimates of potential adverse health effects (*Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual Part A*, EPA 1989).

Toxicity values (and hence risk-based criteria) are not available for a number of the constituents detected in the sediment (refer to Tables H2-1 through H2-4). Therefore these chemicals could not be included in the quantitative risk assessment. The inability to include these chemicals in the risk assessment may result in an underestimation of risk associated with recreational exposure to sediment at Capitol Lakes.

The speciation of chromium present in sediment was not available. Therefore, it was conservatively assumed that chromium was present in its most toxic form, chromium VI.

Toxicity values are not available for the dermal route of exposure. Where gastrointestinal absorption data were available, dermal toxicity values were derived from oral toxicity values in accordance with EPA guidelines. For aldrin, dieldrin, heptachlor epoxide, and antimony, gastrointestinal absorption data were not available so an efficiency of 100 percent was assumed. The use of a default absorption efficiency of 100 percent may result in the underestimation of risk with the magnitude of the underestimation being inversely proportional to the true oral absorption of the chemical in question (*EPA Region IX Preliminary Remediation Goals*, EPA 1998). In addition, dermal toxicity values could not be developed for the polycyclic aromatic hydrocarbons. EPA risk assessment guidelines state that it is inappropriate to use the oral slope factor to evaluate risks associated with dermal exposure to carcinogens which cause skin cancer through a direct action at the point of application (*Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual Part A*, EPA 1989). Therefore, the polycyclic aromatic hydrocarbons were not included in quantitation of health risks for dermal exposure to sediment which could result in an underestimation of risk.

Risk Characterization. Because each slope factor is an upper 95th percentile estimate of potency, and because upper 95th percentiles of probability distributions are not strictly additive, the total cancer risk estimate might become artificially more conservative as risks from a number of different carcinogens are summed. Also, the cancer risk equation for multiple chemicals sums all carcinogens equally, giving as much weight to class B as to class A carcinogens. In addition, slope factors derived from animal data are given the same weight as slope factors derived from human data.

The risk measures used in EPA risk assessment methodology are not fully probabilistic estimates of risk, but conditional estimates given a considerable number of assumptions about exposure and toxicity. An important potential source of uncertainty in the assessment of health risks involves the evaluation of simultaneous exposure to multiple chemicals. EPA methods are based on the assumption of additivity to help prevent an underestimation of cancer risk or potential noncancer health effects at a site. The assumption of dose additivity ignores possible synergisms or antagonisms among chemicals and assumes similarity in mechanisms of action and metabolism. This approach may not be applicable when the mechanisms of toxicity and/or the target organs differ between chemicals. Since chemical interactions are not well-described for most

chemicals, additivity may underestimate or overestimate potential health risks depending on the chemicals involved. In addition, current models do not consider cellular repair mechanisms which may be operative at low doses of carcinogens.

Lead was identified as a COC for sediment in Area 2 because the maximum concentration detected (409 mg/kg) exceeded the risk-based screening criterion of 400 mg/kg. Toxicity values are not available for lead therefore lead could not be included in the quantitation of health risks for exposure to sediment in Area 2. EPA recommends that exposure to lead be evaluated separately using the Integrated Exposure Uptake Model (EPA 1994) or the Adult Lead Cleanup Level Model (EPA 1994). Since the exposure concentration for lead in sediment in Area 2 (156 mg/kg) is well below the risk-based criterion (400 mg/kg), it was determined that it was not necessary to evaluated exposure to lead using the models mentioned above.

TABLE H5-1
CALCULATION OF A HAZARD INDEX FOR THE
INGESTION OF CHEMICALS IN SEDIMENT IN AREA 1

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	Chemical Intake[4] (mg/kg-day)	RfD_o[5] (mg/kg-day)	Hazard Quotient[6] (unitless)
Antimony	1.28E+01	4.4E-07	5.63E-06	4.0E-04	1.4E-02
Arsenic	1.36E+01	4.4E-07	5.98E-06	3.0E-04	2.0E-02

Hazard Index for the ingestion of chemicals in sediment - Area 1[7]	Σ HQ =	3.4E-02

[1]Refer to Tables H2-1 and H2-5.
[2]Exposure concentration (wet weight) for sediment in Area 1; refer to Table H3-1.
[3]Refer to Table H3-3.
[4]Chemical intake = concentration in sediment x intake factor.
[5]Oral reference dose; refer to Table H4-1.
[6]Hazard Quotient = chemical intake/RfD_o.
[7]Hazard Index = sum of the Hazard Quotients for each chemical of concern.

TABLE H5-2
CALCULATION OF A HAZARD INDEX
FOR DERMAL CONTACT WITH CHEMICALS IN SEDIMENT IN AREA 1

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	ABS[4] (unitless)	Chemical Intake[5] (mg/kg-day)	RfD_d[6] (mg/kg-day)	Hazard Quotient[7] (unitless)
Antimony	1.28E+01	2.3E-04	0.01	2.94E-05	4.0E-04	7.4E-02
Arsenic	1.36E+01	2.3E-04	0.03	9.38E-05	2.85E-04	3.3E-01

Hazard Index for dermal contact with chemicals in sediment - Area 1[8]	Σ HQ =	4.0E-01

[1]Refer to Tables H2-1 and H2-5.
[2]Exposure concentration (wet weight) for sediment in Area 1; refer to Table H3-1.
[3]Refer to Table H3-4.
[4]Dermal absorption factor *(Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual Supplemental Guidance Dermal Risk Assessment Interim Guidance,* EPA 1998); refer to Table H3-5.
[5]Chemical intake = concentration in sediment x intake factor.
[6]Dermal reference dose; refer to Table H4-1.
[7]Hazard Quotient = chemical intake/RfD_o.
[8]Hazard Index = sum of the Hazard Quotients for each chemical of concern.

TABLE H5-3
CALCULATION OF A HAZARD INDEX FOR THE INGESTION OF CHEMICALS IN SEDIMENT IN AREA 2

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	Chemical Intake[4] (mg/kg-day)	RfD_o[5] (mg/kg-day)	Hazard Quotient[6] (unitless)
Aldrin	3.35E-02	4.4E-07	1.47E-08	3.0E-05	4.9E-04
Dieldrin	1.92E-02	4.4E-07	8.45E-09	5.0E-05	1.7E-04
Antimony	2.23E+01	4.4E-07	9.81E-06	4.0E-04	2.5E-02
Arsenic	2.32E+01	4.4E-07	1.02E-05	3.0E-04	3.4E-02
Chromium	1.59E+01	4.4E-07	7.00E-06	3.0E-03	2.3E-03
Mercury (inorganic)	9.5E-01	4.4E-07	4.18E-07	3.0E-04	1.4E-03

Hazard Index for the ingestion of chemicals in sediment - Area 2[7]	Σ HQ =	6.3E-02

Hazard Index - Liver[8]:

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	Chemical Intake[4] (mg/kg-day)	RfD_o[5] (mg/kg-day)	Hazard Quotient[6] (unitless)
Aldrin	3.35E-02	4.4E-07	1.47E-08	3.0E-05	4.9E-04
Dieldrin	1.92E-02	4.4E-07	8.45E-09	5.0E-05	1.7E-04

Hazard Index - Liver	Σ HQ =	6.6E-04

Hazard Index - Longevity, Blood Chemistries[8]:

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	Chemical Intake[4] (mg/kg-day)	RfD_o[5] (mg/kg-day)	Hazard Index[6] (unitless)
Antimony	2.23E+01	4.4E-07	9.81E-06	4.0E-04	2.5E-02

Hazard Index - Skin, Vascular System[8]:

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	Chemical Intake[4] (mg/kg-day)	RfD_o[5] (mg/kg-day)	Hazard Index[6] (unitless)
Arsenic	2.32E+01	4.4E-07	1.02E-05	3.0E-04	3.4E-02

Hazard Index - Neurotoxicity, Kidney Effects[8]:

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	Chemical Intake[4] (mg/kg-day)	RfD_o[5] (mg/kg-day)	Hazard Index[6] (unitless)
Mercury (inorganic)	9.5E-01	4.4E-07	4.18E-07	3.0E-04	1.4E-03

Hazard Index - No Target Organ/Critical Effect Reported[8]:

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	Chemical Intake[4] (mg/kg-day)	RfD_o[5] (mg/kg-day)	Hazard Index[6] (unitless)
Chromium	1.59E+01	4.4E-07	7.00E-06	3.0E-03	2.3E-03

TABLE H5-3
CALCULATION OF A HAZARD INDEX FOR THE INGESTION OF CHEMICALS IN SEDIMENT IN AREA 2
(Continued)

[1]Refer to Tables H2-2 and H2-5.
[2]Exposure concentration (wet weight) for sediment in Area 2; refer to Table H3-1.
[3]Refer to Table H3-3.
[4]Chemical intake = concentration in sediment x intake factor.
[5]Oral reference dose; refer to Table H4-1.
[6]Hazard Quotient = chemical intake/RfD_o.
[7]Hazard Index = sum of the Hazard Quotients for each chemical of concern.
[8]As a screening step, the Hazard Quotients for all COCs are summed for a given exposure pathway to develop a Hazard Index for that pathway. If the resulting screening Hazard Index is less than or equal to the acceptable Hazard Index of 1.0, then no further evaluation of the pathway is necessary. However, when the Hazard Index (for all of the COCs) exceeds the acceptable Hazard Index of 1.0, the chemicals are segregated by target organ/critical effect and separate Hazard Indices are derived for each target organ/critical effect. A Hazard Index is derived for each target organ/critical effect because the assumption of dose additivity (summing of the Hazard Quotients for individual COCs) is most appropriately applied to chemicals that induce the same effect by the same mechanism of action (e.g., chemicals that affect the same target organ or have the same critical effect) (*Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual Part A*, EPA 1989; *Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana*, (Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife and Fisheries, 1997). For this pathway, the Hazard Index does not exceed 1.0. However, for dermal contact with sediment in Area 2, the Hazard Index does exceed 1.0 and thus separate Hazard Indices were derived for each target organ/critical effect for the dermal pathway (refer to Table H5-4). In order to assess total exposure to chemicals present in sediment in Area 2, separate Hazard Indices were developed for the ingestion pathway so that the Hazard Indices for the ingestion pathway could be summed with the Hazard Indices for the dermal contact pathway. Refer to Table H4-1 for the target organs/critical effects for the COCs at Capitol Lakes.

TABLE H5-4
CALCULATION OF A HAZARD INDEX FOR
DERMAL CONTACT WITH CHEMICALS IN SEDIMENT IN AREA 2

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	ABS[4] (unitless)	Chemical Intake[5] (mg/kg-day)	RfD_d[6] (mg/kg-day)	Hazard Quotient[7] (unitless)
Aldrin	3.35E-02	2.3E-04	0.1	7.71E-07	3.0E-05	2.6E-02
Dieldrin	1.92E-02	2.3E-04	0.1	4.42E-07	5.0E-05	8.8E-03
Antimony	2.23E+01	2.3E-04	0.01	5.13E-05	4.0E-04	1.3E-01
Arsenic	2.32E+01	2.3E-04	0.03	1.6E-04	2.85E-04	5.6E-01
Chromium	1.59E+01	2.3E-04	0.01	3.66E-05	3.0E-05	1.2E+00
Mercury (inorganic)	9.5E-01	2.3E-04	0.01	2.19E-06	2.1E-05	1.0E-01

Hazard Index for dermal contact with all COCs in sediment - Area 2[8]	Σ HQ =	2.0E+00

Hazard Index - Liver[9]:

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	ABS[4] (unitless)	Chemical Intake[5] (mg/kg-day)	RfD_d[6] (mg/kg-day)	Hazard Quotient[7] (unitless)
Aldrin	3.35E-02	2.3E-04	0.1	7.71E-07	3.0E-05	2.6E-02
Dieldrin	1.92E-02	2.3E-04	0.1	4.42E-07	5.0E-05	8.8E-03

Hazard Index - Liver	Σ HQ =	3.5E-02

Hazard Index - Longevity, Blood Chemistries[9]:

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	ABS[4] (unitless)	Chemical Intake[5] (mg/kg-day)	RfD_d[6] (mg/kg-day)	Hazard Index[7] (unitless)
Antimony	2.23E+01	2.3E-04	0.01	5.13E-05	4.0E-04	1.3E-01

Hazard Index - Skin, Vascular System[9]:

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	ABS[4] (unitless)	Chemical Intake[5] (mg/kg-day)	RfD_d[6] (mg/kg-day)	Hazard Index[7] (unitless)
Arsenic	2.32E+01	2.3E-04	0.03	1.6E-04	2.85E-04	5.6E-01

Hazard Index - Neurotoxicity, Kidney Effects[9]:

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	ABS[4] (unitless)	Chemical Intake[5] (mg/kg-day)	RfD_d[6] (mg/kg-day)	Hazard Index[7] (unitless)
Mercury (inorganic)	9.5E-01	2.3E-04	0.01	2.19E-06	2.1E-05	1.0E-01

Hazard Index - No Target Organ/Critical Effect Reported[9]:

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	ABS[4] (unitless)	Chemical Intake[5] (mg/kg-day)	RfD_d[6] (mg/kg-day)	Hazard Index[7] (unitless)
Chromium	1.59E+01	2.3E-04	0.01	3.66E-05	3.0E-05	1.2E+00

TABLE H5-4
CALCULATION OF A HAZARD INDEX FOR
DERMAL CONTACT WITH CHEMICALS IN SEDIMENT IN AREA 2
(Continued)

[1]Refer to Tables H2-2 and H2-5.
[2]Exposure concentration (wet weight) for sediment in Area 2; refer to Table H3-1.
[3]Refer to Table H3-4.
[4]Dermal absorption factor (*Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual Supplemental Guidance Dermal Risk Assessment Interim Guidance,* EPA 1998); refer to Table H3-5.
[5]Chemical intake = concentration in sediment x intake factor.
[6]Dermal reference dose; refer to Table H4-1.
[7]Hazard Quotient = chemical intake/RfD_o.
[8]Hazard Index = sum of the Hazard Quotients for each chemical of concern.
[9]As a screening step, the Hazard Quotients for all COCs are summed for a given exposure pathway to develop a Hazard Index for that pathway. If the resulting screening Hazard Index is less than or equal to the acceptable Hazard Index of 1.0, then no further evaluation of the pathway is necessary. However, when the Hazard Index (for all of the COCs) exceeds the acceptable Hazard Index of 1.0, the chemicals are segregated by target organ/critical effect and separate Hazard Indices are derived for each target organ/critical effect. A Hazard Index is derived for each target organ/critical effect because the assumption of dose additivity (summing of the Hazard Quotients for individual COCs) is most appropriately applied to chemicals that induce the same effect by the same mechanism of action (e.g., chemicals that affect the same target organ or have the same critical effect) (*Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual Part A,* EPA 1989; *Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana,* (Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife and Fisheries, 1997). For this pathway, the Hazard Index exceeds 1.0. Therefore, the COCs in sediment in Area 2 were segregated by target organ/critical effect and separate Hazard Indices were developed for each target organ/critical effect. Refer to Table H4-1 for the target organs/critical effects for the COCs at Capitol Lakes.

TABLE H5-5
CALCULATION OF A HAZARD INDEX FOR
THE INGESTION OF CHEMICALS IN SEDIMENT IN AREA 3

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	Chemical Intake[4] (mg/kg-day)	RfD_o[5] (mg/kg-day)	Hazard Quotient[6] (unitless)
Aldrin	1.8E-02	4.4E-07	7.92E-09	3.0E-05	2.6E-04
Arsenic	7.75E+00	4.4E-07	3.41E-06	3.0E-04	1.1E-02
Hexachlorobenzene	3.37E-01	4.4E-07	1.48E-07	8.0E-04	1.9E-04

Hazard Index for the ingestion of chemicals in sediment - Area 3[7]	Σ HQ =	1.2E-02

[1]Refer to Tables H2-3 and H2-5.
[2]Exposure concentration (wet weight) for sediment in Area 3; refer to Table H3-1.
[3]Refer to Table H3-3.
[4]Chemical intake = concentration in sediment x intake factor.
[5]Oral reference dose; refer to Table H4-1.
[6]Hazard Quotient = chemical intake/RfD_o.
[7]Hazard Index = sum of the Hazard Quotients for each chemical of concern.

TABLE H5-6
CALCULAITON OF A HAZARD INDEX FOR
DERMAL CONTACT WITH CHEMICALS IN SEDIMENT IN AREA 3

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	ABS[4] (unitless)	Chemical Intake[5] (mg/kg-day)	RfD_d[6] (mg/kg-day)	Hazard Quotient[7] (unitless)
Aldrin	1.8E-02	2.3E-04	0.1	4.14E-07	3.0E-05	1.4E-02
Arsenic	7.75E+00	2.3E-04	0.03	5.35E-05	2.85E-04	1.9E-01
Hexachlorobenzene	3.37E-01	2.3E-04	0.1	7.75E-06	5.76E-04	1.3E-02

Hazard Index for dermal contact with chemicals in sediment - Area 3[8]	Σ HQ =	2.2E-01

[1]Refer to Tables H2-3 and H2-5.
[2]Exposure concentration (wet weight) for sediment in Area 3; refer to Table H3-1.
[3]Refer to Table H3-4.
[4]Dermal absorption factor *(Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual Supplemental Guidance Dermal Risk Assessment Interim Guidance,* EPA 1998); refer to Table H3-5.
[5]Chemical intake = concentration in sediment x intake factor.
[6]Dermal reference dose; refer to Table H4-1.
[7]Hazard Quotient = chemical intake/RfD_o.
[8]Hazard Index = sum of the Hazard Quotients for each chemical of concern.

TABLE H5-7
CALCULATION OF A HAZARD INDEX FOR
THE INGESTION OF CHEMICALS IN SEDIMENT IN AREA 4

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	Chemical Intake[4] (mg/kg-day)	RfD_o[5] (mg/kg-day)	Hazard Quotient[6] (unitless)
Aldrin	6.2E-02	4.4E-07	2.73E-08	3.0E-05	9.1E-04
Dieldrin	2.0E-02	4.4E-07	8.80E-09	5.0E-05	1.8-04
Heptachlor epoxide	3.0E-02	4.4E-07	1.32E-08	1.3E-05	1.0E-03
Arsenic	6.12E+00	4.4E-07	2.69E-06	3.0E-04	9.0E-03

Hazard Index for the ingestion of chemicals in sediment - Area 4[7]	Σ HQ =	1.1E-02

[1]Refer to Tables H2-4 and H2-5.
[2]Exposure concentration (wet weight) for sediment in Area 4; refer to Table H3-1.
[3]Refer to Table H3-3.
[4]Chemical intake = concentration in sediment x intake factor.
[5]Oral reference dose; refer to Table H4-1.
[6]Hazard Quotient = chemical intake/RfD_o.
[7]Hazard Index = sum of the Hazard Quotients for each chemical of concern.

TABLE H5-8
CALCULATION OF A HAZARD INDEX FOR
DERMAL CONTACT WITH CHEMICALS IN SEDIMENT IN AREA 4

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	ABS[4] (unitless)	Chemical Intake[5] (mg/kg-day)	RfD_d[6] (mg/kg-day)	Hazard Quotient[7] (unitless)
Aldrin	6.2E-02	2.3E-04	0.1	1.43E-06	3.0E-05	4.8E-02
Dieldrin	2.0E-02	2.3E-04	0.1	4.60E-07	5.0E-05	9.2E-03
Heptachlor epoxide	3.0E-02	2.3E-04	0.1	6.90E-07	1.3E-05	5.3E-02
Arsenic	6.12E+00	2.3E-04	0.03	4.22E-05	2.85E-04	1.5E-01

Hazard Index for dermal contact with chemicals in sediment - Area 4 [8]	Σ HQ =	2.6E-01

[1]Refer to Tables H2-4 and H2-5.
[2]Exposure concentration (wet weight) for sediment in Area 4; refer to Table H3-1.
[3]Refer to Table H3-4.
[4]Dermal absorption factor *(Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual Supplemental Guidance Dermal Risk Assessment Interim Guidance,* EPA 1998); refer to Table H3-5.
[5]Chemical intake = concentration in sediment x intake factor.
[6]Dermal reference dose; refer to Table H4-1.
[7]Hazard Quotient = chemical intake/RfD_o.
[8]Hazard Index = sum of the Hazard Quotients for each chemical of concern.

TABLE H5-9
CALCULATION OF A CANCER RISK ESTIMATE FOR
THE INGESTION OF CHEMCIALS IN SEDIMENT IN AREA 1

All Chemicals of Concern Detected in Sediment:

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	Chemical[4] Intake (mg/kg-day)	Oral Slope Factor[5] ((mg/kg-day)$^{-1}$)	Cancer Risk[6] (unitless)
Aroclor 1242	3.11E-01	4.7E-08	1.46E-08	2.0E+00	2.9E-08
Aroclor 1248	2.32E-01	4.7E-08	1.09E-08	2.0E+00	2.2E-08
Aroclor 1260	2.03E-01	4.7E-08	9.54E-09	2.0E+00	1.9E-08
Benzo[a]anthracene	4.01E-01	4.7E-08	1.88E-08	7.3E-01	1.4E-08
Benzo[a]pyrene	4.49E-01	4.7E-08	2.11E-08	7.3E+00	1.5E-07
Benzo[b]fluoranthene	4.53E-01	4.7E-08	2.13E-08	7.3E-01	1.6E-08
Dibenzo[a,h]anthracene	2.32E-01	4.7E-08	1.09E-08	7.3E+00	8.0E-08
Indeno[1,2,3-cd]pyrene	3.96E-01	4.7E-08	1.86E-08	7.3E-01	1.4E-08
Arsenic	1.36E+01	4.7E-08	6.39E-07	1.5E+00	9.6E-07

Cancer risk estimate for the ingestion of all COCs in sediment - Area 1[7]	Σ cancer risks =	1.3E-06

Polychlorinated Biphenyls (PCBs) Detected in Sediment:

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	Chemical[4] Intake (mg/kg-day)	Oral Slope Factor[5] ((mg/kg-day)$^{-1}$)	Cancer Risk[6] (unitless)
Aroclor 1242	3.11E-01	4.7E-08	1.46E-08	2.0E+00	2.9E-08
Aroclor 1248	2.32E-01	4.7E-08	1.09E-08	2.0E+00	2.2E-08
Aroclor 1260	2.03E-01	4.7E-08	9.54E-09	2.0E+00	1.9E-08

Cancer risk estimate for the ingestion of PCBs in sediment - Area 1[8]	Σ cancer risks =	7.0E-08

[1]Refer to Tables H2-1 and H2-5.
[2]Exposure concentration (wet weight) for sediment in Area 1; refer to Table H3-1.
[3]Refer to Table H3-3.
[4]Chemical intake = concentration in sediment x intake factor.
[5]Refer to Table H4-2.
[6]Cancer risk = chemical intake x oral slope factor.
[7]Cancer risk estimate for the ingestion of sediment in Area 1 = sum of cancer risks for each chemical of concern.
[8]Cancer risk estimate for the ingestion of sediment in Area 1 = sum of cancer risks for PCBs.

TABLE H5-10
CALCULAITON OF A CANCER RISK ESTIMATE FOR
DERMAL CONTACT WITH CHEMICALS IN SEDIMENT IN AREA 1

All Chemicals of Concern Detected in Sediment:

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	ABS[4] (unitless)	Chemical Intake[5] (mg/kg-day)	Dermal Slope Factor[6] ((mg/kg-day)$^{-1}$)	Cancer Risk[7] (unitless)
Aroclor 1242	3.11E-01	7.7E-05	0.14	3.35E-06	2.7E+00	9.1E-06
Aroclor 1248	2.32E-01	7.7E-05	0.14	2.50E-06	2.7E+00	6.8E-06
Aroclor 1260	2.03E-01	7.7E-05	0.14	2.19E-06	2.7E+00	5.9E-06
Benzo[a]anthracene	4.01E-01	7.7E-05	--	--	--[8]	--
Benzo[a]pyrene	4.49E-01	7.7E-05	--	--	--[8]	--
Benzo[b]fluoranthene	4.53E-01	7.7E-05	--	--	--[8]	--
Dibenzo[a,h]anthracene	2.32E-01	7.7E-05	--	--	--[8]	--
Indeno[1,2,3-cd]pyrene	3.96E-01	7.7E-05	--	--	--[8]	--
Arsenic	1.36E+01	7.7E-05	0.03	3.14E-05	1.58E+00	5.0E-05

Cancer risk estimate for dermal contact with all COCs in sediment - Area 1[9]	Σ cancer risks =	7.2E-05

Polychlorinated Biphenyls (PCBs) Detected in Sediment:

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	ABS[4] (unitless)	Chemical Intake[5] (mg/kg-day)	Dermal Slope Factor[6] ((mg/kg-day)$^{-1}$)	Cancer Risk[7] (unitless)
Aroclor 1242	3.11E-01	7.7E-05	0.14	3.35E-06	2.7E+00	9.1E-06
Aroclor 1248	2.32E-01	7.7E-05	0.14	2.50E-06	2.7E+00	6.8E-06
Aroclor 1260	2.03E-01	7.7E-05	0.14	2.19E-06	2.7E+00	5.9E-06

Cancer risk estimate for dermal contact with PCBs in sediment - Area 1[10]	Σ cancer risks =	2.2E-05

[1]Refer to Tables H2-1 and H2-5.
[2]Exposure concentration (weight wet) for sediment in Area 1; refer to Table H3-1.
[3]Refer to Table H3-4.
[4]Dermal absorption factor *(Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual Supplemental Guidance Dermal Risk Assessment Interim Guidance,* EPA 1998); refer to Table H3-5.
[5]Chemical intake = concentration in sediment x intake factor x ABS.
[6]Refer to Table H4-2.
[7]Cancer risk = chemical intake x dermal slope factor.
[8]Not Available, see Section H4.0.
[9]Cancer risk estimate for dermal contact with sediment in Area 1 = sum of cancer risks for each chemical of concern.
[10]Cancer risk estimate for dermal contact with sediment in Area 1 = sum of cancer risks for PCBs.

TABLE H5-11
CALCULATION OF A CANCER RISK ESTIMATE FOR
THE INGESTION OF CHEMICALS IN SEDIMENT IN AREA 2

All Chemicals of Concern Detected in Sediment:

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	Chemical Intake[4] (mg/kg-day)	Oral Slope Factor[5] ((mg/kg-day)$^{-1}$)	Cancer Risk[6] (unitless)
Aldrin	3.35E-02	4.7E-08	1.57E-09	1.7E+01	2.7E-08
Aroclor 1242	1.58E+00	4.7E-08	7.43E-08	2.0E+00	1.5E-07
Aroclor 1260	1.38E+00	4.7E-08	6.49E-08	2.0E+00	1.3E-07
Dieldrin	1.92E-02	4.7E-08	9.02E-10	1.6E+01	1.4E-08
Benzo[a]anthracene	7.88E+00	4.7E-08	3.70E-07	7.3E-01	2.7E-07
Benzo[a]pyrene	3.34E+00	4.7E-08	1.57E-07	7.3E+00	1.1E-06
Benzo[b]fluoranthene	3.34E+00	4.7E-08	1.57E-07	7.3E-01	1.1E-07
Benzo[k]fluoranthene	4.15E+00	4.7E-08	1.95E-07	7.3E-02	1.4E-08
Dibenzo[a,h]anthracene	4.25E+00	4.7E-08	2.00E-07	7.3E+00	1.5E-06
Indeno[1,2,3-cd]pyrene	1.46E+00	4.7E-08	6.86E-08	7.3E-01	5.0E-08
Arsenic	2.32E+01	4.7E-08	1.09E-06	1.5E+00	1.6E-06

Cancer risk estimate for ingestion of all COCs in sediment - Area 2[7]	Σ cancer risks =	5.0E-06

Polychlorinated Biphenyls Detected in Sediment:

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	Chemical Intake[4] (mg/kg-day)	Oral Slope Factor[5] ((mg/kg-day)$^{-1}$)	Cancer Risk[6] (unitless)
Aroclor 1242	1.58E+00	4.7E-08	7.43E-08	2.0E+00	1.5E-07
Aroclor 1260	1.38E+00	4.7E-08	6.49E-08	2.0E+00	1.3E-07

Cancer risk estimate for ingestion of PCBs in sediment - Area 2[8]	Σ cancer risks =	2.8E-07

[1]Refer to Tables H2-2 and H2-5.
[2]Exposure concentration (wet weight) for sediment in Area 2; refer to Table H3-1.
[3]Refer to Table H3-3.
[4]Chemical intake = concentration in sediment x intake factor.
[5]Refer to Table H4-2.
[6]Cancer risk = chemical intake x oral slope factor.
[7]Cancer risk estimate for the ingestion of sediment in Area 2 = sum of cancer risks for each chemical of concern.
[8]Cancer risk estimate for the ingestion of sediment in Area 2 = sum of cancer risks for PCBs.

TABLE H5-12
CALCULATION OF A CANCER RISK ESTIMATE FOR
DERMAL CONTACT WITH CHEMICALS IN SEDIMENT IN AREA 2

All Chemicals of Concern Detected in Sediment:

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	ABS[4] (unitless)	Chemical Intake[5] (mg/kg-day)	Dermal Slope Factor[6] ((mg/kg-day)$^{-1}$)	Cancer Risk[7] (unitless)
Aldrin	3.35E-02	7.7E-05	0.10	2.58E-07	1.70E+01	4.4E-06
Aroclor 1242	1.58E+00	7.7E-05	0.14	1.70E-05	2.7E+00	4.6E-05
Aroclor 1260	1.38E+00	7.7E-05	0.14	1.49E-05	2.7E+00	4.0E-05
Dieldrin	1.92E-02	7.7E-05	0.10	1.48E-07	1.6E+01	2.4E-06
Benzo[a]anthracene	7.88E+00	7.7E-05	--	--	--[8]	--
Benzo[a]pyrene	3.34E+00	7.7E-05	--	--	--[8]	--
Benzo[b]fluoranthene	3.34E+00	7.7E-05	--	--	--[8]	--
Benzo[k]fluoranthene	4.15E+00	7.7E-05	--	--	--[8]	--
Dibenzo[a,h]anthracene	4.25E+00	7.7E-05	--	--	--[8]	--
Indeno[1,2,3-cd]pyrene	1.46E+00	7.7E-05	--	--	--[8]	--
Arsenic	2.32E+01	7.7E-05	0.03	5.36E-05	1.58E+00	8.5E-05

Cancer risk estimate for dermal contact with all COCs in sediment - Area 2[9]	Σ cancer risks =	1.8E-04

Polychlorinated Biphenyls (PCBs) Detected in Sediment:

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	ABS[4] (unitless)	Chemical Intake[5] (mg/kg-day)	Dermal Slope Factor[6] ((mg/kg-day)$^{-1}$)	Cancer Risk[7] (unitless)
Aroclor 1242	1.58E+00	7.7E-05	0.14	1.70E-05	2.7E+00	4.6E-05
Aroclor 1260	1.38E+00	7.7E-05	0.14	1.49E-05	2.7E+00	4.0E-05

Cancer risk estimate for dermal contact with PCBs in sediment - Area 2[10]	Σ cancer risks =	8.6E-05

[1]Refer to Tables H2-2 and H2-5.
[2]Exposure concentration (weight wet) for sediment in Area 2; refer to Table H3-1.
[3]Refer to Table H3-4.
[4]Dermal absorption factor *(Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual Supplemental Guidance Dermal Risk Assessment Interim Guidance,* EPA 1998); refer to Table H3-5.
[5]Chemical intake = concentration in sediment x intake factor x ABS.
[6]Refer to Table H4-2.
[7]Cancer risk = chemical intake x dermal slope factor.
[8]Not Available, see Section H4.0.
[9]Cancer risk estimate for dermal contact with sediment in Area 2 = sum of cancer risks for each chemical of concern.
[10]Cancer risk estimate for dermal contact with sediment in Area 2 = sum of cancer risks for PCBs.

TABLE H5-13
CALCULATION OF A CANCER RISK ESTIMATE FOR
THE INGESTION OF CHEMICALS IN SEDIMENT IN AREA 3

All Chemicals of Concern Detected in Sediment:

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	Chemical Intake[4] (mg/kg-day)	Oral Slope Factor[5] ((mg/kg-day)$^{-1}$)	Cancer Risk[6] (unitless)
Aldrin	1.8E-02	4.7E-08	8.46E-10	1.7E+01	1.4E-08
Aroclor 1242	7.3E-01	4.7E-08	3.43E-08	2.0E+00	6.9E-08
Aroclor 1260	2.76E-01	4.7E-08	1.30E-08	2.0E+00	2.6E-08
Benzo[a]anthracene	8.14E-01	4.7E-08	3.83E-08	7.3E-01	2.8E-08
Benzo[a]pyrene	8.16E-01	4.7E-08	3.83E-08	7.3E+00	2.8E-07
Benzo[b]fluoranthene	1.06E+00	4.7E-08	4.98E-08	7.3E-01	3.6E-08
Dibenzo[a,h]anthracene	6.6E-01	4.7E-08	3.10E-08	7.3E+00	2.3E-07
Indeno[1,2,3-cd]pyrene	3.28E-01	4.7E-08	1.54E-08	7.3E-01	1.1E-08
Hexachlorobenzene	3.37E-01	4.7E-08	1.58E-08	1.6E+00	2.5E-08
Arsenic	7.75E+00	4.7E-08	3.64E-07	1.5E+00	5.5E-07

Cancer risk estimate for ingestion of all COCs in sediment - Area 3[7]	Σ cancer risks =	1.3E-06

Polychlorinated Biphenyls (PCBs) Detected in Sediment:

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	Chemical Intake[4] (mg/kg-day)	Oral Slope Factor[5] ((mg/kg-day)$^{-1}$)	Cancer Risk[6] (unitless)
Aroclor 1242	7.3E-01	4.7E-08	3.43E-08	2.0E+00	6.9E-08
Aroclor 1260	2.76E-01	4.7E-08	1.30E-08	2.0E+00	2.6E-08

Cancer risk estimate for ingestion of PCBs in sediment - Area 3[8]	Σ cancer risks =	9.5E-08

[1]Refer to Tables H2-3 and H2-5.
[2]Exposure concentration (wet weight) for sediment in Area 3; refer to Table H3-1.
[3]Refer to Table H3-3.
[4]Chemical intake = concentration in sediment x intake factor.
[5]Refer to Table H4-2.
[6]Cancer risk = chemical intake x oral slope factor.
[7]Cancer risk estimate for the ingestion of sediment in Area 3 = sum of cancer risks for each chemical of concern.
[8]Cancer risk estimate for the ingestion of sediment in Area 3 = sum of cancer risks for PCBs.

TABLE H5-14
CALCULATION OF A CANCER RISK ESTIAMTE FOR
DERMAL CONTACT WITH CHEMICALS IN SEDIMENT IN AREA 3

All Chemicals of Concern Detected in Sediment:

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	ABS[4] (unitless)	Chemical Intake[5] (mg/kg-day)	Dermal Slope Factor[6] ((mg/kg-day)$^{-1}$)	Cancer Risk[7] (unitless)
Aldrin	1.8E-02	7.7E-05	0.10	1.39E-07	1.7E+01	2.4E-06
Aroclor 1242	7.3E-01	7.7E-05	0.14	7.87E-06	2.7E+00	2.1E-05
Aroclor 1260	2.76E-01	7.7E-05	0.14	2.98E-06	2.7E+00	8.0E-06
Benzo[a]anthracene	8.14E-01	7.7E-05	--	--	--[8]	--
Benzo[a]pyrene	8.16E-01	7.7E-05	--	--	--[8]	--
Benzo[b]fluoranthene	1.06E+00	7.7E-05	--	--	--[8]	--
Dibenzo[a,h]anthracene	6.6E-01	7.7E-05	--	--	--[8]	--
Indeno[1,2,3-*cd*]*pyrene*	3.28E-01	7.7E-05	--	--	--[8]	--
Hexachlorobenzene	3.37E-01	7.7E-05	0.10	2.60E-06	2.2E+00	5.7E-06
Arsenic	7.75E+00	7.7E-05	0.03	1.79E-05	1.58E+00	2.8E-05

Cancer risk estimate for dermal contact with all COCs in sediment - Area 3[9]	Σ cancer risks =	6.5E-05

Polychlorinated Biphenyls (PCBs) Detected in Sediment:

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	ABS[4] (unitless)	Chemical Intake[5] (mg/kg-day)	Dermal Slope Factor[6] ((mg/kg-day)$^{-1}$)	Cancer Risk[7] (unitless)
Aroclor 1242	7.3E-01	7.7E-05	0.14	7.87E-06	2.7E+00	2.1E-05
Aroclor 1260	2.76E-01	7.7E-05	0.14	2.98E-06	2.7E+00	8.0E-06

Cancer risk estimate for dermal contact with PCBs in sediment - Area 3[10]	Σ cancer risks =	2.9E-05

[1]Refer to Tables H2-3 and H2-5.
[2]Exposure concentration (weight wet) for sediment in Area 3; refer to Table H3-1.
[3]Refer to Table H3-4.
[4]Dermal absorption factor *(Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual Supplemental Guidance Dermal Risk Assessment Interim Guidance,* EPA 1998); refer to Table H3-5.
[5]Chemical intake = concentration in sediment x intake factor x ABS.
[6]Refer to Table H4-2.
[7]Cancer risk = chemical intake x dermal slope factor.
[8]Not Available, see Section H4.0.
[9]Cancer risk estimate for dermal contact with sediment in Area 3 = sum of cancer risks for each chemical of concern.
[10]Cancer risk estimate for dermal contact with sediment in Area 3 = sum of cancer risks for PCBs.

TABLE H5-15
CALCULATION OF A CANCER RISK ESTIMATE FOR
THE INGESTION OF CHEMICALS IN SEDIMENT IN AREA 4

All Chemicals of Concern Detected in Sediment:

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	Chemical Intake[4] (mg/kg-day)	Oral Slope Factor[5] ((mg/kg-day)$^{-1}$)	Cancer Risk[6] (unitless)
DDD	7.52E-01	4.7E-08	3.53E-08	2.4E-01	8.5E-09
Aldrin	6.2E-02	4.7E-08	2.91E-09	1.7E+01	5.0E-08
Benzo[a]anthracene	9.25E-01	4.7E-08	4.35E-08	7.3E-01	3.2E-08
Benzo[a]pyrene	8.85E-01	4.7E-08	4.16E-08	7.3E+00	3.0E-07
Benzo[b]fluoranthene	1.09E+00	4.7E-08	5.12E-08	7.3E-01	3.7E-08
Dibenzo[a,h]anthracene	3.64E-01	4.7E-08	1.71E-08	7.3E+00	1.3E-07
Indeno[1,2,3-cd]pyrene	7.8E-01	4.7E-08	3.67E-08	7.3E-01	2.7E-08
Dieldrin	2.0E-02	4.7E-08	9.40E-10	1.6E+01	1.5E-08
Heptachlor epoxide	3.0E-02	4.7E-08	1.41E-09	9.1E+00	1.3E-08
Arsenic	6.12E+00	4.7E-08	2.88E-07	1.5E+00	4.3E-07

Cancer risk estimate for ingestion of all COCs in sediment - Area 4[7]	Σ cancer risks =	1.0E-06

[1]Refer to Tables H2-4 and H2-5.
[2]Exposure concentration (wet weight) for sediment in Area 4; refer to Table H3-1.
[3]Refer to Table H3-3.
[4]Chemical intake = concentration in sediment x intake factor.
[5]Refer to Table H4-2.
[6]Cancer risk = chemical intake x oral slope factor.
[7]Cancer risk estimate for the ingestion of sediment in Area 4 = sum of cancer risks for each chemical of concern.

TABLE H5-16
CALCULATION OF A CANCER RISK ESTIMATE FOR
DERMAL CONTACT WITH CHEMICALS IN SEDIMENT IN AREA 4

All Chemicals of Concern Detected in Sediment:

Chemical of Concern[1]	Concentration in Sediment[2] (mg/kg)	Intake Factor[3] (kg/kg-day)	ABS[4] (unitless)	Chemical Intake[5] (mg/kg-day)	Dermal Slope Factor[6] ((mg/kg-day)$^{-1}$)	Cancer Risk[7] (unitless)
DDD	7.52E-01	7.7E-05	0.03	1.74E-06	3.4E-01	5.9E-07
Aldrin	6.2E-02	7.7E-05	0.10	4.77E-07	1.7E+01	8.1E-06
Benzo[a]anthracene	9.25E-01	7.7E-05	--	--	--[8]	--
Benzo[a]pyrene	8.85E-01	7.7E-05	--	--	--[8]	--
Benzo[b]fluoranthene	1.09E+00	7.7E-05	--	--	--[8]	--
Dibenzo[a,h]anthracene	3.64E-01	7.7E-05	--	--	--[8]	--
Indeno[1,2,3-cd]pyrene	7.8E-01	7.7E-05	--	--	--[8]	--
Dieldrin	2.0E-02	7.7E-05	0.10	1.54E-07	1.6E+01	2.5E-06
Heptachlor epoxide	3.0E-02	7.7E-05	0.10	2.31E-07	9.1E+00	2.1E-06
Arsenic	6.12E+00	7.7E-05	0.03	1.41E-05	1.58E+00	2.2E-05

Cancer risk estimate for dermal contact with all COCs in sediment - Area 4[9]	Σ cancer risks =	3.5E-05

[1]Refer to Tables H2-4 and H2-5.
[2]Exposure concentration (weight wet) for sediment in Area 4; refer to Table H3-1.
[3]Refer to Table H3-4.
[4]Dermal absorption factor *(Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual Supplemental Guidance Dermal Risk Assessment Interim Guidance,* EPA 1998); refer to Table H3-5.
[5]Chemical intake = concentration in sediment x intake factor x ABS.
[6]Refer to Table H4-2.
[7]Cancer risk = chemical intake x dermal slope factor.
[8]Not Available, see Section H4.0.
[9]Cancer risk estimate for the ingestion of sediment in Area 4 = sum of cancer risks for each chemical of concern.

TABLE H5-17
CALCULATION OF A HAZARD INDEX FOR THE INGESTION OF CHEMICALS IN CARP

Chemical of Concern	Concentration in Carp[1] (mg/kg)	Intake Factor[2] (kg/kg-day)	AF[3] (unitless)	Chemical Intake[4] (mg/kg-day)	RfD_o[5] (mg/kg-day)	Hazard Quotient[6] (unitless)
Aldrin	4.4E-03	4.3E-04	1	1.89E-06	3.0E-05	6.3E-02
Chlordane	9.9E-03	4.3E-04	1	4.26E-06	5.0E-04	8.5E-03
Dieldrin	7.4E-03	4.3E-04	1	3.18E-06	5.0E-05	6.4E-02
Heptachlor epoxide	1.0E-03	4.3E-04	1	4.30E-07	1.3E-05	3.3E-02
Heptachlor	9.3E-04	4.3E-04	1	4.00E-07	5.0E-04	8.0E-04
Endrin	1.9E-03	4.3E-04	1	8.17E-07	3.0E-04	2.7E-03
Endosulfan	1.2E-03	4.3E-04	1	5.16E-07	6.0E-03	8.6E-05
DDT	1.5E-03	4.3E-04	1	6.45E-07	5.0E-04	1.3E-05
Methylmercury	3.0E-02	4.3E-04	1	1.29E-05	1.0E-04	1.3E-01

Hazard Index for the ingestion of chemicals in carp[7]	Σ HQ =	3.0E-01

[1]Exposure concentration (wet weight) for carp (refer to Table H3-2).
[2]Refer to Table H3-6.
[3]Gastrointestinal absorption factor.
[4]Chemical intake = concentration in carp x intake factor x AF.
[5]Oral reference dose; refer to Table H4-1.
[6]Hazard Quotient = chemical intake/RfD_o.
[7]Hazard Index = sum of the Hazard Quotients for each chemical of concern.

TABLE H5-18
CALCULATION OF A HAZARD INDEX FOR
THE INGESTION OF CHEMICALS IN BIGMOUTH BUFFALO

Chemical of Concern	Concentration in Bigmouth Buffalo[1] (mg/kg)	Intake Factor[2] (kg/kg-day)	AF[3] (unitless)	Chemical Intake[4] (mg/kg-day)	RfD_o[5] (mg/kg-day)	Hazard Quotient[6] (unitless)
Aldrin	8.5E-03	4.3E-04	1	3.66E-06	3.0E-05	1.2E-01
Chlordane	2.5E-02	4.3E-04	1	1.08E-05	5.0E-04	2.2E-02
Dieldrin	1.7E-02	4.3E-04	1	7.3E-06	5.0E-05	1.5E-01
Heptachlor epoxide	3.2E-03	4.3E-04	1	1.38E-06	1.3E-05	1.1E-01
Lindane	1.9E-03	4.3E-04	1	8.17E-07	3.0E-04	2.7E-03
Endrin	9.6E-03	4.3E-04	1	4.13E-06	3.0E-04	1.4E-02
Endosulfan	9.9E-03	4.3E-04	1	4.26E-06	6.0E-03	7.1E-04
DDT	3.3E-02	4.3E-04	1	1.42E-05	5.0E-04	2.8E-02
Mercury	2.7E-02	4.3E-04	1	1.16E-05	1.0E-04	1.2E-01

Hazard Index for the ingestion of chemicals in bigmouth buffalo[7]	Σ HQ =	5.7E-01

[1]Exposure concentration (wet weight) for bigmouth buffalo (refer to Table H3-2).
[2]Refer to Table H3-6.
[3]Gastrointestinal absorption factor.
[4]Chemical intake = concentration in bigmouth buffalo x intake factor x AF.
[5]Oral reference dose; refer to Table H4-1.
[6]Hazard Quotient = chemical intake/RfD_o.
[7]Hazard Index = sum of the Hazard Quotients for each chemical of concern.

TABLE H5-19
CALCULATION OF A HAZARD INDEX FOR
THE INGESTION OF CHEMICALS IN GREEN SUNFISH

Chemical of Concern	Concentration in Green Sunfish[1] (mg/kg)	Intake Factor[2] (kg/kg-day)	AF[3] (unitless)	Chemical Intake[4] (mg/kg-day)	RfD_o[5] (mg/kg-day)	Hazard Quotient[6] (unitless)
Aldrin	1.3E-03	4.3E-04	1	5.59E-07	3.0E-05	1.9E-02
Dieldrin	1.4E-03	4.3E-04	1	6.02E-07	5.0E-05	1.2E-02
Endosulfan	1.5E-03	4.3E-04	1	6.45E-07	6.0E-03	1.1E-04
DDT	2.8E-03	4.3E-04	1	1.20E-06	5.3E-04	2.3E-03
Methyl mercury	8.4E-03	4.3E-04	1	3.61E-06	1.0E-04	3.6E-02

Hazard Index for the ingestion of chemicals in green sunfish[7]	Σ HQ =	6.9E-02

[1]Exposure concentration (wet weight) for green sunfish (refer to Table H3-2).
[2]Refer to H3-6.
[3]Gastrointestinal absorption factor.
[4]*Chemical intake = concentration in green sunfish x intake factor x AF.*
[5]Oral reference dose; refer to Table H4-1.
[6]Hazard Quotient = chemical intake/RfD_o.
[7]Hazard Index = sum of the Hazard Quotients for each chemical of concern.

TABLE H5-20
CALCULATION OF A HAZARD INDEX FOR
THE INGESTION OF CHEMICALS IN BLUEGILL

Chemical of Concern	Concentration in Bluegill[1] (mg/kg)	Intake Factor[2] (kg/kg-day)	AF[3] (unitless)	Chemical Intake[4] (mg/kg-day)	RfD_o[5] (mg/kg-day)	Hazard Quotient[6] (unitless)
Dieldrin	1.2E-03	4.3E-04	1	5.16E-07	5.0E-05	1.0E-02
DDT	1.0E-03	4.3E-04	1	4.30E-07	5.0E-05	8.6E-03

Hazard Index for the ingestion of chemicals in bluegill[7]	Σ HQ =	1.9E-02

[1]Exposure concentration (wet weight) for bluegill (refer to Table H3-2).
[2]Refer to Table H3-6.
[3]Gastrointestinal absorption factor.
[4]Chemical intake = concentration in bluegill x intake factor x AF.
[5]Oral reference dose; refer to Table H4-1.
[6]Hazard Quotient = chemical intake/RfD_o.
[7]Hazard Index = sum of the Hazard Quotients for each chemical of concern.

TABLE H5-21
CALCULATION OF A HAZARD INDEX FOR
THE INGESTION OF CHEMICALS IN BLACK BULLHEAD

Chemical of Concern	Concentration in Black Bullhead[1] (mg/kg)	Intake Factor[2] (kg/kg-day)	AF[3] (unitless)	Chemical Intake[4] (mg/kg-day)	RfD_o[5] (mg/kg-day)	Hazard Quotient[6] (unitless)
Aldrin	4.9E-03	4.3E-04	1	2.11E-06	3.0E-05	7.0E-02
Chlordane	2.6E-02	4.3E-04	1	1.12E-05	5.0E-04	2.2E-02
Dieldrin	1.1E-02	4.3E-04	1	4.73E-06	5.0E-05	9.5E-02
Endrin	2.0E-02	4.3E-04	1	8.60E-06	3.0E-04	2.0E-02
Endosulfan	1.3E-02	4.3E-04	1	5.59E-06	6.0E-03	9.3E-04
DDT	2.0E-02	4.3E-04	1	8.60E-06	5.0E-04	1.7E-02

Hazard Index for the ingestion of chemicals in black bullhead[7]	Σ HQ =	2.3E-01

[1]Exposure concentration (wet weight) for black bullhead (refer to Table H3-2).
[2]Refer to Table H3-6.
[3]Gastrointestinal absorption factor.
[4]Chemical intake = concentration in black bullhead x intake factor x AF.
[5]Oral reference dose; refer to Table H4-1.
[6]Hazard Quotient = chemical intake/RfD_o.
[7]Hazard Index = sum of the Hazard Quotients for each chemical of concern.

TABLE H5-22
CALCULATION OF A HAZARD INDEX FOR
THE INGESTION OF CHEMICALS IN YELLOW BULLHEAD

Chemical of Concern	Concentration in Yellow Bullhead[1] (mg/kg)	Intake Factor[2] (kg/kg-day)	AF[3] (unitless)	Chemical Intake[4] (mg/kg-day)	RfD_o[5] (mg/kg-day)	Hazard Quotient[6] (unitless)
Aldrin	1.6E-03	4.3E-04	1	6.88E-07	3.0E-05	2.3E-02
Chlordane	4.3E-03	4.3E-04	1	1.85E-06	5.0E-04	3.7E-03
Dieldrin	2.2E-03	4.3E-04	1	9.46E-07	5.0E-05	1.9E-02
Endrin	3.3E-03	4.3E-04	1	1.42E-06	3.0E-04	4.7E-03
Endosulfan	4.1E-03	4.3E-04	1	1.76E-06	6.0E-03	2.9E-04
DDT	6.9E-03	4.3E-04	1	2.97E-06	5.0E-04	5.9E-03

Hazard Index for the ingestion of chemicals in yellow bullhead[7]	Σ HQ =	5.7E-02

[1]Exposure concentration (wet weight) for yellow bullhead (refer to Table H3-2).
[2]Refer to Table H3-6.
[3]Gastrointestinal absorption factor.
[4]Chemical intake = concentration in yellow bullhead x intake factor x AF.
[5]Oral reference dose; refer to Table H4-1.
[6]Hazard Quotient = chemical intake/RfD_o.
[7]Hazard Index = sum of the Hazard Quotients for each chemical of concern.

TABLE H5-23
CALCULATION OF A CANCER RISK ESTIMATE FOR THE INGESTION OF CHEMICALS IN CARP

All Chemicals of Concern Detected in Carp:

Chemical of Concern	Concentration in Carp[1] (mg/kg)	Intake Factor[2] (kg/kg-day)	AF[3] (unitless)	Chemical Intake[4] (mg/kg-day)	Oral Slope Factor[5] ((mg/kg-day)$^{-1}$)	Cancer Risk[6] (unitless)
DDD	7.7E-03	4.3E-04	1	3.31E-06	2.4E-01	8.0E-07
Aldrin	4.4E-03	4.3E-04	1	1.89E-06	1.7E+01	3.2E-05
Chlordane	9.9E-03	4.3E-04	1	4.26E-06	3.5E-01	1.5E-06
Aroclor 1248	1.4E-01	4.3E-04	1	6.02E-05	2.0E+00	1.2E-04
Aroclor 1260	2.0E-01	4.3E-04	1	8.60E-05	2.0E+00	1.7E-04
Dieldrin	7.4E-03	4.3E-04	1	3.20E-06	1.6E+01	5.1E-05
Heptachlor epoxide	1.0E-03	4.3E-04	1	4.30E-07	9.1E+00	3.9E-06
β-BHC	1.7E-03	4.3E-04	1	7.31E-07	1.8E+00	1.3E-06
Heptachlor	9.3E-04	4.3E-04	1	4.0E-07	4.5E+00	1.8E-06
DDE	8.0E-03	4.3E-04	1	3.44E-06	3.4E-01	1.2E-06
DDT	1.5E-03	4.3E-04	1	6.45E-07	3.4E-01	2.2E-07

Cancer risk estimate for the ingestion of all COCs in carp[7]	Σ cancer risks =	3.8E-04

Polychlorinated Biphenyls (PCBs) Detected in Carp:

Chemical of Concern	Concentration in Carp[1] (mg/kg)	Intake Factor[2] (kg/kg-day)	AF[3] (unitless)	Chemical Intake[4] (mg/kg-day)	Oral Slope Factor[5] ((mg/kg-day)$^{-1}$)	Cancer Risk[6] (unitless)
Aroclor 1248	1.4E-01	4.3E-04	1	6.02E-05	2.0E+00	1.2E-04
Aroclor 1260	2.0E-01	4.3E-04	1	8.60E-05	2.0E+00	1.7E-04

Cancer risk estimate for the ingestion of PCBs in carp[8]	Σ cancer risks =	2.9E-04

[1]Exposure concentration (wet weight) in carp (refer to Table H3-2).
[2]Refer to Table H3-6.
[3]Gastrointestinal absorption factor.
[4]Chemical intake = concentration in carp x intake factor x AF.
[5]Cancer risk = chemical intake x oral slope factor.
[6]Refer to Table H4-2.
[7]Cancer risk estimate for the ingestion of carp = sum of the cancer risks for each chemical of concern.
[8]Cancer risk estimate for the ingestion of carp = sum of the cancer risks for PCBs.

TABLE H5-24
CALCULATION OF A CANCER RISK ESTIMATE FOR
THE INGESTION OF CHEMCIALS IN BIGMOUTH BUFFALO

All Chemicals of Concern Detected in Bigmouth Buffalo:

Chemical of Concern	Concentration in Bigmouth Buffalo[1] (mg/kg)	Intake Factor[2] (kg/kg-day)	AF[3] (unitless)	Chemical Intake[4] (mg/kg-day)	Oral Slope Factor[5] ((mg/kg-day)$^{-1}$)	Cancer Risk[6] (unitless)
DDD	2.2E-02	4.3E-04	1	9.46E-06	2.4E-01	2.3E-06
Aldrin	8.5E-03	4.3E-04	1	3.66E-06	1.7E+01	6.2E-05
Chlordane	2.5E-02	4.3E-04	1	1.08E-05	3.5E-01	3.8E-06
Aroclor 1248	4.0E-01	4.3E-04	1	1.72E-04	2.0E+00	3.4E-04
Dieldrin	1.7E-02	4.3E-04	1	7.31E-06	1.6E+01	1.2E-04
Heptachlor epoxide	3.2E-03	4.3E-04	1	1.38E-06	9.1E+00	1.3E-05
Lindane	1.9E-03	4.3E-04	1	8.17E-07	1.3E+00	1.1E-06
DDT	3.3E-02	4.3E-04	1	1.42E-05	3.4E-01	4.8E-06

Cancer risk estimate for the ingestion of all COCs in bigmouth buffalo[7]	Σ cancer risks =	5.5E-04

Polychlorinated Biphenyls (PCBs) Detected in Bigmouth Buffalo:

Chemical of Concern	Concentration in Bigmouth Buffalo[1] (mg/kg)	Intake Factor[2] (kg/kg-day)	AF[3] (unitless)	Chemical Intake[4] (mg/kg-day)	Oral Slope Factor[5] ((mg/kg-day)$^{-1}$)	Cancer Risk[6] (unitless)
Aroclor 1248	4.0E-01	4.3E-04	1	1.72E-04	2.0E+00	3.4E-04

Cancer risk estimate for the ingestion of PCBs in bigmouth buffalo[8]	Cancer risks =	3.4E-04

[1]Exposure concentration (wet weight) for bigmouth buffalo (refer to Table H3-2).
[2]Refer to Table H3-6.
[3]Gastrointestinal absorption factor.
[4]Chemical intake = concentration in bigmouth buffalo x intake factor x AF.
[5]Cancer risk = chemical intake x oral cancer slope factor.
[6]Refer to Table H4-2.
[7]Cancer risk estimate for the ingestion of bigmouth buffalo = sum of the cancer risks for each chemical of concern.
[8]Cancer risk estimate for the ingestion of bigmouth buffalo = cancer risks for PCBs.

TABLE H5-25
CALCULATION OF A CANCER RISK ESTIMATE FOR
THE INGESTION OF CHEMICALS IN GREEN SUNFISH

All Chemicals of Concern Detected in Green Sunfish:

Chemical of Concern	Concentration in Green Sunfish[1] (mg/kg)	Intake Factor[2] (kg/kg-day)	AF[3] (unitless)	Chemical Intake[4] (mg/kg-day)	Oral Slope Factor[5] ((mg/kg-day)$^{-1}$)	Cancer Risk[6] (unitless)
DDD	2.2E-03	4.3E-04	1	9.46E-07	2.4E-01	2.3E-07
Aldrin	1.3E-03	4.3E-04	1	5.59E-07	1.7E+01	9.5E-06
Aroclor 1248	5.4E-02	4.3E-04	1	2.32E-05	2.0E+00	4.6E-05
Aroclor 1260	8.5E-02	4.3E-04	1	3.66E-05	2.0E+00	7.3E-05
Dieldrin	1.4E-03	4.3E-04	1	6.02E-07	1.6E+01	9.6E-06
DDE	3.4E-03	4.3E-04	1	1.46E-06	3.4E-01	5.0E-07
DDT	2.8E-03	4.3E-04	1	1.20E-06	3.4E-01	4.1E-07

Cancer risk estimate for the ingestion of all COCs in green sunfish[7]	Σ cancer risks =	1.4E-04

Polychlorinated Biphenyls (PCBs) Detected in Green Sunfish:

Chemical of Concern	Concentration in Green Sunfish[1] (mg/kg)	Intake Factor[2] (kg/kg-day)	AF[3] (unitless)	Chemical Intake[4] (mg/kg-day)	Oral Slope Factor[5] ((mg/kg-day)$^{-1}$)	Cancer Risk[6] (unitless)
Aroclor 1248	5.4E-02	4.3E-04	1	2.32E-05	2.0E+00	4.6E-05
Aroclor 1260	8.5E-02	4.3E-04	1	3.66E-05	2.0E+00	7.3E-05

Cancer risk estimate for the ingestion of PCBs in green sunfish[8]	Σ cancer risks =	1.2E-04

[1]Exposure concentration (wet weight) for green sunfish (refer to Table H3-2).
[2]Refer to Table H3-6.
[3]Gastrointestinal absorption factor.
[4]Chemical intake = concentration in green sunfish x intake factor x AF.
[5]Cancer risk = chemical intake x oral slope factor.
[6]Refer to Table H4-2.
[7]Cancer risk estimate for the ingestion of green sunfish = sum of the cancer risks for each chemical of concern.
[8]Cancer risk estimate for the ingestion of green sunfish = sum of the cancer risks for PCBs.

TABLE H5-26
CALCULATION OF A CANCER RISK ESTIMATE FOR THE INGESTION OF CHEMICALS IN BLUEGILL

All Chemicals of Concern Detected in Bluegill:

Chemical of Concern	Concentration in Bluegill[1] (mg/kg)	Intake Factor[2] (kg/kg-day)	AF[3] (unitless)	Chemical Intake[4] (mg/kg-day)	Oral Slope Factor[5] ((mg/kg-day)$^{-1}$)	Cancer Risk[6] (unitless)
DDD	1.1E-03	4.3E-04	1	4.73E0-7	2.4E-01	1.1E-07
Aroclor 1248	7.7E-02	4.3E-04	1	3.31E-05	2.0E+00	6.6E-05
Aroclor 1260	3.6E-02	4.3E-04	1	1.54E-05	2.0E+00	3.1E-05
Dieldrin	1.2E-03	4.3E-04	1	5.16E-07	1.6E+01	8.3E-06
DDE	1.2E-03	4.3E-04	1	5.16E-07	3.4E-01	1.8E-07
DDT	1.0E-03	4.3E-04	1	4.30E-07	3.4E-01	1.5E-07

Cancer risk estimate for the ingestion of all COCs in bluegill[7]	Σ cancer risks =	1.1E-04

Polychlorinated Biphenyls (PCBs) Detected in Bluegill:

Chemical of Concern	Concentration in Bluegill[1] (mg/kg)	Intake Factor[2] (kg/kg-day)	AF[3] (unitless)	Chemical Intake[4] (mg/kg-day)	Oral Slope Factor[5] ((mg/kg-day)$^{-1}$)	Cancer Risk[6] (unitless)
Aroclor 1248	7.7E-02	4.3E-04	1	3.31E-05	2.0E+00	6.6E-05
Aroclor 1260	3.6E-02	4.3E-04	1	1.54E-05	2.0E+00	3.1E-05

Cancer risk estimate for the ingestion of PCBs in bluegill[8]	Σ cancer risks =	9.7E-05

[1]Exposure concentration (wet weight) in bluegill (refer to Table H3-2).
[2]Refer to Table H3-6.
[3]Gastrointestinal absorption factor.
[4]Chemical intake = concentration in bluegill x intake factor x AF.
[5]Cancer risk = chemical intake x oral slope factor.
[6]Refer to Table H4-2.
[7]Cancer risk estimate for the ingestion of bluegill = sum of the cancer risks for each chemical of concern.
[8]Cancer risk estimate for the ingestion of bluegill = sum of the cancer risks for PCBs.

TABLE 5-27
CALCULATION OF A CANCER RISK ESTIMATE FOR
THE INGESTION OF CHEMICALS IN BLACK BULLHEAD

All Chemicals of Concern Detected in Black Bullhead:

Chemical of Concern	Concentration in Black Bullhead[1] (mg/kg)	Intake Factor[2] (kg/kg-day)	AF[3] (unitless)	Chemical Intake[4] (mg/kg-day)	Oral Slope Factor[5] ((mg/kg-day)$^{-1}$)	Cancer Risk[6] (unitless)
DDD	3.2E-02	4.3E-04	1	1.38E-05	2.4E-01	3.3E-06
Aldrin	4.9E-03	4.3E-04	1	2.11E-06	1.7E+01	3.6E-05
Chlordane	2.6E-02	4.3E-04	1	1.12E-05	3.5E-01	3.9E-06
Aroclor 1248	1.3E-01	4.3E-04	1	5.59E-05	2.0E+00	1.1E-04
Aroclor 1260	3.6E-01	4.3E-04	1	1.54E-04	2.0E+00	3.1E-04
Dieldrin	1.1E-02	4.3E-04	1	4.73E-06	1.6E+01	7.6E-05
DDE	3.7E-02	4.3E-04	1	1.59E-05	3.4E-01	5.4E-06
DDT	2.0E-02	4.3E-04	1	8.6 0E-06	3.4E-01	2.9E-06

Cancer risk estimate for the ingestion of all COCs in black bullhead[7]	Σ cancer risks =	5.5E-04

Polychlorinated Biphenyls (PCBs) Detected in Black Bullhead:

Chemical of Concern	Concentration in Black Bullhead[1] (mg/kg)	Intake Factor[2] (kg/kg-day)	AF[3] (unitless)	Chemical Intake[4] (mg/kg-day)	Oral Slope Factor[5] ((mg/kg-day)$^{-1}$)	Cancer Risk[6] (unitless)
Aroclor 1248	1.3E-01	4.3E-04	1	5.59E-05	2.0E+00	1.1E-04
Aroclor 1260	3.6E-01	4.3E-04	1	1.54E-04	2.0E+00	3.1E-04

Cancer risk estimate for the ingestion of PCBs in black bullhead[8]	Σ cancer risks =	4.2E-04

[1]Exposure concentration (wet weight) in black bullhead (refer to Table H3-2).
[2]Refer to Table H3-6.
[3]Gastrointestinal absorption factor.
[4]Chemical intake = concentration in black bullhead x intake factor x AF.
[5]Cancer risk = chemical intake x oral slope factor.
[6]Refer to Table H4-2.
[7]Cancer risk estimate for the ingestion of black bullhead = sum of the cancer risks for each chemical of concern.
[8]Cancer risk estimate for the ingestion of black bullhead = sum of the cancer risks for PCBs.

TABLE H5-28
CALCULATION OF A CANCER RISK ESTIMATE FOR
THE INGESTION OF CHEMICALS IN YELLOW BULLHEAD

All Chemicals of Concern Detected in Yellow Bullhead:

Chemical of Concern	Concentration in Yellow Bullhead[1] (mg/kg)	Intake Factor[2] (kg/kg-day)	AF[3] (unitless)	Chemical Intake[4] (mg/kg-day)	Oral Slope Factor[5] ((mg/kg-day)$^{-1}$)	Cancer Risk[6] (unitless)
DDD	1.4E-02	4.3E-04	1	6.02E-06	2.4E-01	1.5E-06
Aldrin	1.6E-03	4.3E-04	1	6.88E-07	1.7E+01	1.2E-05
Chlordane	4.3E-03	4.3E-04	1	1.90E-06	3.5E-01	6.5E-07
Aroclor 1248	8.2E-02	4.3E-04	1	3.50E-05	2.0E+00	7.1E-05
Aroclor 1260	2.1E-01	4.3E-04	1	9.03E-05	2.0E+00	1.8E-04
Dieldrin	2.2E-03	4.3E-04	1	9.46E-07	1.6E+01	1.5E-05
DDE	1.6E-02	4.3E-04	1	6.88E-06	3.4E-01	2.3E-06
DDT	6.9E-03	4.3E-04	1	2.97E-06	3.4E-01	1.0E-06

Cancer risk estimate for the ingestion of all COCs in yellow bullhead[7]	Σ cancer risks =	2.8E-04

Polychlorinated Biphenyls (PCBs) Detected in Yellow Bullhead:

Chemical of Concern	Concentration in Yellow Bullhead[1] (mg/kg)	Intake Factor[2] (kg/kg-day)	AF[3] (unitless)	Chemical Intake[4] (mg/kg-day)	Oral Slope Factor[5] ((mg/kg-day)$^{-1}$)	Cancer Risk[6] (unitless)
Aroclor 1248	8.2E-02	4.3E-04	1	3.50E-05	2.0E+00	7.1E-05
Aroclor 1260	2.1E-01	4.3E-04	1	9.03E-05	2.0E+00	1.8E-04

Cancer risk estimate for the ingestion of PCBs in yellow bullhead[8]	Σ cancer risks =	2.5E-04

[1]Exposure concentration (wet weight) in yellow bullhead (refer to Table H3-2).
[2]Refer to Table H3-6.
[3]Gastrointestinal absorption factor.
[4]Chemical intake = concentration in yellow bullhead x intake factor x AF.
[5]Cancer risk = chemical intake x oral slope factor.
[6]Refer to Table H4-2.
[7]Cancer risk estimate for the ingestion of yellow bullhead = sum of the cancer risks for each chemical of concern.
[8]Cancer risk estimate for the ingestion of yellow bullhead = sum of the cancer risks for PCBs.

TABLE H5-29
CAPITOL LAKES
SUMMARY OF THE TOTAL HAZARD INDICES FOR
RECREATIONAL EXPOSURE TO CHEMICALS PRESENT IN SEDIMENT

Total Hazard Indices For All Chemicals of Concern Detected in Sediment:

Exposure Pathway	Area 1	Area 2 [1]	Area 2 [2]	Area 2 [3]	Area 2 [4]	Area 2 [5]	Area 3	Area 4
Ingestion of sediment	3.4E-02 [6]	6.6E-04 [8]	2.5E-02 [8]	3.4E-02 [8]	1.4E-03 [8]	2.3E-03 [8]	1.2E-02 [10]	1.1E-02 [12]
Dermal contact with sediment	4.0E-01 [7]	3.5E-02 [9]	1.3E-01 [9]	5.6E-01 [9]	1.0E-01 [9]	1.2E+00 [9]	2.2E-01 [11]	2.6E-01 [13]
Total Hazard Index [14]	**4.3E-01**	**3.6E-02**	**1.6E-01**	**5.9E-01**	**1.0E-01**	**1.2E+00**	**2.3E-01**	**2.7E-01**

[1]Target organ/critical effect - Liver.
[2]Target organ/critical effect - Longevity, blood chemistries.
[3]Target organ/critical effect - Skin, vascular system.
[4]Target organ/critical effect - Neurotoxicity, kidney effects.
[5]Target organ/critical effect is not available for chromium (IRIS, EPA 1998).
[6]Table H5-1.
[7]Table H5-2.
[8]Table H5-3.
[9]Table H5-4.
[10]Table H5-5.
[11]Table H5-6.
[12]Table H5-7.
[13]Table H5-8.
[14]Total Hazard Index = sum of the Hazard Index for ingestion of sediment and the Hazard Index for dermal contact with sediment.

TABLE H5-30
CAPITOL LAKES
SUMMARY OF THE TOTAL CANCER RISK ESTIMATES
FOR RECREATIONAL EXPOSURE TO CHEMICALS PRESENT IN SEDIMENT

Total Cancer Risks For All Chemicals of Concern Detected in Sediment:

Exposure Pathway	Area 1	Area 2	Area 3	Area 4
Ingestion of sediment	1.3E-06 [1]	5.0E-06 [3]	1.3E-06 [5]	1.0E-06 [7]
Dermal contact with sediment	7.2E-05 [2]	1.8E-04 [4]	6.5E-05 [6]	3.5E-05 [8]
Total Cancer Risks [9]	**7E-05**	**2E-04**	**7E-05**	**4E-05**

Total Cancer Risks For PCBs Detected in Sediment:

Exposure Pathway	Area 1	Area 2	Area 3	Area 4
Ingestion of sediment	7.0E-08 [1]	2.8E-07 [3]	9.5E-08 [5]	-- [10]
Dermal contact with sediment	2.2E-05 [2]	8.6E-05 [4]	2.9E-05 [6]	--
Total Cancer Risks	**2E-05**	**9E-05**	**3E-05**	--

Total Cancer Risks For All Chemicals of Concern Detected in Sediment Excluding PCBs [11]:

Exposure Pathway	Area 1	Area 2	Area 3	Area 4
Ingestion of sediment	1.2E-06 [1]	4.7E-06 [3]	1.2E-06 [5]	1.0E-06 [7]
Dermal contact with sediment	5.0E-05 [2]	9.4E-05 [4]	3.6E-05 [6]	3.5E-05 [8]
Total Cancer Risks	**5E-05**	**1E-04**	**4E-05**	**4E-05**

[1]Table H5-9.
[2]Table H5-10.
[3]Table H5-11.
[4]Table H5-12.
[5]Table H5-13.
[6]Table H5-14.
[7]Table H5-15.
[8]Table H5-16.
[9]Total Cancer Risks = sum of the cancer risk estimate for ingestion of sediment and the cancer risk estimate for dermal contact with sediment.
[10]PCBs were not detected in sediment in Area 4.
[11]Calculated by subtracting the cancer risk estimate for PCBs from the cancer risk estimate for all COCs.

TABLE H5-31
CAPITOL LAKES
SUMMARY OF THE TOTAL HAZARD INDICES
FOR THE INGESTION CHEMICALS PRESENT IN FISH

Fish Species	Total Hazard Index
Carp	3.0E-01 [1]
Bigmouth Buffalo	5.7E-01 [2]
Green Sunfish	6.9E-02 [3]
Bluegill	1.9E-02 [4]
Black Bullhead	2.3E-01 [5]
Yellow Bullhead	5.7E-02 [6]

[1]Table H5-17.
[2]Table H5-18.
[3]Table H5-19.
[4]Table H5-20.
[5]Table H5-21.
[6]Table H5-22.

TABLE H5-32
CAPITOL LAKES
SUMMARY OF THE TOTAL CANCER RISK ESTIMATES
FOR THE INGESTION OF CHEMCIALS IN FISH

Total Cancer Risks For All Chemicals of Concern Detected in Fish:

Fish Species	Total Cancer Risk - All COCs
Carp	4E-04 [1]
Bigmouth Buffalo	6E-04 [2]
Green Sunfish	1E-04 [3]
Bluegill	1E-04 [4]
Black Bullhead	6E-04 [5]
Yellow Bullhead	3E-04 [6]

Total Cancer Risks For PCBs Detected in Fish:

Fish Species	Total Cancer Risk - PCBs
Carp	3E-04 [1]
Bigmouth Buffalo	3E-04 [2]
Green Sunfish	1E-04 [3]
Bluegill	1E-04 [4]
Black Bullhead	4E-04 [5]
Yellow Bullhead	3E-04 [6]

Total Cancer Risks For All Chemicals of Concern Detected in Fish Excluding PCBs [7]:

Fish Species	Total Cancer Risk - All COCs Excluding PCBs
Carp	9E-05 [1]
Bigmouth Buffalo	2E-04 [2]
Green Sunfish	2E-05 [3]
Bluegill	1E-05 [4]
Black Bullhead	1E-04 [5]
Yellow Bullhead	3E-05 [6]

[1]Table H5-23.
[2]Table H5-24.
[3]Table H5-25.
[4]Table H5-26.
[5]Table H5-27.
[6]Table H5-28.
[7]Calculated by subtracting the cancer risk estimate for PCBs from the cancer risk estimate for all COCs.

TABLE H5-33
CAPITOL LAKES
BASELINE HEALTH RISK ESTIMATES FOR
RECREATIONAL EXPOSURE TO CHEMICALS PRESENT IN SEDIMENT

Assessment of Noncarcinogenic Health Effects For All Chemicals of Concern Detected in Sediment:

Sediment	Total Hazard Index [1]	Acceptable Hazard Index [2]	Total Hazard Index Exceeds the Acceptable Hazard Index
Area 1	4.3E-01	≤ 1.0E+00	
Area 2	3.6E-02 [3]	≤ 1.0E+00	
	1.6E-01 [4]	≤ 1.0E+00	
	5.9E-01 [5]	≤ 1.0E+00	
	1.0E-01 [6]	≤ 1.0E+00	
	1.2E+00 [7]	≤ 1.0E+00	X [8]
Area 3	2.3E-01	≤ 1.0E+00	
Area 4	2.7E-01	≤ 1.0E+00	

Assessment of Carcinogenic Health Effects For All Chemicals of Concern Detected in Sediment:

Sediment	Total Cancer Risk Estimate [9]	Acceptable Risk Range [2]	Total Cancer Risk Estimate Exceeds the Acceptable Risk Range
Area 1	7E-05	1E-06 to 1E-04	
Area 2	2E-04	1E-06 to 1E-04	X [10]
Area 3	7E-05	1E-06 to 1E-04	
Area 4	4E-05	1E-06 to 1E-04	

Assessment of Carcinogenic Health Effects For Polychlorinated Biphenyls (PCBs) Detected in Sediment :

Sediment	Total Cancer Risk Estimate [9]	Acceptable Risk Range [2]	Total Cancer Risk Estimate Exceeds the Acceptable Risk Range
Area 1	2E-05	1E-06 to 1E-04	
Area 2	9E-05	1E-06 to 1E-04	
Area 3	3E-05	1E-06 to 1E-04	
Area 4	-- [11]	1E-06 to 1E-04	

Assessment of Carcinogenic Health Effects For All Chemicals of Concern Detected in Sediment Excluding PCBs:

Sediment	Total Cancer Risk Estimate [9]	Acceptable Risk Range [2]	Total Cancer Risk Estimate Exceeds the Acceptable Risk Range
Area 1	5E-05	1E-06 to 1E-04	
Area 2	1E-04	1E-06 to 1E-04	
Area 3	4E-05	1E-06 to 1E-04	
Area 4	4E-05	1E-06 to 1E-04	

TABLE H5-33
CAPITOL LAKES
BASELINE HEALTH RISK ESTIMATES FOR
RECREATIONAL EXPOSURE TO CHEMICALS PRESENT IN SEDIMENT
(Continued)

[1]Table H5-29.
[2]*Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual Part A*, EPA 1989; *Soil Screening Guidance*, EPA 1996; *Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana*, Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife and Fisheries, 1997.
[3]Target organ/critical effect - Liver.
[4]Target organ/critical effect - Longevity, blood chemistries.
[5]Target organ/critical effect - Skin, vascular system.
[6]Target organ/critical effect - Neurotoxicity, kidney effects.
[7]Chromium -a target organ/critical effect is not reported for chromium (IRIS, EPA 1998).
[8]The total cancer risk estimate for recreational exposure to chemicals present in the sediment in Area 2 of the Capitol Lakes System is greater than the acceptable risk range defined by EPA.
[9]Table H5-30.
[10]The total hazard index for recreational exposure to chromium present in the sediment in Area 2 of the Capitol Lakes System is greater than the acceptable total Hazard Index of 1.0.
[11]PCBs were not detected in sediment in Area 4.

TABLE H5-34
CAPITOL LAKES BASELINE HEALTH RISK ESTIMATES FOR THE INGESTION OF CHEMICALS IN FISH

Assessment of Noncarcinogenic Health Effects For All Chemicals of Concern Detected in Fish:

Fish Species	Total Hazard Index [1]	Acceptable Hazard Index [2]	Total Hazard Index Exceeds the Acceptable Hazard Index
Carp	3.0E-01	≤ 1.0E+00	
Bigmouth Buffalo	5.7E-01	≤ 1.0E+00	
Green Sunfish	6.9E-02	≤ 1.0E+00	
Bluegill	1.9E-02	≤ 1.0E+00	
Black Bullhead	2.3E-01	≤ 1.0E+00	
Yellow Bullhead	5.7E-02	≤ 1.0E+00	

Assessment of Carcinogenic Health Effects For All Chemicals of Concern Detected in Fish:

Fish Species	Total Cancer Risk Estimate [3]	Acceptable Risk Range [2]	Total Cancer Risk Estimate Exceeds the Acceptable Risk Range
Carp	4E-04	1E-06 to 1E-04	X [4]
Bigmouth Buffalo	6E-04	1E-06 to 1E-04	X [4]
Green Sunfish	1E-04	1E-06 to 1E-04	
Bluegill	1E-04	1E-06 to 1E-04	
Black Bullhead	6E-04	1E-06 to 1E-04	X [4]
Yellow Bullhead	3E-04	1E-06 to 1E-04	X [4]

Assessment of Carcinogenic Health Effects For Polychlorinated Biphenyls (PCBs) Detected in Fish:

Fish Species	Total Cancer Risk Estimate [3]	Acceptable Risk Range [2]	Total Cancer Risk Estimate Exceeds the Acceptable Risk Range
Carp	3E-04	1E-06 to 1E-04	X [5]
Bigmouth Buffalo	3E-04	1E-06 to 1E-04	X [5]
Green Sunfish	1E-04	1E-06 to 1E-04	
Bluegill	1E-04	1E-06 to 1E-04	
Black Bullhead	4E-04	1E-06 to 1E-04	X [5]
Yellow Bullhead	3E-04	1E-06 to 1E-04	X [5]

Assessment of Carcinogenic Health Effects For All Chemicals of Concern Detected in Fish Excluding PCBs:

Fish Species	Total Cancer Risk Estimate [3]	Acceptable Risk Range [2]	Total Cancer Risk Estimate Exceeds the Acceptable Risk Range
Carp	9E-05	1E-06 to 1E-04	
Bigmouth Buffalo	2E-04	1E-06 to 1E-04	
Green Sunfish	2E-05	1E-06 to 1E-04	
Bluegill	1E-05	1E-06 to 1E-04	
Black Bullhead	1E-04	1E-06 to 1E-04	
Yellow Bullhead	3E-05	1E-06 to 1E-04	

TABLE H5-34
CAPITOL LAKES BASELINE HEALTH RISK ESTIMATES FOR THE INGESTION OF CHEMICALS IN FISH
(Continued)

[1]Table H5-31.
[2]*Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual Part A*, EPA 1989. *Soil Screening Guidance*, EPA 1996; *Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions*, EPA 1991; *Memorandum Risk-Based Clean Closure*, EPA 1998; and *Protocol for Issuing Health Advisories and Bans Based on Chemical Contamination of Fish/Shellfish in Louisiana*, Louisiana Department of Health and Hospitals Office of Public Health Section of Environmental Epidemiology and Toxicology in collaboration with Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and Louisiana Department of Wildlife and Fisheries, 1997.
[3]Table H5-32.
[4]The total cancer risk estimate for the ingestion of all chemicals detected in fish obtained from Areas 1 and 3 of the Capitol Lakes System is greater than the acceptable risk range defined by EPA.
[5]The total cancer risk estimate for the ingestion of PCBs in fish obtained from Areas 1 and 3 of the Capitol Lakes System is greater than the acceptable risk range defined by EPA.

H6.0 CONCLUSIONS

If the actual exposure conditions at Capitol Lakes differ from those assumed in the estimation of exposure for this assessment, then the Total Hazard Indices and Total Cancer Risk estimates should be recalculated based on the revised exposure estimates.

H6.1 Recreational Exposure to Sediment in Area 1

Noncarcinogenic Health Effects. The Total Hazard Index for the assessment of potential noncarcinogenic health effects associated with recreational exposure to chemicals present in sediment (including the incidental ingestion of sediment and dermal contact with sediment) while swimming or wading in Area 1 of Capitol Lakes is 4.3E-01 (0.43) which is less than the acceptable total Hazard Index of 1.0. Based on this estimated value, potential noncarcinogenic health effects are not expected for recreational receptors exposed to chemicals present in sediment while swimming or wading in Area 1 of Capitol Lakes. Refer to Tables H5-1, H5-2, H5-29 and H5-33 for the supporting Hazard Index calculations and summaries.

Carcinogenic Health Effects. The Total Cancer Risk estimate for the assessment of potential carcinogenic health effects associated with recreational exposure to chemicals present in sediment (including the incidental ingestion of sediment and dermal contact with sediment) while swimming or wading in Area 1 of Capitol Lakes is 7E-05 ($7x10^{-5}$) which is within the acceptable risk range of 1E-06 to 1E-04 ($1x10^{-6}$ to $1x10^{-4}$). Based on this cancer risk estimate, unacceptable cancer risks are not expected for recreational receptors exposed to chemicals present in sediment while swimming or wading in Area 1 of Capitol Lakes. The presence of PCBs contributed approximately 30 percent of the Total Cancer Risk estimated for recreational exposure to sediment in Area 1 of Capitol Lakes. The remaining 70 percent of the Total Cancer Risk estimated for recreational exposure to sediment in Area 1 is due to the presence of polycyclic aromatic hydrocarbons and arsenic in the sediment. Refer to Tables H5-8, H5-10, H5-30, and H5-33 for the supporting Cancer Risk estimates and summaries.

H6.2 Recreational Exposure to Sediment in Area 2

Noncarcinogenic Health Effects. The Total Hazard Indices for the assessment of potential noncarcinogenic health effects associated with recreational exposure to chemicals present in sediment (including the incidental ingestion of sediment and dermal contact with sediment) while swimming or wading in Area 2 of Capitol Lakes are 3.6E-02 (0.036) for the liver; 1.6E-01 (0.16) for longevity and blood chemistries; 5.9E-01 (0.59) for the skin and vascular system; 1.0E-01 (0.1) for neurotoxicity and kidney effects; and 1.2E+00 (1.2) for chromium (no target organ/critical effect reported for the RfD). For the liver, longevity and blood chemistries, skin and vascular system, and neurotoxicity and kidney effects the Total Hazard Indices are less than the acceptable Total Hazard Index of 1.0. However, the Hazard Index for chromium (1.2) slightly exceeds the acceptable Total Hazard Index 1.0. Based on the Total Hazard Index

estimated for chromium, it can be concluded that potential noncarcinogenic health effects may occur in recreational receptors exposed to chromium in sediment (via dermal contact) while swimming or wading in Area 2 of Capitol Lakes. However, based on: 1) the conservatism of the assumptions used in the estimation of chemical intake from sediment; 2) the use of the chromium VI (the most toxic form of chromium) RfD in the absence of site-specific speciation data; and 3) the minimal degree of exceedence of the Hazard Index for chromium (1.2 versus the acceptable Hazard Index of 1.0), it is unlikely that noncarcinogenic health effects will occur in recreational receptors exposed to chromium in sediment in Area 2 of Capitol Lakes. Refer to Tables H5-3, H5-4, H5-29 and H5-33 for the supporting Hazard Index calculations and summaries.

Carcinogenic Health Effects. The Total Cancer Risk estimate for the assessment of potential carcinogenic health effects associated with recreational exposure to chemicals present in sediment (including the incidental ingestion of sediment and dermal contact with sediment) while swimming or wading in Area 2 of Capitol Lakes is 2E-04 ($2x10^{-4}$) which is exceeds the upper bound of the acceptable risk range of 1E-06 to 1E-04 ($1x10^{-6}$ to $1x10^{-4}$). Based on this cancer risk estimate, it can be concluded that potential cancer risks may be unacceptable for recreational receptors exposed to chemicals present in sediment while swimming or wading in Area 2 of Capitol Lakes. The presence of PCBs contributed approximately 47 percent of the Total Cancer Risk estimated for recreational exposure to sediment in Area 2 of Capitol Lakes. The remaining 53 percent of the Total Cancer Risk estimated for recreational exposure to sediment in Area 2 is due to the presence of pesticides (aldrin and dieldrin), polycyclic aromatic hydrocarbons and arsenic in the sediment. Refer to Tables H5-12, H5-13, H5-29, H5-30, and H5-33 for the supporting Cancer Risk estimates and summaries.

H6.3 Recreational Exposure to Sediment in Area 3

Noncarcinogenic Health Effects. The Total Hazard Index for the assessment of potential noncarcinogenic health effects associated with recreational exposure to chemicals present in sediment (including the incidental ingestion of sediment and dermal contact with sediment) while swimming or wading in Area 3 of Capitol Lakes is 2.3E-01 (0.23) which is less than the acceptable total Hazard Index of 1.0. Based on this estimated value, potential noncarcinogenic health effects are not expected for recreational receptors exposed to chemicals present in sediment while swimming or wading in Area 3 of Capitol Lakes. Refer to Tables H5-5, H5-6, H5-29 and H5-33 for the supporting Hazard Index calculations and summaries.

Carcinogenic Health Effects. The Total Cancer Risk estimate for the assessment of potential carcinogenic health effects associated with recreational exposure to chemicals present in sediment (including the incidental ingestion of sediment and dermal contact with sediment) while swimming or wading in Area 3 of Capitol Lakes is 7E-05 ($7x10^{-5}$) which is within the acceptable risk range of 1E-06 to 1E-04 ($1x10^{-6}$ to $1x10^{-4}$). Based on this cancer risk estimate, unacceptable cancer risks are not expected for recreational receptors exposed to chemicals in sediment while swimming or wading in Area 3 of

Capitol Lakes. The presence of PCBs contributed approximately 44 percent of the Total Cancer Risk estimated for recreational exposure to sediment in Area 3 of Capitol Lakes. The remaining 56 percent of the Total Cancer Risk estimated for recreational exposure to sediment in Area 3 is due to the presence of a pesticide (aldrin), polycyclic aromatic hydrocarbons, hexachlorobenzene, and arsenic in the sediment. Refer to Tables H5-13, H5-14, H5-30, and H5-33 for the supporting Cancer Risk estimates and summaries.

H6.4 Recreational Exposure to Sediment in Area 4

Noncarcinogenic Health Effects. The Total Hazard Index for the assessment of potential noncarcinogenic health effects associated with recreational exposure to chemicals present in sediment (including the incidental ingestion of sediment and dermal contact with sediment) while swimming or wading in Area 4 of Capitol Lakes is 4.3E-01 (0.43) which is less than the acceptable total Hazard Index of 1.0. Based on this estimated value, potential noncarcinogenic health effects are not expected for recreational receptors exposed to chemicals present in sediment while swimming or wading in Area 4 of Capitol Lakes. Refer to Tables H5-7, H5-8, H5-29, and H5-33 for the supporting Hazard Index calculations and summaries.

Carcinogenic Health Effects. The Total Cancer Risk estimate for the assessment of potential carcinogenic health effects associated with recreational exposure to chemicals present in sediment (including the incidental ingestion of sediment and dermal contact with sediment) while swimming or wading in Area 4 of Capitol Lakes is 4E-05 ($4x10^{-5}$) which is within the acceptable risk range of 1E-06 to 1E-04 ($1x10^{-6}$ to $1x10^{-4}$). Based on this cancer risk estimate, unacceptable cancer risks are not expected for recreational receptors exposed to chemicals present in sediment while swimming or wading in Area 4 of Capitol Lakes. The Total Cancer Risk estimated for recreational exposure to sediment in Area 4 is due to the presence of pesticides (DDD, aldrin, dieldrin, and heptachlor expoxide), polycyclic aromatic hydrocarbons, and arsenic in the sediment. Refer to Tables H5-15, H5-16, H5-30 and H5-33 for the supporting Cancer Risk estimates and summaries.

H6.5 Ingestion of Carp Obtained from Capitol Lakes

Noncarcinogenic Health Effects. The Total Hazard Index for the assessment of potential noncarcinogenic health effects associated with the ingestion of chemicals present in carp obtained from Areas 1 and 3 of Capitol Lakes is 3.0E-01 (0.3) which is less than the acceptable total Hazard Index of 1.0. Based on this estimated value, potential noncarcinogenic health effects are not expected for recreational receptors ingesting chemicals present in carp obtained from Areas 1 and 3 of Capitol Lakes. Refer to Tables H5-17, H5-31 and H5-34 for the supporting Hazard Index calculations and summaries.

Carcinogenic Health Effects. The Total Cancer Risk estimate for the assessment of potential carcinogenic health effects associated with the ingestion of chemicals present in carp obtained from Areas 1 and 3 of Capitol Lakes is 4E-04 ($4x10^{-4}$) which exceeds the

acceptable risk range of 1E-06 to 1E-04 ($1x10^{-6}$ to $1x10^{-4}$). Based on this cancer risk estimate, it can be concluded that potential cancer risks may be unacceptable for recreational receptors ingesting chemicals present in carp obtained from Areas 1 and 3 of Capitol Lakes. The presence of PCBs contributed approximately 76 percent of the Total Cancer Risk estimated for the ingestion of carp obtained from Areas 1 and 3 of Capitol Lakes. The remaining 24 percent of the Total Cancer Risk estimated for the ingestion of carp is due to the presence of pesticides (aldrin, chlordane, DDD, DDE, DDT, dieldrin, heptachlor epoxide, β-BHC, and heptachlor) in the carp. Refer to Tables H5-23, H5-31, H5-32, and H5-34 for the supporting cancer risk estimates and summaries.

H6.6 Ingestion of Bigmouth Buffalo Obtained from Capitol Lakes

Noncarcinogenic Health Effects. The Total Hazard Index for the assessment of potential noncarcinogenic health effects associated with the ingestion of chemicals present in bigmouth buffalo obtained from Areas 1 and 3 of Capitol Lakes is 5.7E-01 (0.57) which is less than the acceptable total Hazard Index of 1.0. Based on this estimated value, potential noncarcinogenic health effects are not expected for recreational receptors ingesting chemicals present in bigmouth buffalo obtained from Areas 1 and 3 of Capitol Lakes. Refer to Tables H5-18, H5-31 and H5-34 for the supporting Hazard Index calculations and summaries.

Carcinogenic Health Effects. The Total Cancer Risk estimate for the assessment of potential carcinogenic health effects associated with the ingestion chemicals present in bigmouth buffalo obtained from Areas 1 and 3 of Capitol Lakes is 6E-04 ($6x10^{-4}$) which exceeds the acceptable risk range of 1E-06 to 1E-04 ($1x10^{-6}$ to $1x10^{-4}$). Based on this cancer risk estimate, it can be concluded that potential cancer risks may be unacceptable for recreational receptors ingesting chemicals present in bigmouth buffalo obtained from Areas 1 and 3 of Capitol Lakes. The presence of PCBs contributed approximately 62 percent of the Total Cancer Risk estimated for the ingestion of bigmouth buffalo obtained from Areas 1 and 3 of Capitol Lakes. The remaining 38 percent of the Total Cancer Risk estimated for the ingestion of bigmouth buffalo is due to the presence of pesticides (aldrin, chlordane, DDD, DDT, dieldrin, heptachlor epoxide, and lindane) in the bigmouth buffalo. Refer to Tables H5-24, H5-31, H5-32, and H5-34 for the supporting cancer risk estimates and summaries.

H6.7 Ingestion of Green Sunfish Obtained from Capitol Lakes

Noncarcinogenic Health Effects. The Total Hazard Index for the assessment of potential noncarcinogenic health effects associated with the ingestion of chemicals present in green sunfish obtained from Areas 1 and 3 of Capitol Lakes is 6.9E-02 (0.069) which is less than the acceptable total Hazard Index of 1.0. Based on this estimated value, potential noncarcinogenic health effects are not expected for recreational receptors ingesting chemicals present in green sunfish obtained from Areas 1 and 3 of Capitol Lakes. Refer to Tables H5-19, H5-31 and H5-34 for the supporting Hazard Index calculations and summaries.

Carcinogenic Health Effects. The Total Cancer Risk estimate for the assessment of potential carcinogenic health effects associated with the ingestion of chemicals present in green sunfish obtained from Areas 1 and 3 of Capitol Lakes is 1E-04 ($1x10^{-4}$) which is within the acceptable risk range of 1E-06 to 1E-04 ($1x10^{-6}$ to $1x10^{-4}$). Based on this cancer risk estimate, unacceptable cancer risks are not expected for recreational receptors ingesting chemicals present in green sunfish obtained from Areas 1 and 3 of Capitol Lakes. The presence of PCBs contributed approximately 86 percent of the Total Cancer Risk estimated for the ingestion of green sunfish obtained from Areas 1 and 3 of Capitol Lakes. The remaining 14 percent of the Total Cancer Risk estimated for the ingestion of green sunfish is due to the presence of pesticides (aldrin, DDD, DDE, DDT, and dieldrin) in the green sunfish. Refer to Tables H5-25, H5-31, H5-32, and H5-34 for the supporting cancer risk estimates and summaries.

H6.8 Ingestion of Bluegill Obtained from Capitol Lakes

Noncarcinogenic Health Effects. The Total Hazard Index for the assessment of potential noncarcinogenic health effects associated with the ingestion of chemicals present in bluegill obtained from Areas 1 and 3 of Capitol Lakes is 1.9E-02 (0.019) which is less than the acceptable total Hazard Index of 1.0. Based on this estimated value, potential noncarcinogenic health effects are not expected for recreational receptors ingesting chemicals present in bluegill from Areas 1 and 3 of Capitol Lakes. Refer to Tables H5-20, H5-31 and H5-34 for the supporting Hazard Index calculations and summaries.

Carcinogenic Health Effects. The Total Cancer Risk estimate for the assessment of potential carcinogenic health effects associated with the ingestion of chemicals present in bluegill obtained from Areas 1 and 3 of Capitol Lakes is 1E-04 ($1x10^{-4}$) which is within the acceptable risk range of 1E-06 to 1E-04 ($1x10^{-6}$ to $1x10^{-4}$). Based on this cancer risk estimate, unacceptable cancer risks are not expected for recreational receptors ingesting chemicals present in bluegill obtained from Areas 1 and 3 of Capitol Lakes. The presence of PCBs contributed approximately 88 percent of the Total Cancer Risk estimated for the ingestion of bluegill obtained from Areas 1 and 3 of Capitol Lakes. The remaining 12 percent of the Total Cancer Risk estimated for the ingestion of bluegill is due to the presence of pesticides (DDD, DDE, DDT, and dieldrin,) in the bluegill. Refer to Tables H5-26, H5-31, H5-32, and H5-34 for the supporting cancer risk estimates and summaries.

H6.9 Ingestion of Black Bullhead Obtained from Capitol Lakes

Noncarcinogenic Health Effects. The Total Hazard Index for the assessment of potential noncarcinogenic health effects associated with the ingestion of chemicals present in black bullhead obtained from Areas 1 and 3 of Capitol Lakes is 2.3E-01 (0.23) which is less than the acceptable total Hazard Index of 1.0. Based on this estimated value, potential noncarcinogenic health effects are not expected for recreational receptors ingesting chemicals present in black bullhead obtained from Areas 1 and 3 of Capitol Lakes. Refer

to Tables H5-21, H5-31 and H5-34 for the supporting Hazard Index calculations and summaries.

Carcinogenic Health Effects. The Total Cancer Risk estimate for the assessment of potential carcinogenic health effects associated with the ingestion of chemicals present in black bullhead obtained from Areas 1 and 3 of Capitol Lakes is 6E-04 ($6x10^{-4}$) which exceeds the acceptable risk range of 1E-06 to 1E-04 ($1x10^{-6}$ to $1x10^{-4}$). Based on this cancer risk estimate, it can be concluded that potential cancer risks may be unacceptable for recreational receptors ingesting chemicals present in black bullhead obtained from Areas 1 and 3 of Capitol Lakes. The presence of PCBs contributed approximately 76 percent of the Total Cancer Risk estimated for the ingestion of black bullhead obtained from Areas 1 and 3 of Capitol Lakes. The remaining 24 percent of the Total Cancer Risk estimated for the ingestion of Black bullhead is due to the presence of pesticides (aldrin, chlordane, DDD, DDE, DDT, and dieldrin) in the black bullhead. Refer to Tables H5-27, H5-31, H5-32, and H5-34 for the supporting cancer risk estimates and summaries.

H6.10 Ingestion of Yellow Bullhead Obtained from Capitol Lakes

Noncarcinogenic Health Effects. The Total Hazard Index for the assessment of potential noncarcinogenic health effects associated with the ingestion of chemicals present in yellow bullhead obtained from Areas 1 and 3 of Capitol Lakes is 5.7E-02 (0.057) which is less than the acceptable total Hazard Index of 1.0. Based on this estimated value, potential noncarcinogenic health effects are not expected for recreational receptors ingesting chemicals present in yellow bullhead obtained from Areas 1 and 3 of Capitol Lakes. Refer to Tables H5-22, H5-31 and H5-34 for the supporting Hazard Index calculations and summaries.

Carcinogenic Health Effects. The Total Cancer Risk estimate for the assessment of potential carcinogenic health effects associated with the ingestion of chemicals present in yellow bullhead obtained from Areas 1 and 3 of Capitol Lakes is 3E-04 ($3x10^{-4}$) which exceeds the acceptable risk range of 1E-06 to 1E-04 ($1x10^{-6}$ to $1x10^{-4}$). Based on this cancer risk estimate, it can be concluded that potential cancer risks may be unacceptable for recreational receptors ingesting chemicals present in yellow bullhead obtained from Areas 1 and 3 of Capitol Lakes. The presence of PCBs contributed approximately 89 percent of the Total Cancer Risk estimated for the ingestion of yellow bullhead obtained from Areas 1 and 3 of Capitol Lakes. The remaining 11 percent of the Total Cancer Risk estimated for the ingestion of yellow bullhead is due to the presence of pesticides (aldrin, chlordane, DDD, DDE, DDT, and dieldrin) in the yellow bullhead. Refer to Tables H5-28, H5-31, H5-32, and H5-34 for the supporting cancer risk estimates and summaries.

H6.11 Summary of Conclusions

Recreational exposure to chemicals present in sediment (dermal contact with sediment) in Area 2 of Capitol Lakes may be associated with potential noncarcinogenic and carcinogenic health effects that exceed the acceptable risk levels.

The ingestion of chemicals present in carp, bigmouth buffalo, black bullhead, and yellow bullhead obtained from Capitol Lakes may be associated with cancer risks that exceed the acceptable risk range.

Appendix B

Specific Data Quality Objectives: Sediment and Edible Fish Tissue (DQOs)

APPENDIX B:
SITE-SPECIFIC DATA QUALITY OBJECTIVE
MEDIA OF CONCERN: SEDIMENT

STEP 1. STATE THE PROBLEM	
Sediment from two lakes (North and South Lakes) associated with the Capitol Lakes system (Site) in Baton Rouge, Louisiana (LA) have been contaminated with polychlorinated bi-phenyls (PCBs) and semi-volatile organic compounds (SVOCs) by past discharges of waste material into the North Lake. EPA Region 6, with the assistance of the Louisiana Department of Environmental Quality (LDEQ) are reassessing the Site to determine if the Site is an eligible candidate for placement on the EPA's National Priorities List (NPL) using the Hazard Ranking System (HRS). For reassessment and NPL evaluation purposes, the PCB and SVOC-contaminated sediments are being evaluated as an HRS source type "contaminated sediment plume." Sediment sampling/analysis in the North and South Lakes will determine if the lake sediments are still contaminated with PCBs and can be evaluated under the HRS source type of "contaminated sediment plume." Secondly, off-site sediment sampling will determine historical and current discharges of PCB materials into the off-site drainage ditches and ultimately into North and South Lakes.	
STEP 2. IDENTIFY THE DECISION	
Sediment samples will be collected on-site from both the North and South Lakes. In addition, sediment samples will be collected from three off-site drainage ditches or designated streams: 1) Drainage Pathway North (DPN) that enters the northern section of the North Lake, 2). The Drainage Pathway East (DPE) that enters into the southeast section of the North Lake; and 3). The Drainage Pathway South (DPS) that enters the southeast section of the South Lake. The analytical results of the collected on-site and off-site sediment samples will be compared to background sediment analytical concentrations to determine if the lake sediment samples can be classified as contaminated based on HRS criteria for an observed release.	
IDENTIFY THE ALTERNATIVE ACTIONS THAT MAY BE TAKEN BASED ON THE DECISIONS.	• If the sediment concentrations exceed 3x greater than the background sediment concentrations for chemical constituents (PCBs, SVOCs, pesticides, herbicides, and total metals) the sediment represented by that sample will be considered contaminated and be evaluated as HRS source type : contaminated sediment plume. • If the sediment concentrations do not exceed 3x the background sediment concentrations for chemical constituents (PCBs, SVOCs, pesticides, herbicides, and total metals) the sediment represented by that sample will not be considered contaminated and will not be evaluated as an HRS source type of "contaminated sediment plume."

APPENDIX B:
SITE-SPECIFIC DATA QUALITY OBJECTIVE
MEDIA OF CONCERN: SEDIMENT
(Continued)

STEP 3. IDENTIFY INPUTS TO THE DECISION	
IDENTIFY THE INFORMATIONAL INPUTS NEEDED TO RESOLVE A DECISION.	Concentration levels in the sediment sample collected on-site from the North Lake and the South Lake and from off-site sediment locations in the DPN, DPE and the DPS.
IDENTIFY THE SOURCES FOR EACH INFORMATIONAL INPUT AND LIST THE INPUTS THAT ARE OBTAINED THROUGH ENVIRONMENTAL MEASUREMENTS.	• Sediment sample locations as defined in Section 3 of the QASP. • Analytical results obtained from the laboratory following SW-846 Methods: Method 8270E (SVOCs); Method 8081A (pesticides); Method 8151A (herbicides); Method 8082A (arochlors); Method 1668B (PCB congeners), and Method 6010D/7471B (TAL Metals + mercury).
BASIS FOR THE CONTAMINANT SPECIFIC ACTION LEVELS.	On-site and off-site sediment analytical results will be compared to corresponding background sediment concentrations. If sediment results are 3x greater than the corresponding background sediment concentrations, then the sediment will be considered as contaminated and evaluated as an HRS source type of contaminated sediment plume.
IDENTIFY POTENTIAL SAMPLING TECHNIQUES AND APPROPRIATE ANALYTICAL METHODS.	Sediment sampling techniques are described in the Quality Assurance Sampling Plan (QASP). The analytical methods to be performed on samples are as follows: Method 8270D (SVOCs); Method 8081A (pesticides); Method 8151A (herbicides); Method 8082A (arochlors or PCBs); Method 1668B (PCB congeners); and Method 6010D/7471B (TAL Metals + mercury).
STEP 4. DEFINE THE BOUNDARIES OF THE STUDY	
DEFINE THE DOMAIN OR GEOGRAPHIC AREA WITHIN WHICH ALL DECISIONS MUST APPLY.	The on-site sediments found in both the North Lake and the South Lake and in the DPN, the DPE and the DPS as illustrated in Figure 3-1 (Proposed Sediment Sample Location Map) and the background sediments found in University Lake as illustrated in Figure 3-2 (Proposed Background Sediment Sample Location Map).
SPECIFY THE CHARACTERISTICS THAT DEFINE THE POPULATION OF INTEREST.	Contaminant concentrations in the on-site and off-site sediments.
DEFINE THE SCALE OF DECISION-MAKING.	The scale of decision will be for sediments represented by the samples collected from North Lake, South Lake, the DPN, , the DPE, and the DPS and the concentration levels represented by the sediment samples.
DETERMINE THE TIME FRAME TO WHICH THE DATA APPLY.	The data will apply until the detected concentration levels represented by the sediment samples is determined to be used in the HRS evaluation for Site placement on the NPL.
DETERMINE WHEN TO COLLECT DATA.	Sediment samples are scheduled to be collected during the week of March 14, 2022.

APPENDIX B:
SITE-SPECIFIC DATA QUALITY OBJECTIVE
MEDIA OF CONCERN: SEDIMENT
(Continued)

IDENTIFY PRACTICAL CONSTRAINTS ON DATA COLLECTION.	Inclement weather; unobtainable signed access agreement from property owners, inoperable boat, lack of sufficient water in South Lake, and inoperable sediment coring devices.
STEP 5. DEVELOP A DECISION RULE	
SPECIFY THE PARAMETER THAT CHARACTERIZES THE POPULATION OF INTEREST.	The sediment sample concentrations at the sample locations will be compared to the corresponding background sediment concentrations as defined in Step 3 - BASIS FOR THE CONTAMINANT SPECIFIC ACTION LEVELS.
SPECIFY THE ACTION LEVEL FOR THE DECISION.	Sediment analytical results will be compared to the corresponding background sediment concentrations for HRS evaluation and NPL placement.
DEVELOP A DECISION RULE.	If the sediment sample result is 3x greater than the corresponding background concentration, then the sediment represented by that sample will be used to define the HRS source type "contaminated sediment plume" during the HRS evaluation process for placement of the Site on the NPL otherwise, the sediment cannot be used to define an HRS source type "contaminated sediment plume."
STEP 6. SPECIFY LIMITS ON DECISION ERRORS	
DETERMINE THE POSSIBLE RANGE OF THE PARAMETER OF INTEREST.	Sediment contaminant concentrations may range from 0 micrograms per kilograms (µg/kg) to greater than 3x the corresponding background sediment concentrations.
DEFINE BOTH TYPES OF DECISION ERRORS AND IDENTIFY THE POTENTIAL CONSEQUENCES OF EACH.	Type I Error: Deciding that the specified area represented by the sediment sample does not exceed 3x times greater than the corresponding sediment background concentration when, in truth, the concentration of the contaminant exceeds 3x greater than the corresponding sediment background concentration. The consequence of this decision error is that the contaminated sediment will not be evaluated as an HRS source type "contaminated sediment plume and the site will not receive an HRS score sufficient for placement onto the NPL. The contaminated sediment will remain in place, possibly endangering human health and the environment. There may also be potential future liability associated with cleanup costs of leaving contamination in place. This decision error is more severe. Type II Error: Deciding that the specified area represented by the sediment sample does exceed 3x greater than the corresponding background concentrations when, in truth, it does not. The consequences of this decision error are the site will be evaluated as an HRS source type contaminated sediment plume, when in fact, it is not contaminated plume and that the site is listed onto the NPL, when in fact it does not receive a sufficient HRS score for placement onto the NPL and thus potential remediation costs will be incurred.

APPENDIX B:
SITE-SPECIFIC DATA QUALITY OBJECTIVE
MEDIA OF CONCERN: SEDIMENT
(Continued)

STEP 6. SPECIFY LIMITS ON DECISION ERRORS (Continued)	
ESTABLISH THE TRUE STATE OF NATURE FOR EACH DECISION RULE.	The true state of nature when the soil sample is decided to be below the contaminant-specific action level when in fact, it is not below the specified assessment level, is that the area does need removal action. The true state of nature when the soil is decided to be above the contaminant -specific action level when in fact, it is not above the contaminant -specific action level, is that the area does not need removal action.
DEFINE THE TRUE STATE OF NATURE FOR THE MORE SEVERE DECISION ERROR AS THE BASELINE CONDITION OR THE NULL HYPOTHESIS (H_o) AND DEFINE THE TRUE STATE FOR THE LESS SEVERE DECISION ERROR AS THE ALTERNATIVE HYPOTHESIS (H_a).	H_o: The soil represented by the soil sample of the specified area is above the contaminant -specific action level. H_a: The soil represented by the soil sample of the specified area is below the contaminant -specific action level.
ASSIGN THE TERMS "FALSE POSITIVE" AND "FALSE NEGATIVE" TO THE PROPER DECISION ERRORS.	• False Positive Error = Type I • False Negative Error = Type II
ASSIGN PROBABILITY VALUES TO POINTS ABOVE AND BELOW THE ACTION LEVEL THAT REFLECT THE ACCEPTABLE PROBABILITY FOR THE OCCURRENCES OF DECISION ERRORS.	To be assigned based on discussions with EPA On-Scene Coordinator (OSC).
STEP 7. OPTIMIZE THE DESIGN	
REVIEW THE DQOs.	Due to insufficient historical data, determination of the standard deviation was not possible; therefore, sample size calculation using the traditional statistical formula may not be the optimal design. In order to select the optimal sampling program that satisfies the DQOs and is the most resource effective, other elements were considered.
DEVELOP GENERAL SAMPLING AND ANALYSIS DESIGN. The START Team will collect a total of 55 sediment samples: 23 samples from North Lake, 10 samples from South Lake, 7 samples from University Lake, 6 samples from the DPN, 5 sediment samples from the DPE, and 4 sediment samples from the DPS. The sediment samples will be analyzed for SW-846 methods: Method 8270E (SVOC); Method 6020A/7471B (TAL Metals + mercury); Method 8081B (Pesticides); Method 8151A (Herbicides); and Method 8082A (Arochlors/PCBs). Sediment samples will be collected utilizing sampling procedures described in Section 3.0 of the QASP. A standard turnaround time (TAT) has been requested for the sediment samples as part of the assessment.	

APPENDIX B:
SITE-SPECIFIC DATA QUALITY OBJECTIVE
MEDIA OF CONCERN: EDIBLE FISH TISSUE

STEP 1. STATE THE PROBLEM
Waste material containing polychlorinated biphenyls (PCBs) was released into the Capitol Lakes system in the 1960's and 1970's. Sediment sampling conducted by Louisiana Department of Environmental Quality (LDEQ) in 1983 indicated the presence of PCBs in the sediments of North Lake. Subsequent sediment sampling by LDEQ in the 1980's and 1990's has indicated the presence of PCBS in the sediment samples found in South Lake as well. Fish tissue samples collected from both lakes indicate the presence of PCBs and PCB congeners in concentrations exceeding LDEQ and Louisiana Department of Health (LDH) risk-based screening levels in edible fish tissue collected from both lakes. As a result of the PCB-contaminated fish tissue, the LDEQ/LDH have issued a Fishing Advisory for both North and South Lakes. The Fish advisory went into affect in 1983 and currently remains in effect. The EPA/START team will collect edible fish tissue for chemical analyses in order to determine if the edible fish tissue is still contaminated with PCBs and PCB congeners and in concentrations greater than the LDEQ/LDH risk-based screening levels. Secondly, to compare the resulting edible fish tissue results to the Hazard Ranking System's (HRS) Human Food Chain Threat, health-based screening levels found in the EPA's Superfund Chemical Data Matrices (SCDMs). Should the resulting edible fish tissue results indicate concentrations of PCBs exceeding the HRS Human Food Chain Threat health-based benchmarks, the site, the site would be eligible for placement onto EPA's NPL.
STEP 2. IDENTIFY THE DECISION
Edible fish tissue samples (from both top feeders and bottom feeders) will be collected from both North and South Lakes and analyzed or chemical contamination. Fish species associated with the Top Feeders include green sunfish and bluegills; fish species associated with the Bottom Feeders include Buffalo, Carp, Black Catfish and Yellow Catfish. The resulting analytical results will be compared to the LDEQ/LDH risk-based screening levels for exceedances of those screening levels. In addition, the analytical results will be compared to the HRS health-based benchmarks for the Human Food Chain Threat found in EPA's HRS SCDMs. Should the detected chemical contamination exceed the Human Food Chain Threat health-based benchmarks found in the SCDMs, the site will be eligible for placement onto EPA's NPL.

APPENDIX B:
SITE-SPECIFIC DATA QUALITY OBJECTIVE
MEDIA OF CONCERN: EDIBLE FISH TISSUE
(Continued)

IDENTIFY THE ALTERNATIVE ACTIONS THAT MAY BE TAKEN BASED ON THE DECISIONS.	• 1). If the detected chemical concentrations (SVOCs, pesticides, herbicides, PCBs, PCB congeners, and total metals + mercury) in the edible fish tissue sample exceed the contaminant-specific LDEQ/LDH risk-based screening levels for those listed chemical contaminants, the detected concentrations represented by that edible fish tissue sample will be considered contaminated and the Fishing Advisory will remain in effect for the Capitol Lakes. 2). If the detected concentrations (SVOCs, pesticides, herbicides, PCBs, PCB congeners and total metals + mercury) in the edible fish tissue sample exceed the Human Food Chain Threat health-based benchmarks identified in the HRS SCDMs, the detected concentrations represented by that edible fish tissue sample will be considered contaminated and be evaluated as Level I Human Food Chain Threat concentrations for the HRS evaluation to place the site onto EPA's NPL. • 1). If the chemical concentrations (SVOCs, pesticides, herbicides, PCBs, PCB congeners, and total metals/mercury) in the edible fish tissue sample do not exceed the contaminant-specific LDEQ/LDH risk-based screening levels for those listed chemical contaminants, the detected concentrations represented by that edible fish tissue sample will be reevaluated and the Fishing Advisory maybe rescinded. 2). If the detected concentrations (SVOCs, pesticides, herbicides, PCBs, PCB congeners, and total metals + mercury) in the edible fish tissue sample do **not** exceed the Human Food Chain Threat health-based benchmarks identified in the HRS SCDMs, the detected concentrations represented by that edible fish tissue sample will **not** be evaluated as Level I or II Human Food Chain Threat concentrations, but as Potential Contamination for the HRS evaluation.
STEP 3. IDENTIFY INPUTS TO THE DECISION	
IDENTIFY THE INFORMATIONAL INPUTS NEEDED TO RESOLVE A DECISION.	Concentration levels detected in the edible fish tissue samples collected from North and South Lakes.
IDENTIFY THE SOURCES FOR EACH INFORMATIONAL INPUT AND LIST THE INPUTS THAT ARE OBTAINED THROUGH ENVIRONMENTAL MEASUREMENTS.	• Edible fish tissue sample locations as defined in Section 3 of the QASP. • Analytical results obtained from the laboratory following SW-846 Methods: Method 8270E (SVOC); Method 6010D/7471B (TAL Metals + mercury); Method 8081B (Pesticides); Method 8151A (Herbicides); Method 8082A (Arochlors) and Method 1668B (PCB congeners)
BASIS FOR THE CONTAMINANT SPECIFIC ACTION LEVELS.	Analytical results will be compared to the LDEQ/LDH risk-based screening levels and the EPA HRS's SCDM Human Food Chain Threat health-based benchmarks.

APPENDIX B:
SITE-SPECIFIC DATA QUALITY OBJECTIVE
MEDIA OF CONCERN: EDIBLE FISH TISSUE
(Continued)

STEP 3. IDENTIFY INPUTS TO THE DECISION (Continued)	
IDENTIFY POTENTIAL SAMPLING TECHNIQUES AND APPROPRIATE ANALYTICAL METHODS.	Edible fish tissue sampling techniques are described in the Quality Assurance Sampling Plan (QASP). The analytical methods to be performed on the edible fish tissue samples include Method 8270E (SVOCs); Method 6010D/7471B (TAL Metals + mercury); Method 8081B (Pesticides); Method 8151A (Herbicides); Method 8082A (Arochlors or PCBs), and Method 1668B (PCB congeners).
STEP 4. DEFINE THE BOUNDARIES OF THE STUDY	
DEFINE THE DOMAIN OR GEOGRAPHIC AREA WITHIN WHICH ALL DECISIONS MUST APPLY.	The edible fish tissue samples within the defined North and South Lakes of the Capitol Lakes system, illustrated in Figure 3-1 (Sample Location Map).
SPECIFY THE CHARACTERISTICS THAT DEFINE THE POPULATION OF INTEREST.	Contaminant concentrations in the edible fish tissue.
DEFINE THE SCALE OF DECISION-MAKING.	The scale of decision will be for edible fish tissue represented by the samples collected from the defined North and South Lakes and the concentration levels represented by the edible fish tissue samples.
DETERMINE THE TIME FRAME TO WHICH THE DATA APPLY.	The data will apply until the edible fish tissue represented by the samples receives appropriate EPA and LDEQ/LDH actions.
DETERMINE WHEN TO COLLECT DATA.	Edible fish tissue samples will be collected during the week of field sampling activities scheduled for the week of April 4, 2022.
IDENTIFY PRACTICAL CONSTRAINTS ON DATA COLLECTION.	Inclement weather; inoperable electroshocking and boat equipment; depth of water too shallow to launch a boat, etc.
STEP 5. DEVELOP A DECISION RULE	
SPECIFY THE PARAMETER THAT CHARACTERIZES THE POPULATION OF INTEREST.	The edible fish tissue sample concentrations at the sample locations within North and South Lake will be compared to the LDEQ/LDH risk-based screening levels and the EPA HRS's Human Food Chain Threat SCDM health-based benchmarks for HRS evaluation
SPECIFY THE ACTION LEVEL FOR THE DECISION.	Concentrations above the LDEQ/LDH risk-based screening levels and the EPA HRS Human Food Chain Threat SCDM health-based benchmarks.
DEVELOP A DECISION RULE.	If the edible fish tissue sample results are above the LDEQ/LDH risk-based screening levels, then the fish tissue represented by that sample will be considered contaminated and the Fishing Advisory will remain in place. If the edible fish tissue sample results exceed the EPA SCDM health-based benchmarks for the Human Food Chain Threat, then there will be Level I human food chain threat targets for HRS evaluation of the Surface Water Migration Pathway. If neither the LDEQ/LDH and/or EPA SCDM health-based benchmarks are not exceeded, the edible fish tissue will not be considered Level I, and the Fishing Advisory will be re-evaluated.

APPENDIX B:
SITE-SPECIFIC DATA QUALITY OBJECTIVE
MEDIA OF CONCERN: EDIBLE FISH TISSUE
(Continued)

STEP 6. SPECIFY LIMITS ON DECISION ERRORS	
DETERMINE THE POSSIBLE RANGE OF THE PARAMETER OF INTEREST.	Edible fish tissue contaminant concentrations may range from 0 micrograms per kilograms (µg/kg) to above the LDEQ/LDH risk-based screening levels and/or EPA SCDM health-based benchmarks for the Human Food Chain Threat.
DEFINE BOTH TYPES OF DECISION ERRORS AND IDENTIFY THE POTENTIAL CONSEQUENCES OF EACH.	Type I Error: Deciding that the specified area represented by the edible fish tissue samples do not exceed the LDEQ/LDH risk-based screening levels and/or EPA SCDM health-based benchmarks for the Human Food Chain Threat when, in truth, the concentration of the contaminant exceeds its LDEQ/LDH risk-based screening levels and/or EPA SCDM health-based benchmarks for the Human Food Chain Threat . The consequence of this decision error is that the LDEQ/LDH Fishing Advisory maybe be rescinded and/or the site is not eligible for including to EPA's NPL, thus. contaminated edible fish tissue will remain in place, possibly endangering human health and the environment. There may also be potential future liability associated with cleanup costs of leaving contamination in place. This decision error is more severe. Type II Error: Deciding that the specified area represented by the edible fish tissue samples do exceed the LDEQ/LDH risk-based screening levels and/or EPA SCDM health-based benchmarks for the Human Food Chain Threat when, in truth, they do not. The consequences of this decision error are that LDEQ/LDH Fishing Advisory remains in effect and/or the site is eligible for placement onto the NPL, when in fact it is not an eligible NPL candidate, thus, remediation of North and South Lakes may occur and unnecessary costs will be incurred.

APPENDIX B:
SITE-SPECIFIC DATA QUALITY OBJECTIVE
MEDIA OF CONCERN: EDIBLE FISH TISSUE
(Continued)

STEP 6. SPECIFY LIMITS ON DECISION ERRORS (Continued)	
ESTABLISH THE TRUE STATE OF NATURE FOR EACH DECISION RULE.	The true state of nature when the edible fish tissue samples are decided to be below the LDEQ/LDH risk-based screening levels and/or the EPA SCDM health-based benchmarks for the Human Food Chain Threat when in fact, it is not below the LDEQ/LDH risk-based screening levels and/or the EPA SCDM health-based benchmarks for the Human Food Chain Threat, is that the site does undergo remediation activities. The true state of nature when the edible fish tissue is decided to be above the LDEQ/LDH risk-based screening levels and/or the EPA SCDM health-based benchmarks for the Human Food Chain Threat, when in fact, they are not above the LDEQ/LDH risk-based screening levels and/or the EPA SCDM health-based benchmarks for the Human Food Chain Threat, is that North and South Lakes do not need to undergo remediation activities.
DEFINE THE TRUE STATE OF NATURE FOR THE MORE SEVERE DECISION ERROR AS THE BASELINE CONDITION OR THE NULL HYPOTHESIS (H_o) AND DEFINE THE TRUE STATE FOR THE LESS SEVERE DECISION ERROR AS THE ALTERNATIVE HYPOTHESIS (H_a).	H_o: The edible fish tissue represented by the edible fish tissue samples of North and South Lakes is above the LDEQ/LDH risk-based screening levels and/or the EPA SCDM health-based benchmarks for the Human Food Chain Threat. H_a: The edible fish tissue represented by the edible fish tissue sample of either North or South Lakes is below the LDEQ/LDH risk-based screening levels and/or the EPA SCDM health-based benchmarks for the Human Food Chain Threat .
ASSIGN THE TERMS "FALSE POSITIVE" AND "FALSE NEGATIVE" TO THE PROPER DECISION ERRORS.	• False Positive Error = Type I • False Negative Error = Type II
ASSIGN PROBABILITY VALUES TO POINTS ABOVE AND BELOW THE ACTION LEVEL THAT REFLECT THE ACCEPTABLE PROBABILITY FOR THE OCCURRENCES OF DECISION ERRORS.	To be assigned based on discussions with EPA Site Assessment Manager.
STEP 7. OPTIMIZE THE DESIGN	
REVIEW THE DQOs.	Due to insufficient historical data, determination of the standard deviation was not possible; therefore, sample size calculation using the traditional statistical formula may not be the optimal design. In order to select the optimal sampling program that satisfies the DQOs and is the most resource effective, other elements were considered.

APPENDIX B:
SITE-SPECIFIC DATA QUALITY OBJECTIVE
MEDIA OF CONCERN: EDIBLE FISH TISSUE
(Continued)

DEVELOP GENERAL SAMPLING AND ANALYSIS DESIGN. START will collect up 17 edible fish tissue samples (includes two duplicate samples) from North and South Lakes with the use of a boat containing electroshocking equipment. In North Lake, four top feeding fish species (such as green sunfish and bluegills) and six bottom feeding species (such as buffalo, carp, and catfish) will be collected, processed as fillet tissue samples, and shipped to procured laboratories for chemical analyses. The samples will be analyzed for SW-846 methods 8270E (SVOCs); 6010D/7471B (Total Metals + mercury); 8081B (Pesticides); 8151A (Herbicides); Method 8082A (PCBs); and Method 1668B (PCB congeners. The samples will be collected utilizing sampling procedures described in Section 3.0 of the QASP. A standard turnaround time (TAT) has been requested for the samples as part of the assessment.

Appendix C

Standard Operating Procedures (SOPs)

GENERAL FIELD SAMPLING GUIDELINES

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4.0 RESPONSIBILITIES

- 4.1 ERT Work Assignment Manager
- 4.2 ERT Quality Control Coordinator
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- 4.2 ERT Contractor Field Personnel
- 4.3 ERT Contractor QA/QC Officer
- 4.5 ERT Contractor Health and Safety Officer

5.0 REFERENCES

6.0 APPENDICES

The policies and procedures established in this document are intended solely for the guidance of OLEM employees of the U.S. Environmental Protection Agency (EPA). They are not intended and cannot be relied upon to create any rights, substantive or procedural, enforceable by any party in litigation with the United States. EPA reserves the right to act at variance with these policies and procedures, and to change them at any time without public notice. EPA strongly encourages all readers to verify the validity of the information contained in this document by consulting the most recent Code of Federal Regulations (CFR) and updated guidance documents.

Mention of trade names or commercial products does not constitute U.S. Environmental Protection Agency (U.S. EPA) endorsement or recommendation for use.

GENERAL FIELD SAMPLING GUIDELINES

1.0 OBJECTIVE

The objective of this standard operating procedure (SOP) is to describe the general field sampling techniques and guidelines that will assist in planning, choosing sampling strategies and sampling locations, and frequency of Quality Control (QC) samples for proper assessment of site characteristics. The ultimate goal is to ensure data quality during field collection activities.

A Quality Assurance Project Plan (QAPP) in Uniform Federal Policy (UFP) format describing the project objectives must be prepared prior to deploying for a sampling event. The sampler needs to ensure the methods used are adequate to satisfy the data quality objectives (DQOs).

The procedures in this SOP may be varied or changed as required, dependent on site conditions, equipment limitations or other procedural limitations. In all instances, the procedures employed must be documented on a Field Change Form and attached to the QAPP. These changes must be documented in the final deliverable.

2.0 APPLICABILITY

This SOP applies to the collection of aqueous and non-aqueous samples for subsequent laboratory analysis to determine the presence, type, and extent of contamination at a site.

3.0 DESCRIPTION

Representative sampling ensures that a sample or a group of samples accurately reflect the target population from which the sample(s) are intended to draw conclusions about. Depending on the contaminant of concern and matrix, several environmental and logistical variables may contribute to uncertainty in sampling design, which may affect the representativeness of the samples and subsequent measurements. Environmental variability can occur due to non-uniform distribution of the pollutant due to topographic, meteorological and hydrogeological factors, changes in species, and dispersion of contaminants and flow rates. Logistical variables including restricted or limited access to areas for sampling due to health and safety concerns, physical obstructions, or inability to obtain access agreements may affect the spatial representativeness of the sampling design and/or preclude samples from being collected in areas of interest.

Determining the sampling approach depends on what is known about the site from prior sampling (if any) and the site history, variation of the contaminant concentrations throughout a site, potential migration pathways, and human and environmental receptors. The objectives of an investigation determine the appropriate sampling design.

The frequency of sampling and the specific sample locations that are required must be defined in the site-specific QAPP.

3.1 Planning Stage

The objectives of an investigation are established and documented in the site-specific QAPP. The technical approach including the media/matrix to be sampled, sampling equipment to be used, sampling design and rationale, and SOPs or descriptions of the procedure to be implemented are included in the QAPP. Refer to the matrix-specific SOPs for sampling techniques which include the equipment required for sampling.

During the planning stage, the DQOs will be determined. In turn, the project's DQOs will determine the need for screening data or definitive data. Screening data supports an intermediate or preliminary decision but eventually is supported by definitive data before the project is complete (i.e., placement

of monitor wells, estimation of extent of contamination). Definitive data is suitable for final decision making, has defined precision and accuracy requirements and is legally defensible (i.e., risk assessments, site closures).

3.2. Sampling Design

A sample design specifies the number of samples to be collected for each matrix of concern, the measurements which will be conducted on those samples, where the samples will be collected (downstream of the contaminant release, along a grid, etc.) and how the samples will be collected (discrete or composite samples, seasonally, etc.). The DQOs for a Site assist in selecting the appropriate sampling design for the population of concern (e.g., lead concentrations in residential soil, contaminant uptake in plants, polychlorinated biphenyl [PCB] levels in a specific reach of a river). Other factors may include logistical, measurement and budgetary constraints, such as accessibility to the sampling area, analytical instrument sensitivity or manpower availability. EPA QA/G-5S, *Guidance on Choosing a Sampling Design for Environmental Data Collection*, provides detailed guidance on the selection of a representative sampling design.

There are two main categories of environmental sampling designs:

1. Judgmental, also known as biased or targeted sampling; and
2. Probability-based sampling, which includes, but is not limited to, simple random, systematic, ranked set, stratified and cluster sampling.

Judgmental sampling is based on expert/technical knowledge of the site, known contaminant pathways and the chemical/physical processes associated with the contaminants of concern (COCs). It can be less expensive than probability-based sampling as it is typically quicker to implement. It is often used to target sampling in areas where there have been known chemical spills or visible staining of the matrix of concern. Because it is based on professional judgment, the reliability and precision of the results cannot be quantified using statistical assessments. The interpretation of the sampling results is dependent on personal interpretation.

Although probabilistic sampling is often more costly in time and implementation, this type of design allows for the assessment of the uncertainty associated with the sampling results and provides reproducible results, if performed accurately. Probability-based sampling includes a random/unbiased component for locating samples. Inferential statistics can be used to extend the measured results of the sampling efforts to the larger population of concern and statistical limits can be computed assessing the variability of the measurements. Probabilistic sampling is used when DQOs include the need to obtain the mean or median concentration across an area of concern, establish variability of the COC(s), perform trend analyses, determine the probability of exceeding an actionable level, locate hot spot(s) within a designated area, compare reference and on-site COCs, and establish background levels of COCs. There are many more applications of probabilistic-sampling. Simple random, systematic and stratified random sampling are the most commonly applied sampling designs in assessing environmental sites.

3.2.1 Judgmental Sampling

Judgmental sampling is the subjective selection of sampling locations based on the professional judgment of the field team. This method is useful to locate and to identify potential sources of contamination when there is reliable historical and physical knowledge about a relatively small feature or condition. It may not be representative of the full site and is used to document worst case scenarios. For example, groundwater sampling points

are typically chosen based on professional judgment, whether permanently installed wells or temporary well points. Judgmental sampling may also be implemented at a site when there are schedule and budget limitations, or to determine if there are contaminant "hotspots" that require further investigation using an extensive probability-based sampling design. For example, judgmental sampling may be used to identify multiple areas of contaminated soil, and a subsequent probability-based sampling design can be used to fully delineate the extent of the contaminated soil in each area within a specified level of uncertainty.

3.2.2 Simple Random Sampling

In simple random sampling, sample locations are selected randomly. For example, random pairs of coordinates could be selected from an area where soil sampling is planned. The simple random sampling approach is applied when there are many sample locations and the concentrations are assumed to be homogeneous across a site with respect to the parameter(s) that are going to be analyzed or monitored for. Simple random sampling can also be used to select an initial sample location in a systematic and stratified sampling design.

3.2.3 Systematic Sampling

Systematic grid sampling involves the collection of samples at fixed intervals when the contamination is assumed to be randomly distributed. A random point is chosen as the origin for the placement of the grid. A grid is constructed over a site and samples are collected from the nodes (where the grid lines intersect). Depending on the number of samples that are required to be collected, the distance between the sampling locations can be adjusted. The representativeness of the sampling may be improved by shortening the distance between sample locations.

Systematic random sampling is used for estimating contaminant concentrations within grid cells. Instead of sampling at each node, a random location is chosen within each grid cell. The systematic grid and random sampling approaches are useful for delineating the extent of contamination, documenting the attainment of clean-up goals, and evaluating and determining treatment and disposal options.

Transect sampling involves one or more transect lines established across the site. Samples are collected at systematic intervals along the transect lines. The number of samples to be collected and the length of the transect line determines the spacing between the sampling points. This type of sampling design is useful for delineating the extent of contamination at a particular site, for documenting the attainment of clean-up goals, and for evaluating and determining treatment and disposal options.

3.2.4 Stratified Sampling

Stratified sampling involves separating a site with heterogenous conditions into multiple homogenous strata. It is useful when a heterogeneous population or area can be broken down into regions with less variability within the boundaries of a stratum then between the strata. Professional judgement, historical information, site observations, exposure to ecological and human receptors, soil type, fate and transport mechanisms, and other site-specific factors can be used to separate a sampling area into multiple strata. Additionally, strata can be defined based on the decisions that will be made. Sampling locations can be

selected from each stratum using professional judgment, random sampling, or systematic sampling. Using a systematic sampling design within each stratum, with varying sample densities between different strata, ensures that areas of the site thought to have higher variability in contaminant concentrations and/or thought to be within the boundaries of uncertainty surrounding decision levels are sampled at a higher spatial resolution. This method still maintains a representative and unbiased sample design within each stratum.

3.3 Sampling Techniques

Sampling is the selection of a representative portion of a larger population or body (i.e. target population). The primary objective of all sampling activities is to characterize a site accurately in a way that the impact on human health and the environment can be evaluated appropriately.

3.3.1 Sample Collection Techniques

Sample collection techniques may be either grab or composite. A grab sample is a discrete aliquot representative of a specific location at a given time and collected all at once from one location. The representativeness of such samples is defined by the nature of the materials that are sampled. Samples collected for volatile organic compounds (VOCs) are always grab samples and are never homogenized. Composite samples are non-discrete samples composed of more than one specific aliquot collected at selected sampling locations. Composite samples must be homogenized by mixing prior to putting the sample into containers. Composite samples can, in certain instances, be used as an alternative to analyzing a number of individual grab samples and calculating an average value. Incremental sampling conducted over a grid is a special case of composite sampling and is detailed in U.S. EPA Environmental Response Team (ERT) SOP, *Incremental Soil Sampling*. Choice of collecting discrete or composite samples is based on project's DQOs.

3.3.2 Homogenization

Mixing of soil and sediment samples is critical to obtain a representative sample. An adequate volume/weight of sample is collected and placed in a stainless steel or Teflon® container, and is thoroughly mixed using a spatula or spoon made of an inert material. Once the sample is thoroughly mixed the sample is placed into sample containers specific for an analysis. Avoid the use of equipment made of plastic or polyvinyl chloride (PVC) when sampling for organic compounds when the reporting limit (RL) is in the parts per billion (ppb) or parts per trillion (ppt) ranges. Refer to ERT SOP, *Soil Sampling*, for more details on homogenization.

3.3.3 Filtration

In-line filters are used specifically for collecting groundwater samples for dissolved metals analysis and for filtering large volumes of turbid groundwater. Groundwater samples collected for VOCs are typically not filtered due to potential VOC losses. Filtering groundwater is performed to remove silt particulates from samples to prevent interference with the laboratory analysis. The filters used in groundwater sampling are either cartridge type filters inserted into a reusable housing, or are self-contained and disposable. Filter chambers are usually made of polypropylene housing an inert filtering material that removes particles larger than 0.45 micrometers (μm). Refer to ERT SOP, *Groundwater Well Sampling* and ERT SOP, *Surface Water Sampling*, for more details on filtration techniques.

3.4 Quality Assurance /Quality Control Samples

QA/QC samples provide an evaluation of both the laboratory's and the field sampling team's performance. Including QA/QC samples in a sampling design allows for identifying and measuring sources of error potentially introduced from the time of sample collection through analysis. The most common QA/QC samples collected in the field are collocated field duplicates, field replicates, equipment blanks and field blanks. Trip blanks are typically added for each matrix in each cooler used to ship VOC samples and are prepared prior to going into the field preferably by the laboratory that will be performing the analyses. Extra volume/mass is collected for a matrix spike/matrix spike duplicate (MS/MSD) at a frequency of 5 percent (%; one in 20 samples). Spiking is performed in the laboratory. For additional information or other QA/QC samples pertinent to sample analysis, refer to ERT SOP, *Quality Assurance/Quality Control Samples*.

Collocated field duplicates may be collected based on site objectives and used to measure variability and precision associated with the sampling process including sample heterogeneity, sampling methodology, and analytical procedures. Field replicates are field samples obtained from one location, homogenized, and divided into separate containers. This is useful for determining whether the sample has been homogenized properly. Equipment blanks (also known as rinsate blanks) are typically collected at a rate of one per day. The equipment blank is used to evaluate the relative cleanliness and the decontamination methods of non-dedicated equipment. Refer to ERT SOP, *Sampling Equipment Decontamination,* for more details regarding decontaminating non-dedicated equipment.

3.5 Sample Containers, Preservation, Storage and Holding Times

The amount of sample to be collected, the proper sample container type (i.e., glass, plastic), chemical preservation, and storage requirements are dependent on the matrix sampled and the analyses to be conducted. This information is provided in ERT SOP, *Sample Storage, Preservation, and Handling.* Field personnel need to be cognizant of any short holding times that warrant immediate shipment/transfer to the laboratory.

3.6 Documentation

Field conditions and site activities must be documented. Scribe will be used to document sample information and generate chain of custody records. Other field measurements not typically entered into Scribe will be documented in a site-specific logbook or in a personal logbook. All sample documentation will be maintained in accordance with ERT SOP, *Sample Documentation* and ERT SOP, *Chain of Custody Procedures.*

4.0 RESPONSIBILITIES

4.1 ERT Work Assignment Manager

The ERT WAM is responsible for providing technical expertise and technical direction to the contractor, preparing task orders/work assignments, reviewing deliverables, interacting with the Regional customers and monitoring the financial and administrative management of the project.

4.2 ERT Quality Control Coordinator

The ERT Quality Coordinator provides quality assurance oversight for all projects and implements/maintains the ERT Quality Assurance Program.

4.3 ERT Contractor Task Leaders

Task Leaders (TLs) are responsible for the overall management of the project. Task Leader responsibilities include ensuring that field personnel are well informed of the sampling requirements for a specific project and that SOP and QA/QC procedures stated in the site-specific QAPP are adhered to, issuing a Field Change Form that documents any changes to sampling activities after the QAPP has been approved and maintaining sample documentation.

4.4 ERT Contractor Field Personnel

Field personnel are responsible for reading the QAPP prior to site activities and performing sample collection activities as written. They are responsible for notifying the TL of deviations from sample collection protocols which occurred during the execution of sampling activities. Field staff will collect samples and prepare documentation in accordance with ERT SOP, *Sample Documentation*. In addition, field personnel are responsible for reading and conforming to the approved site-specific Health and Safety Plan (HASP).

4.5 ERT Contractor QA/QC Officer

The contractor's QA/QC Officer is responsible for reviewing this SOP and ensuring that the information in this SOP is updated on a timely basis. Compliance to this SOP may be monitored by either conducting a field audit or reviewing deliverables prepared by the contractor's TL.

4.6 ERT Contractor Health and Safety Officer

Based on OSHA requirements, a site-specific health and safety plan (HASP) must be prepared for response operations under the Hazardous Waste Operations and Emergency Response (HAZWOPER) standard, 29 CFR 1910.120. Field personnel working for EPA's ERT should consult the Emergency Responder Health and Safety Manual currently located at https://response.epa.gov/_HealthSafetyManual/manual-index.htm for the development of the HASP, required personal protective equipment (PPE) and respiratory protection.

The contractor's Health and Safety Officer (HSO) is responsible for ensuring that a HASP has been written and approved prior to field activities. Additionally, the contractor's HSO is responsible for ensuring that the contractor's site personnel H&S training and that their medical monitoring is current.

5.0 REFERENCES

U.S. EPA. 2006. Guidance on Systematic Planning using the Data Quality Objectives Process (QA/G-4), EPA/240/B-06/001, February 2006.

U.S. EPA. 2002. Guidance on Choosing a Sampling Design for Environmental Data Collection (QA/G-5S), EPA/240/R-02/005, December 2002.

6.0 APPENDICES

This section is not applicable to this SOP.

STANDARD OPERATING PROCEDURE APPROVAL AND CHANGE FORM

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SEDIMENT SAMPLING

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SUPERCEDES: SOP #2016, Rev. 0.0, 11/02/01, U.S. EPA Contract 68-C99-223

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SEDIMENT SAMPLING

1.0 SCOPE AND APPLICATION

This Standard Operating Procedure (SOP) describes general and specific procedures to be used by Scientific, Engineering, Response and Analytical Services (SERAS) personnel when collecting representative sediment samples. For the purposes of this SOP, sediment is defined as organic or inorganic material that is broken down by the processes of weathering and erosion and deposited/transported by the action of water. Some examples of sediments include: weathered rock, naturally occurring organic material, and secretions from organisms (e.g. Calcite). The methodologies discussed in this SOP are applicable to the sampling of sediment located adjacent to and underneath the surface of water bodies. Sediment samples are most typically collected to determine the following:

- chemical analysis
- contaminant toxicity
- bioassays
- the presence of benthic biota
- delineate the type, extent and concentration of contamination/impact
- to identify contaminant migration pathways and sources
- disposal of contaminants
- grain size distribution of contamination
- depositional environment/ambient conditions
- sediment type

A Quality Assurance Project Plan (QAPP) in Uniform Federal Policy (UFP) format describing the project objectives must be prepared prior to deploying for a sampling event. The sampler needs to ensure the methods used are adequate to satisfy the data quality objectives listed in the site-specific QAPP

The procedures in this SOP may be varied or changed as required, dependent on site conditions, equipment limitations or other procedural limitations. In all instances, the procedures employed must be documented on a Field Change Form and attached to the QAPP. These changes must be documented in the final deliverable.

2.0 METHOD SUMMARY

Various techniques, methods and equipment have been developed for the collection of sediment samples and their use is subject to site conditions and project goals. Sediment samples may be collected using a variety of methods and equipment, depending on the depth of the aqueous layer, the portion of the sediment profile required (surface vs. subsurface), the type of sample required (disturbed vs. undisturbed), contaminants present, sediment type, and analyses required.

Sediment is collected from beneath an aqueous layer either directly, using a hand-held device such as a scoop, trowel, or auger, or indirectly, using a remotely activated device such as an Ekman or Ponar dredge. Following collection, sediment is transferred from the sampling device to a sample containers of appropriate size and construction for the analysis (es) requested. If composite sampling techniques are employed, multiple grabs are placed into a container constructed of an inert material (e.g. stainless steel bowl, aluminum pan, or re-sealable plastic bag), homogenized, and transferred to the sample container(s) appropriate for the analysis (es) requested. The homogenization procedure should not be used if the sample analysis includes volatile organic compounds (VOCs). In this case, sediment, or multiple grabs of sediment, should be transferred directly from the sample collection device or homogenization container to the sample container.

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Cores may also be collected directly into an acetate or polyvinyl chloride (PVC) sleeve that serves as the sample container for undisturbed samples.

3.0 SAMPLE PRESERVATION, CONTAINERS, HANDLING, AND STORAGE

Chemical preservation of solids is generally not recommended. Cooling to less than or equal to (≤) 6 degrees Celsius (^{O}C) is usually the best approach, supplemented by the appropriate holding time for the analyses requested.

Wide-mouth glass containers with Teflon lined caps are utilized for sediment samples. The sample volume is a function of the analytical requirements and will be specified in the QAPP.

The amount of sample collected, along with the proper sample container type (i.e. glass, plastic), chemical preservation, and storage requirements are dependent upon the matrix sampled and analysis performed. For further information, refer to the SERAS SOP #2003, *Sample Storage, Preservation and Handling,* and/or the QAPP. Preservation of sediment samples is dependent on the analytical method chosen for analysis. Use of sodium bisulfate for VOCs creates low pH conditions that may deteriorate certain target compounds. Samples preserved with methanol can only be analyzed by the medium level method; thereby, elevating reporting limits (RLs).

Additional Quality Assurance/Quality Control (QA/QC) samples should be collected as outlined in the QAPP for each specific site. Further information on QA/QC Samples can be found in SERAS SOP #2005, *Quality Assurance/Quality Control Samples.*

Samples are packed and shipped in accordance with SERAS SOP #2004, *Sample Packing and Shipping.*

4.0 INTERFERENCES AND POTENTIAL PROBLEMS

Sediments occur in a wide variety of environments such as streams, wetlands, rivers, lakes and oceans. Some of these environments can be difficult and possibly hazardous to sample. It is common to find material that may be too large to sample such as cobbles and gravel. In addition, dense clays, silts and organic material may also be found. The appropriate sampling equipment must be assigned, prior to field work, for the collection of the materials anticipated to be encountered.

When working in areas deeper than wading depth, a vessel would be required. SERAS maintains a wide range of vessels (from small zodiacs, pontoon boat for inland projects to a 41-survey vessel capable of working in the open ocean). Appropriate health and safety measures must be applied to the collection methods chosen.

The potential of introducing contamination by a sampling device or technique poses a limitation in sediment sampling. Sometimes, the material that sample containers are made of can interfere with the contaminants that a sample will be analyzed for (i.e. plastics absorb pesticides, metal devices may corrode, etc.). When selecting the samples bottles, consider the contaminants of concern which are to be analyzed.

Substrate particle size and organic matter content are a direct consequence of the physical characteristics of a water body and the watershed. Contaminants are more likely to be concentrated in sediment typified by fine particle size and high organic matter. This type of sediment is most likely to be collected from depositional zones. In contrast, coarse sediment with low organic matter does not typically concentrate

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contaminants and are generally found in erosional zones. The selection of a sampling location can, therefore, greatly influence the analytical results and should be justified and discussed in the QAPP.

Sediments may contain very light particulate matter. For undisturbed samples, all efforts must be made to protect these light sediments from being lost during sampling due to current, agitation, or other methods. Care must be taken when decanting standing water from a sediment sample to minimize the loss of these fine particulates.

5.0 EQUIPMENT/APPARATUS

The equipment required for collection of sediment samples mainly depends on the environment where the sampling is going to take place and the contaminants that are being analyzed. In general, the equipment listed below may be required to perform sediment sampling:

- Maps/Navigational charts
- Personal protective equipment (PPE)
- Compass
- Global positioning system (GPS) receiver
- Tape measure
- Survey stakes, flags, buoys and anchors
- Digital camera
- Bucket, plastic or stainless steel
- Sample bottles
- Ziploc® plastic bags of various sizes
- Field logbook/Sampling data sheets
- Sample labels
- COC records
- Custody seals
- Cooler(s)
- Wet ice
- Decontamination equipment and supplies
- Scoops (plastic or stainless steel)
- Trowels (plastic or stainless steel)
- Bucket auger, with T-handle and extensions
- Tube auger, with T-handle and extensions
- Pipe wrenches
- "T" handle for Volatile Organic Compound (VOC) sampling and "T" handle for sampling with auger bucket/tube
- Ekman™ dredge
- Ponar™ dredge
- Van Veen Sampler or Young-Modified Van Veen Sampler
- Nylon™ rope line or steel cable
- Winch
- Power drill
- Photo-Ionization Detector (PID)/Flame-Ionization Detector (FID)
- Tools and toolbox, multi-use
- SCUBA/dive gear

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- Laptop computer with Scribe™ software
- Portable printer
- Printer paper
- Power strip (s)
- Extension cords
- Vessel
- Hacksaw
- En Core®/Terra Core® samplers
- Trash bags
- Coring device
- Acetate/Polycarbonate/PVC sleeves
- Cutting shoes
- Core catchers
- Hook blade razor knife
- Geoprobe® liner cutting tool
- Hip and chest waders
- Over boots
- Ice
- Bowls, stainless steel, for homogenizing sample

6.0 REAGENTS

Decontamination solutions are specified in the SERAS SOP #2006, *Sampling Equipment Decontamination*. In addition, these solutions are included in the site-specific Health and Safety Plan (HASP).

7.0 PROCEDURES

7.1 Preparation

1. Determine the project objectives and extent of the sampling event.
2. Perform a general site survey prior to commencement of field activities, in accordance with the site-specific HASP.
3. Prepare schedules, coordinate with staff and subcontractors, and communicate with the regulatory agency.
4. Determine the type of equipment and supplies required based on the site characteristics and project objectives.
5. Identify, obtain and calibrate the required air monitoring equipment (e.g. PID/FID), if required by the health and safety plan (HASP).
6. Confirm that the sampling equipment is working and ready to use.
7. Decontaminate all non-dedicated sampling equipment in accordance with SERAS SOP #2006, *Sampling Equipment Decontamination.*

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8. Identify and mark all potential sampling locations with stakes, flags, and/or buoys, if appropriate. A GPS may be used to identify preselected sampling locations or to record sampling locations. When selecting sampling locations, consider the site's specific physical characteristics including, but not limited to, water flow, topography, depth of the overlying aqueous layer, sediment type, contaminant source, and the extent and nature of contamination. In addition, consider on-site access and property boundaries.

7.2 Sample Collection

The selection of a sampling device is mainly contingent upon the:

- physical characteristics of the sediment to be sampled,
- type of sample needed,
- analytical parameters to be studied,
- amount of sediment needed,
- contaminant(s) contained in the sediment,
- depth of water above the sampling location, and
- possible interferences or contamination introduced by the sampling device.

If analysis of sediment from a discrete depth or location is desired, sediment is transferred directly from the sampling device to a labeled sample container(s) of appropriate size and construction for the analysis (es) requested. Transfer is accomplished with a stainless steel or plastic lab spoon or equivalent.

If composite sampling techniques or multiple grabs are employed, equal portions of sediment from each location or collocation are deposited into a decontaminated stainless steel, plastic, aluminum pan or other appropriate container (e.g., Teflon). The sediment is homogenized thoroughly to obtain a mixture representative of the area sampled. The composite sediment sample is transferred to a labeled container(s) of appropriate size and construction for the analysis (es) requested. Transfer of sediment is accomplished with a stainless steel or plastic lab spoon or equivalent. Samples for VOC analysis must be transferred directly from the sample collection device or pooled from multiple areas in the homogenization container prior to mixing. This is done to minimize the loss of contaminant due to volatilization during homogenization.

All non-dedicated sampling devices should be decontaminated prior to use, then wrapped in aluminum foil. The sampling device should remain wrapped until needed. Dedicated sampling devices should be used for each sample. Disposable sampling devices for sediment are generally impractical due to cost and the large number of sediment samples which may be required. Sampling devices should be cleaned in the field using the decontamination procedure described in (SERAS) SOP #2006, *Sampling Equipment Decontamination.*

Once samples have been collected, the following procedures must be followed:

1. Transfer the sample(s) into suitable, labeled sample containers specific for the analyses to be performed.
2. Preserve the sample, if appropriate, or use pre-preserved sample bottles. Do not overfill bottles if they are pre-preserved.

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3. Cap the container securely, place in a resealable plastic bag, and cool to ≤)6°C, if required by the analytical method.
4. Record all pertinent data in the site logbook and/or on field data sheets.
5. Enter all sampling information into Scribe.
6. Generate a Chain of Custody (COC) record, place inside a plastic sleeve and tape to the top of the inside of the cooler.
7. Attach custody seals to cooler prior to shipment.

7.3 Surface Sediment Sampling Methods and Operational Instructions

The main purpose of sediment sampling is to collect a sample of a deposited material. In performing this task, proper sampling equipment and precautions are required to be taken. Several techniques have been developed to sample sediment material from different surface water environments. In general, the main techniques are sampling with scoops, bucket/tube augers, coring devices and mechanical grabs.

Scoops cause the greatest degree of sediment disturbance. Cores and mechanical grabs cause the least disturbance in the water-sediment interface. The main sediment sampling procedures are discussed below.

7.3.1 Sampling Surface Sediment with a Scoop/Trowel

In shallow, slow moving water representative surficial sediment samples may be collected with plastic or stainless steel scoops or trowels.

1. Collect the desired thickness and volume of sediment from the marked sampling location causing minimal disturbance of the water-sediment interface with a scoop.

2. Place the sample into a homogenization container or a specified sampling bottle. (If sampling for VOCs, do not homogenize; transfer the sample directly into the container). See section 7.3.8 for more information on collecting VOC samples.

3. Label the sample bottle and store in a cooler with wet ice.

7.3.2 Sampling Surface Sediment with a Bucket/Tube Auger

In shallow water, representative surficial sediment samples may be collected with a bucket or tube auger. Bucket and tube augers are sampling devices that consist of a bucket or tube with a series of extensions and a handle in the shape of the letter "T" (commonly known as "T" handle). Refer to Figure 1, Appendix A)

1. Attach the bucket/tube auger to the required length of extensions and attach the "T" handle to the upper extension.

2. If the study objectives and characteristics of the sediment or water body warrant, an acetate sleeve may be inserted into the tube auger prior to sampling.

3. Insert the bucket/tube auger onto the sediment at a 90° vertical angle.

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4. Begin sampling by rotating the auger into the sediment with downward pressure until the desired depth is reached.

5. Slowly retrieve the auger containing the sample. The auger should be examined to determine if significant amounts of sediment are lost due to the thin, wet nature of some sediments. If significant losses have occurred, an alternate method of sampling should be performed, such as coring.

6. Carefully decant the surface water contained in the auger.

7. Collect VOC samples directly from the bucket/tube auger using methods discussed in section 7.8.3.

8. Place the sediment sample in a container to homogenize, and then transfer the sediment sample into the appropriate sample bottle.

9. Label the sample bottle and store in a cooler with wet ice.

7.3.3 Sampling Deep Sediment with a Bucket/Tube Auger

In some instances Bucket/Tube Augers may also be used to collected subsurface sediment samples in a dry creek bed. Typically this method is not practical due to difficulties keeping boreholes open to desired depth.

1. Attach the auger bucket/tube to the required length of extensions and attach the "T" handle to the upper extension.

2. If using a tube auger, insert an acetate sleeve prior to sampling.

3. Insert the bucket/tube auger into the sediment at a 90° vertical angle.

4. Rotate the auger into the sediment with downward pressure until the desired depth is reached.

5. Begin augering while periodically removing any accumulated sediment (i.e. cuttings) from the auger bucket/tube. The cuttings should be temporarily stored on plastic sheeting at a distance of at least two (2) feet from the sampling area, to prevent cross-contamination.

6. After reaching the upper range of the desired depth, carefully retrieve the bucket/tube auger from the boring.

7. Advance the auger down the borehole carefully avoiding contact with the borehole sides to prevent cross-contamination. Gradually push down the auger into the sediment sampling location to reach the desired depth.

8. Retrieve the auger from the borehole.

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9. Carefully decant the surface water contained in the auger.

10. Collect VOC samples directly from the bucket/tube auger using methods discussed in section 7.8.3.

11. Place the sediment sample in a homogenization container, homogenize, and then transfer into the appropriate sample bottle.

12. Label the sample bottle and store in a cooler with wet ice.

13. Dispose the cuttings in accordance with the site-specific QAPP.

7.3.4 Surface Sediment Sampling with a Mechanical Dredge

The Ekman, Van Veen, and the Ponar™ dredges are recommended for sampling in deeper water (water that is too deep to use scoops or augers) or for when relatively large amounts of sediments are required. In general, dredges are devices with jaws that are forced shut by weights, level arms, springs, cables or cords. The Ekman™ dredge is mainly used to sample fine sediments (e.g. mud, silt, and other soft and unconsolidated materials) whereas the Ponar™ dredges can be used to sample a wider range of grain sizes (clay to small gravel). Listed below are the assembly and operation instructions for both devices (Figures 2 and 3, Appendix A)

Sampling using an Ekman™ Dredge

1. Attach a dredge head to the bracket on the base of the extension pole with machine bolts.

2. Engage the jaws in a way that they are in the open position by placing trip cables over the release studs. Ensure that the hinged doors on the top of the dredge open freely to grab a sample.

3. Lower the dredge above the sampling location and hold.

4. Using the extension pole, push the dredge head into the sediments to the desired depth.

5. Trigger the jaw by depressing the button on the upper end of the extension pole.

6. Raise the sampler and slowly decant the water contained in the device through the top opening of the sampler.

7. Open the dredge jaws and place the sediment into a container for homogenization or directly into appropriate sample containers.

8. Label the sample bottle and store in a cooler with wet ice.

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Sampling using a Ponar™ or Van Veen Dredge

NOTE: Special care should be taken when using these types of dredges. The steel arms act in such a way as to cause significant pinch hazards.

1. Attach a nylon rope (at least ¼″) or a steel cable (at least ⅛″) to the ring located on top of the dredge.
2. Arrange the dredge with the jaws in the open position, setting the trip bar or spring pin so the sampler remains open when lifted from the top.
3. Slowly lower the sampler to just above the sediment surface and drop the sampler into the sediment.
4. Raise the dredge to the surface and slowly decant the water through the screens on top of the dredge.
5. Open the dredge jaws and place the sediment into a container for homogenization or directly into appropriate sample containers.
6. Label the sample container and store in a cooler with wet ice.

7.3.5 Sampling Sediment with a Coring Device

This method is ideal for collecting intact sediment core samples. By utilizing this technique the original layering of the sediment deposited will be preserved. In general, core samplers are elongated tubes composed of an acetate sleeve, a "T" handle, a core catcher, drive hammer and a cutting shoe (Figure 4, Appendix A).

1. Assemble the coring device and insert a PVC sleeve into the sampling tube.
2. Insert the core catcher, if needed, into the lower end of the sampling tube with the convex surface positioned inside the acetate sleeve.
3. Screw the cutting shoe onto the lower end of the sampling tube, securing the acetate sleeve and core catcher.
4. Attach the sampling device to the required length of extensions; then attach the "T" handle or the drive hammer onto the upper extension.
5. Place the sampler 90° over the location to be sampled.
6. If the "T" handle is used, place downward pressure on the device until the desired depth is reached. After the desired depth is reached, slowly retrieve the sampler from the sediment. Some samplers may be equipped with a ball valve at the top of the core to aid in retrieving wetter samples. This valve should be closed before retrieving the sampler from the bottom.

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7. Carefully remove the coring device from the water sampling location.

8. Unscrew the cutting shoe and remove the core catcher.

9. Slide the PVC sleeve out of the bottom of the sampler tube. Decant surface water, using care to retain the fine sediment fraction. The sample may be left in the PVC sleeve, collected directly from the sleeve, or placed in a container for homogenization prior to transferring to sample containers. Cores should always be stored in an upright position until the overlying water has been drained, the PVC cores cut to remove any overlying air spaces, and capped on both ends. To drain the overlying water, the PVC core should cut at various levels starting near the top of the core and proceeding to just above the top of the sediments. Water should drained at a rate slow enough to minimize turbulence and disturbance to the sediment. Indicate on the PVC tube the orientation of the sediment core using a waterproof marker.

10. Label the sample and store in a cooler with wet ice.

7.3.6 Diver-Assisted Sediment Sampling

For sampling in deep water environments where dredge methods cannot be used or core samples are required, a diver-assisted sediment sampling may be utilized. This technique may be used in biological and chemically-contaminated environments at depths up to 130 feet sea water (fsw) and is performed by trained EPA-certified scientific divers. All divers performing these activities are required to adhere to the SERAS SOP # 3019, *Dive Operation Safety*. Divers collecting sediment samples should have experience with equipment/methodology required to collect sediment.

1. Prepare two teams: a surface team (surface support) and a dive team (sampling team). The dive team will sample all locations and will remain in constant communication and supported by the surface team.

2. The surface control team will provide the diver team with an acetate or polyvinyl chloride (PVC) sampling tube, and two plastic end caps. A metal cap and a sledge hammer may be used in stiffer sediments to achieve the required sample depth.

3. The diver(s) will move to the sampling location.

4. Once at the sampling location, the diver(s) communicate to the surface team; the depth of water and the site/sediment conditions.

5. The diver(s) will manually advance the sample tube into the sediment or place the metal cap on top of the sleeve and hammer the sleeve vertically into the sediment until the desired depth is reached.

6. Remove the metal cap from the top of the core (if used) and replace with an end cap.

7. The core will then be slowly pulled from the sediment. The diver should reach under the sediment and place a bottom cap on the core as soon as possible.

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8. The diver will carry core vertically to the surface and give it to a member of the surface support team.

9. The surface support team will secure the end caps to the core with duct tape and document the sample location, sample depth and sample orientation (top of core/bottom of core). Cores are then transported and stored in an upright position.

10. The sample may be left in the sleeve, sampled directly from the core, or placed in a container for homogenization or compositing. Cores should always be stored in an upright position until the overlying water has been drained.

11. If intact cores are to be used for analysis or transported off the site, they should be cut and recapped after removing all overlying water/air space in the core. To drain the overlying water, the acetate core should cut at various levels starting near the top of the core and proceeding to just above the top of the sediment. Water should be drained at a rate slow enough to minimize water turbulence and disturbance to the sediment. After the water has been drained from the core, the core should be cut at the top of the sediment and recapped.

11. Label the sample and store in a cooler with wet ice.

7.3.7 Vibracore Sampling

When sampling in deep water or where significant sample volume or depth are required, Vibracoring techniques may be used. Use of the Vibracore obtains sediment samples by vibrating a metal core barrel into the sediment. Penetration success is dependent upon the lithology of the formation.

Vibracores are generally composed of a stainless steel tube, detachable metal-cutting nose, stainless steel core catcher and the Vibracore drilling head. In general, Vibracores are operated by a team of two or more people from a vessel or on a structure extending over the water surface. Vibracoring should be conducted in accordance with subcontractor's SOPs and industry methodology standards.

Vibracoring uses vibration to achieve penetration into the sediments. If undisturbed cores are required, alternate sampling methods should be evaluated (Figure 5, Appendix A).

1. After allowing the sediments in the core to settle, all standing water should be drained from the core by cutting small holes above the sediment line. Water should be drained slowly so as not to re-entrain fine sediments.

2. Put the core sleeve on the soil identification table.

3. Use a Vibracore™ sleeve cutting tool (electric sheet metal cutter) and cut the full length of the sleeve. Then position the cutting tool roughly 4 inches to the left or right of the first cut and cut the entire length of the sleeve again.

4. Separate the sample core into the pre-determined sampling intervals.

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5. Screen the sample core with the appropriate air monitoring device and record all readings in a site log book.

6. Perform soil identification/description activities.

7. Collect Terra Core samples for VOC's first. Then, transfer the remainder of the interval to a mixing bowl and homogenize.

8. Transfer the samples into the appropriately labeled sample containers and then store in a cooler with wet ice to maintain a temperature of ≤6°C.

7.3.8 Volatile Organic Compound Sampling

7.3.8.1 En Core® Sampler Method

The En Core® sampler is designed to collect sediment samples to be analyzed for VOC's. The En Core® sampler is comprised of an inert composite polymer (coring body) and a stainless steel "T" handle. This method reduces the open-air handling of soil samples in the field, minimizing the loss of VOCs. The following procedures are used for collecting sediment samples using an En Core® sampler (Figure 6, Appendix A).

1. Assemble the coring body, plunger rod and "T" handle.

2. Turn the "T" handle with the T-up and the coring body down and push the sampler into the sediment until the coring body is completely full (o-ring on sampler seen in the bottom hole of the sampler for 5 grams, and the top hole of the sampler for 25 grams) with minimal disturbance of the sample. Remove the sampler from the sediment.

3. Cap the coring body while it is still on the "T" handle. Push the cap over the flat area of the ridge. Ensure that the cap is seated properly to seal the sampler. Push cap to lock arm in place. Rotate the cap 90 degrees ensuring the cap is locked.

4. Remove the capped sampler by depressing the locking lever on the "T" handle while twisting and pulling the sampler from the "T" handle.

5. Using the hole located on the En Core® "T" handle, insert the core plunger, twist and lock the plunger of the core body.

6. Attach the label to the coring body cap, place it back into the En Core® sample bag and seal the bag.

7. This process will be conducted a total of three times for each field sample, six times for a sample and a field duplicate and nine times for a sample that has been chosen for the Matrix Spike/Matrix Spike Duplicate (MS/MSD) as outlined in the UFP-QAPP.

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8. Store the sample in a cooler with wet ice at ≤6°C.

9. Decontaminate the En Core® "T" handle according to SERAS SOP #2006, *Sampling Equipment Decontamination.*

7.3.8.2 Terra Core® Sampler Method

A Terra Core® sampler is a single-use device designed to collect sediment samples to be analyzed for VOCs. The Terra Core® sampler is made of an inert composite polymer and reduces the open-air handling of sediment samples in the field. The following procedures are used for collecting sediment samples using a Terra Core® sampler (Figure 7, Appendix A).

1. Assemble the Terra Core® sampler by inserting the plunger portion into the "T" handle. Snap the plunger into the sampler.

2. Push the Terra Core® sampler into the sediment, ensuring that the Terra Core® sampler is completely full with sediment. Remove sampler from the sediment.

3. Unclip the plunger, rotate 90° and push the sample out of the sampler into a pre-weighted 40-milliliter (mL) vial containing a stirring bar. Refer to the analytical method if preservation is required. Label sample and store on wet ice.

4. This process will be conducted 3 times for the collection of a sample, 6 times for a duplicate and 9 times for an MS/MSD as outlined in the UFP-QAPP.

8.0 CALCULATIONS

This section is not applicable to this SOP.

9.0 QUALITY ASSURANCE/QUALITY CONTROL

Specific QA/QC activities that apply to the implementation of these procedures will be listed in the Quality Assurance Project Plan QAPP prepared for the applicable sampling event. The following general QA procedures will also apply:

1. All sample collection data, including sample collection methods, times of collection, analyses required, and decontamination procedures (if any) must be documented on site logbooks.

2. All instrumentation must be operated in accordance with operating instructions as supplied by the manufacturer or instrument-specific SOPs, unless otherwise specified in the QAPP. Equipment check out and calibration is necessary prior to purging and sampling and must be done according to the instruction manuals supplied by the manufacturer.

3. Each field sampler's level of competency must be documented for each type of equipment used.

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10.0 DATA VALIDATION

Data verification (completeness checks) must be conducted to ensure that all data inputs are present for ensuring the availability of sufficient information. These data are essential to providing an accurate and complete final deliverable. The SERAS Task Leader (TL) is responsible for completing the UFP-QAPP verification checklist for each project.

11.0 HEALTH AND SAFETY

When working with potentially hazardous materials, follow U.S. EPA, Occupational Safety and Health Administration (OSHA) and SERAS health and safety guidelines. More specifically, depending upon the site specific contaminants, various protective programs must be implemented prior to sampling the first well. The site's health and safety plan (HASP) should be reviewed with specific emphasis placed on the protection program planned for the well sampling tasks. Standard safe operating practices should be followed such as minimizing contact with potential contaminants in both the vapor phase and liquid matrix through the use of respirators and other PPE.

When conducting sediment sampling activities, physical hazards must be identified and adequate precautions are required to be taken to prevent any hazards. If sampling is conducted from a shore or bank adjacent to a water body, the sampler should be alert for bank collapse. The person performing the sampling should be on a lifeline and wearing the appropriate PPE [including a personal flotation device (PFD)]. If sampling from a vessel, samplers are required to take all appropriate protective measures and wear a PFD or mustang suit. Further information on personal protective equipment can be found in SERAS SOP # 3016, *Personal Protective Equipment Program*.

All diver assisted sampling should also follow SERAS SOP# 3019, *Diver Operation Safety*. Any sampling that is being conducted from a vessel should follow both safety and operation requirements.

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13.0 APPENDICES

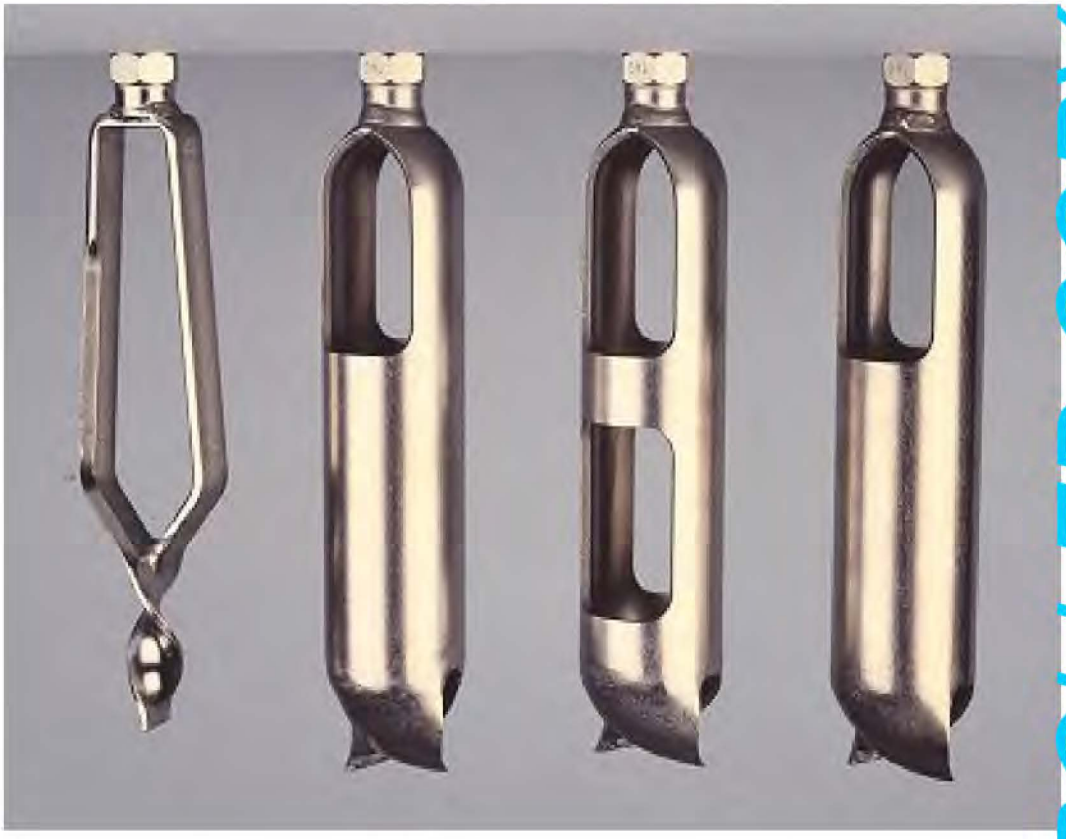
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APPENDIX A
Figures
SETAS SOP #2016
July 2016

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FIGURE 1 - Example of Sampling Augers



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FIGURE 2 - Example of an Ekman™ Dredge



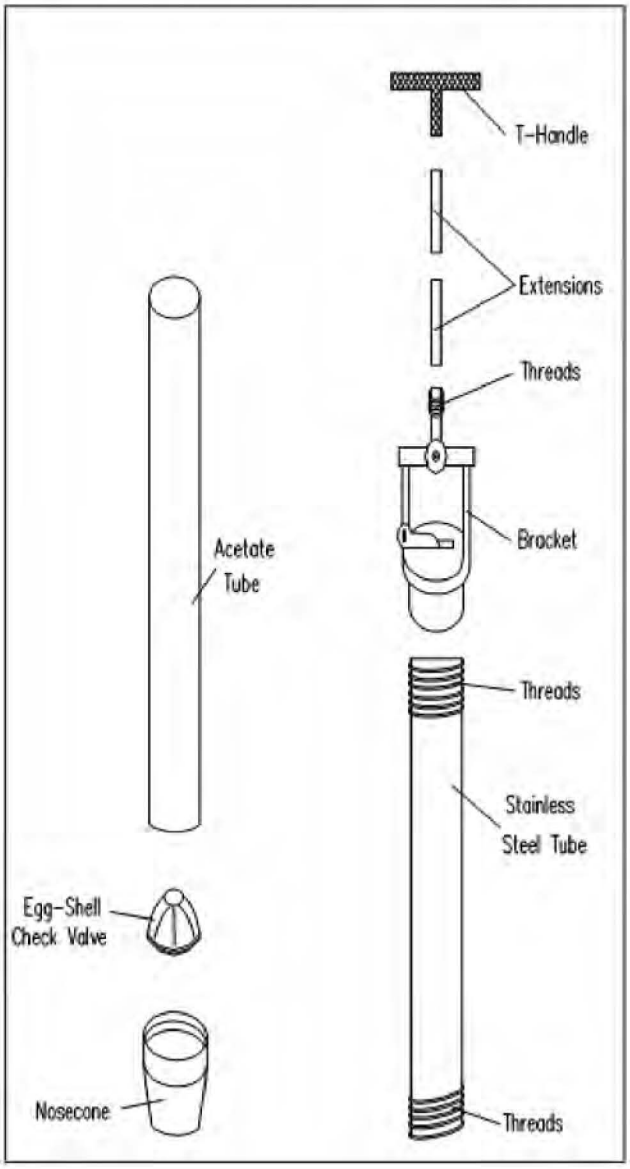
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FIGURE 3 - Example of a Ponar™ Dredge



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Figure 4 - Example of a Sampling Coring Device



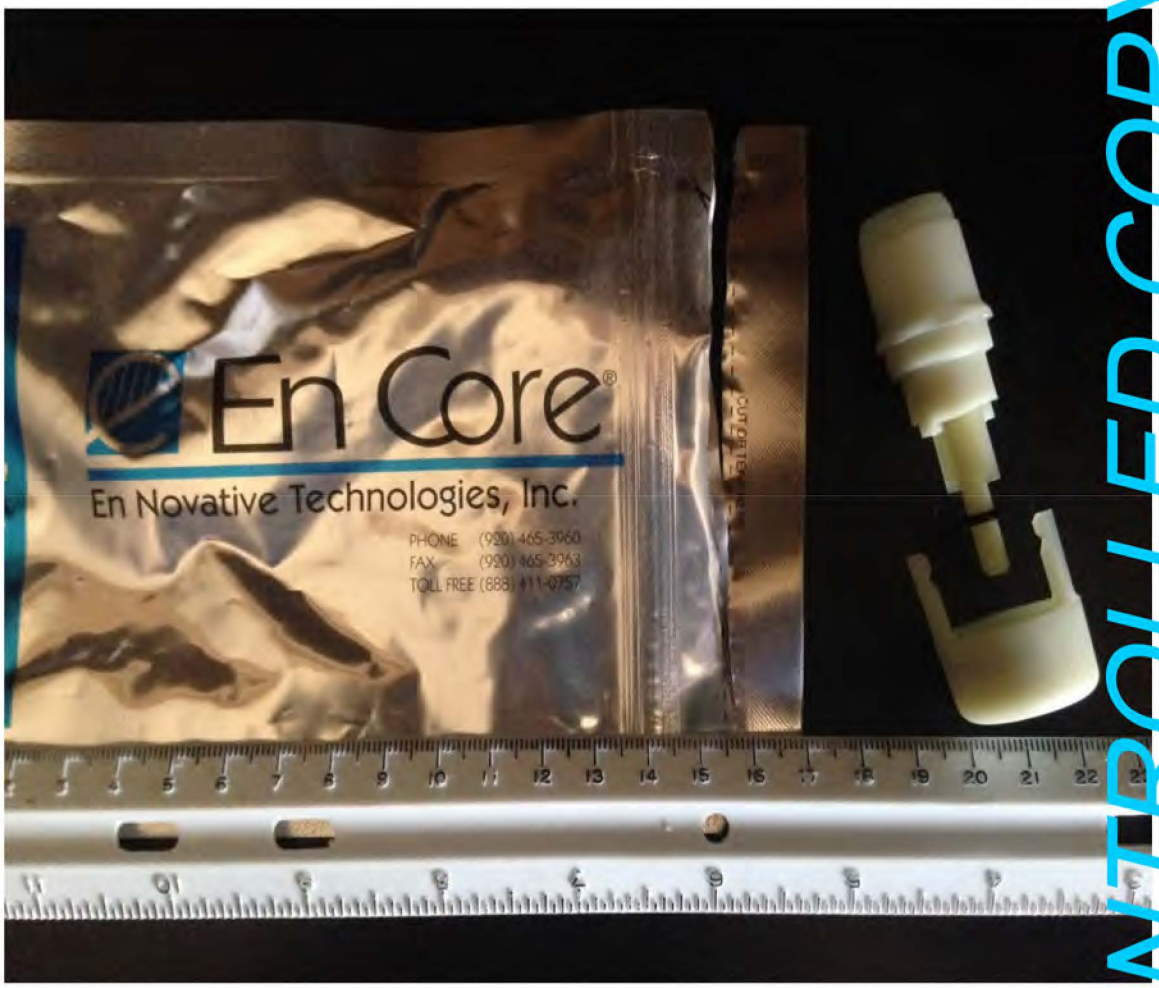
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Figure 5 - Example of Vibracoring



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Figure 6 - Example of an Encore Sampler



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Figure 7 - Example of a Terracore Sampler



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STANDARD OPERATING PROCEDURE APPROVAL AND CHANGE FORM

Scientific, Engineering, Response and Analytical Services 2890 Woodbridge Avenue Building 209 Annex Edison New Jersey 08837-3679
STANDARD OPERATING PROCEDURE
Title: Fish Handling and Processing
Approval Date: 07/31/16
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The top row of this table shows the most recent changes to the controlled document. For previous revision history information, archived versions of this document are maintained by the SERAS QA/QC Officer on the SERAS local area network (LAN).

History	Effective Date
Editorial changes	07/31/16
Added UFP QAPP preparation language to Section 1.0; training records for documenting competency to Section 9.0; data verification text to Section 10.0	07/31/16
Added list of methods for collecting fish to Section 1.0	07/31/16
Deleted paragraph discussing training for processing staff in Section 4.4 and moved it to Section 9.0	07/31/16
Added text on insufficient sample numbers to Section 4.4	07/31/16
Added spring balance, s-weights and scientific collection permit to Section 5.0	07/31/16
Rewrite of Section 6.0 Reagents	07/31/16
Added text on collecting tissue sections for histopathology to Section 7.6	07/31/16

FISH HANDLING AND PROCESSING

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SUPERSEDES: SOP #2039; Rev. 0.0; 04/10/98; U.S. EPA Contract 68-C4-0022

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FISH HANDLING AND PROCESSING

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1.0 SCOPE AND DESCRIPTION

This standard operating procedure (SOP) describes the basic procedures for field processing of fish collected at hazardous waste sites. Fish can be used to determine whether contaminants in aquatic habitats accumulate in fish tissue, cause histopathological damage, or affect fish condition or growth. Impacts on aquatic community structure can also be assessed.

Fish are typically collected in the field using seine, trawl or dip nets, electroshocking or angling using a hook and line. It is outside of the scope of this SOP to discuss these techniques.

A Quality Assurance Project Plan (QAPP) in Uniform Federal Policy (UFP) format describing the project objectives must be prepared prior to deploying for a sampling event. The sampler needs to ensure that the methods used are adequate to satisfy the data quality objectives listed in the QAPP for a particular site.

The procedures in this SOP may be modified, dependent on site conditions, equipment limitations or other procedural limitations. In all instances, the procedures employed must be documented on a Field Change Form and attached to the QAPP. These changes must be documented in the final deliverable.

2.0 METHOD SUMMARY

Specific procedures used to process fish will depend on the project objectives. Regardless of the objectives, data that should always be collected on fish in the field include length, weight, species, and information on parasites or other noted abnormalities. Scales, otoliths, or fin rays should be collected for the purpose of aging fish. When possible, sex and stage of maturity should also be noted.

Fish may be temporarily kept on wet ice at ≤ 6°C in the field. Fish that are collected for contaminant analysis should be measured, then filleted or frozen whole on dry ice at -10 degrees Centigrade (°C). If study objectives include histopathology, fish should be dissected so sections of target tissues can be collected.

3.0 SAMPLE PRESERVATION, CONTAINERS, HANDLING, AND STORAGE

Fish for heavy metal analysis may be placed directly into plastic bags. If fish are going to be analyzed for organic compounds, they should be wrapped in aluminum foil and then placed into plastic bags.

Fish collected for population studies can be preserved in ethanol or 10 percent (%) formalin. If otoliths are going to be collected to age fish, fish should not be preserved in formalin until the otoliths have been collected, as formalin will decalcify the bones. Specimens should be stored in glass jars or plastic buckets. Small fish can be preserved by simply placing them in ethanol or formalin. When preserving large fish, a slit should be made along the belly on the right side of the midline. Incisions should also be made in the dorsal muscle mass, on either side of the vertebral column. For proper preservation, the specimen volume should be no more than 50% of the total volume occupied by the specimen and preservative.

4.0 INTERFERENCES AND POTENTIAL PROBLEMS

4.1 Length

Factors, which contribute to length measurement errors, are muscular tension in live fish, eroded fins, shrinkage of fish due to preservation and failure to consistently squeeze the tail to get maximum

total length.

4.2 Weight

When taking weights, an attempt should be made to have fish at a standard degree of wetness. Variation in stomach contents or amount of water swallowed at capture will also affect fish weights. Other sources of error include movement of the scale due to fish movements, wind or boat motion.

4.3 Aging

Because scales initially appear on different body parts at different times, scales collected to age fish must be removed from the same location. Scales should not be removed from areas likely to shed scales or where there are irregularly shaped scales. Generally, these scales should be collected along the lateral line.

Otoliths are brittle and can crack easily. Because there are only two large otoliths per fish, care should be taken not to damage them when removing them. Field crews should practice locating otoliths on target species before the fieldwork begins.

4.4 General

Extreme temperatures can alter tissue characteristics, making tissues unsuitable for analysis. Exposure of dead specimens to extreme cold can cause tissue to freeze, making histopathological analysis difficult. Extreme heat can cause rapid decomposition of tissue. An effort should be made to keep fish alive until they are processed. Dead fish should be processed as soon as possible.

In some cases, fish collected may not have sufficient body mass for analysis of a contaminant to the analytical detection limit. If this occurs, then individuals of the same species from the same sampling location may be pooled for analysis. If multiple analyses of contaminants in tissue are being done, these may need to be prioritized if body mass of the specimens is insufficient to conduct all of the analysis. Analyses to be conducted on each specimen should be carefully documented and will be included in the UFP-QAPP. In some instances, a desired species may not be present in sufficient numbers or at all and an alternate similar species (similar ecological niche and feeding habits) should be selected based on availability and project goals.

5.0 EQUIPMENT/APPARATUS

Equipment needed for processing fish is listed below:

- Measuring board
- Balance or scale
- Field Data Sheets
- Field guides or keys
- Coin envelopes, approximately 1 by 2 inches (")
- Knife
- Forceps
- Saw

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- Probe
- Pliers
- Ziploc bags
- Aluminum foil
- Large scissors
- Small scissors
- Dissecting microscope
- Glass vials with caps
- Glass jars with lids
- Preservative
- Scalpel
- Fillet Knives
- Knife Sharpener
- Dissecting trays
- Spring balance or electronic digital scale, calibrated annually by an outside vendor, capable of weighing to 0.01 gram (g)
- "S" Weights, certified every 3 years, for daily calibration of the balance. The balance should be calibrated using a weight close to the fish being weighed.

A scientific collection permit, if needed, should be obtained in advance of fish collection.

6.0 REAGENTS

- Buffered paraformaldehyde, 4%, purchased through commercial chemical supply companies for histopathological analyses
- Ethanol, 70%, for fish population studies
- Formalin, 10%, for fish population studies

7.0 PROCEDURES

When fish are collected for residue analysis, generally the largest fish captured are the ones which should be analyzed. All fish captured should be held until a sufficient number and weight of fish are caught either at a particular location or determined at the end of the day. If necessary, fish should be labeled as they are captured so that individual fish can be identified later. Length, weight and species should be determined at the time a fish is labeled. The fish may be kept in an individual Ziploc bag labeled on the outside with a printed label or permanent ink. Other data can be collected after fish that will be analyzed have been selected.

A data sheet should be completed for each specimen processed. Sampling location, tag number, date, species, and data on the specimen metrics described below should be recorded.

7.1 Length

Fish length is determined using a measuring board on which the anterior end of a fish is placed against a stop at the beginning of a measuring scale. The fish should be measured with the mouth closed and the body positioned on its right side with the head to the measurer's left. Any one of three measurements can be taken: total, fork or standard length (Figure 1, Appendix A). Total length is the greatest length of a fish from its anterior most extremity (usually the mouth) to the end of the

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tail fin. For fish with a forked tail, the two lobes should be pressed together, and the length of the longest lobe should be taken. Fork length is measured from the anterior end of the fish to the tip of the middle rays of the tail. Standard length is the length of a fish from the anterior end to where the base of the median tail fin rays joins the caudal peduncle. This spot can be located by bending the tail sharply. A crease should form where the tail fin rays end. Total length or fork length measurements are used most often. Determination of standard length is very difficult on some species.

7.2 Weight

Spring balances or electronic digital scales of appropriate capacity are generally used to weigh individual fish. Prior to weighing samples, ensure that the balance has been externally calibrated by an outside vendor at least annually and a calibration check has been performed using a "S" weight in the range of the fish being weighed daily prior to use. Fish can be weighed by themselves, or by placing them in a container of water. Taking the weight in water reduces error due to fish movement, but may not be practicable for large fish. Large numbers of fish can be weighed in bulk if individual weights are not needed (e.g., for population studies).

Because most fish maintain near-neutral buoyancy in water, their specific gravity is close to 1.0 and body volume is proportional to weight. Therefore, the amount of water displaced in a container can also be used to determine weight.

7.3 Species Identification

Study objectives will dictate what level of identification is needed for a fish. Fish collected for residue analysis should be identified to species, as different genera may have different feeding habits.

Local authorities should be consulted before fieldwork begins to determine whether regional taxonomic references exist.

7.4 Aging

Hard parts collected for aging can be scales, otoliths, spines or fin rays. Prior to field work, a literature search should be conducted to determine the best method for aging a particular target species.

Scales are the easiest hard structure to collect, but only scales from a particular area on a fish can be used for aging (Figure 2, Appendix A). Lateral line scales should not be collected. Before collection, gently scrape the target area to remove mucus, dirt and epidermis. Remove scales by scraping towards the head, or by firmly pressing a knife point on a scale and pushing towards the tail. Place the scales in a small, labeled coin envelope.

Otoliths are a more accurate method of determining age, but collection and reading requires more skill and time than scales. To collect otoliths, grasp the head firmly and cut the top of the skull slightly behind the eyes back to the upper edge of the gill cover (Figure 3, Appendix A). If the cut is made correctly, the large sacculus otoliths should be exposed behind the brain. If not, carefully probe around the area until the otolith is located. Gently remove both large otoliths with forceps,

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clean them, and store dry in a coin envelope.

7.5 External Examination

While processing fish, note any external abnormalities or parasites on data sheets or in field logbooks. Information on sex and stage of maturity should also be noted. If fish are collected during spawning season, some fish can be sexed based on breeding colors. Mature fish may release eggs or milt when they are handled.

7.6 Final Processing

To assess environmental risk through food chain concentration of contaminants, the whole body should be analyzed for tissue residue. Based on the objectives of the study, the stomach contents of the fish may be removed (using dissection technique) prior to analysis. Alternately, fish may be held in aerated chambers for 24 hours to depurate stomach contents. This will allow for a determination of the concentration of contaminants accumulated in the tissue versus contaminants entrained in the gut.

To assess risk to humans from fish consumption, the fish is generally filleted and only the muscle tissue is sent to the laboratory for analysis. Fish should be dissected if tissues are being collected for histopathology or for residue analysis on specific organs. Tissue sections for histopathology should be collected before fish are frozen. Fish being collected for population studies can be preserved in either 70 percent ethanol or 10 percent formalin.

Procedures for filleting or dissecting a fish are described below. Live fish should be killed by a blow to the head or severing the spinal cord immediately before processing.

7.6.1 Filleting

To fillet a fish, an initial cut should be made from the dorsal fin to the pelvic fin, just behind the opercular flap. Run the tip of the knife along the dorsal side of the fish, from the initial cut to the caudal fin. Continue making successively deeper cuts, running the knife blade as close to the neural spines and ribs as possible. After the fillet is obtained, remove the skin. Place the skin side of the fillet down on the dissecting tray, hold on to the tail portion of the fillet, and run the knife between the skin and the muscle tissue. Turn the fish over and repeat the process to obtain the other fillet.

7.6.2 Dissecting

Begin the dissection by laying the fish on its right side and making an incision from just above the vent to the top of the rib cage. Cut along the rib cage, forward through the pectoral girdle. Make a shallow incision to avoid damage to internal organs. Pull the flap downward to open the body cavity. Note any gross abnormalities or parasites observed in the body cavity. Also record sex and stage of maturity.

Liver, gill and kidney tissues are the fish tissues collected most often for histopathology or residue analysis. The liver should be located near the anterior end of the stomach. It is connected to the gut by the gall bladder and bile duct. The liver should be removed and

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weighed to the nearest 0.001g. A hepatosomatic index, liver weight expressed as a percentage of body weight, can be used as an indicator of fish condition. For histopathology, two tissue sections should be obtained from the distal end of the medial lobe. The sections should be cut 1.0 centimeter (cm) towards the center of the lobe, and 0.5 cm thick. Cut the section using a scalpel, and handle carefully to avoid crushing the tissue. Place the tissue sections in a glass scintillation vial filled with 4% buffered paraformaldehyde.

The gills are located beneath the opercular flap. Pull back or remove the operculum to expose the gills. Carefully remove a section of gill tissue, taking care not to crush it. Place the gill tissue in the scintillation vial with the liver tissue.

The kidney is located along the backbone above the gas bladder. Kidney tissue is difficult to remove from fish because it adheres to the body wall and is soft. Thin slices can be taken through the vertebral columns that include the kidney. These tissue sections should be preserved with the liver and gill tissue sections. Again, for proper preservation, the specimen volume should be no more than 50 percent of the total volume occupied by specimen and preservative.

Unless specific organs are being analyzed for residues, place all tissues back in the body cavity and wrap the fish in plastic or aluminum foil. Samples should be labeled and shipped following ERTC/REAC SOP #2002. *Sample Documentation* and ERTC/REAC SOP #2004, *Sample Packaging and Shipping.*

8.0 CALCULATIONS

No calculations are needed for the above procedures.

9.0 QUALITY ASSURANCE/QUALITY CONTROL

Specific QA/QC activities that apply to the implementation of these procedures will be listed in the QAPP prepared for the applicable sampling event. The following general QA procedures also apply:

1. All sample collection data such as sample number and sample location must be documented on site logbooks or Field Sampling Worksheets.

2. All equipment must be operated in accordance with operating instructions as supplied by the manufacturer, unless otherwise specified in the QAPP. Equipment check-out and calibration is necessary prior to processing and must be done according to the instruction manuals supplied by the manufacturer.

3. A training record indicating the level of competency for each field employee will be documented and maintained on file. All members of the processing staff should be trained in techniques used to make length and weight measurements. Inconsistencies in the way these measurements are taken can lead to errors. Aging fish using scales or otoliths should be done by one person if possible. Meaningful age estimates can only be obtained if hard parts are read in a consistent manner. If possible, species identifications will be confirmed by a regional biologist familiar with the site's aquatic fauna.

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The following specific QC activities apply:

1. Samples will be duplicated in an unimpacted reference area.

10.0 DATA VALIDATION

Data verification (completeness checks) must be conducted to ensure that all data inputs are present for ensuring the availability of sufficient information. These data are essential to providing an accurate and complete final deliverable. The SERAS Task Leader (TL) is responsible for completing the UFP-QAPP verification checklist for each project.

11.0 HEALTH AND SAFETY

A site-specific Health and Safety plan will be prepared prior to any field activity, and must be approved by the SERAS Health and Safety officer. All members of field crews should be trained in cardiopulmonary resuscitation (CPR).

Any time fish are collected, water and boat safety precautions must be taken. Wading can be dangerous, especially in swift currents or if the bottom is uneven or algae-covered. Samplers should always work in pairs, and wader belts should be worn to prevent waders filling with water if falls occur. Boating safety guidelines should be followed for activities that require transportation by boat.

12.0 REFERENCES

Anderson, R.O. and S. J. Gutreuter. 1983. Length, weight and associated structural indices. Pgs. 283-300 In: Fisheries Techniques, L.A. Nielson and D. L. Johnson (eds). American Fisheries Society, Bethesda, Maryland.

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Cailliet, G.M., M.S. Love and A.W. Ebeling. 1943. Fishes. A field and laboratory manual on their structure, identification and natural history. Wadsworth Publishing Company, Belmont, CA. 194 pp.

Hunn, J.B. 1988. Field assessment of the effects of contaminants on fishes. U.S. Fish Wildl. Serv., Biol. Rep. 88(19). 25 pp.

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13.0 APPENDICES

A – Figures

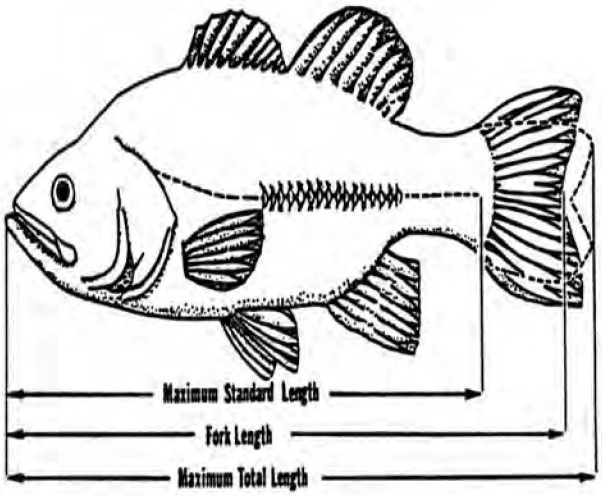
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APPENDIX A
Figures
SOP #2039
July 2016

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FIGURE 1. Measurements of Fish Length - Standard, Fork, and Total
(From Anderson and Gutreuter 1983)

FIGURE 1. Measurements of Fish Length - Standard, Fork, and Total
(From Anderson and Gutreuter 1983)

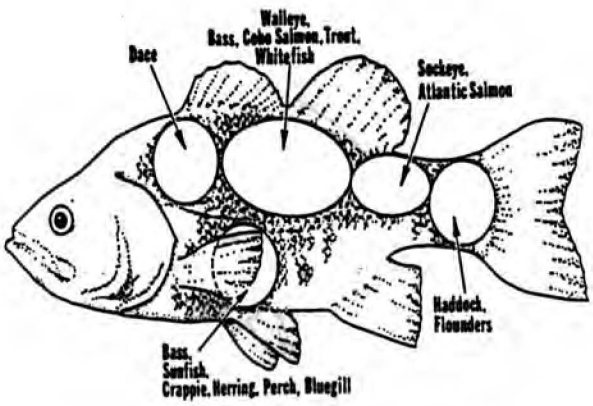


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FIGURE 2. Location of Scales for Aging

FISH HANDLING AND PROCESSING

FIGURE 2. Location of Scales for Aging
(From Jearld 1983)

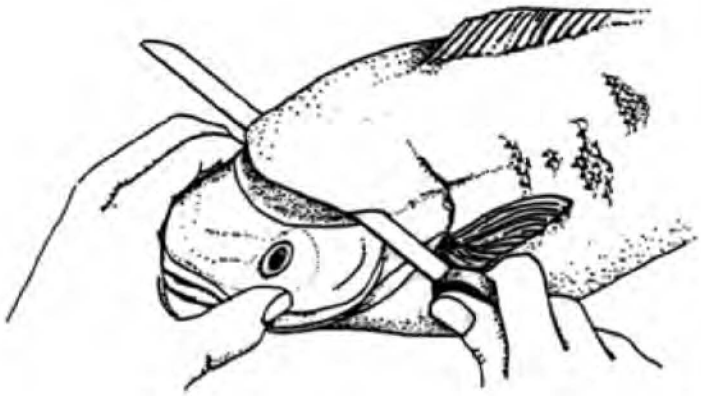


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FIGURE 3. Method for Removing Otoliths
(From Jearld 1983)

FISH HANDLING AND PROCESSING

FIGURE 3. Method for Removing Otoliths
(From Jearld 1983)

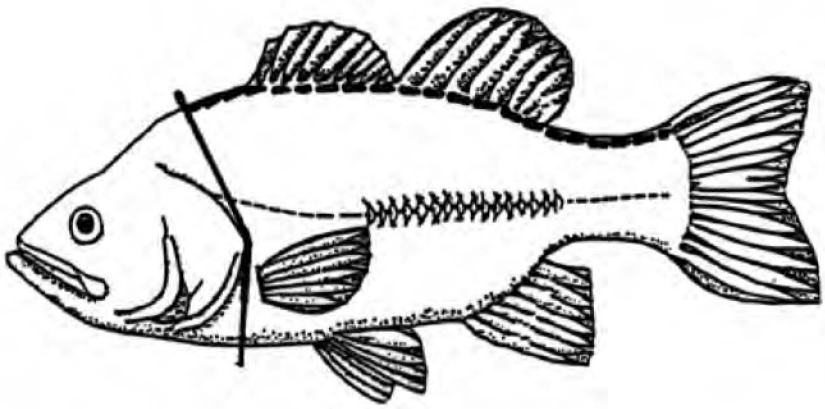


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FIGURE 4. Location of Cuts for Filleting a Fish

FISH HANDLING AND PROCESSING

FIGURE 4. Location of Cuts for Filleting a Fish



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FLD 18 OPERATION AND USE OF BOATS AND WATERCRAFT

Revised March 03, 2015

GENERAL

WESTON acknowledges the unique hazards associated with operating watercraft. This procedure describes the minimum requirements for WESTON personnel and subcontractors that require the use of watercraft on Weston projects. The following is an outline of the combinations of personnel that are possible in a boating related job:

1. Only WESTON Personnel
2. WESTON personnel and client and/or vendor personnel
3. Vendor personnel only
4. Subcontractors

WESTON requires that an appropriately trained and licensed Pilot, Helmsman, or Captain of the watercraft be identified and approved for projects involving watercraft.

NOTE: *The local Marine Resource Office should be contacted and a review of the project contract should be reviewed to determine the need for the appropriate Captains license. Criteria to be assessed would include project location, type of craft, tasks to be conducted, personnel involved and the basis for passengers to be onboard.*

APPROVALS

Use of watercraft requires the written approval of the local Weston Safety authority that has the necessary boating safety training or experience to make this determination. The local safety authority shall review and approve Site Specific Health and Safety Plans and Float Plans associated with the use of all watercraft. Current Weston boating safety resources that can be contacted are as follows:

Name	Location	Work Phone Number
James Davis	Mobile, AL	(251) 434-6420
Danny Newman	Houston, TX	(713) 985-6600
Chris Baer	West Chester, PA	(610) 701-3653
Larry Werts	West Chester, PA	(610) 701-3912
Erik Hadwin	Baton Rouge, LA	(225) 297-5406
Sam Pack	Auburn, AL	(334) 466-5600

The licensed boat operator shall be identified by name and approved by the local safety authority prior to initiating work activities. The boat operator shall prepare a float plan, when appropriate, and file the float plan with the Project Manager. The Float Plan may also be filed with the appropriate authority (U.S. Coast Guard). The boat operator qualifications and experience shall be defined at a minimum as follows:

- License and rating (Coast Guard and State or other) if required,
- Experience with type/size of boat being used
- Experience on body of water where the boat will be operating

REFERENCES

Related FLD OPS:

FLD02 - Inclement Weather
FLD05 - Heat Stress Prevention and Monitoring
FLD06 - Cold Stress
FLD07 - Wet Feet
FLD10 - Manual Lifting of Heavy Objects
FLD15 - Remote Areas
FLD19 - Working Over or Near Water
FLD32 - Fire Extinguisher Required and Requirements

United States Army Corps of Engineers EM 385-1-1
United States Coast Guard Reference Guide to State Boating Laws

PROCEDURE

This field operating procedure is intended as a guide for safe boating/watercraft operations. At a minimum, WESTON requires that WESTON personnel, Venders and Subcontractors who plan to operate any watercraft take a course on Boating Skills and Seamanship offered by the Coast Guard Auxiliary, individual state-required training, as appropriate. Topics covered usually include sailing, marine engines, navigation, ropes and knots, locks and dams, float plan development and safe boat handling and operation.

Introduction

Boats and other watercraft are frequently used in WESTON field activities to gather environmental information and samples. The use of boats and watercraft without adequate preparation and training can lead to mishaps, injuries, and death.

All personnel involved in watercraft operations have responsibilities for safety, whether they are a passenger or boat operator. All personnel working on boats need some basic information about boat safety equipment and preparation, routine boating procedures and emergency procedures. Even if an individual does not plan to pilot a boat, an accident may unexpectedly put him or her in command or in the water alone.

Three major areas of boating safety will be discussed in this field operating procedure:

1. Selection, inspection and preparation of the vessel and its equipment.
2. Preparation of information and other items needed for the project.
3. Operation of the vessel under routine and emergency conditions.

Much of the information in this field operating procedure has been drawn from publications of the U.S. Coast Guard, U.S. Coast Guard Auxiliary, and EM 385-1-1.. Please refer to these sources for additional information.

Hazard Recognition

The physical hazards associated with the operation and use of watercraft include but are not limited to:

- drowning
- heat stress
- cold stress
- hypothermia
- noise
- radiation
- injuries from slips, trips, and falls
- material handling
- electrical hazardous

Carelessness, horseplay, or other unsafe acts that could cause injury to personnel when operating or using boats are prohibited. Some of the most serious and often neglected hazards associated with boating safety include:

- Weather – weather and weather forecasts need to be reviewed prior to departure and while boating. Changes in weather conditions can happen quickly and can create serious problems if caught unaware.
- Operating in unfamiliar waters – currents, subsurface obstructions, and navigation need to be included in float plan development
- Operating an unfamiliar vessel – different types of boats have different characteristics in handling and performance. The type of vessel must be both appropriate for the type of waters where the vessel will operate and for the type of work expected to be performed.

Documentation Requirements

Health and Safety Plan

A WESTON Accident prevention plan (APP) or HASP is required for any work involving a boat or other watercraft. The APP/HASP shall include specific descriptions of:

- Work to be performed from the boat/watercraft
- Body of water that will be involved
- Type of boat or watercraft to be used
- Identity and qualifications & experience of the Pilot, Helmsman, or Captain and the crew
- Definition of conditions such as weather and hours of operation where the boat or watercraft will be prohibited from operating or will be required to stop work and return to port
- Communication methods and frequency
- Methods of navigation, charts and maps
- Pre and post boat inspections
- Contingency operations and emergency equipment

Pre-Trip Hazard Assessment and Boating Checklist

The Pilot, Helmsman or Captain/operator shall be responsible for completing a Daily Pre-Trip Inspection Checklist (Refer to attachment "A") prior to each day's operations. Any deficiencies noted shall be resolved prior to leaving the dock.

Registration

All watercraft requiring propulsion other than manual operations (paddle) must be registered in the state of origin and their numbers and validation stickers displayed. The certificate of registration must be onboard at all times when the boat is being operated.

NOTE: Livery boats under 26 feet in length, hired for less than seven days, need not carry the certificate, but must have copy of the lease or rental agreement on board, signed by the owner/representative and by the person renting the boat. The agreement must show the registration number and the period of time for which the boat is rented.

Navigation Charts

Up-to-date navigation charts, a GPS, and a compass should be taken and information should be obtained about any unusual navigation hazards that may be likely in the area, such as shoals, sandbars, rocks, or rapids.

Float Plans

The Pilot, Helmsman, or Captain/operator shall prepare a float plan, for each trip and file it with the assigned site safety and health officer and project manager, who will be responsible to request a search if necessary. At a minimum, the Float Plan should include destination, time of return, passengers, and a description of the boat (refer to Attachment E—Sample Float Plan).

The Coast Guard's recommended format for a Float Plan provides space for recording:

1. Description of boat in detail, so the boat can be identified and its position can be estimated
2. Number of persons aboard and who they are
3. Radio type and frequencies available
4. Trip expectations, destination, and latest expected return time
5. Name and telephone numbers of Coast Guard or other agency to be notified if return is delayed beyond the latest expected return time.

Selection and Preparation of the Vessel

This section describes requirements for the selection and preparation of a vessel, compliance with WESTON operating procedures, boating safety regulations, and recommendations for achieving more than the minimum protection required.

Only watercraft that is considered to be stable in the environment of use should be used for environmental monitoring and sampling projects.

One convenient way to see if a watercraft is in compliance with the minimum safety requirements is to request a complimentary inspection from the local Coast Guard Auxiliary. A member of the Coast Guard Auxiliary will examine the watercraft for compliance with the federal regulations and additional recommendations that the Auxiliary considers desirable for safety. If the watercraft passes the inspection, a current Courtesy Examination decal will be placed on the watercraft. If the watercraft does not pass, a confidential report of deficiencies will be given to the watercraft owner.

Equipment Needed or Required

Equipment required on all motorboats includes a fire extinguisher, a signaling device, means of preventing accumulation of flammable fuel vapors, an USCG approved PFD appropriate for the conditions for each person onboard, visual distress signals, and lights if the vessel will be operated at any time before sunrise or after sunset. Refer to Attachment "B" for additional equipment discussion and Attachment "A" for a Daily Pre-trip Inspection/Equipment Checklist

Inspections

Before a boat or watercraft is taken out on a field trip, it should be inspected carefully to see that it is sea worthy, the engine has an adequate fuel and oil supply and is in good working order, that all navigation and communication equipment is working, and that all safety equipment is on board and accessible. In addition, all watercraft equipment is expected to be in good operating condition.

The Coast Guard Auxiliary publishes information that can be used to develop a pre-trip checklist for each specific type of boat. They also provide information that can be used to prepare guidelines for engine troubleshooting and for routine engine maintenance. The watercraft should not be operated unless a complete pre-trip watercraft inspection is conducted and there are no deficiencies detected.

Refueling Precautions

Watercrafts are very susceptible to damage from fire and require special safety precautions to be taken. Four basic precautions are:

- keep all sources of ignition away from flammable vapors
- keep the nozzle of the fueling source in contact with the fill opening to prevent static sparks
- avoid overfilling tanks
- never fill portable fuel tanks in the boat. (Portable tanks should be filled on the dock or at another location.)

The precautions for fueling boats with inboard engines are usually more elaborate than for outboard motors because inboard engine fuel tanks cannot be filled remote from the boat and special ventilation equipment is needed.

Equipment

All boats or watercraft to be used on WESTON projects will be required to have, at a minimum, the equipment indicated below. Additional information on equipment, loading and boat handling is contained in Attachment B.

Minimum Required Safety Equipment for Boats to 26 Feet

Equipment	*Class A* *Less Than 16 Feet (4.9m)*	*Class 1* *16 Feet to Less Than 26 Feet (4.9–7.9m)*
Personal flotation devices	One Type I, II, III, or IV for each person.	One Type I, II, or III for each person on board or being towed on water skiis, etc., plus one Type IV available to be thrown.
Fire extinguishers		
When no fixed fire extinguishing system is installed in machinery space(s)	At least one B-I type approved hand portable fire extinguisher. Not require on outboard motorboats less than 26 feet (7.9 m) in length and not carrying passengers for hire if the construction of such motorboats will not permit the entrapment of flammable gases or vapors.*	
When fixed fire extinguishing system is installed in machinery space(s)	None	
Ventilation	At least two ventilator ducts fitted with cowls or their equivalent for the purpose of properly and efficiently ventilating the bilges of every engine and fuel tank compartment of boats constructed or decked over after 25 April 1940, using gasoline or other fuel having a flashpoint less than 110°F. (43°C). Boats built after 31 July 1981 must have operable power blowers.	
Whistle	Boats up to 39.4 feet (12 m)—any device capable of making an "efficient sound signal" audible 1/2 mile.	
Bell	Boats up to 39.4 feet (12 m)—any device capable of making an "efficient sound signal."	
Backfire flame arrester	One approved device on each carburetor of all gasoline engines installed after 25 April 1940, expect outboard motors.	
Visual distress signals	Required only when operating at night or carrying six or fewer passengers for hire. Same equipment as for larger boats.	Orange flag with black square-and-disc (D); and an S-O-S electric light (N); or three orange smoke signals, hand held or floating (D); or three red flares of handheld, meteor, or parachute type (D/N).

*Dry chemical and carbon dioxide (CO_2) or the most widely used types, in that order. Other approved types are acceptable. Toxic vaporizing-liquid type fire extinguishers, such as those containing tetrachloride or chlorobromomethane, are not acceptable.

Minimum Required Safety Equipment for Boats 26 to 65 Feet

Equipment	*Class 2* *26 Feet to Less Than 40 Feet (7.9–12.2m)*	*Class 3* *40 Feet to Not More Than 65 Feet (12.2–19.8m)*
Personal flotation devices	One Type I, II, or III for each person on board devices or being towed on water skiis, etc., plus one Type IV available to be thrown.	
Fire extinguishers		
When no fixed fire extinguishing system is installed in machinery space(s)	At least two B-I type approved hand portable fire extinguishers, or at least one B-II type approved hand portable fire extinguisher.	At least three B-I type approved hand protable fire extinguishers, or at least one B-I type plus one B-II type approved hand portable fire extinguisher.
When fixed fire estinguishing system is installed in machinery space(s)	At least one B-I type approved hand portable fire extinguisher.	At least two B-I type approved hand portable fire extinguishers, or at least one B-II approved unit.
Ventilation	At least two ventilator ducts fitted with cowls or their equivalent for the purpose of properly and efficiently ventilating the bilges of every engine and fuel tank compartment of boats constructed or decked over after 25 April 1940, using gasoline or other fuel having a flashpoint less than 110°F. (43°C). Boats built after 31 July 1981 must have operable power blowers.	
Whistle	Boats up to 39.4 feet (12 m)—any device capable of making an "efficient sound signal" audible 1/2 mile.	Boats 39.4 to 65.7 feet (12–20 m)—device meeting technical specifications of Inland Rules Annex III, audible 1/2 mile.
Bell	Boats up to 39.4 feet (12 m)—any device capable of making an "efficient sound signal."	Boats 39.4 to 65.7 feet (12–20 m)—bell meeting technical specifications of Inalnd Rules Annex II; mouth diameter of at least 7.9 inches (200 m).
Backfire flame arrester	One approved device on each carburetor of all gasoline engines installed after 25 April 1940, expect outboard motors.	
Visual distress signals	Orange flag with black square-and-disc (D); and an S-O-S electric light (N); or three orange smoke signals, hand held or floating (D); or three red flares of handheld, meteor, or parachute type (D/N).	

Accidents

Various studies have shown the following to be the major causes of boating accidents:

- Overloading, overpowering, and improper trim
- High speed turns, especially in rough water
- Failure to keep a sharp lookout for obstructions
- Going out in bad weather (or not starting for home soon enough when good weather turns bad)
- Standing in a moving boat
- Having too much weight too high in the boat, as when someone sits on the deck of a small outboard
- Leaks in the fuel system

Each of these factors should be avoided. A carefully matched boat, motor, and propeller, operated in accordance with the law and with courtesy, will go a long way toward eliminating accidents. Always remember that the possibility of trouble always exists; be prepared to act in an emergency.

Man Overboard

If someone falls overboard, maneuver the boat's stern away from the person. Shift into neutral immediately (kill the motor if you do not have a gearshift) and throw a buoyant cushion or life jacket near the victim (try to get it close, but do not aim directly at the victim). Make sure you are well clear of the person in the water before shifting into gear again.

Circle around quickly, selecting a course that will allow you to approach the person with the boat headed into the wind or waves. Approach him slowly, taking care to come alongside and not over him. Stop the motor before attempting to get the victim aboard.

When alongside, extend a paddle or boathook to him, or one end of a line. With the motor stopped, lead him around to the stern, where the freeboard is the lowest, if there is enough space at the transom for him to get aboard without contacting the motor. If this is not feasible, help the victim aboard over the side as far aft as possible. In either case, the use of a boarding ladder will be of help. To avoid capsizing the watercraft while the victim is coming aboard, other passengers should shift their weight to the opposite side to maintain trim as much as possible. When helping a person aboard, hold him under the armpits and lift gently.

In Case of an Accident

Personnel involved in a boating accident are required to stop and give as much help as possible without seriously endangering their boat or passengers. Personnel must identify themselves and their boat to any person injured or to the owner of any property damaged.

Personnel witnessing an accident may now render assistance with reasonable assurance of freedom from liability. The Federal Boat Safety Act of 1971 contains a "good Samaritan" section which provides that any person who renders assistance at the scene of a vessel accident will not be liable for civil damages from such action if he acts as a reasonably prudent man would have acted under the same circumstances.

When giving first aid, proceed slowly. More damage may be done by the well-meaning amateur than was caused by the actual injury. Remember, there are only three instances when speed in giving first aid is required:

1. When the victim has stopped breathing and has no pulse
2. When there is arterial bleeding
3. When the victim has been subjected to other injuries that may be life threatening

The measures required in these instances are taught in standard first aid courses. An NOI is to be completed and submitted, as appropriate. If the incident results in the sinking of the vessel or damage to the vessel, a Coast Guard report and Notice of Incident Report is to be submitted as soon as possible.

ATTACHMENT A
PRE-BOAT TRIP INSPECTION CHECKLIST

Boat Pre-trip Inspection Checklist

Date:
Name of inspector:
Type of vessel:
Type of engine(s):
Rated boat weight capacity:
Captain of the boat:
List of personnel who will be part of the trip:

BASICS			
Is there a fire extinguisher on board (Type ABC)?	☐ YES	☐ NO*	
Is the fire extinguisher inspected?	☐ YES Date of inspection ___/___/_____	☐ NO*	☐ Not Applicable
Are lifejackets available for each person on board?	☐ YES Specify Type: _____	☐ NO*	
Has the first aid kit been inspected?	☐ YES Date of inspection ___/___/_____	☐ NO	
Is the first aid kit in a waterproof container?	☐ YES	☐ NO	
Indicate the emergency signaling devices on board (e.g., flares, mirrors, flags, etc.).	List:		
What electronics/navigational devices are you planning to use (e.g., radar, GPS, depth finder, compass, communications [e.g., 2-way radio, _____, marine radio, etc.], etc.)?	List:		
What body of water will the boat be operating in?	☐ river ☐ stream ☐ lake ☐ ocean ☐ pond	Name: _____ Location: _____	
Are there any special conditions present (barge traffic, dam, adverse weather, operation near shipping lanes, near sand bars, etc…)	☐ YES	☐ NO	List:

BOAT			
Is the boat registration inspection updated for the current year?	☐ YES	☐ NO*	
Are the fuel levels adequate?	☐ YES Fuel levels_____	☐ NO*	
Are bail plugs (upper and lower) present on boat?	☐ YES	☐ NO*	
Is the motor size adequate for the boat (see boat specifications)?	☐ YES	☐ NO*	
Are there holes or cracks in the hull?	☐ YES*	☐ NO	
Is the bilge pump operational?	☐ YES	☐ NO*	
Do all engine(s) operate properly?	☐ YES	☐ NO*	
Are spare fuses available on board? (if req'd)	☐ YES	☐ NO	
Does the boat need to have an anchor?	☐ YES	☐ NO	
Is an anchor present?	☐ YES	☐ NO	
Is there enough rope on the anchor for the location, depth, and scope?	☐ YES Length of rope_____	☐ NO	
If operating at night, are the navigational lights working?	☐ YES	☐ NO*	☐ Not Applicable
If operating at night, does the pilot, helmsman, or captain have prior experience operating in such conditions?	☐ YES	☐ NO*	
Overall, is the vessel sea-worthy? (If possible this determination should be made by Coast Guard personnel, prior to the trip.)	☐ YES	☐ NO*	
Will the dead weight (people + equipment) exceed the maximum weight requirements for the boat?	☐ YES*	☐ NO	
TRAILER			
Is trailer in good condition?	☐ YES	☐ NO	☐ Not Applicable
Are the trailer lights working properly?	☐ YES	☐ NO	
Is the winch operating properly?	☐ YES	☐ NO	
Is the winch strap in good condition?	☐ YES	☐ NO	
Are the trailer rollers cracked?	☐ YES	☐ NO	
Are the trailer boat guides straight and in good condition?	☐ YES	☐ NO	
Do the tires have appropriate air pressure?	☐ YES	☐ NO	
Are the tires in good condition?	☐ YES	☐ NO	
Are the engines secured to or removed from the transom during transportation?	☐ YES	☐ NO	

SUPPLEMENTAL INFORMATION			
WEATHER FORECAST			
How will the pilot, helmsman, or captain/operator and crew keep track of changing weather conditions?			
Will someone onshore track weather conditions also?	☐ YES	☐ NO	
How will that person remain in contact with the boat?			
For a small boat (under 21'), are the waves equal or greater than 2 feet (1' wave)?	☐ YES*	☐ NO	☐ Not Applicable
For a larger boat, are the waves equal or greater to 4 feet (2' wave)?	☐ YES*	☐ NO	☐ Not Applicable
For any boat, is the wind speed equal or greater than 15 knots?	☐ YES*	☐ NO	☐ Not Applicable
OTHER			
Has a float plan been filed with the Project PM?	☐ YES Plan filed with _____	☐ NO	
Is the operator licensed (with the State or with Coast Guard)?	☐ YES	☐ NO*	
Are any members of the crew capable of operating the boat if the pilot, helmsman, or captain is incapacitated?	☐ YES	☐ NO*	
Does the APP/HASP describe the task(s) involved with the operation of boats?	☐ YES	☐ NO*	

*If any answer followed by an asterisk is checked, justify task continuation if a "No" is checked.

I certify that I have inspected all the items on this checklist and that the information is accurate to the best of my knowledge.

Reviewer's Signature: _____ Date: _____

NOTE: Copy of checklist to be placed in Project file.

ATTACHMENT B
HANDLING AND EQUIPMENT DISCUSSION

HANDLING

Before getting underway, have all weight evenly distributed so that the boat will trim properly – level from side to side and slightly down at the stern, never down at the bow. Passengers should be seated toward the centerline of the craft and not hanging over the sides; with not too many forward or aft. If the load is concentrated near the bow or stern, the boat will plow or drag needlessly, reducing the safety margin and increasing fuel consumption. Proper trim is essential to proper performance.

In boarding from a pier, step into the boat as near to the center as possible, and keeping body weight low. When boarding from a beach, come in over the bow. Keep lines tight or have someone steady the boat.

Never jump into a boat or step on the gunwale (edge of the hull). Pile gear to be taken aboard on the pier so that it can be easily reached from the center of the boat. Better still, hand it in to someone already aboard. It is the team leader's responsibility to determine that each boat, after loading, is within the maximum allowed load.

Trim the boat as well as possible before getting underway. In smaller craft, it is dangerous for passengers to change places or move while the boat is in motion. If movement becomes essential, slow or stop the boat first, remembering in rough weather to keep enough momentum to retain steerage control and to keep the craft headed into wind and waves. Have the person who must move keep low and near the boat's centerline.

Outboard craft are often operated at relatively high speeds and their stability becomes a matter of safety. Some hulls will run straight ahead quite steadily but have a tendency to heel excessively, or even flip over, when turned sharply. The faster a boat goes, the less keel it requires, and the more important it is to reduce speed before starting a turn. Never turn more sharply than necessary. Normal operation seldom requires a sudden, sharp, high-speed turn. Every outboard operator must carry one or more types of emergency signaling equipment, in good condition and ready for immediate use. If no distress equipment is on board, an outboard boatman in need of help can always signal by slowly and repeatedly raising and lowering his arms outstretched to each side while he stands in the craft (or from a kneeling position if rough water conditions make standing hazardous).

Whenever boating in unfamiliar waters, take advantage of "local knowledge:" watch the operation of boats piloted by skippers who are at home in these waters, and do not hesitate to ask questions about possible hazards.

Many persons who have not handled a small boat have the misconception that one can be maneuvered and stopped as easily as an automobile. This is not the case; however, much can be done with a boat if one takes it slowly and easily. The new boat operator should practice leaving from and returning to the pier, and other maneuvers, until he has developed both skill and confidence. Begin cautiously at first and gradually build up to the procedures of experienced operators.

Always slow down gradually rather than pulling the throttle back quickly. All boats have a stern wave that will catch up with and pass the craft if it comes to an abrupt stop. This can bring water into the boat, especially if it has a low-cut transom with no motor well.

All boating at night will be performed at reduced speeds. Personnel, who become disoriented, or unsure of their position, should stop the boat until they can determine where they are.

Radio contact between crews should be more frequent; crew check-ins at set intervals will be mandatory.

Fire Extinguisher

Every motorboat will have a fire extinguisher suitable for putting out a fire of burning liquids or electrical equipment. Fire extinguishers must show approval by Underwriters' Laboratories, Inc. (UL) or another testing laboratory. For boats less than 26 feet in length, the required extinguisher has to have a rating of B-1.

Small extinguishers usually have very limited fire-fighting capability, and may be inadequate for a fire involving liquid fuel. WESTON recommends that new or replacement fire extinguishers be the dry chemical, of the largest capacity that will fit conveniently in the boat. (A 6-pound dry chemical fire extinguisher with a rating of 2A; 40B is commercially available.)

If WESTON has responsibility for a fueling location, WESTON requires that a special extinguisher be available at that location that is effective on spill fires (a foam-type that forms an aqueous film).

Signaling Devices for Navigation

Boats up to 39.4 feet are required to carry a whistle or horn that can be heard for at least one mile. The device can be operated by mouth, hand, or power. Longer boats have the same requirements except that the whistle or horn must be operated by power.

Preventing Accumulation of Fuel Vapors

Powered ventilation is needed for motorboats with enclosed spaces in which flammable fuel vapors may accumulate, such as engine and fuel tank compartments, in order to prevent explosion and fire. Special ventilation is not required in open boats in which flammable vapors are not likely to accumulate. (If gasoline is spilled in any boat, there will be an accumulation of flammable vapors in the boat until the vapors are removed by exhaust blowers or air circulation.)

Personal Flotation Devices

All boats less than 16 feet in length are required by law to carry at least one approved personal flotation device for each person onboard. Boats of greater length are required to carry at least one approved wearable personal flotation device for each person onboard, plus one throw-able flotation device. Five types of personal flotation devices are approved by the Coast Guard. Four of the types are acceptable for recreational boats and readily available: Types I, II, III, and IV. A Type V work-jacket is not approved for recreational boats. Of the four wearable types of approved flotation devices, only two Types I and II are designed to prevent the drowning of an unconscious person.

A Type I device is the familiar collar-type life jacket. It provides more than 20 pounds of buoyancy and is designed to deep the wearer afloat for extended periods of time in rough water. A Type I device is recommended for maximum protection. Type I devices are required on commercial vessels and on licensed passenger-carrying vessels. (Reflective tape is required on Type I devices on passenger-carrying vessels.)

A Type II device is more comfortable to wear than a Type I device, but has less buoyancy (15.5 pounds) and is less able to turn an unconscious person face upwards.

A Type III personal flotation device is designed to keep a conscious person in a vertical or slightly backward position, but not to turn an unconscious person over from a face downward position (even though it does have some turning ability). Buoyancy provided is 15.5 pounds minimum.

A Type IV personal flotation device is not designed to be worn but to be thrown to a conscious person in the water. Buoyancy provided is 16.5 pounds. One Type IV device is required for each boat 16 feet and over in length. Type IV devices are permitted as the minimum required in canoes, kayaks, and other vessels less than 16 feet in length.

A Type V personal flotation device is a wearable work jacket designed to deep a conscious person in a vertical or slightly backward position, but it is not designed to turn an unconscious person over from a face-downward position. Buoyancy provided is 27 pounds minimum. (Type V devices are not approved for use in recreational boats, and they usually cannot be purchased in stores that sell only recreational boats and equipment.)

WESTON personnel working on a boat are required to use either a Type I or II personal flotation device while underway. For cold weather operations, recommended devices are float coats or exposure suits, both Coast Guard approved. Other types of PFDs may be approved for use based upon location (i.e., ponds, lakes, etc.) and task activities (i.e., sampling, surveying, etc.) under a site-specific HASP and Float Plan.

Visual Distress Signals

Visual distress signals are needed for any boating activity where the need to signal for emergency help may arise. Personnel who are close to another boat can wave their outstretched arms up and down to signal distress. However, at distances farther from shore or other boats, another way may be needed to signal for help. By carrying approved visual distress signals, boaters can assure that they have a noticeable and effective way of attracting attention to secure prompt assistance in case of an emergency.

Since January 1981, visual distress signals have been required for all recreational boats except manually-propelled boats, boats less than 16 feet in length, open sailboats less than 26 feet in length, boats on Western rivers and boats participating in organized events such as races and regattas.

When a search is underway, the time it takes to locate a boat in difficulty or a person in the water can be reduced by the use of visual distress signals.

There are two types of signaling devices: non-pyrotechnic and pyrotechnic. Each device is approved for day use, for night use, or for both day and night. Visual distress signaling devices must carry the manufacturer's certification that they meet Coast Guard requirements.

Non-pyrotechnic devices include:

- An orange distress flag, 3-feet square with a black square and a black ball. This is accepted as a day signal only.
- An electric distress light, which must automatically flash the international SOS distress signal (three short flashes, three long flashes, and three short flashes) four to six times each minute. This is accepted as a night signal only. (An ordinary flashlight is not acceptable since it must be flashed manually and does not normally produce enough candle power.)

One flag and one electric distress light will meet the requirements for visual distress signals. These are best for small boats because there is less chance for fire and explosion than with pyrotechnic devices.

Pyrotechnic devices that meet the requirements include:

- Hand-held orange smoke distress signals (day use only)
- Floating orange smoke distress signals lasting 5 or 15 minutes (day use)
- Hand-held red flare distress signals (day or night use)

The minimum number of pyrotechnic devices required (because they are single-use devices, with limited burning time) is three for day use and three for night use, or three that can be used effectively either day or night.

Pistol-projected parachute red flare distress signals, which require suitable approved launching devices, can be used in the day or at night. Also approved for day or night use are self-contained rocket-propelled parachute red flares and red aerial pyrotechnic flare signals, which may need approved, suitable launching devices.

Visual distress signals are an important part of a boat's safety and survival gear. They should be in good condition and easily accessible. Pyrotechnic devices must be stored to protect them from water, puncturing and access by children. They must also be handled very carefully to prevent setting fire to the boat.

Pyrotechnic devices that have passed their expiration date (42 months from the date of manufacture) need to be replaced. The expiration date on pyrotechnic devices, if used, should be checked before the boat is launched.

Identification Lights

Every boat is required to be equipped with certain lights if it is on the water at any time after sunset and before sunrise. The purpose of these lights is to identify the boat's location so that collision can be avoided.

Vessels underway after sunset and before sunrise are required to display at least three lights: a green light and a red running light, each visible for one mile, and a white anchor light visible for two miles. (Details of location and visibility distance may vary, depending on the area in which the boat will be operating.)

The green light must be visible only from directly ahead of a boat and on the right or starboard side of the boat through an arc of 112½ degrees, or only as far back as an angle of 22½ degrees to the rear of a right angle from the centerline of the boat. In the corresponding sector on the left side of a vessel, from dead ahead to 2 points aft of the port beam, the vessel must display a red light.

Each vessel must display a white anchor light that can be seen from all directions. Two white lights are required for vessels operating in international waters, and two lights may be used by vessels in other waters. One white light must be visible through the combined arcs of the red and green lights and be mounted 1 meter (3.3 feet) higher than they are. The second white light must be visible from the rear of the boat, through the arc that is not covered by the front white light.

Under the rules governing all United States waters (except the Great Lakes until March 1983), motorboats from 26 feet up to 65 feet in length must have an additional white light in the forepart of

the vessel that is visible for a distance of 2 miles through the same arc of visibility as the red and green lights (20 points).

The nautical jargon for the 112½ degree arc of visibility for the starboard green light is: "Visible from dead ahead to 2 points abaft the starboard beam." In nautical terminology, a circle of 360 degrees has 32 points, corresponding to the points of the compass, and each point equals 11¼ degrees of the circle. Another way of describing the arc of visibility would be to say that on a boat heading north, the green light would have to be seen by boats approaching from any direction between north and east-south-east.

The particular arc of 112½ degrees, or 10 points, represents the "Danger Zone" for the boat, the directions in which the boat must yield the right of way to other vessels. Any vessel that can see the green light on the boat can "Go," because it has the right of way.

In that sector of approach, you are in the Give Way vessel (or Burdened vessel). The other vessel is the Stand On vessel (or Privileged Vessel).

Personnel who expect to be out in a boat after dark in waters where large vessels, tugboats, or working boats may be encountered, need to learn exactly what lighting such vessels will display in order to avoid dangerous situations.

Additional Equipment Recommended

In addition to required equipment, other equipment is recommended for safe boating operations, including an up-to-date chart of the area of operations, a compass for open waters, paddles or oars, a boat hook, and a bailing bucket or bilge pump.

The Coast Guard Auxiliary recommends that each boat carry a first aid kit, emergency water and food, an anchor and rope, a radio for monitoring weather information, and a radiotelephone for emergencies.

The Coast Guard Auxiliary also recommends that spare parts and tools be carried in case of engine trouble or an emergency. For outboard motorboats this includes:

- spare spark plugs
- starter cord
- shear pins
- cotter pins
- a propeller

For inboard motorboats, spare equipment includes:

- bilge pump
- carburetor drip pan
- backfire arrestor
- spark plugs
- coil
- fuel pump
- fuel filter element and gasket
- points and condenser
- propeller

- distributor or parts
- generator and starter brushes
- fuses
- V-belts
- spare oil

The anchor should be selected for the type of bottom where it will be used and be capable of holding the boat against wind and current. Since anchors hold better against a horizontal pull, a 3-foot length of chain is recommended to hold the top of the anchor down. The length of anchor rope should be seven times as the deep as the water.

Personal Gear

Personal gear should include appropriate footwear, clothing to provide protection from extremes of heat and cold, extra dry clothing, medication for motion sickness, if needed, and a water-resistant outer garment. If water temperatures below 60 F or 16 C are expected, wearing a float coat, wet suit, or exposure coveralls is recommended.

Sampling Apparatus and Equipment

Sampling apparatus and equipment should be weighed and the weight marked on an outside surface for convenience in balancing the load in a boat. It will also make it easier to calculate the total load being placed in a boat and to avoid overloading. In figuring the load on the boat, remember to add the estimated weight of samples to be gathered on the trip.

Preparation for Emergencies

Preparation for emergencies should include making sure that everyone in the boat can put on his or her personal flotation device quickly and correctly, and that everyone knows to stay with the boat if it should capsize. Preparation should also be made for any other emergency procedures. (If the passengers on the boat include non-swimmers, they should wear personal flotation devices when there is any likelihood that they may fall into the water.) A site-specific H&S meeting should be given immediately prior to conducting boat operations.

One of the Coast Guard requirements for personal flotation devices that are not worn is that they be readily accessible. They must not be in a locker or be obstructed by other gear.

Field personnel should plan how to conduct scheduled sampling activities with minimum disturbance of the balance of the boat or risk of capsizing or falling out of the boat. Planning should include any special precautions that may be needed (such as using a safety line on a piece of apparatus or on a person using sampling equipment).

In order to prevent capsizing or swamping, a boat must not be overloaded. The total load of passengers, motor, sampling apparatus and other gear should not exceed the weight limit stated on the capacity plate on the boat. It may be prudent to reduce the load in the boat if inclement weather, turbulent water conditions, or vigorous sampling activities are anticipated.

Getting Into and Loading a Boat

Getting into and loading a boat at a dock takes a little care and practice, because it is different from simply stepping down to another level. If you board a boat the wrong way, it may move away from the dock or it may tip precariously. Be sure that the boat is secured to the dock, then grasp one or both

sides of the boat and step into the center of the boat. Stepping into the center of the boat, or as near the centerline as possible, reduces the chance of tipping the boat and losing your balance.

Loading gear into a boat also takes care and practice. Incorrect loading may cause the boat to tip and the gear may fall into the boat or the water.

It is always preferable to load a boat with another person. One person stands with both feet on the dock, passing the gear over and down to another person standing in the center of the boat.

Sampling apparatus, equipment and containers must be loaded into a boat in a safe manner so there is no damage or spill. In the boat, the load should be stashed equally on both sides fore and aft (front and back) with the weight distributed as evenly as possible.

All sampling gear, particularly any that is heavy, should be tied down or secured to keep it from moving around when the boat gets underway, turns, vibrates, or reacts to rough waters.

Although sampling activities may require standing up or leaning over the side of the boat, such actions should be done carefully and under controlled conditions, when the boat is not moving. When the boat is moving, personnel should sit on the seats provided. No one should ride on the bow or gunwales (sides) of the boat.

Personal flotation devices should be worn whenever there is a higher than normal risk of falling out of a boat, such as when the boat is moving at high speed or in rough water. (In some boating activities the safe practice would be to wear a personal flotation device at all times.)

ATTACHMENT C
WEIGHT CAPACITY CALCULATION

WEIGHT CARRYING CAPACITY

One of the most important safety requirements is to limit the weight of the total load on a boat to the rated capacity of the boat. Most boats built since 1972 have been required to display their load capacity on a plate mounted in the boat.

Capacity Considerations

a.	Listed capacity of vessel:	_____	Certified Capacity of the Vessel in Pounds
b.	# of People & Weight:	_____	Approximate Weight of Personnel in Pounds
c.	Weight of Motor:	_____	Listed Weight of Motor in Pounds
d.	Weight of Gear:	_____	List Equipment and Weight
……	Fuel (Gallons/Pounds)…….	_____	……. _____
…….		_____	……. _____
…….		_____	……. _____
…….		_____	……. _____
…….		_____	……. _____
e.	**Total Weight of Gear/Equip:**	**_____**	Add items (c + d)
e.	Number/Volume of water samples:	_____	List the number and Volume of Water Samples (in Gallons) to be collected
f.	Weight of Water Samples:	_____	Multiply (# of Samples x Volume in Gallons x 8.33 lbs/gallon)
g.	Weight of Other Samples:	_____	Estimate the number and weight of other samples
h.	**Total Weight of Samples:**	**_____**	Add items (f + g)
i.	**Weight of Personnel & Equip:**	**_____**	**Add items (b + e + h)**
j.	**Capacity Factor:**	**_____**	**Insert a Capacity Reduction for Rough Weather**
k.	**Planned Weight:**	**_____**	**Add (i +j)**

If The Planned Weight in (k) is greater than the Certified Weight in (a), then the weight shall be adjusted be limiting equipment, personnel or samples as necessary to reduce the weight in the vessel.

In the combination capacity plate and certificate of compliance for an outboard motorboat, the first entry lists the manufacturer's rating of the maximum horsepower engine that is safe to use on the boat. The second entry lists the maximum number and weight of persons that can be carried and the third entry lists the maximum weight that can safely be carried by the boat (including persons, motor, and gear). Some boats may have two plates: a certificate of compliance and a separate capacity plate.

In order to avoid exceeding the load carrying capacity of a boat, it is necessary to know the number and total weight of all passengers and the weight of all the equipment and gear planned to be taken on board, including fuel, food, and environmental sampling apparatus. To this total weight must be added the estimated weight of the water or other samples to be collected and brought on board.

The recommended maximum weight shown on the capacity plate may be more than can be carried safely under some weather conditions and for some activities. For example, if rough water is expected, less weight should be carried so that the boat rides higher in the water and is less likely to be swamped by waves.

ATTACHMENT D
BOATING OPERATION UNDER ROUTINE AND EMERGENCY CONDITIONS

OPERATION OF THE VESSEL UNDER ROUTINE AND EMERGENCY CONDITIONS

Boating Operations

Operation of a boat used for WESTON field activities may be so routine that everyone knows how to operate the boat and is thoroughly qualified to operate it under all conditions. If that is not the case, the person in charge of the boat should familiarize a second person on board with the operation and navigation of the boat. Doing so ensures a backup person who can run the boat and get it back to port if the pilot becomes disabled.

Weather Conditions

Before leaving the dock, check the local weather forecast for the area and look for weather signals that may be displayed at marinas, municipal piers, lighthouses, or Coast Guard stations.

The U.S. Weather Bureau publishes charts giving the locations and telephone numbers of all Weather Bureau offices and the location and time schedule of all stations that broadcast marine weather information. The charts also show the location of all storm warning display stations. Charts for local areas can be obtained from the Government Printing Office.

A small craft warning indicates winds up to 38 miles per hour, or 33 knots, and /or sea conditions considered dangerous for small craft such as the ones used commonly in WESTON activities. The daytime signal is one triangular red pennant. Although most display sites do not post night signals, the night signal for a small craft warning is one red light displayed above one white light.

A gale warning, with winds within the range of 34 to 47 knots, or 39 to 54 miles per hour, is signaled by two triangular red flags.

A storm, which may have winds of 48 to 63 knots, or 55 miles per hour up to 73 miles per hour, is forecast when a single square red flag with a black center is displayed.

Two square red flags with black centers are displayed only to show the forecast of a hurricane or tropical cyclone, in which winds speeds of more than 74 knots can be expected.

In addition to getting weather information before beginning a boat trip, it is a good idea to keep track of weather conditions as they develop while the boating activity is underway. Pay attention to increases in wind speed or waves, changes in wind direction, or approach of storm clouds, listen for static on an AM radio, or monitor a weather radio.

Rules of the Road

Every person operating a boat is legally responsible for any damage the boat or its waste may cause. For example, creating an unnecessarily large wake can cause problems in a crowded anchorage or other area, and the boat operator may be held responsible for any damage caused by such a wake.

The person in command of a boat is required to have knowledge of the requirements for operation and navigation of the boat, and of the regulations that apply locally, including the mandatory rules of the road.

The rules of the road that must be followed by everyone operating a boat govern three major subjects: identification lights, rules for steering and signaling course, and signals in fog. The major emphasis in this section will be on rules for steering and signaling course.

Rules for steering and for signaling course are designed to prevent collision by defining which of two approaching vessels has the right-of-way, and what signals are used to quickly signal intent and agreement or disagreement.

The vessel that has the right-of-way is the privileged vessel, now referred to as the Stand On vessel. The Stand On vessel has a right to maintain its course and speed. It also has a duty to maintain its course and speed so that the other vessel can base its actions on known conditions. If a collision becomes imminent, the Stand On vessel no longer has the right-of-way or any privilege.

The vessel that does not have the right-of-way is the Give Way vessel, previously referred to as the "burdened" vessel. When this vessel approaches another closely enough so that collision is possible if both vessels continue, the Give Way vessel must slow, turn or take other positive action to avoid collision.

The steering rules for power vessels apply when two are in sight of each other and close enough so that a collision could occur if both vessels continue on the same course at the same speed.

When two vessels are meeting, crossing, or overtaking, which vessel has the right-of-way? What signals are used to communicate? The following discussion presents three different situations, recommended actions, and recommended signals.

Meeting Situation

When two vessels are approaching head, on or nearly so, in a meeting situation, neither has the right-of-way. If their courses are likely to result in a collision, both must alter their course to the starboard (right) so that each can pass safely to the port (left) of the other.

As a confirmation of its intention to take a particular course, a vessel will give a "course indicating signal" of one or two short blasts on a whistle or horn. In United States waters, the other vessel will signal its understanding and agreement by answering with the same signal, and its lack of understanding or agreement by sounding the danger signal, four short blasts. (In international waters no response is required, and the danger signal is five short blasts.)

One blast in a meeting situation signals intention to alter course to the starboard and to pass the other vessel port to port. Two blasts in the same situation signals intention to alter course to the port and to pass starboard to starboard.

Crossing Situation

When two vessels are approaching at an angle in a crossing situation, the vessel on the right has the right-of-way. As described earlier, your vessel must "give way" or yield the right-of-way to any vessel approaching from any direction on your right between dead ahead to two compass points abaft your starboard beam (the arc of 112½ degrees in which your vessel shows the green light at night). The Give Way vessel must slow or alter course to avoid collision, while the Stand On vessel maintains her course and speed. The U.S. signals are one short blast by the Stand On vessel to indicate intention to maintain course and speed, and an answering blast from the Give Way vessel to
indicate that she has heard and understood the signal the signal and will keep clear. If there is any doubt, the danger signal of four blasts should be sounded and both vessels must stop. Then the vessels must exchange signals until there is an agreement on the courses to be taken.

If you see the red light of a vessel which is crossing your course at night, that vessel has the right-of-way and your vessel must keep clear.

Overtaking Situation

If one vessel is overtaking another, the overtaking vessel is burdened and must be ready to give way until the overtaken vessel has been passed safely.

If the overtaking vessel wishes to pass to the starboard side of the other vessel (altering course to the starboard), the overtaking (Give Way) vessel gives one short signal on the whistle or horn. If she wishes to pass to the port side the overtaking vessel gives two short signals. The Stand On, or privileged, vessel (the one being overtaken) must either indicate agreement by repeating the signal given or disagreement by giving the danger signal.

If you see the white light of another vessel at night, but cannot see either the red or green lights, you are approaching the vessel from the rear and must follow the rules for overtaking another vessel.

Special Situation

In a narrow channel, keep to the right side of the channel if possible, and when nearing a bend where another vessel might not be seen, signal with a prolonged whistle blast of 4 to 6 seconds.

Large deep-draft ships, which may not be able to maneuver or stop easily, have the right-of-way in such situations.

Generally, right-of way must be given to fishing vessels, sailing vessels, and very large vessels.

Fog Signals

In orders to avoid collisions in fog or other conditions of poor visibility, the rules of the road require all vessels to sound fog, mist, falling snow or heavy rain, by day or by night.

A power vessel underway should signal one prolonged blast on the whistle at least every minute. A vessel at anchor (outside of a specified anchorage area) must ring its bell or sound its horn or whistle rapidly for 5 seconds at a time and at least one time each minute.

Towing vessels underway must sound a series of three blasts in succession every minute, in a series consisting of one prolonged and two short blasts.

Navigation Aids

On the navigable waters of the United States a system of aids to navigation exist that boaters should be familiar with: buoys, markers and lights.

These navigation aids are provided to mark channels and obstructions for the convenience and safety of vessels, to provide direction, and to give information on exact position.

The basic system provides black rectangular buoys or markers with odd numbers on one side of the channel, and red triangular buoys or markers with even numbers on the other side. On rivers, the black rectangular shapes and odd numbers will be on the left or port side of the boat if it is traveling up the flow of the river.

When returning from the sea, going upstream, the red triangular shapes and the even numbers will be on the right or starboard side of the boat: “red right returning.”. Conversely, if the red buoys are on the opposite side, the boat is traveling downriver and heading toward the sea.

In the Great Lakes, going westerly, or to the source of one of the lakes, corresponds to going upstream from the sea. When traveling in that direction, the black rectangular and odd will be on the port side (left), and the red triangular and even will be on the starboard side.

On the Intracoastal Waterway, “upstream” or “returning from the sea” is marked from New Jersey going south to the southernmost tip of Florida, and west to Texas. On the Pacific Coast, “upstream” is marked in the direction of travel from California to Alaska. Another way of viewing the system is that travel “clockwise” corresponds to “upstream.”

Buoys and markers on the Intracoastal Waterway are marked with a yellow band, stripe, square or triangle. For example, a yellow band near the top of a black can buoy identifies it as being on the Intracoastal Waterway, as does a yellow square on a lighted black marker.

Regulatory markers may provide information or give warning, such as a boat speed restrictions.

In waters too deep for other types of navigation aids, Texas Tower structures and lightships provide warning and guidance to ships. Most of the lightships have been replaced by the Texas Towers.

Large navigational buoys have primary and standby generators for operation of a high-intensity light, a radio beacon and a fog signal. These 40-foot diameter buoys are replacing lighthouses at major harbor entrances. (They have meteorological monitoring apparatus for air and water temperature, wind speed and direction, and other data.)

Some buoys have an automated light, a fog horn, and a marine radio beacon.

Boat Handling

Even in calm water a boat does not handle like any land vehicle. It turns differently, starts differently, and stops differently. The Corporate Health and Safety Department recommends personnel take one of the boating skills courses offered by the Coast Guard Auxiliary and practice handling a boat under calm conditions.

Even personnel who have operated a boat may not have had training or experience in the type of boat used to perform work for WESTON, handling a boat under conditions where there is heavy traffic, narrow channels, and swift current or stormy weather. Training is recommended before difficult conditions arise. For example, the Boating Skills and Seamanship textbook and courses cover topics such as towing a disabled boat, operating on a river and going through locks, special hazards of dams, and navigating safely through waves that could capsize a vessel.

Boating Emergencies

Boating personnel need to understand two aspects of distress signals: when to use them and how to respond when others use them. If a boat capsizes, loses power in high winds or heavy seas, or collides with a fixed object or another boat, emergency help will be needed. If such an event occurs, or if a member of the team has a major medical emergency, call for help by any means available: horn, whistle, radio, or visual distress signals.

If a radio is onboard, should send a “Mayday” distress message on either VHF Channel 16 or 2182 kilohertz, following the recommended format. A Mayday message must include the following information:

1. Boat and call letters
2. Location
3. The nature of distress
4. The number of persons aboard and conditions of any injured
5. Estimated seaworthiness of the boat
6. Detailed description of the boat
7. Anything else that may help rescuers locate the boat

If the distressed boat is close enough to shore or other vessels for someone to see it, use the short-range distress signal or arm waving, as well as an orange smoke signal. (Do not stand up unless the water is calm.)

If no other vessel or source of assistance is close by, hoist a distress flag if one is onboard and can be seen, or if it is dark, use an electric distress light.

If only pyrotechnic distress signals are onboard, prepare to use them when someone is in a position to see them. In general, wait until another boat or an aircraft can be seen or heard, or it is reasonably sure that someone on shore is in position to see the signal. Use caution when using pyrotechnic devices not to set fire to the boat or its cargo.

If the boat capsizes, “ STAY WITH THE BOAT" Get into it if possible. Water conducts heat away from the body rapidly, and in 50 degree water, survival time may be as little as three hours.

Conserving body heat is important to extend survival time. To conserve body heat:

1. Wear the warmest personal flotation device available
2. DO NOT SWIM AWAY FROM THE BOAT
3. Get up out of the water as far as possible

If it is not possible to get out of the water, assume the fetal position to reduce the escape of heat from the body. If there are several persons, huddle with the others, side-by-side in a circle. Do not swim for shore unless there is absolutely no chance of rescue. The boat is easier for rescuers to spot than an individual in the water.

A response to a distress signal should be made by anyone near enough to answer or assist.

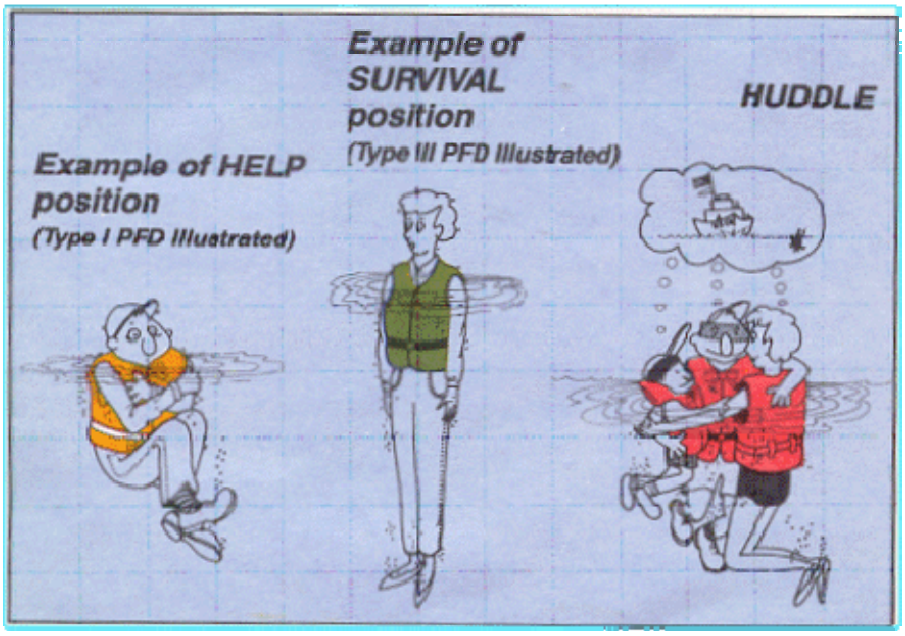
Personnel in boats equipped with a radio should notify the nearest Coast Guard station on VHF marine Channel 16, or someone else on CB Channel 9, upon seeing or hearing a distress signal. Personnel in a position to assist without being endangered should do so. (The “Good Samaritan” clause in the Federal Boat Safety Act of 1971 protects from liability anyone who provides or arranges towage, medical treatment, or other assistance as an ordinary, reasonably prudent person would under the same or similar circumstances.)

COLD WATER SURVIVAL

The following actions should be reviewed and implemented when conducting boat operations in cold weather. In addition, Weston FLD 06 should be reviewed and implemented to protect employees from the hazards associated with exposure to cold weather.

Cold Facts:

- Be aware that cold water (less than 70 degrees F (21 Degrees C)) can lower your body temperature. This is called hypothermia. If your body temperature goes too low, you may pass out and then drown. Even if you're wearing a PFD, your body can cool down 25 times faster in cold water than in air.
- Water temperature, body size, amount of body fat, and movement in the water all play a part in cold water survival. Small people cool faster than large people. Children cool faster than adults.
- But PFDs can still help you stay alive longer in cold water. They let you float without using energy and they protect part of your body from cold water. A snug-fitting PFD is better than one that's loose-fitting. When you boat in cold water, use a flotation coat or deck-suit style PFD. In cold water, they're better than vests because they cover more of your body.
- When you're in cold water, don't swim unless you can reach a nearby boat, fellow survivor, or floating object. Even good swimmers drown while swimming in cold water. Swimming lowers your body temperature.
- If a nearby floating object is large, pull yourself up on it. The more your body is out of water, the warmer you'll be. Don't use drown proofing methods that call for putting your face in the water. Keep your head out of the water to lessen heat loss and increase survival time.
- Use of the HELP position will lessen heat loss. However, if you're wearing a Type III PFD, or if the HELP position turns you face down, bring your legs together tight and your arms tight to your sides and your head back. See the SURVIVAL POSITION examples shown below.
- If there are others in the water, HUDDLE together for warmth. Keep a positive outlook. It will improve your chances of survival.
- Always wear your PFD. Even if you become helpless from hypothermia, your PFD will keep you afloat.
- Consider using cold water personal protection equipment to include submersion suits, mustang suits, and gumby suits for any work over water below 50 degrees F



How hypothermia affects most adults:

Water Temperature in Degrees F (Degrees C)	Exhaustion or Unconsciousness	Expected Time of Survival
32.5 (0.3)	Under 15 min.	Under 15 to 45 min.
32.5 to 40 (0.3 to 4.5)	15 to 30 min.	30 to 90 min.
40 to 50 (4.5 to 10)	30 to 60 min.	1 to 3 hrs.
50 to 60 (10 to 15.5)	1 to 2 hrs.	1 to 6 hrs.
60 to 70 (15.5 to 21)	2 to 7 hrs.	2 to 40 hrs.
70 to 80 (21 to 26.5)	2 to 12 hrs.	3 hrs. to indefinite
Over 80 (Over 26.5)	Indefinite	Indefinite

ATTACHMENT E
BOATING SAFETY REGULATIONS
FEDERAL REQUIREMENTS
FLOAT PLAN

FLOAT PLAN

Complete this form before going boating and leave it with a reliable person who can be depended upon to notify the Coast Guard or other rescue organization, should you not return as scheduled. Do not file this plan with the Coast Guard unless required to do so by the boat owner, client or federal/local regulations.

1. Person Reporting Overdue

Name: _____ Phone: _____

Address: _____

_____

2. Description of Boat

Registration/Documentation No.: _____

Length: _____ Make: _____ Type: _____

Hull Color: _____ Trim Color: _____

Fuel Capacity: _____ Engine Type: _____ No. of Engines: _____

Distinguishing Features: _____

3. Operator of Boat

Name: _____ Age: _____

Health: _____ Phone: _____

Address:

_____

Operator's Experience: _____

_____

4. Survival Equipment (Check as Appropriate)

☐ # PFDs: _____ ☐ Flares ☐ Mirror

☐ Smoke Signals ☐ Water ☐ Anchor

☐ Raft or Dinghy ☐ EPIRB ☐ **Horn** ☐ **Whistle**

☐ Others _____

_____

5. Marine Radio

☐ Yes ☐ No

Type: _____ Freqs.: _____

6. Trip Expectations

Depart From: _____

Departure Date: _____ Time: _____

Going To: _____

Arrival Date: _____ Time: _____

If Operator has not arrived/returned by: Date: _____ Time: _____

Call the Coast Guard or Local Authority at the following number:

_____

_____

7. Vehicle Description

License No.: _____ Make: _____

Model: _____ Color: _____

Where is vehicle parked? _____

Trailer License No:_____

8. Persons on Board

Name	Age	Phone	Medical Conditions

9. Remarks

_____

_____

_____

_____

ATTACHMENT F
GLOSSARY OF BOATING TERMS

A

ABAFT - Toward the rear (stern) of the boat. Behind.
ABEAM - At right angles to the keel of the boat, but not on the boat.
ABOARD - On or within the boat.
ABOVE DECK - On the deck (not over it - see ALOFT).
AFT - Toward the stern of the boat.
AGROUND - Touching or fast to the bottom.
AHEAD - In a forward direction.
AIDS TO NAVIGATION (AtoN) - Artificial objects to supplement natural landmarks to indicate safe and unsafe waters.
ALOFT - Above the deck of the boat.
AMIDSHIPS - In or toward the center of the boat.
ANCHOR - A heavy metal device, fastened to a chain or line, to hold a vessel in position, partly because of its weight, but chiefly because the designed shape digs into the bottom.
ANCHORAGE - A place suitable for anchoring in relation to the wind, seas and bottom.
ASTERN - In back of the boat, opposite of ahead.
ATHWARTSHIPS - At right angles to the centerline of the boat; rowboat seats are generally athwartships.



B

BATTEN DOWN - Secure hatches and loose objects both within the hull and on deck.
BEACON - A lighted or unlighted fixed aid to navigation attached directly to the earth's surface. (Lights and daybeacons both constitute "beacons.")
BEAM - The greatest width of the boat.
BEARING - The direction of an object expressed either as a true bearing as shown on the chart, or as a bearing relative to the heading of the boat.
BELOW - Beneath the deck.
BIGHT - The part of the rope or line, between the end and the standing part, on which a knot is formed. A shallow bay.
BILGE - The interior of the hull below the floor boards.
BITTER END - The last part of a rope or chain. The inboard end of the anchor rode.
BLOCK - A wooden or metal case enclosing one or more pulleys and

having a hook, eye, or strap by which it may be attached.
BOAT - A fairly indefinite term. A waterborne vehicle smaller than a ship. One definition is a small craft carried aboard a ship.
BOAT HOOK - A short shaft with a fitting at one end shaped to facilitate use in putting a line over a piling, recovering an object dropped overboard, or in pushing or fending off.
BOW - The forward part of a boat.
BOW LINE - A docking line leading from the bow.
BOW SPRING LINE - A bow pivot line used in docking and undocking, or to prevent the boat from moving forward or astern while made fast to a pier.
BOWLINE KNOT - A knot used to form a temporary loop in the end of a line.
BOWSPRIT - A spar extending forward from the bow.
BRIDGE - The location from which a vessel is steered and its speed controlled. "Control Station" is really a more appropriate term for small craft.
BULKHEAD - A vertical partition separating compartments.
BUOY - An anchored float used for marking a position on the water or a hazard or a shoal and for mooring.

C

CABIN - A compartment for passengers or crew.
CAPSIZE - To turn over.
CAST OFF - To let go.
CATAMARAN - A twin-hulled boat, with hulls side-by-side.
CHAFING GEAR - Tubing or cloth wrapping used to protect a line from chafing on a rough surface.
CHANNEL - 1. That part of a body of water deep enough for navigation through an area otherwise not suitable. It is usually marked by a single or double line of buoys and sometimes by range markers. 2. The deepest part of a stream, bay, or strait, through which the main current flows. 3. A name given to a large strait, for example, the English Channel.
CHART - A map for use by navigators.
CHINE - The intersection of the bottom and sides of a flat or v-bottomed boat.
CHOCK - A fitting through which anchor or mooring lines are led. Usually U-shaped to reduce chafe.
CLEAT - A fitting to which lines are made fast. The classic cleat to which lines are belayed is approximately anvil-shaped.
CLOVE HITCH - A knot for temporarily fastening a line to a spar or piling.
COAMING - A vertical piece around the edge of a cockpit, hatch, etc. to prevent water on deck from running below.
COCKPIT - An opening in the deck from which the boat is handled.
COIL - To lay a line down in circular turns.
COMPASS - Navigation instrument, either magnetic (showing magnetic north) or gyro (showing true north).
COMPASS CARD - Part of a compass, the card is graduated in degrees, to conform with the magnetic meridian-referenced direction system inscribed with direction which remains constant; the vessel turns, not the card.

COMPASS ROSE - The resulting figure when the complete 360° directional system is developed as a circle with each degree graduated upon it, and with the 000° indicated as True North. True North is also known as true rose. This is printed on nautical charts for determining direction.
CURRENT - The horizontal movement of water.

D

DAYBEACON - A fixed navigation aid structure used in shallow waters upon which is placed one or more daymarks.
DAYMARK - A signboard attached to a daybeacon to convey navigational information presenting one of several standard shapes (square, triangle, rectangle) and colors (red, green, orange, yellow, or black). Daymarks usually have reflective material indicating the shape, but may also be lighted.
DEAD AHEAD - Directly ahead.
DEAD ASTERN - Directly aft or behind.
DEAD RECKONING - A plot of courses steered and distances traveled through the water.
DECK - A permanent covering over a compartment, hull or any part of a ship serving as a floor.
DISPLACEMENT - The weight of water displaced by a floating vessel.
DISPLACEMENT HULL - A type of hull that plows through the water, displacing a weight of water equal to its own weight, even when more power is added.
DOCK - A protected water area in which vessels are moored. The term is often used to denote a pier or a wharf.
DRAFT - The depth of water a boat draws.

E

EASE - To slacken or relieve tension on a line.
EBB TIDE - A receding tide.
EVEN KEEL - When a boat is floating on its designed waterline, it is said to be floating on an even keel.
EYE OF THE WIND - The direction from which the wind is blowing.
EYE SPLICE - A permanent loop spliced in the end of a line.

F

FAST - Said of an object that is secured to another.
FATHOM - Six feet.
FENDER - A cushion, placed between boats, or between a boat and a pier, to prevent damage.
FIGURE EIGHT KNOT - A knot in the form of a figure eight, placed in the end of a line to prevent the line from passing through a grommet or a block.

FLAME ARRESTER - A safety device, such as a metal mesh protector, to prevent an exhaust backfire from causing an explosion; operates by absorbing heat.
FLARE - The outward curve of a vessel's sides near the bow. A distress signal.
FLYING BRIDGE - An added set of controls above the level of the normal control station for better visibility. Usually open, but may have a collapsible top for shade.
FOLLOWING SEA - An overtaking sea that comes from astern.
FORE AND AFT - In a line parallel to the keel.
FORWARD - Toward the bow of the boat.
FOULED - Any piece of equipment that is jammed or entangled, or dirtied.
FOUNDER - hen a vessel fills with water and sinks.
FREEBOARD - The minimum vertical distance from the surface of the water to the gunwale.

G

GAFF - A spar to support the head of a gaff sail.
GALLEY - The kitchen area of a boat.
GANGWAY - The area of a ship's side where people board and disembark.
GEAR - A general term for ropes, blocks, tackle and other equipment.
GIVE-WAY VESSEL - A term, from the Navigational Rules, used to describe the vessel which must yield in meeting, crossing, or overtaking situations.
GRAB RAILS - Hand-hold fittings mounted on cabin tops and sides for personal safety when moving around the boat.
GROUND TACKLE - Anchor, anchor rode (line or chain), and all the shackles and other gear used for attachment.
GUNWALE - The upper edge of a boat's sides.

H

HARBOR - A safe anchorage, protected from most storms; may be natural or man-made, with breakwaters and jetties; a place for docking and loading.
HATCH - An opening in a boat's deck fitted with a watertight cover.
HEAD - A marine toilet. Also the upper corner of a triangular sail.
HEADING - The direction in which a vessel's bow points at any given time.
HEADWAY - The forward motion of a boat. Opposite of sternway.
HEAVE TO - To bring a vessel up in a position where it will maintain little or no headway, usually with the bow into the wind or nearly so.
HEEL - To tip to one side.
HELM - The wheel or tiller controlling the rudder.
HITCH - A knot used to secure a rope to another object or to another rope, or to form a loop or a noose in a rope.
HOLD - A compartment below deck in a large vessel, used solely for

carrying cargo.
HULL - The main body of a vessel.
HYPOTHERMIA - A life-threatening condition in which the body's warming mechanisms fail to maintain normal body temperature and the entire body cools.

I

INBOARD - More toward the center of a vessel; inside; a motor fitted inside the boat.

J

There are no boating terms under this heading.

K

KEDGE - To use an anchor to move a boat by hauling on the anchor rode; a basic anchor type.
KEEL - The centerline of a boat running fore and aft; the backbone of a vessel.
KETCH - A two-masted sailboat with the smaller after mast stepped ahead of the rudder post.
KNOT - A measure of speed equal to one nautical mile (6076 feet) per hour. A fastening made by interweaving rope to form a stopper, to enclose or bind an object, to form a loop or a noose, to tie a small rope to an object, or to tie the ends of two small ropes together.

L

LEEWARD - The direction away from the wind. Opposite of windward.
LEEWAY - The sideways movement of the boat caused by either wind or current.
LINE - Rope and cordage used aboard a vessel.
LOG - A record of courses or operation. Also, a device to measure speed.

LUBBER'S LINE - A mark or permanent line on a compass indicating the direction forward; parallel to the keel when properly installed.

M

MAST - A spar set upright to support rigging and sails.
MONOHULL - A boat with one hull.

MOORING - An arrangement for securing a boat to a mooring buoy or a pier.
MOORING BUOY - A buoy secured to a permanent anchor sunk deeply into the bottom.

N

NAUTICAL MILE - One minute of latitude; approximately 6076 feet - about 1/8 longer than the statute mile of 5280 feet.
NAVIGATION - The art and science of conducting a boat safely from one point to another.

O

OUTBOARD - Toward or beyond the boat's sides. A detachable engine mounted on a boat's stern.
OUTDRIVE - A propulsion system for boats with an inboard engine operating an exterior drive, with drive shaft, gears, and propeller; also called stern-drive and inboard/outboard.
OVERBOARD - Over the side or out of the boat.

P

PAINTER - A line attached to the bow of a boat for use in towing or making fast.
PAY OUT - To ease out a line, or let it run in a controlled manner.
PENNANT (sometimes PENDANT) - The line by which a boat is made fast to a mooring buoy.
PERSONAL FLOTATION DEVICE (PFD) - PDF is official terminology for life jacket. When properly used, the PDF will support a person in the water. Available in several sizes and types.
PIER - A loading/landing platform extending at an angle from the shore.
PILOTING - Navigation by use of visible references, the depth of the water, etc.
PITCH - 1. The alternate rise and fall of the bow of a vessel proceeding through waves; 2. The theoretical distance advanced by a propeller in one revolution; 3. Tar and resin used for caulking between the planks of a wooden vessel.
PITCHPOLING - A small boat being thrown end-over-end in very rough seas.
PLANING HULL - A type of hull shaped to glide easily across the water at high speed.
PORT - The left side of a boat looking forward. A harbor.
PROPELLER - A rotating device, with two or more blades, that acts as a screw in propelling a vessel.

Q

QUARTER - The sides of a boat aft of amidships.
QUARTERING SEA - Sea coming on a boat's quarter.



R

REEF - To reduce the sail area.
RIGGING - The general term for all the lines of a vessel.
RODE - The anchor line and/or chain.
ROLL - The alternating motion of a boat, leaning alternately to port and starboard; the motion of a boat about its fore-and-aft axis.
ROPE - In general, cordage as it is purchased at the store. When it comes aboard a vessel and is put to use, it becomes a line.
RUDDER - A vertical plate or board for steering a boat.
RUNNING LIGHTS - Lights required to be shown on boats underway between sundown and sunup.



S

SCOPE - The ratio of the length of an anchor line, from a vessel's bow to the anchor, to the depth of the water.
SCREW - A boat's propeller.
SEA ANCHOR - Any device used to reduce a boat's drift before the wind.

SECURE - To make fast.
SHACKLE - A "U" shaped connector with a pin or bolt across the open end.
SHEAR PIN - A safety device, used to fasten a propeller to its shaft; it breaks when the propeller hits a solid object, thus preventing further damage.
SHEET BEND - A knot used to join two ropes. Functionally different from a square knot in that it can be used between lines of different diameters.
SHIP - A larger vessel usually used for ocean travel. A vessel able to carry a "boat" on board.
SHOAL - An offshore hazard to navigation at a depth of 16 fathoms (30 meters or 96 feet) or less, composed of unconsolidated material.
SLACK - Not fastened; loose. Also, to loosen.
SLOOP - A single masted vessel with working sails (main and jib) set fore and aft.
SPLICE - To permanently join two ropes by tucking their strands alternately over and under each other.
SPRING LINE - A pivot line used in docking, undocking, or to prevent the boat from moving forward or astern while made fast to a dock.
SQUALL - A sudden, violent wind often accompanied by rain.
SQUARE KNOT - A knot used to join two lines of similar size. Also called a reef knot.
STANDING PART - That part of a line which is made fast. The main

part of a line as distinguished from the bight and the end.
STAND-ON VESSEL - That vessel which continues its course in the same direction at the same speed during a crossing or overtaking situation, unless a collision appears imminent. (Was formerly called "the privileged vessel.")
STARBOARD - The right side of a boat when looking forward.
STERN - The after part (back) of the boat.
STERN LINE - A docking line leading away from the stern.
STOW - To pack or store away; especially, to pack in an orderly, compact manner.
SWAMP - To fill with water, but not settle to the bottom.

T

TACKLE - A combination of blocks and line to increase mechanical advantage.
THWART - A seat or brace running laterally across a boat.
TIDE - The periodic rise and fall of water level in the oceans.
TILLER - A bar or handle for turning a boat's rudder or an outboard motor. **TOPSIDES** - The sides of a vessel between the waterline and the deck; sometimes referring to onto or above the deck.
TRANSOM - The stern cross-section of a square-sterned boat.
TRIM - Fore and aft balance of a boat.
TRIMARAN - A boat with three hulls.
TRIPLINE - A line fast to the crown of an anchor by means of which it can be hauled out when dug too deeply or fouled; a similar line used on a sea anchor to bring it aboard.
TRUE NORTH POLE - The north end of the earth's axis. Also called North Geographic Pole. The direction indicated by 000° (or 360°) on the true compass rose.
TRUE WIND - The actual direction from which the wind is blowing.
TURNBUCKLE - A threaded, adjustable rigging fitting, used for stays, lifelines and sometimes other rigging.

U

UNDERWAY - Vessel in motion, i.e., when not moored, at anchor, or aground.

V

V BOTTOM - A hull with the bottom section in the shape of a "V."
VARIATION - The angular difference between the magnetic meridian and the geographic meridian at a particular location.
VHF RADIO - A very high frequency electronic communications and direction finding system.

W

WAKE - Moving waves, track or path that a boat leaves behind when moving across the waters.
WATERLINE - A line painted on a hull which shows the point to which a boat sinks when it is properly trimmed.
WAY - Movement of a vessel through the water, such as headway, sternway, or leeway.
WHARF - A man-made structure bonding the edge of a dock and built along or at an angle to the shoreline, used for loading, unloading, or tying up vessels.
WINCH - A device used to increase hauling power when raising or trimming sails.
WINDWARD - Toward the direction from which the wind is coming. Opposite of leeward.

X

There are no boating terms under this heading.

Y

YAW - To swing off course, as when due to the impact of a following or quartering sea.
YAWL - A two-masted sailboat with the small mizzen mast stepped abaft the rudder post.

Z

There are no boating terms under this heading.

Appendix D

Covid-19 Best Safety Practice Procedures

COVID-19 Best Practice Safety Procedures for WESTON Field Personnel and Subcontractors

WESTON and subcontractor personnel are encouraged to follow current CDC guidance and updates regarding the COVID-19 outbreak. Print and post CDC posters at your jobsite and review with site personnel and field teams, regarding signs, symptoms, and controls. These materials can be found here on the WESTON Portal. Below is a list of best practices for WESTON operations:

Stay Home When Sick

- Sick is sick – do not report to work if you are experiencing any symptoms of illness. Contact your supervisor and healthcare provider for further direction and seek medical attention if advised.
- On a project-specific basis/at the request of the client, temperature checks may be initiated at the beginning of each workday for all team members including subcontractors. If implementing temperature checks, follow the WESTON guidance on Employee Health Symptoms Surveys/Employee Temperature Checks.

Personal Hygiene

- Follow all CDC guidance regarding personal hygiene and handwashing. Wash hands thoroughly with soap and clean water (preferably hot) for at least 20 seconds before eating, drinking, or smoking, and during and after work. Wash hands after touching any surfaces or objects.
- Avoid hand to face contact, including touching eyes, nose, and mouth.
- Wear gloves, as practical, to minimize hand/skin contact with objects/surfaces. Wash hands when gloves are removed.

Site Sanitation

- Ensure that your project site has permanent/temporary bathroom and handwashing facilities in accordance with the Sanitation standards found in 29 CFR 1910 and 29 CFR 1926.
- Employees should have facilities in which they can wash their hands with potable water and an appropriate cleansing agent. Facilities must be maintained through regular cleaning and trash removal, and should be stocked with enough soap, paper towels, and toilet paper.
- Your project HASP or APP should address site sanitation and personal hygiene. The EHS Team will review and revise the existing HASP template to ensure HASP preparers are prompted to include information regarding site sanitation.

Social Distancing

- Practice social distancing in accordance with CDC guidelines by maintaining a 6 ft. distance between team members while performing work tasks.
- Practice social distancing when in office space, trailers, and break areas, as well as during morning meetings/toolbox talks (conduct group meetings outdoors, in open space) and while driving (1 person per vehicle unless approved by EHS Manager).
- Drive to project sites rather than flying – coordinate with PM/RCO if this would result in additional costs requiring approval
- It may be necessary to change how work is executed, to maintain social distancing when operating equipment or performing site specific tasks.

Consult the Coronavirus Information page on the WESTON Portal for more information. If you have any questions or concerns, reach out to your EHS Manager.