1.5

SITE INSPECTION REPORT
LOWER DUWAMISH RIVER (RK 2.5 TO 11.5)
SEATTLE, WASHINGTON

VOLUME 1—REPORT AND APPENDICES

Prepared for
U.S. Environmental Protection Agency
Region 10
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April 1999

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Dear Dave:

We have noted an error in Section 4 of the report and are providing a replacement page(s) for the reports distributed under your cover letter of last week. Please replace the attached pages of your reports with the enclosed.

If you have any questions, please contact me at (206) 521-7630 or Keith Pine at (206) 521-7681.

Sincerely,

ROY F. WESTON, INC.

Michael C. Shaw
Task Manager

Enclosure (replacement page)
cc: N. Musgrove (letter only)
Distribution

ERRATA

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Lower Duwamish River (RK 2.5 to 11.5
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SECTION 1

INTRODUCTION

Pursuant to United States Environmental Protection Agency (EPA) Contract No. 68-W9-0046, Multiple Site Inspections, and Work Plan Addenda (WESTON 1994a and 1998a) WESTON conducted a Site Inspection (SI) of sediments in the lower Duwamish River from river kilometer (RK) 2.5 to RK 11.5 (see Figure 1-1).

The EPA (SI) Site Investigation process evaluates actual or potential environmental hazards at a particular site relative to other sites across the nation for the purpose of identifying remedial action priorities. The SI, 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), is intended to collect sufficient data to determine a site's potential for inclusion on the National Priorities List (NPL) and establish priorities for additional action, if warranted.

The data collection efforts in the lower Duwamish River were also designed to complement and support the other ongoing environmental and beneficial use projects being conducted by various agencies and interested parties to restore and enhance aquatic habitats within the Duwamish River corridor.

This document represents a summary of the objectives, sampling activities, and results of the Duwamish River SI. Included are site background information (Section 2), project description (Section 3), sampling and analysis results (Section 4), and references.

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SECTION 2

BACKGROUND

2.1 SITE LOCATION AND DESCRIPTION

The Duwamish River originates at the confluence of the Green and Black rivers near Tukwila, WA, then flows northwest for approximately 21 kilometers (km), bifurcating at the southern end of Harbor Island to form the East and West waterways prior to discharging into Elliott Bay. The study area for this SI extends from the southern tip of Harbor Island (RK 2.5) to approximately 1.5 kilometers upchannel of the head of navigation (RK 11.5), also referred to as the upper turning basin or Turning Basin #3. The portion of the river that is maintained by the U.S. Army Corps of Engineers (Corps) as a federal navigation channel (i.e., the reach downchannel of Turning Basin #3) is typically referred to as the Duwamish Waterway. Navigation depths maintained by the Corps within the waterway generally range from –15 feet mean lower low water (MLLW) to -30 feet MLLW (WESTON 1994b).

The shorelines along the majority of the Duwamish Waterway have been developed for industrial and commercial operations, as the waterway serves as a major shipping route for containerized and bulk cargo. Common shoreline features within the study area include constructed bulkheads, with manmade structures such as piers, wharves and buildings extending over the water, and steeply sloped banks armored with riprap or other fill materials (e.g., concrete slabs and miscellaneous debris). Intertidal habitats are dispersed in relatively small patches (i.e., generally less than one acre in size), with the exception of Kellogg Island, which represents the largest contiguous area of intertidal habitat remaining in the Duwamish River (Tanner 1991).

The Duwamish River/Green River system drains an area of approximately 483 square miles, with peak runoff occurring during winter rains, and low flow throughout the late summer dry season (WESTON 1994b). Stream flow for most of the Duwamish River is regulated by the Howard-Hanson dam upstream of the junction of the Green and Black rivers. The Corps has limited peak discharges to 12,000 cubic feet per second (cfs) at Tukwila and minimum flows to as low as 200 cfs, with an average flow of 1,500 to 1,800 cfs.

Tidal effects have been observed throughout the entire reach of the Duwamish River, resulting in characteristic estuarine stratification of the river: surface water is generally fresh or brackish; bottom water is more saline. This bottom layer (referred to as a "salt wedge") oscillates with the river based on river flow volume and tidal stage, but tends to be persistent under low flow conditions and high tidal magnitude, being detected as far as 16 km upstream (WESTON 1994b).

Bottom sediment composition is variable throughout the study area. Available historical surface sediment data suggest the presence of coarser sediments (e.g., medium and coarse sands) in nearshore areas adjacent to combined sewer overflow (CSO) and storm drain (SD) discharges

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and riprap or similarly constructed banks, as well as in subtidal (scour) areas in the vicinity of the bridges that cross the river (e.g., the First Avenue South and 16th Avenue South bridges). Finer-grained sediments (i.e., silts and clays) have generally been encountered in the remnant mudflats, along channel sideslopes, and within portions of the navigation channel.

2.2 INDUSTRIAL OPERATIONS AND PAST INVESTIGATIONS

Much of the upland areas adjacent to the project area are heavily industrialized, and marine traffic within the Duwamish Waterway is considered to be intensive. Historical or current commercial and industrial operations include cargo handling and storage; marine construction; boat manufacturing; maintenance and repair; marina operations; concrete and other stone material manufacturing and distribution; paper and metals fabrication; food processing; and airplane parts manufacturing. In addition, this reach of the river is the receiving body for discharges from numerous municipal SDs and CSOs, as well as multiple privately held outfalls and drains.

Numerous past investigations within the Duwamish Waterway have been conducted with varying scopes. Some of the historical studies focused on specific properties, while the remaining studies were riverwide and incorporated sediment sampling as only one component of the entire study. These past sediment studies have indicated that polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), metals (e.g., mercury), miscellaneous organic compounds (e.g., phthalate esters and chlorinated benzenes), pesticides, and organotins are present in the river sediments at concentrations that may cause deleterious effects to humans and aquatic organisms. PCBs and bis(2-ethylhexy)phthalate appear to be the most widespread contaminants of potential concern, followed by metals (primarily mercury and zinc) and PAHs. These contaminants may have entered the river via several transport pathways or mechanisms, including spillage during product shipping and handling, direct disposal or discharge, contaminated groundwater discharge, surface water runoff, stormwater discharge, or contaminated soil erosion.

2.3 REGIONAL GEOLOGY

The regional geology of the Seattle area is dominated by recent tectonics and Quaternary glaciations. Drift unconsolidated glacial materials and nonglacial deposits cover structurally deformed Tertiary bedrock comprising marine and estuarine sandstone, shale, and conglomerate, in addition to basalt, andesite, and volcaniclastic rocks. Drift units, separated by nonglacial sediments, from at least five major glaciations are recognized. The last glacier retreated from the Seattle area about 13,500 years before present. Each glaciation is characterized by a complex sequence of lacustrine (lake) deposits, advance outwash (river sediment), glaciomarine drift, till, and recessional outwash. The preservation of these deposits is patchy due to the erosion and deposition during the succeeding nonglacial and glacial intervals. The nonglacial intervals are represented typically by alluvial deposits (Galster and Laprade 1991).

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The dominant post-glacial stratigraphy, which occupies relict subglacial meltwater channels scoured into advance outwash and older deposits during recession of the Puget lobe, consists of large, prograding river-mouth deltaic sequences that interfinger with marine embayment deposits. The Duwamish River valley is a relict trough and post-glacial ancient marine embayment, which has been filled with sediment in the past few thousand years by the prograding ancestral Duwamish river-mouth delta (Dragovich et al. 1994).

2.4 CHANNEL DYNAMICS

The original topography of the lower Duwamish River valley has been modified. Prior to development of the Duwamish River valley, the land surface consisted of low-lying floodplains and tidal flats. Prior to 1918, the Duwamish River was widely meandering. The natural slips cutting into the riverbank today are the only evidence of the river's original meandering course. During the period between 1910 and 1920, the lower portion of the river was channelized to create the Duwamish Waterway. The former river channel and surrounding floodplains were filled and graded to form the present-day topography.

2.5 AQUATIC RESOURCES AND CRITICAL HABITATS

The Duwamish River serves as a migratory route, nursery, and osmoregulatory transition zone for several species of Pacific salmon, including coho (*Oncorhynchus kistuch*), chinook (*O. tshawytscha*), chum (*O. keta*), pink (*O. gorbuscha*), as well as steelhead (*O. mykiss*) and cutthroat trout (*O. clarki*) (WESTON 1998b). Chinook and coho utilize Elliot Bay and the Duwamish estuary more extensively than any of the other species (WESTON 1998b). The runs are composed of native and hatchery-reared salmon as a result of the state hatchery program located on the Green River. As part of a continuing effort to protect dwindling Pacific salmon stocks, the Puget Sound chinook salmon has recently been listed as a threatened species under the Endangered Species Act.

The Duwamish River is part of the traditional fishing grounds for the Muckleshoot and Suquamish tribes. During seasonal migration runs, tribal members engage in a gillnet fishery for various commercially important salmonid species (e.g., chinook and coho salmon). The stocks also receive pressure from recreational fishing, which is popular at various public access locations along the lower reaches of the river.

There is a diverse assemblage of avian species present within the lower Duwamish River estuary. Both migratory and resident species of shorebirds, waterfowl, seabirds, songbirds, and raptors can be observed throughout much of the year. Piscivorous species recorded in the lower estuary include kingfisher and great blue heron. Raptors, such as hawks, bald eagles, and ospreys also reside and/or frequent the Duwamish corridor (WESTON 1994b). An active osprey nest located on the Birmingham Steel property was observed during the SI site reconnaissance, as well as during the field sampling program. It is also not uncommon to find bald eagles nesting in the

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underdeveloped open spaces or parks in West Seattle. The type of habitat use is not well documented for any of these species, but at a minimum, the lower Duwamish estuary serves as an adult and juvenile forage area.

Mammals such as otters and muskrats have been observed along the Duwamish River corridor. Marine mammals, including harbor seals (*Phoca vitulina*), and California sea lions (*Zalophus californianus*) are known to frequently forage in Elliott Bay and have been sighted in the Duwamish Waterway (WESTON 1994b). Both harbor seals and California sea lions are classified by the Washington Department of Fish and Wildlife as state monitor species (WESTON 1998b).

2.6 POTENTIAL CONTAMINANT TRANSPORT PATHWAYS AND RECEPTORS

2.6.1 Sediment

Sediments located in areas of direct deposition of waste materials or receiving contaminated surface water or groundwater drainage may act as a receptor, and, in turn, also act as a source, because the sediments can retain contaminants. In addition, sediments can act as a source of contaminants to locations distal from the original source materials because they can be transported by tides, currents, and wave action. Aquatic organisms represent additional receptors that may be impacted by sediment-bound contaminants due to exposure via dermal contact, respiration, or direct ingestion. Exposed lower trophic-order organisms also provide a pathway for exposure of higher trophic-order organisms via ingestion of contaminated prey. The potential for sediments to act as a receptor and a source was evaluated through the collection and chemical analysis of surface and subsurface sediments and sediment porewater from locations throughout the 9-kilometer study area.

2.6.2 Surface Water

The surface waters of the Duwamish River represent the principal surface water receptor. The primary and secondary ecological receptors associated with this aquatic habitat include anadromous and resident populations of fish, and numerous piscivorous birds, migratory waterfowl, raptors, and mammals. As described above, in addition to direct deposition, transport of contaminants to the surface waters of the Duwamish River may have occurred via stormwater runoff, direct discharge (i.e., storm drains and CSO discharges), tidal flushing, or groundwater transport. However, water quality was not directly evaluated as a part of this project.

2.6.3 Soil

Although this medium may represent a source of contamination or an exposure mechanism to terrestrial receptors, soil conditions associated with adjacent upland areas were not evaluated as part of this investigation. However, soil that may have been eroded and transported to nearshore

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sediment by stormwater flow was evaluated as part of the sediment pathway through collection of nearshore surface and subsurface sediment samples.

2.6.4 Groundwater

The groundwater pathway was not directly evaluated for this site, but the investigation of the sediment pathway would likely have captured areas of significant groundwater contamination that impacted sediment quality.

2.6.5 Air

The air pathway was not directly evaluated for this site, but the investigation of the sediment pathway would likely have captured potential impacts to riverine areas receiving significant particulate matter from the upland properties adjacent to the Duwamish River.

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SECTION 3

PROJECT DESCRIPTION

3.1 SAMPLING OBJECTIVES

The EPA SI process is used to determine actual or potential environmental hazards at a particular site relative to other sites across the nation for the purposes of identifying remedial action priorities. This project was designed to collect sufficient data to support an SI evaluation for a 9-kilometer section of the Duwamish River, as well as other ongoing environmental efforts being conducted by various agencies and interested parties.

The purpose of this investigation was to provide a screening level evaluation of sediment quality in the Duwamish River. Accordingly, the following sampling objectives were identified for this investigation:

- Characterize the nature and areal extent of contaminant distribution in surface (0-10 cm) sediments.
- Preliminarily characterize the nature and vertical extent of sediment contaminant distribution in shallow (up to 1.21 m below mudline) subsurface sediments in localized areas.
- Obtain sediment porewater samples to evaluate the potential bioavailability of organotins and metals to aquatic receptors.

3.2 SAMPLE TYPES, NUMBERS LOCATIONS AND RATIONALE

In total, 300 stations were sampled and analyzed for various contaminants as part of this SI effort. The following is a breakdown of the number of stations and samples collected for each media. A graphical representation of station location and identification is depicted in Maps 3-1 through 3-3.

3.2.1 Surface (300 stations)

- 312 surface sediment samples
- 300 primary surface (0 to 10 cm) sediment samples
- 12 duplicate surface (0 to 10 cm) sediment samples

3.2.2 Subsurface (17 stations co-located with selected surface sediment sample station)

- 35 subsurface sediment samples
- 17 primary subsurface (0 to 0.6 m) sediment samples
- 1 duplicate subsurface (0 to 0.6 m) sediment samples

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- 16 primary subsurface (0.6 to 1.2 m) sediment samples
- 1 duplicate subsurface (0.6 to 1.2 m) sediment sample

3.2.3 Porewater (15 stations co-located with selected surface sediment sample station)

- 16 surface sediment porewater samples
- 15 primary surface (0 to 10 cm) sediment porewater
- 1 duplicate surface (0 to 10 cm) sediment porewater

Surface, subsurface, and sediment porewater analyses performed at each station are depicted in Maps 3-4 through 3-6.

Split samples were provided to two interested parties owning properties adjacent to the study area. Information detailing interested parties and split sampling locations is provided in Table 3-1.

3.3 SAMPLING METHODS, ANALYTICAL REQUIREMENTS, AND STATION LOCATIONS

3.3.1 Sampling Methods

3.3 1.1 Surface Sediment Sampling

Subtidal surface sediments were collected using a stainless-steel modified 0.1 m^2 van Veen grab sampler in accordance with the procedures outlined in the sampling and analysis plan (SAP; WESTON 1998a). Up to eleven grabs were required at each station to achieve sufficient sediment volumes for bulk chemical and porewater analyses. Penetration depths for acceptable grabs ranged from 5 to 17 cm, depending on sediment type.

Observations of sediment composition were made for each sample and recorded on the appropriate field sample record forms (see Appendix A). Samples were placed in a stainless-steel container for homogenization; homogenized samples were placed in labeled precleaned sample jars or decontaminated high-density polyethylene (HDPE) buckets in the case of porewater samples. All sample containers were subsequently packed in coolers with ice for shipment.

3.3.1.2 Subsurface Sediment Sampling

Subsurface sediment samples were generally collected in accordance with the SAP (WESTON 1998a), with the exception of the size of the gravity corer selected for use. Based on past experience with coring in the Duwamish River, it was recommended that a 10.2 cm corer configured with a 1.52 m stainless-steel core barrel and a 317 kg weight stand be used, (Eaton 1998). Core recovery lengths varied throughout the study area depending on sediment type, and

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ranged from 0.7 to 1.4 (m), with an average recovery of 1.3 (m). A summary of the actual recovery lengths is provided in Table 3-2.

Core processing was conducted aboard the sampling vessel. Sediment from each core was extruded onto a decontaminated 1.5 (m) stainless-steel tray by elevating the tube at an angle. When necessary, the core was tapped with a rubber mallet to loosen the sediment from the core barrel. Care was taken to ensure that samples were extruded slowly to maintain the integrity of the core. Once the core was extruded onto the tray, observations of sediment composition were made and recorded on the appropriate field sample record forms (see Appendix B). Samples were then placed in stainless-steel bowls for homogenization; homogenized samples were subsequently placed in labeled precleaned sample jars. All sample containers were packed in coolers with ice for shipment.

3.3.2 Analytical Requirements

In general, all samples were analyzed in accordance with the methods and procedures specified in the SAP (WESTON 1998a). A few minor deviations from the proposed sample analytical requirements occurred, as follows:

- Surface sediment organotin analyses were inadvertently omitted during the field sample collection effort at stations DR013, DR109, DR139, DR190, and DR228.
- Physical conditions encountered in the field, including the presence of obstructions (e.g., overhead lines, moorage lines, moored vessels, shallow water, and impenetrable substrates composed of gravel, large rocks, and wood debris prohibited the collection of surface and subsurface sediment samples at several originally proposed sampling locations. As a result, some stations were deleted from the sampling effort, and alternate locations were evaluated as substitutes and sampled when appropriate conditions permitted. Where necessary, subsurface sediment analyses were also modified to coincide with that of the co-located surface sediments. A list of the samples affected, analytical changes, and justification for deviation is provided in Table 3-3.

Chemical analyses conducted at each surface sediment sampling location (including porewater stations) are presented in Tables 3-4 through 3-7. Chemical analyses conducted at each subsurface sediment sampling location are presented in Table 3-8.

3.3.3 Station Locations

3.3.3.1 Surface Sediment Stations

Considerable effort was made to collect surface sediment at or within close proximity of the sampling locations identified in the SAP. However, as described in Section 3.3.2, sampling locations had to be relocated due to physical obstructions or poor substrate conditions in several instances. Under the latter condition, multiple attempts were made before the given station was abandoned. In some cases, an appropriate alternate site was established and sampled

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accordingly. A description of the sites affected and the corrective action taken is provided in Table 3-3. Complete station coordinates are provided in Appendix C.

3.3.3 2 Subsurface Sediment Stations

Considerable effort was made to co-locate subsurface sediment sampling locations within 3 meters of the previously occupied surface sediment sampling locations. However, in several instances, subsurface sediment conditions prohibited adequate recovery of subsurface sediment. If an adequate sample could not be obtained after numerous attempts, then the station was abandoned or moved to an area of more favorable sampling conditions that had previously been sampled for surface (0 to 10 cm) sediment. Station-positioning modifications are detailed in Table 3-3. Complete station coordinates are provided in Appendix C.

3.4 SAMPLE HANDLING, PACKAGING, AND SHIPPING

Samples were handled, packaged, and shipped in accordance with the procedures specified in the SAP (WESTON 1998a).

3.5 DOCUMENTATION

All field documentation, sample designation and labeling, and chain of custody procedures were followed in accordance with the procedures specified in the SAP (WESTON 1998a).

3.6 EQUIPMENT DECONTAMINATION AND INVESTIGATION-DERIVED WASTE

Procedures specified in the SAP (WESTON, 1998a) for decontaminating equipment and disposing of investigation-derived wastes (IDW) were followed during field activities.

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SECTION 4

SAMPLING RESULTS

The following sections present analytical data generated during this SI. A log summarizing individuals and affiliated agencies contacted during the course of this SI is provided in Appendix D. Chain-of-custody forms and data validation reports can be provided by EPA Region 10 upon request.

4.1 DATA PRESENTATION

Analytical data tables for surface, subsurface, and surface sediment porewater are presented in Appendix E, along with a list of data qualifiers. Analytical data are reported as follows:

- Sediment inorganic concentrations are expressed in units of milligram per kilogram (mg/kg) dry-weight
- Sediment organic concentrations are expressed in units of microgram per kilogram (µg/kg) dry-weight; sediment nonionic/nonpolar organics are also expressed in units of µg/kg-organic carbon (i.e., the dry-weight concentration was normalized to the organic carbon content of the sample by dividing the chemical concentration by the sample-specific decimal fraction of organic carbon).
- Sediment porewater inorganic concentration and organotin compound concentration are expressed in units of microgram per liter (µg/L).
- Sediment organotin concentrations are expressed in units of µg-ion/kg-dry weight and µg-ion/kg-organic carbon
- Sediment total organic carbon (TOC) content and grain size fractions are expressed as percentages.

4.2 DATA EVALUATION METHODS

4.2.1 Comparisons with Effects-Based Screening Values

Average and range of concentrations have been provided in the analytical results section of this report for selected analytes found to be at elevated concentrations and/or possess a wide distribution throughout the study area. Because information collected as part of this investigation may be used by various regulatory agencies, including the National Oceanic and Atmospheric Administration (NOAA), Washington State Department of Ecology (Ecology), and the EPA, the sediment and porewater data were also compared to several effects-based screening guidelines to assist in the interpretation of potential risks associated with exposures to these media at the site. The screening guidelines used for such comparisons include:

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4.2.1.1 Sediment Screening Guidelines

- Washington State Sediment Management Standards (SMS) Sediment Quality Standard (SQS) and Cleanup Screening Level (CSL) (WAC 173-204). SQS are long-term cleanup goals that correspond to a sediment quality that will not result in adverse effects to biological resources. CSL are less stringent standards that correspond to minor adverse effects to biological resources; they are typically used to determine if remediation is required in a specific area.
- The SMS include TOC-normalized criteria for nonionic/nonpolar organic compounds. However, these criteria are generally only effective at predicting adverse effects in sediments with TOC content greater than 0.5 percent (Michelsen 1997). Also, in cases where high TOC (greater than 3 to 4 percent) may be due to some anthropogenic contribution (e.g., oils and wood debris), TOC normalization may not be appropriate. Where TOC exceeded 4 percent, concentrations of nonionic/nonpolar organic chemicals for these samples were compared with the Apparent Effects Threshold (AET) values (Barrick et al. 1988). The AET values are the functional equivalent of the SQS and CSL values, only they are expressed on a dry-weight basis. The lowest AET (LAET) was used as the equivalent of the SQS, and the second lowest AET (2LAET) was used in place of the CSL.

4.2.1.2 Porewater Screening Guidelines

- Federal marine chronic and acute Ambient Water Quality Criteria (AWQC; EPA 1995). As a requirement of the Clean Water Act (CWA), ambient water quality criteria have been published for the protection of aquatic organisms and human health (40 CFR 131). Acute values are designed to protect for short-term exposures to higher concentration, whereas chronic criteria address long-term exposures. While not promulgated standards, states and tribes are expected to adopt these criteria as their standards or develop criteria affording a similar degree of protectiveness.
- Washington State marine acute and chronic AWQC (WAC 173-201A). State water quality standards have been promulgated and incorporate the federal criteria in large measure.
- EPA proposed marine acute and chronic AWQC for tributyltin (TBT; EPA 1997). These guidelines are based on protection of most invertebrates and fishes, but do not protect for the most sensitive life stages or taxa.

These comparisons are only depicted in the graphical representations contained within Volume 2 of this report and are not discussed in the analytical results section. Summaries of the above screening guidelines, as well as other potentially applicable effects-based screening values, are provided in Appendix F.

4.2.2 Additional Evaluations of TBT Data

No standards are available for evaluating tributyltin in sediment. However, screening guidelines have been proposed for evaluation of TBT for use in several Puget Sound sediment management

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programs. The guidelines are based on partitioning theory and estimate a threshold sediment concentration based on an effects concentration in water. The following formula is used to calculate the sediment concentration of TBT:

$$[TBT]_{sed\ oc} = [TBT]_{pw} * K_{oc}$$

Where:

$[TBT]_{pw}$ = Concentration of TBT in porewater (µg/L)

$[TBT]_{sed\ oc}$ = Concentration of TBT in sediment (µg/kg oc)

K_{oc} = Organic carbon partition coefficient (L/kg)

For the purpose of this study, the PSDDA porewater screening guideline of 0.15 µg TBT/L was used to calculate a lower-end sediment screening concentration of 3,765 µg/kg oc, based on a K_{oc} of 25,100 (Meador et al. 1997). An upper-end sediment screening value was derived based on the marine acute water quality criterion and resulted in a concentration of 9,287 µg/kg oc. A TOC of 1 percent was used to calculate the dry weight equivalents for these screening concentrations.

4.3 ANALYTICAL RESULTS

4.3.1 Surface Sediment

4.3.1.1 Polychlorinated Biphenyls (PCBs)

PCBs were analyzed at all surface sediment sampling stations. Total PCBs were detected at 91 percent of these stations. Total PCB concentration averaged 334 µg/kg and ranged from 20 to 12,000 µg/kg dry-weight (DW). The highest measured total PCB concentration occurred in Reach C at station DR207. Aroclors 1254, 1260, and 1242 were the only PCB Aroclors detected. Aroclor 1254 was detected at 89 percent of the stations at concentrations ranging from 20 to 9,400 µg/kg DW. Aroclor 1260 was also frequently detected at 85 percent of the surface sediment stations. The highest measured concentration for Aroclors 1254 and 1260 occurred at station DR271 and DR207, respectively. Aroclor 1242 was infrequently detected at 13 percent of the stations. A statistical summary and complete listing of the PCB and PCB congener data are presented, as dry-weight concentrations, in Appendix E-1. A statistical summary and complete data listing of the TOC-normalized data can also be found in Appendix E-1. Map series 4-1 provides a graphical representation of the total PCB results for the entire waterway.

4.3 1.2 Base-Neutral Acid Extractables (BNAs)

BNAs were analyzed and detected at all surface sediment stations collected for this study. PAHs were most prevalent. Total high molecular weight PAHs (HPAHs) were encountered in

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98 percent of the samples collected. Total HPAH concentration averaged 4,356 µg/kg and ranged from 20 to 50,840 µg/kg DW. The highest measured HPAH concentration was observed in Reach A at station DR044. Fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene were also ubiquitous throughout the waterway.

Total low molecular weight PAHs (LPAHs) and phenanthrene were detected at 97 percent of the surface sediment stations sampled. Total LPAH concentration averaged 791 µg/kg and ranged from 30 to 20,030 µg/kg DW. Phenanthrene averaged 514 µg/kg DW and ranged from 30 to 16,000 µg/kg DW. The highest measured concentration for LPAHs and phenanthrene occurred in Reach C at station DR175. Acenaphthene, fluorene, phenol, and hexachlorobenzene were also encountered in the waterway.

Bis(2-ethylhexyl) phthalate and butyl benzyl phthalate were detected at 74 and 64 percent of the surface sediment sampling stations, respectively. Bis(2-ethylhexyl) phthalate averaged 568 µg/kg, and ranged from 20 to 11,000 µg/kg DW. Butyl benzyl phthalate concentration averaged 47 µg/kg, with a range of 20 to 940 µg/kg DW. The highest concentrations of both analytes occurred at station DR008. A statistical summary and a complete listing of the BNA data are presented, as dry-weight concentrations, in Appendix E-2. A statistical summary and complete data listing of the TOC-normalized data can also be found in Appendix E-2. Map series 4-2 through 4-13 provides a graphical representation of these BNA results for the entire waterway.

4.3.1.3 Total Inorganics

Analytical results indicate that total inorganics were detected at all surface sediment sampling stations. Mercury was detected in 96 percent of the surface sediment samples collected for this study. The average mercury concentration was 0.18 mg/kg and ranged from 0.02 to 1.6 mg/kg DW. The highest mercury concentration occurred in Reach B at station DR157. Arsenic and zinc were also detected at all surface sediment stations. Maximum concentrations for both analytes occurred in Reach A at station DR020. The highest lead concentration was recorded in Reach D at station DR254. Appendix E-3 provides a statistical summary of the data and a complete data listing. Map series 4-14 through 4-17 provides a graphical representation of mercury, arsenic, lead, and zinc at selected reaches.

4.3.1.4 Pesticides

Pesticides were analyzed at 47 of the surface sediment sampling stations. Pesticides were infrequently detected with exception to 4,4'-dichloro-diphenyl-trichloroethene (4,4'-DDT) and its associated metabolites (i.e., 4,4'-DDD and 4,4'-DDE). 4,4'-DDT was detected in approximately 11 percent of those samples analyzed for this analyte. 4,4'-DDT had a mean concentration of 42 µg/kg and ranged from 2 to 1,670 µg/kg DW. The highest concentrations of 4,4'-DDT, 4,4'-DDD, and 4,4'-DDE were detected in Reach C at station DR178. Appendix E-1 provides a statistical summary of pesticide data and a complete listing of the data. Map series

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4-18 through 4-20 provides a graphical representation of the 4,4'-DDT, 4,4'-DDD, and 4,4'-DDE results at selected reaches.

4.3.1 5 Dioxins/Furans

Analyses for dioxins/furans were conducted at 30 surface sediment sampling stations. Analytical results indicate that dioxins/furans were detected at all stations. For this study, total 2,3,7,8-TCDD (equivalence) was used as a measure of the relative toxicity of the various congeners identified. Total 2,3,7,8-TCDD (equivalence) had a mean concentration of 16 ng/kg, and ranged from below the method detection limit to 218 ng/kg DW. The highest concentration occurred in Reach B at DR123. Appendix E-4 provides a statistical summary and a complete listing of the data. Map series 4-21 provides a graphical representation of the total 2,3,7,8-TCDD results throughout the waterway.

4.3.1.6 Organotins

Organotins (reported as Organotin-ion) were analyzed at 92 of the surface sediment sampling stations. The most commonly detected organotin constituent was tri-n-butyltin (TBT), occurring in 92 percent of the samples analyzed for this analyte. TBT concentration averaged 70 µg/kg and ranged from 1 to 320 µg/kg DW, with the highest concentration identified at station DR002. Appendix E-5 provides a statistical summary of organotin data and a complete data listing. Map series 4-22 provides a graphical representation of the TBT results throughout the waterway.

4.3.1.7 Volatile Organic Compounds (VOCs)

VOCs were analyzed at 47 surface sediment sampling stations. VOCs were infrequently detected, with exception of 2-butanone. 2-Butanone was detected at 26 percent of the surface sediment stations sampled for this analyte. 2-Butanone concentrations averaged 30 µg/kg and ranged from 5 µg/kg to 35µg/kg DW. The highest measured concentration occurred at station DR154. Appendix E-6 provides a statistical summary and complete listing of the VOC data, as dry-weight concentrations.

4.3.1.8 Total Organic Carbon (TOC)

TOC analysis was performed at all surface sediment sampling stations. Analytical results indicate that TOC averaged 2.2 percent. TOC ranged from 0.1 to 9.2 percent, with the highest concentration measured at DR042. Appendix E-7 provides a statistical summary and a complete listing of the TOC data. Map series 4-23 provides a graphical representation of TOC results for the entire waterway.

4.3.1.9 Grain Size

Grain size analysis was performed at all surface sediment sampling stations. Sediments were characterized as coarse if the total fines fraction was less than 55 percent fines. Sediments

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identified as having 55 percent fines or greater were labeled as fine-grain sediments. As a result, the majority of stations sampled for this study were characterized as having fine-grain sediments. Analytical results indicate that stations averaged 65 percent total fines and 33 percent total sand. Total fines ranged from 1 to 97 percent, with the greatest percentage of fines occurring at station DR244. Total sands ranged from 3 to 99 percent. Station DR297 was identified as the station with the highest percentage of sands. Appendix E-7 provides a statistical summary and a complete listing of the grain size data. Map series 4-24 provides a graphical representation of grain size results for the entire waterway.

4.3.2 Subsurface Sediment

4.3.2.1 Polychlorinated Biphenyls

PCBs were analyzed at all of the subsurface sediment sampling stations. Total PCBs were detected at 76 percent of the subsurface stations analyzed and averaged 583 µg/kg, with a range of 37 to 4,043 µg/kg DW. The highest concentration was detected in Reach A at the 2- to 4-foot interval of station DR021. Aroclors 1254, 1260, and 1242 were the only PCB Aroclors detected. Aroclor 1254 was most frequently detected at 76 percent of the stations sampled. Concentrations of Aroclor 1254 ranged from 37 to 2,200 µg/kg, with the highest concentration measured at Reach A in the 0- to 2-foot interval of station DR068. Aroclor 1260 was also detected at many of the stations (73 percent) and ranged from 22 to 678 µg/kg DW. The maximum concentration of Aroclor 1260 was identified at the surface interval of station DR206 in Reach C. Aroclor 1242 was detected in 58 percent of the samples analyzed for this analyte. A statistical summary and complete listing of the PCB and PCB congener data are presented, as dry-weight concentrations, in Appendix E-8. A statistical summary and complete data listing of the TOC-normalized data can also be found in Appendix E-8. Map series 4-25 provides a graphical representation of total PCB results throughout the entire waterway.

4.3.2.2 Base-Neutral Acid Extractables

BNAs were analyzed at all subsurface sediment sampling stations and were frequently detected. Subsurface sediment results were similar to that of the surface, due to the prevalence of PAHs. Total HPAH and LPAH were detected in every core sampled. Total HPAH concentration averaged 3,095 µg/kg DW, with a range of 80 to 15,080 µg/kg. The highest total HPAH concentration was measured at the 2- to 4-foot interval of station DR054. Fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene were detected at this same station and interval.

Total LPAH and phenanthrene were detected at 100 percent of the subsurface samples collected. The total LPAH concentration averaged 411 µg/kg and ranged from 20 to 2,310 µg/kg DW. Phenanthrene averaged 252 µg/kg DW and ranged from 20 to 1,500 µg/kg. The highest measured concentration for LPAHs and phenanthrene occurred in Reach A at the 2- to 4-foot interval of station DR054. Acenaphthene, fluorene, phenol, and hexachlorobenzene were also encountered in the waterway.

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Phthalates were frequently detected at subsurface stations, as well. Bis(2-ethylhexyl)phthalate and butyl benzyl phthalate were detected at 88 and 61 percent of the subsurface samples, respectively. Bis(2-ethylhexyl) averaged 741 µg/kg and ranged from 30 to 6,900 µg/kg DW. The maximum concentration was measured at the 0- to 2-foot interval of station DR008. Butyl benzyl phthalate ranged from 20 to 670 µg/kg, with an average concentration of 70 µg/kg DW. The highest measured concentration of butyl benzyl phthalate was observed at station DR008, 2 to 4 feet below the surface. A statistical summary and a complete listing of the BNA data are presented, as dry-weight concentrations, in Appendix E-9. A statistical summary and complete data listing of the TOC-normalized data can also be found in Appendix E-9. Map series 4-26 through 4-37 provides a graphical representation of these BNA results throughout the waterway and selected reaches.

4.3.2.3 Total Inorganics

Total inorganics were analyzed at all subsurface sediment sampling stations. Analytical results indicate that total inorganics were detected at all stations. Mercury was detected at 100 percent of the subsurface sediment samples collected for this study. The average mercury concentration was 0.30 mg/kg and ranged from 0.06 to 1.44 mg/kg DW. The highest measured concentration occurred at the 2- to 4-foot interval of station DR054 in Reach A. The highest concentrations of arsenic, lead, and zinc were also measured at DR054. Appendix E-10 provides a statistical summary and a complete listing of the total inorganic data. Map series 4-38 through 4-41 provides a graphical representation of mercury, arsenic, lead, and zinc at selected reaches.

4.3.2.4 Pesticides

Pesticides were analyzed at 8 of the subsurface sediment sampling stations. Pesticides were infrequently detected, with the exception of 4,4'-DDD and 4,4'-DDE. 4,4'-DDD was detected in 44 percent of the samples analyzed for this metabolite and ranged from 2 to 14 µg/kg DW. The highest concentration occurred at station DR008, 2 to 4 feet below the surface. 4,4'-DDE was detected at a frequency of 63 percent, with a range of 1 to 18 µg/kg DW. The highest 4,4'-DDE concentration was detected in Reach A at the 2- to 4-foot interval of station DR021. A statistical summary and complete data listing of the pesticide data, as dry-weight concentrations, are presented in Appendix E-8. Map series 4-42 through 4-44 provides a graphical representation of the 4,4'-DDT, 4,4'-DDD and 4,4'-DDE results at selected reaches.

4.3.2.5 Organotins

Organotins (reported as organotin-ion) were analyzed at 13 of the subsurface sediment sampling stations. The most commonly detected organotin was TBT, occurring in 80 percent of the samples analyzed for this analyte. TBT concentration averaged 235 µg/kg DW, and ranged from 3 to 2,500 µg/kg. The highest TBT concentration was measured at the surface interval of station DR054. Appendix E-11 provides a statistical summary and complete data listing of organotin data in subsurface sediments. Map series 4-45 provides a graphical representation of the TBT results throughout the waterway.

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4.3 2 6 Total Organic Carbon

TOC analysis was performed at all subsurface sediment sampling stations. Analytical results indicate that TOC averaged 2.2 percent. TOC ranged from 0.8 to 3.6 percent, with the highest concentration measured at DR008. Appendix E-12 provides a statistical summary and complete data listing of the TOC data.

4.3.2.7 Grain Size

Grain size analysis was performed at all subsurface sediment sampling stations. Analytical results indicate that subsurface stations averaged 76 percent total fines and 23 percent total sand. Total fines ranged from 30 to 94 percent, with the greatest percentage of fines occurring at the 2- to 4-foot interval of stations DR044. Total sands ranged from 6 to 69 percent. The highest percentage of sands was identified at the 2- to 4-foot fraction of station DR269. Appendix E-12 provides a statistical summary and complete data listing of the grain size data.

4.3.3 Sediment Porewater Analysis

4.3.3 1 Total Inorganics

Total inorganics were analyzed at all surface sediment porewater stations. Analytical results indicate that total inorganics were detected at all stations. Arsenic was detected at 80 percent of the surface sediment porewater stations. Arsenic concentration averaged 53 µg/L and ranged from 26 to 114 µg/L. The highest measured concentration occurred at station DR244. Appendix E-13 provides a statistical summary and a complete data listing of the surface sediment porewater data. Map series 4-46 provides a graphical representation of surface sediment porewater results for arsenic throughout the entire waterway.

4.3.3.2 Organotins

Organotins were analyzed at all surface sediment porewater sampling stations. The most commonly detected organotin constituent was TBT; occurring in 53 percent of the samples analyzed for this analyte. Detected TBT concentrations ranged from less than the method detection limit to 0.08 µg/L, with the highest concentration measured at station DR055. Appendix E-14 provides a statistical summary and a complete data listing of organotin data in surface sediment porewater. Map series 4-47 provides a graphical representation of surface sediment porewater results for TBT throughout the entire waterway.

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SECTION 5

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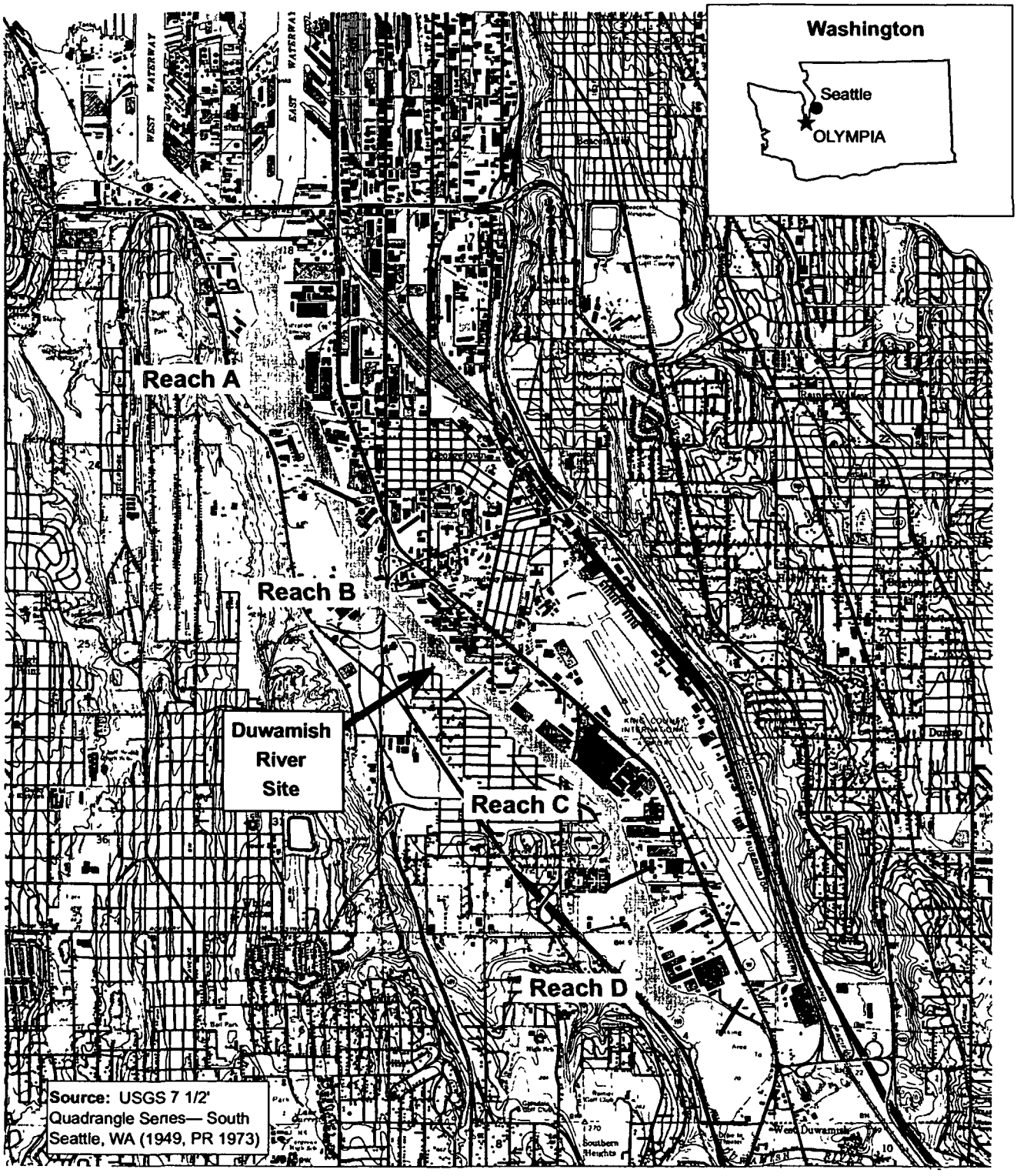
FIGURES



0 2000 4000

Scale in Feet

Duwamish River Site Inspection
Vicinity Map and Reach Locations

FIGURE
1-1

98-0404 Fig1-1 FH8

TABLES

Table 3-1—Surface Sediment Split Sampling Locations

Weston Sample ID	EPA Sample ID	Split Sample Provided To:
SD-DR095-0000	98344072	Lone Star
SD-DR097-0000	98344074	Lone Star
SD-DR098-0000	98344075	Lone Star
SD-DR099-0000	98344076	Lone Star
SD-DR176-0000	98364019	Boeing
SD-DR177-0000	98354003	Boeing
SD-DR178-0000	98354000	Boeing
SD-DR178-1000	98354001	Boeing
SD-DR179-0000	98354002	Boeing
SD-DR180-0000	98354004	Boeing
SD-DR181-0000	98364025	Boeing
PW-DR181-0000	98364038	Boeing
SD-DR182-0000	98354005	Boeing
SD-DR183-0000	98354006	Boeing
SD-DR242-0000	98354007	Boeing
SD-DR242-1000	98354008	Boeing
SD-DR241-0000	98354009	Boeing
SD-DR240-0000	98354011	Boeing
SD-DR243-0000	98354010	Boeing
SD-DR244-0000	98364024	Boeing
PW-DR244-0000	98364037	Boeing
SD-DR245-0000	98354012	Boeing
SD-DR246-0000	98364018	Boeing
SD-DR256-0000	98384016	Boeing
SD-DR257-0000	98384015	Boeing
SD-DR274-0000	98384018	Boeing
SD-DR275-0000	98384017	Boeing
SD-DR276-0000	98384014	Boeing
SD-DR294-0000	98384011	Boeing
SD-DR295-0000	98384012	Boeing
SD-DR296-0000	98384013	Boeing

Table 3-2—Subsurface Sediment Core Sampling Locations and Recovery Lengths

Station	Recovery Length (m)	Original Proposed Station[a]
Reach A		
DR008	1.1	
DR021	1.3	
DR025	1.3	
DR044	1.3	SD-DR046[b]
DR054	1.3	
DR068	0.70	
Reach B		
DR101	1.2	
DR106	1.0	SD-DR111[b]
DR112	1.3	
DR123[c]	--	
DR137	1.3	
DR137	1.4	
DR154[b]	--	
DR171	1.4	SD-DR142[b]
Reach C		
DR183[b]	--	
DR206	1.3	
DR220	1.4	SD-DR187[b]
DR224	1.0	
Reach D		
DR246	1.4	
DR269	1.4	SD-DR291[b]
DR284	1.4	

[a]As detailed in the Sampling and Analysis Plan (WESTON 1998)

[b]Location abandoned because of poor recovery and/or subsurface obstructions

[c]Sampling location abandoned as it could not be reached by the sampling vessel

Table 3-3—Deviation from Sampling and Analysis Plan

Sample Number	Modification	Justification for Deviation
SD-DR004-1000	Duplicate sample dropped	Consistent sediment over penetration
SD-DR029-0000	Station dropped	Inaccessible by boat
SD-DR065-0000	Organotin and dioxin analyses added	Compensate for SD-DR029-0000
SD-DR045-1000	Duplicate sample dropped	Insufficient sediment volume
SD-DR046-0000A	Sample replaced with SD-DR044-0000A; organotin analysis deleted	Insufficient core penetration @ DR046
SD-DR046-0020	Sample replaced with SD-DR044-0020; organotin analysis deleted	Insufficient core penetration @ DR046
SD-DR068-0020	Core sample dropped	Insufficient core penetration
SD-DR092-1000	Duplicate sample dropped; replaced with SD-DR111-1000; analyses unchanged	Consistent grab washout @ DR092
SD-DR142-0000	VOC, pesticide, organotin and dioxin analyses deleted	Insufficient sediment volume
SD-DR111-0000A	Sample replaced with SD-DR106-0000A; pesticide & organotin analysis deleted [a]	Insufficient core penetration @ DR111
SD-DR111-0020	Sample replaced with SD-DR106-0020; pesticide & organotin analysis deleted [a]	Insufficient core penetration @ DR111
SD-DR123-0000A	Station dropped	Inaccessible by core sampling vessel
SD-DR123-0020	Station dropped	Inaccessible by core sampling vessel
SD-DR139-0000A	Sample replaced with SD-DR137-0000A; analyses remain unchanged	Insufficient core penetration @ DR139
SD-DR139-0020	Sample replaced with SD-DR137-0020; analyses remain unchanged	Insufficient core penetration @ DR139
SD-DR139-1000A	Sample replaced with SD-DR137-1000A; analyses remain unchanged	Insufficient core penetration @ DR139
SD-DR139-1020	Sample replaced with SD-DR137-1020; analyses remain unchanged	Insufficient core penetration @ DR139
SD-DR142-0000A	Sample replaced with SD-DR171-0000A; pesticide analysis deleted [a]	Insufficient core penetration @ DR142
SD-DR142-0020	Sample replaced with SD-DR171-0020; pesticide analysis deleted [a]	Insufficient core penetration @ DR142
SD-DR154-0000A	Station dropped	Insufficient core penetration @ DR154
SD-DR154-0020	Station dropped	Insufficient core penetration @ DR154
SD-DR185-0000	VOC, pesticide, and organotin analyses deleted	Insufficient sediment volume
SD-DR185-1000	Duplicate sample dropped	Insufficient sediment volume
SD-DR186-0000	VOC, pesticide, and organotin analyses added	Compensate for SD-DR185-0000
SD-DR190-0000	Inadvertently dropped voc, pesticide, organotin and dioxin samples	N.A.
SD-DR221-0000	VOC, pesticide, organotin, and dioxin analyses added	Compensate for SD-DR190-0000
SD-DR183-0000A	Station dropped	Insufficient core penetration
SD-DR183-0020	Station dropped	Insufficient core penetration
SD-DR187-0000A	Sample replaced with SD-DR220-0000A; pesticide and organotin analyses deleted [a]	Insufficient core penetration @ DR187
SD-DR187-0020	Sample replaced with SD-DR220-0020; pesticide and organotin analyses deleted [a]	Insufficient core penetration @ DR187
SD-DR265-1000	Duplicate sample replaced with SD-DR286-1000; analyses unchanged	Insufficient sediment volume @ DR265
SD-DR291-0000A	Sample replaced with SD-DR269-0000A; pesticide and organotin analyses deleted [a]	Insufficient core penetration @ DR291
SD-DR291-0020	Sample replaced with SD-DR269-0020; pesticide and organotin analyses deleted [a]	Insufficient core penetration @ DR291

[a] Analyses were modified to coincide with co-located sediment analyses.

Table 3-4—Reach A Sampling Locations and Analyses

WESTON Sample ID	EPA Sample ID	Analysis							
		TAL Metals	BNA and PCB[a]	VOCs	Pesticides	Organotins	Dioxins	TOC	Grain Size
Surface Sediment									
SD-DR001-0000	98364023	X	X					X	X
SD-DR002-0000	98334002	X	X	X	X	X	X	X	X
SD-DR003-0000	98334001	X	X					X	X
SD-DR004-0000	98334000	X	X					X	X
SD-DR005-0000	98344022	X	X	X	X	X		X	X
SD-DR006-0000	98344023	X	X					X	X
SD-DR007-0000	98344024	X	X					X	X
SD-DR008-0000	98344025	X	X	X	X	X	X	X	X
SD-DR009-0000	98344026	X	X					X	X
SD-DR010-0000	98384000	X	X					X	X
SD-DR011-0000	98344028	X	X	X	X	X		X	X
SD-DR012-0000	98344030	X	X					X	X
SD-DR013-0000	98344031	X	X					X	X
SD-DR014-0000	98344033	X	X					X	X
SD-DR015-0000	98344000	X	X					X	X
SD-DR016-0000	98344001	X	X					X	X
SD-DR017-0000	98344002	X	X					X	X
SD-DR018-0000	98364031	X	X			X		X	X
PW-DR018-0000	**98364044**	**X**				**X**			
SD-DR019-0000	98344004	X	X					X	X
SD-DR020-0000	98344003	X	X					X	X
SD-DR021-0000	98344005	X	X	X	X	X	X	X	X
SD-DR022-0000	98344006	X	X					X	X
SD-DR022-1000	98344007	X	X					X	X
SD-DR023-0000	98344008	X	X					X	X
SD-DR024-0000	98344011	X	X					X	X
SD-DR025-0000	98344012	X	X	X	X	X		X	X
SD-DR026-0000	98344013	X	X					X	X
SD-DR027-0000	98344014	X	X					X	X
SD-DR028-0000	98344015	X	X					X	X
SD-DR030-0000	98344018	X	X					X	X
SD-DR031-0000	98334004	X	X					X	X
SD-DR032-0000	98334003	X	X					X	X
SD-DR033-0000	98334005	X	X	X	X	X	X	X	X
SD-DR034-0000	98334007	X	X					X	X
SD-DR035-0000	98334006	X	X					X	X
SD-DR036-0000	98334008	X	X					X	X
SD-DR037-0000	98344036	X	X					X	X
SD-DR038-0000	98364030	X	X			X		X	X
PW-DR038-0000	**98364043**	**X**				**X**			
SD-DR039-0000	98334009	X	X					X	X
SD-DR040-0000	98334010	X	X					X	X
SD-DR041-0000	98334014	X	X					X	X
SD-DR042-0000	98334012	X	X	X	X	X	X	X	X
SD-DR043-0000	98334011	X	X					X	X
SD-DR044-0000	98334013	X	X					X	X
SD-DR045-0000	98384009	X	X					X	X
SD-DR046-0000	98334019	X	X			X	X	X	X
SD-DR047-0000	98384008	X	X	X	X	X	X	X	X
SD-DR048-0000	98334018	X	X					X	X
SD-DR049-0000	98334022	X	X			X		X	X
SD-DR050-0000	98364010	X	X					X	X
SD-DR051-0000	98334024	X	X			X	X	X	X

Table 3-4—Reach A Sampling Locations and Analyses

WESTON Sample ID	EPA Sample ID	Analysis							
		TAL Metals	BNA and PCB[a]	VOCs	Pesticides	Organotins	Dioxins	TOC	Grain Size
SD-DR052-0000	98334026	X	X					X	X
SD-DR053-0000	98364011	X	X	X	X	X		X	X
SD-DR053-1000	98364012	X	X	X	X	X		X	X
SD-DR054-0000	98334030	X	X			X		X	X
SD-DR055-0000	98364035	X	X			X		X	X
PW-DR055-0000	98364049	X				X			
SD-DR056-0000	98364000	X	X			X		X	X
SD-DR057-0000	98364001	X	X					X	X
SD-DR058-0000	98364002	X	X					X	X
SD-DR059-0000	98344027	X	X					X	X
SD-DR060-0000	98344029	X	X					X	X
SD-DR061-0000	98344032	X	X					X	X
SD-DR062-0000	98344009	X	X					X	X
SD-DR063-0000	98344010	X	X					X	X
SD-DR064-0000	98344016	X	X					X	X
SD-DR065-0000	98344017	X	X			X	X	X	X
SD-DR066-0000	98344034	X	X					X	X
SD-DR067-0000	98344035	X	X	X	X	X		X	X
SD-DR068-0000	98344037	X	X			X		X	X
SD-DR069-0000	98334015	X	X					X	X
SD-DR069-1000	98334016	X	X					X	X
SD-DR070-0000	98334017	X	X			X		X	X
SD-DR071-0000	98344038	X	X					X	X
SD-DR072-0000	98334020	X	X			X		X	X
SD-DR073-0000	98334021	X	X					X	X
SD-DR074-0000	98334025	X	X					X	X
SD-DR075-0000	98334027	X	X					X	X
SD-DR076-0000	98354013	X	X					X	X
SD-DR077-0000	98354017	X	X					X	X
SD-DR078-0000	98354016	X	X					X	X
SD-DR079-0000	98354015	X	X					X	X
SD-DR080-0000	98354014	X	X					X	X
SD-DR081-0000	98364003	X	X	X	X	X		X	X
SD-DR082-0000	98364004	X	X					X	X
SD-DR083-0000	98364005	X	X					X	X
SD-DR084-0000	98364006	X	X					X	X
SD-DR085-0000	98364007	X	X					X	X
SD-DR086-0000	98364008	X	X					X	X
SD-DR087-0000	98334023	X	X	X	X	X		X	X
SD-DR088-0000	98364009	X	X					X	X
SD-DR089-0000	98334028	X	X					X	X
SD-DR090-0000	98334029	X	X			X		X	X

Porewater sample

[a]Analyzed for both Aroclors and Congeners

Table 3-5—Reach B Sampling Locations and Analyses

WESTON Sample ID	EPA Sample ID	Analysis							
		TAL Metals	BNA and PCB[a]	VOCs	Pesticides	Organotins	Dioxins	TOC	Grain Size
Surface Sediment									
SD-DR091-0000	98364013	X	X					X	X
SD-DR092-0000	98354085	X	X	X	X	X	X	X	X
SD-DR093-0000	98344020	X	X					X	X
SD-DR094-0000	98344073	X	X					X	X
SD-DR095-0000	98344072	X	X					X	X
SD-DR096-0000	98364032	X	X			X		X	X
PW-DR096-0000	98364045	X				X		X	
PW-DR096-1000	98364046	X				X		X	
SD-DR097-0000	98344074	X	X					X	X
SD-DR098-0000	98344075	X	X					X	X
SD-DR099-0000	98344076	X	X					X	X
SD-DR100-0000	98344077	X	X					X	X
SD-DR101-0000	98344078	X	X	X	X	X	X	X	X
SD-DR102-0000	98344079	X	X					X	X
SD-DR103-0000	98344039	X	X					X	X
SD-DR104-0000	98344040	X	X					X	X
SD-DR105-0000	98344057	X	X					X	X
SD-DR106-0000	98344054	X	X					X	X
SD-DR107-0000	98344053	X	X					X	X
SD-DR108-0000	98344052	X	X					X	X
SD-DR109-0000	98364029	X	X			X		X	X
PW-DR109-0000	98364042	X				X			
SD-DR110-0000	98344051	X	X			X		X	X
SD-DR111-0000	98344055	X	X	X	X	X	X	X	X
SD-DR111-1000	98344056	X	X	X	X	X		X	X
SD-DR112-0000	98344050	X	X			X		X	X
SD-DR113-0000	98344058	X	X					X	X
SD-DR113-1000	98344059	X	X					X	X
SD-DR114-0000	98344060	X	X					X	X
SD-DR115-0000	98384003	X	X			X	X	X	X
SD-DR116-0000	98344043	X	X	X	X	X		X	X
SD-DR117-0000	98344044	X	X					X	X
SD-DR118-0000	98344045	X	X					X	X
SD-DR119-0000	98344046	X	X					X	X
SD-DR120-0000	98334031	X	X					X	X
SD-DR121-0000	98364014	X	X			X		X	X
SD-DR122-0000	98384001	X	X					X	X
SD-DR123-0000	98384002	X	X	X	X	X	X	X	X
SD-DR124-0000	98384010	X	X					X	X
SD-DR125-0000	98364015	X	X					X	X
SD-DR126-0000	98334033	X	X					X	X
SD-DR127-0000	98334034	X	X					X	X
SD-DR128-0000	98334035	X	X					X	X
SD-DR129-0000	98354082	X	X					X	X
SD-DR130-0000	98334036	X	X					X	X
SD-DR131-0000	98334038	X	X					X	X
SD-DR131-1000	98334039	X	X					X	X
SD-DR132-0000	98334041	X	X					X	X
SD-DR133-0000	98364034	X	X			X		X	X
PW-DR133-0000	98364048	X				X			
SD-DR134-0000	98334044	X	X					X	X

Table 3-5—Reach B Sampling Locations and Analyses

WESTON Sample ID	EPA Sample ID	Analysis							
		TAL Metals	BNA and PCB[a]	VOCs	Pesticides	Organotins	Dioxins	TOC	Grain Size
SD-DR135-0000	98334046	X	X					X	X
SD-DR136-0000	98334048	X	X			X		X	X
SD-DR137-0000	98334050	X	X					X	X
SD-DR138-0000	98364022	X	X					X	X
SD-DR139-0000	98384004	X	X	X	X			X	X
SD-DR140-0000	98364028	X	X			X		X	X
PW-DR140-0000	98364041	X				X			
SD-DR141-0000	98344080	X	X					X	X
SD-DR141-1000	98344081	X	X					X	X
SD-DR142-0000	98344183	X	X					X	X
SD-DR143-0000	98364020	X	X					X	X
SD-DR144-0000	98344019	X	X					X	X
SD-DR145-0000	98344021	X	X					X	X
SD-DR146-0000	98344071	X	X					X	X
SD-DR147-0000	98364033	X	X			X		X	X
PW-DR147-0000	98364047	X				X			
SD-DR148-0000	98344041	X	X					X	X
SD-DR149-0000	98344061	X	X					X	X
SD-DR150-0000	98344042	X	X					X	X
SD-DR151-0000	98344047	X	X			X		X	X
SD-DR152-0000	98354086	X	X	X	X	X		X	X
SD-DR153-0000	98364017	X	X					X	X
SD-DR154-0000	98334037	X	X	X	X	X	X	X	X
SD-DR155-0000	98334042	X	X					X	X
SD-DR156-0000	98334049	X	X					X	X
SD-DR157-0000	98364021	X	X					X	X
SD-DR158-0000	98344082	X	X					X	X
SD-DR159-0000	98334053	X	X					X	X
SD-DR160-0000	98334032	X	X					X	X
SD-DR161-0000	98364016	X	X					X	X
SD-DR162-0000	98354084	X	X					X	X
SD-DR163-0000	98354083	X	X	X	X	X		X	X
SD-DR164-0000	98344070	X	X					X	X
SD-DR165-0000	98334040	X	X					X	X
SD-DR166-0000	98334043	X	X			X		X	X
SD-DR167-0000	98334045	X	X					X	X
SD-DR168-0000	98334047	X	X	X	X	X	X	X	X
SD-DR169-0000	98334051	X	X					X	X
SD-DR170-0000	98334052	X	X					X	X
SD-DR171-0000	98344069	X	X			X		X	X

Porewater sample

[a]Analyzed for both Aroclors and Congeners

Table 3-6—Reach C Sampling Locations and Analyses

WESTON Sample ID	EPA Sample ID	Analysis							
		TAL Metals	BNA and PCB[a]	VOCs	Pesticides	Organotins	Dioxins	TOC	Grain Size
Surface Sediment									
SD-DR172-0000	98344048	X	X					X	X
SD-DR173-0000	98344049	X	X					X	X
SD-DR174-0000	98344098	X	X			X		X	X
SD-DR175-0000	98344097	X	X					X	X
SD-DR176-0000	98364019	X	X					X	X
SD-DR177-0000	98354003	X	X					X	X
SD-DR178-0000	98354000	X	X	X	X	X		X	X
SD-DR178-1000	98354001	X	X	X	X	X		X	X
SD-DR179-0000	98354002	X	X					X	X
SD-DR180-0000	98354004	X	X					X	X
SD-DR181-0000	98364025	X	X			X		X	X
PW-DR181-0000	98364038	X				X			
SD-DR182-0000	98354005	X	X					X	X
SD-DR183-0000	98354006	X	X	X	X	X	X	X	X
SD-DR184-0000	98344066	X	X					X	X
SD-DR185-0000	98354073	X	X					X	X
SD-DR186-0000	98354072	X	X	X	X	X		X	X
SD-DR187-0000	98354070	X	X	X	X	X	X	X	X
SD-DR188-0000	98354029	X	X					X	X
SD-DR189-0000	98384005	X	X					X	X
SD-DR190-0000	98334055	X	X					X	X
SD-DR191-0000	98334061	X	X					X	X
SD-DR192-0000	98334057	X	X	X	X	X		X	X
SD-DR193-0000	98334059	X	X					X	X
SD-DR194-0000	98344086	X	X			X		X	X
SD-DR195-0000	98344089	X	X					X	X
SD-DR196-0000	98344090	X	X					X	X
SD-DR197-0000	98344092	X	X					X	X
SD-DR198-0000	98344094	X	X					X	X
SD-DR199-0000	98344095	X	X			X		X	X
SD-DR200-0000	98344096	X	X					X	X
SD-DR201-0000	98354064	X	X					X	X
SD-DR202-0000	98354081	X	X					X	X
SD-DR203-0000	98354066	X	X	X	X	X	X	X	X
SD-DR204-0000	98354080	X	X					X	X
SD-DR205-0000	98354078	X	X					X	X
SD-DR206-0000	98354077	X	X	X	X	X	X	X	X
SD-DR207-0000	98354076	X	X					X	X
SD-DR208-0000	98354074	X	X			X		X	X
SD-DR209-0000	98354071	X	X					X	X
SD-DR210-0000	98354031	X	X			X		X	X
SD-DR211-0000	98354030	X	X					X	X
SD-DR212-0000	98344084	X	X					X	X
SD-DR213-0000	98344085	X	X					X	X
SD-DR214-0000	98344062	X	X					X	X
SD-DR215-0000	98344063	X	X			X		X	X
SD-DR216-0000	98344099	X	X					X	X
SD-DR217-0000	98344065	X	X	X	X	X		X	X
SD-DR218-0000	98344064	X	X					X	X
SD-DR219-0000	98384007	X	X					X	X

Table 3-6—Reach C Sampling Locations and Analyses

WESTON Sample ID	EPA Sample ID	Analysis							
		TAL Metals	BNA and PCB[a]	VOCs	Pesticides	Organotins	Dioxins	TOC	Grain Size
SD-DR220-0000	98354033	X	X					X	X
SD-DR221-0000	98334056	X	X	X	X	X	X	X	X
SD-DR222-0000	98334058	X	X					X	X
SD-DR223-0000	98344087	X	X					X	X
SD-DR223-1000	98344088	X	X					X	X
SD-DR224-0000	98344091	X	X	X	X	X	X	X	X
SD-DR225-0000	98344093	X	X					X	X
SD-DR226-0000	98354065	X	X					X	X
SD-DR227-0000	98354079	X	X					X	X
SD-DR228-0000	98364027	X	X			X		X	X
PW-DR228-0000	98364040	X				X			
SD-DR229-0000	98354075	X	X					X	X
SD-DR230-0000	98354032	X	X					X	X
SD-DR231-0000	98334054	X	X					X	X
SD-DR232-0000	98334060	X	X			X		X	X
SD-DR233-0000	98344068	X	X					X	X
SD-DR234-0000	98344067	X	X			X		X	X
SD-DR235-0000	98354063	X	X					X	X

Porewater sample

[a]Analyzed for both Aroclors and Congeners

Table 3-7—Reach D Sampling Locations and Analyses

WESTON Sample ID	EPA Sample ID	Analysis							
		TAL Metals	BNA and PCB[a]	VOCs	Pesticides	Organotins	Dioxins	TOC	Grain Size
Surface Sediment									
SD-DR236-0000	98354069	X	X					X	X
SD-DR237-0000	98354025	X	X					X	X
SD-DR238-0000	98354067	X	X	X	X	X	X	X	X
SD-DR239-0000	98354068	X	X					X	X
SD-DR240-0000	98354011	X	X					X	X
SD-DR241-0000	98354009	X	X					X	X
SD-DR242-0000	98354007	X	X	X	X	X		X	X
SD-DR242-1000	98354008	X	X	X	X	X		X	X
SD-DR243-0000	98354010	X	X					X	X
SD-DR244-0000	98364024	X	X			X		X	X
PW-DR244-0000	**98364037**	**X**				**X**			
SD-DR245-0000	98354012	X	X					X	X
SD-DR246-0000	98364018	X	X			X	X	X	X
SD-DR247-0000	98354059	X	X					X	X
SD-DR248-0000	98354058	X	X					X	X
SD-DR249-0000	98354052	X	X	X	X	X		X	X
SD-DR250-0000	98354050	X	X					X	X
SD-DR251-0000	98354043	X	X			X		X	X
SD-DR252-0000	98354038	X	X					X	X
SD-DR253-0000	98354037	X	X			X		X	X
SD-DR254-0000	98354036	X	X					X	X
SD-DR255-0000	98384019	X	X					X	X
SD-DR256-0000	98384016	X	X	X	X	X	X	X	X
SD-DR257-0000	98384015	X	X					X	X
SD-DR258-0000	98354026	X	X	X	X	X		X	X
SD-DR259-0000	98354023	X	X					X	X
SD-DR260-0000	98364036	X	X			X		X	X
PW-DR260-0000	**98364050**	**X**				**X**			
SD-DR261-0000	98354021	X	X					X	X
SD-DR262-0000	98364026	X	X			X		X	X
PW-DR262-0000	**98364039**	**X**				**X**			
SD-DR263-0000	98354018	X	X					X	X
SD-DR264-0000	98354056	X	X			X	X	X	X
SD-DR265-0000	98354053	X	X					X	X
SD-DR266-0000	98354049	X	X	X	X	X		X	X
SD-DR267-0000	98354042	X	X					X	X
SD-DR268-0000	98354041	X	X					X	X
SD-DR269-0000	98354040	X	X					X	X
SD-DR270-0000	98354039	X	X			X		X	X
SD-DR271-0000	98384020	X	X					X	X
SD-DR272-0000	98354034	X	X					X	X
SD-DR273-0000	98354035	X	X			X		X	X
SD-DR274-0000	98384018	X	X					X	X
SD-DR275-0000	98384017	X	X					X	X
SD-DR276-0000	98384014	X	X					X	X
SD-DR277-0000	98354027	X	X					X	X
SD-DR278-0000	98354062	X	X					X	X
SD-DR279-0000	98354061	X	X					X	X
SD-DR280-0000	98354057	X	X					X	X
SD-DR281-0000	98354051	X	X					X	X
SD-DR282-0000	98354028	X	X					X	X

Table 3-7—Reach D Sampling Locations and Analyses

WESTON Sample ID	EPA Sample ID	Analysis							
		TAL Metals	BNA and PCB[a]	VOCs	Pesticides	Organotins	Dioxins	TOC	Grain Size
SD-DR283-0000	98354022	X	X					X	X
SD-DR284-0000	98354020	X	X	X	X	X	X	X	X
SD-DR285-0000	98354019	X	X					X	X
SD-DR286-0000	98354054	X	X					X	X
SD-DR286-1000	98354055	X	X					X	X
SD-DR287-0000	98354048	X	X					X	X
SD-DR288-0000	98354024	X	X			X		X	X
SD-DR289-0000	98354060	X	X	X	X	X		X	X
SD-DR290-0000	98354047	X	X					X	X
SD-DR291-0000	98354046	X	X	X	X	X	X	X	X
SD-DR292-0000	98354044	X	X					X	X
SD-DR292-1000	98354045	X	X					X	X
SD-DR293-0000	98384006	X	X					X	X
SD-DR294-0000	98384011	X	X					X	X
SD-DR295-0000	98384012	X	X					X	X
SD-DR296-0000	98384013	X	X					X	X
SD-DR297-0000	98384021	X	X	X	X	X		X	X
SD-DR298-0000	98384022	X	X	X	X	X	X	X	X
PW-DR298-0000	**98384026**	X				X			
SD-DR299-0000	98384024	X	X	X	X	X		X	X
SD-DR300-0000	98384025	X	X	X	X	X		X	X
SD-DR301-0000	98384023	X	X	X	X	X	X	X	X
PW-DR301-0000	**98384027**	X				X			

Porewater sample

[a]Analyzed for both Aroclors and Congeners

Table 3-8—Subsurface Sediment Core Sample Analyses

WESTON Sample ID	EPA Sample ID	Analysis					
		TAL Metals	BNA and PCB[a]	Pesticides	Organotins	TOC	Grain Size
Reach A							
SD-DR008-0000A	98394014	X	X	X	X	X	X
SD-DR008-0020	98394015	X	X	X	X	X	X
SD-DR021-0000A	98394012	X	X	X	X	X	X
SD-DR021-0020	98394013	X	X	X	X	X	X
SD-DR025-0000A	98394010	X	X	X	X	X	X
SD-DR025-0020	98394011	X	X	X	X	X	X
SD-DR044-0000A	98394023	X	X			X	X
SD-DR044-0020	98394024	X	X			X	X
SD-DR054-0000A	98394008	X	X		X	X	X
SD-DR054-0020	98394009	X	X		X	X	X
SD-DR068-0000A	98394016	X	X		X	X	X
Reach B							
SD-DR101-0000A	98394006	X	X	X	X	X	X
SD-DR101-0020	98394007	X	X	X	X	X	X
SD-DR106-0000A	98394004	X	X			X	X
SD-DR106-0020	98394005	X	X			X	X
SD-DR112-0000A	98394002	X	X		X	X	X
SD-DR112-0020	98394003	X	X		X	X	X
SD-DR137-0000A	98394027	X	X	X	X	X	X
SD-DR137-0020	98394028	X	X	X	X	X	X
SD-DR137-1000A	98394029	X	X	X	X	X	X
SD-DR137-1020	98394030	X	X	X	X	X	X
SD-DR171-0000A	98394033	X	X		X	X	X
SD-DR171-0020	98394034	X	X		X	X	X
Reach C							
SD-DR220-0000A	98394031	X	X			X	X
SD-DR220-0020	98394032	X	X			X	X
SD-DR206-0000A	98394021	X	X	X	X	X	X
SD-DR206-0020	98394022	X	X	X	X	X	X
SD-DR224-0000A	98394000	X	X	X	X	X	X
SD-DR224-0020	98394001	X	X	X	X	X	X
Reach D							
SD-DR246-0000A	98394017	X	X		X	X	X
SD-DR246-0020	98394018	X	X		X	X	X
SD-DR269-0000A	98394025	X	X			X	X
SD-DR269-0020	98394026	X	X			X	X
SD-DR284-0000A	98394019	X	X	X	X	X	X
SD-DR284-0020	98394020	X	X	X	X	X	X

[a] Analyzed for both Aroclors and congeners.

APPENDIX A

SURFACE SEDIMENT RECORD FORMS

WESTON MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

8/31 A. LANCASTER

Project Name: Duwamish River SI REACH A (EAST)
Sampling Personnel: D. Hughes, M. SHAW, J. SHANNON, S. FERNANDEZ
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kyluk or —
Project No.: 4000-018-038-5100
Subcontractor(s): —
Date: 8/11/98 / 8/31/98
Weather: CLEAR

WESTON Sample No.: SD-DR001-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: ~~98334000~~ 98361023
Proposed Location: Intertidal; Ash Grove Cement
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X_N	X_W							
W01 1	1100		473413	1222044	NO						WATER GRAB
W02 2	1115		473412	1222045	NO						DIDN'T TRIP
W03 3	1119	15	473414	1222044	NO						DIDN'T TRIP
W04 4	1122	>20'	473412	1222044	NO						MOVED STATION ROCK IN JAWS
W05 5	1128	>20'	473413	1222044	NO —	DIDN'T TRIP					MOVED STATION CLOSER TO CENTER CHANNEL
W06 6	1133		473412	1222044	NO —	H_2O GRAB					MOVED TO NEW LOCATION
W08 7	1139	>20'	473408	1222044	NO						CLAY IN JAWS - SAMPLER DIDN'T CLOSE
~~W09 8~~		~~720'~~									
W09 8	1147	720'	473407	1222044	NO						DIDN'T TRIP
W10 9	1153	>20'	473407	1222044	NO						DIDN'T TRIP
W11 10	1156		473407	1222044	NO	2					INSUF PENET
W12 11	1202		473408	1222044	NO						DIDN'T PENET
		TEMPORARILY	ABANDON	STATION							
W18 12	1358	11	473408	1222044	NO						WATER GRAB
		TEMPORARILY	ABANDON	STATION							
8/31 W20 1	1506	NA	473408	1222044	NO —	WASHOUT / KELP IN JAWS					

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

WESTON MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/31/98

Sampling Personnel: D. Hughes M SHAND J SHANNON A LANCASTER
Sampling Vessel: M/V Karluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: ~~SD~~ SD-DR001-0000
EPA Sample No.: 98V4023

Sampling Method: 0.1 m² van Veen
Proposed Location: Intended; Ash Grove Cement

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates X/N	Coordinates Y/N	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W11	2	1510		473408	1222044	NO - WASHOUT						
W12	3	1513		473408	1222043	NO - WASHOUT						
W13	4	1517	NA	473408	1222043	YES	15	GY-GR	SC/F-SD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST)
Sampling Personnel: D. Hughes M. SHAW, J. SHANNON, S. FERNANDEZ
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/11/98
Weather: CLEAR

WESTON Sample No.: SD-DR002-0000
Sampling Method: 0.1 m^2 van Veen
EPA Sample No.: 98334002
Proposed Location: Intertidal; Ash Grove Cement
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins; Dioxins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
W17 ~~W13~~ 1	1258	>20	473404	1222045	YES	10	BR-BK	SD-SURF B SC	NONE	NONE	POLY TUBES

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: Dana R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/11/98
Sampling Personnel: D. Hughes MSHAW JSHANNON SFERNANDEZ
Sampling Vessel: M/V Kyluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR003-0000
EPA Sample No.: 98334001
Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Ash Grove Cement
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates Y N	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W110 1	1239	>20	473401	1222047	YES	12	BR/BK	SC	NONE	NONE	CLAMS
	COLLECTED		SAMPLE	ADJACENT	TO MOORED BARGE						

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: Donna F Hughes

~~DUPLICATE~~

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST) Sampling Personnel: D. Hughes M SHAW J SHANNON S FERNANDEZ

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk 2

Project No.: 4000-019-038-5100 Subcontractor(s):

Date: 8/11/98 Weather: CLEAR

WESTON Sample No.: SD-DR004-0000/~~1000~~ Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98334000 Proposed Location: Intertidal; Port of Seattle T106

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates XW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W13	1	1213		473359	1222046	NO						
W14	2	1217		473358	1222047	NO						CHAINS FOULED
W15	3	1221	>20	473358	1222046	YES	16	GY MOTTLE BR/BK	SC	NONE	NONE	NO SHEEN

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: Donald Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST)
Sampling Personnel: D. Hughes M SHAW L VANSELOW J SHANNON
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/18/98
Weather: OVERCAST

WESTON Sample No.: SD-DR005-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98344022
Proposed Location: Intermidal; Part of Seattle T106
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates XW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WP1 1	0746	27	473354	1222047	YES	11	SC/FSD	GY-BK	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D. Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST) Sampling Personnel: D. Hughes M SHAW J SHANNON C VANSELOW

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kiluk

Project No.: 4000-019-038-5100 Subcontractor(s):

Date: 8/18/98 Weather: OVERCAST

WESTON Sample No.: SD-DR006-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98344023 Proposed Location: Intertidal; Part of Sediment Trap 6

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
WP2 1	0758	22	47 33 51	122 20 96	YES	11	BR GY	SL/FSP	MOD H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST) Sampling Personnel: D. Hughes J SHANNON M SHAW C JANSEN

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kulluk (2nd)

Project No.: 4000-019-038-5100 Subcontractor(s):

Date: 8/18/98 Weather: OVERCAST

WESTON Sample No.: SD-DR007-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98344024 Proposed Location: Intertidal, Part of Seattle T106/Diagonal Way CSO/SD

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
WP3 1	0807	17	473348	1222045	YES	11	GY-BK	SC/F-SD	SL H_2S	NONE	MOD STRW ON SED SURF

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST) Sampling Personnel: D. Hughes J SHANNON M JIHAN L VAN SELOW

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kyluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/18/98 Weather: OVERCAST

WESTON Sample No.: SD-DR008-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98344025 Proposed Location: Intertidal; Diagonal Wzy CSO/SD

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins; Dioxins Split Collected? ☐ Yes ☒ No

CO-LOCATED SHALLOW SUBSURFACE CORE STATION PROPOSED

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	Y W							
WØ4 1	0816	18	473346	1222044	NO-	INSUF PENET					
WØ5 2	0820		473346	1222043	NO-	DIDN'T TRIP					
WØ6 3	0822		473346	1222043	NO-	DIDN'T SET					
WØ7 4	0825		473346	1222044	NO-	DIDN'T TRIP					
5	0828	18	473347	1222044	YES	13	BK	SC/SD	V-ST H2S	NONE	HEAVY SHEEN ON SED SURF

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST) Sampling Personnel: D. Hughes M SHAW J SHANNON L JANSEN

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kaluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/18/98 Weather: OVERCAST

WESTON Sample No.: SD-DR009-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98344026 Proposed Location: Intertidal; PNA of Seattle T108

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
W09 1	0830	20	473345	1222043	NO — WATER GRAB						
W10 2	0841		473345	1222043	NO — DIDN'T TRIP						
W11 3	0842	18	473345	1222043	YES	12	BK	SC/SD	ST-H_2S. ST-TPH	NONE	HEAVY SHEEN ON SED SURF

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST)
Sampling Personnel: D. Hughes M SHAW J SHANNON
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kyluk
Project No.: 4000-019-038-5100
Subcontractor(s): MULLINS
Date: 9/14/98
Weather: CLEAR

WESTON Sample No.: SD-DR010-0000
Sampling Method: 0.1 m^2 van Veen
EPA Sample No.: 98384000
Proposed Location: Intertidal, Part of Seattle T108
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
WQ7 1	0957	15	473342.08	1222042.14	YES	12	BK-GY	FCD/SC	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST) Sampling Personnel: D. Hughes M SHAW J SHANNON L VANSELOW

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/18/98 Weather: OVERCAST

WESTON Sample No.: SD-DR011-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98349028 Proposed Location: Intertidal; Port of Seattle T108

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	Y W							
W13 1	0902	27	473339	1222043	YES	9	BKGY	SC/FSD	MOD H_2S	—	SLIGHT SHEEN ON SED SURF

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST) Sampling Personnel: D. Hughes M SHAW J SHANNIN L VANSELOW

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kaluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/18/98 Weather: OVERCAST

WESTON Sample No.: SD-DR012-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 99344030 Proposed Location: Intertidal; Fed. Center S. (GSA)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☒ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W15 1	0925	17	473334	1222039	YES	11	GY-GR	SC/F SD	MOD H_2S	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: DR Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST) | Sampling Personnel: D. Hughes M STAN J SHANNON L VAN SERAD
Project Location: Duwamish River, Seattle, WA | Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100 | Subcontractor(s): —
Date: 8/18/98 | Weather: OVERCAST

WESTON Sample No.: SD-DR013-0000 | Sampling Method: 0.1 m^2 van Veen
EPA Sample No.: 98344031 | Proposed Location: InterAid 1; Fed Center S. (GSA)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins | Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
W16 1	0934	16	473332	1222038	YES	16	OLIVE	SG F-SD	MOD H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: DRHughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST)
Sampling Personnel: D. Hughes M SHAN J SHANNON LUANSELOW
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kaluk
Project No.: 4000-019-038-5100
Subcontractor(s):
Date: 8/18/98
Weather: OVERCAST

WESTON Sample No.: SD-DR014-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98344033
Proposed Location: Intertidal; Fed Centers. (GSA)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates X W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W18	1	0951		473329	1222037	NO -	DIDN'T TRIP					
W19	2	0952	NA	473329	1222037	YES	13	GY-GR	SC/FNSD	NONE	NONE	TRACE ROOTS

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST)
Sampling Personnel: D. Hughes M SHAW K TAMASHI K PINE
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/17/98
Weather: OVERCAST

WESTON Sample No.: SD-DR015-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98344000
Proposed Location: Intertidal; Fed Center S. (GSA)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X/N	Coordinates Y/W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
1	0830	18	473325	1222033	YES	13	GR-GY	SL F. M SAND	NONE	NONE	SL OILY SHEEN ON SED SURF

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/17/98
Sampling Personnel: D. Hughes M SHAW K PINE K TAYLOR
Sampling Vessel: M/V Kyuluk
Subcontractor(s): —
Weather: OVERCAST

WESTON Sample No.: SD-DR016-0000
EPA Sample No.: 98344001
Sampling Method: 0.1 m² van Veen
Proposed Location: Slip 1 - North Side (Fed Center S.-GSA)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	Y W							
W50 1	0844	22	413325	1222031	YES	12	GY-GR	SC	MOD H_2S	NONE	TRACE SHROOM (1/4" DIAM) TRACE SHELL

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/17/98

Sampling Personnel: D. Hughes M SHAW K TANNER K PINE
Sampling Vessel: M/V Kaluk
Subcontractor(s):
Weather: OVERCAST

WESTON Sample No.: SD-DR017-0000
EPA Sample No.: 98344002
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m^2 van Veen
Proposed Location: Slip 1-North Side (Fed Centers S.-GSA)
Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates XW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WS1	1	0855	21	473325	1222025	NO-	DIDN'T TRIP					
WS2	2	0857	22	473325	1222026	YES	14	GY-GR	SC	MOD H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

POREWATER

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST) Sampling Personnel: D. Hughes MSHAW JSHANNON A LANCASTER

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 9/2/98 Weather: CLEARING W/FOG

WESTON Sample No.: SD-DR018-0000/PW-DR018-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98364031/98364044 Proposed Location: Slip 1-Center

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins (SED) Split Collected? ☐ Yes ☒ No
Metals; Organotins (PW)

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
		32									
WQ1 1	0831	26	473324.09	1222027.41	YES	10	GY-GR	FSD/SC	SLH2S	NONE	SL SHEEN
WQ2 2	0839	31	473323.95	1222027.40	YES	14	"	"	"	"	"

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/17/98
Sampling Personnel: D. Hughes MSHAW KTAHTOM KPINE
Sampling Vessel: M/V Kaluk
Subcontractor(s):
Weather: PART CLOUDY

WESTON Sample No.: SD-DR019-0000
EPA Sample No.: 98344004
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Sampling Method: 0.1 m² van Veen
Proposed Location: Slip 1 - South Side (KC-Monsan)
Split Collected? ☐ Yes ☒ No

COLLECTED ADJ. TO MOORED BARGE

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
WP2 1	0942	22	473322	1222027	YES	17	GY-GR	SC	MOD H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST) Sampling Personnel: D. Hughes MSHAW KPINE KTAHASH

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kaluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/17/98 Weather: PART CLOUDY

WESTON Sample No.: SD-DR020-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98344003 Proposed Location: Slip 1 - South Side (KC-Manson)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
WP1 1	0913	12	473322	1222023	YES	14	GY-GR	SC	MOD H_2S	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H_2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST) | Sampling Personnel: D. Hughes M SHAW K PINE K TAMIGHI

Project Location: Duwamish River, Seattle, WA | Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 | Subcontractor(s): —

Date: 8/17/98 | Weather: PART CLOUDY

WESTON Sample No.: SD-DR021-0000 | Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98344005 | Proposed Location: Slip 1 - Mouth

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins; Dioxins | Split Collected? ☐ Yes ☒ No

CO-LOCATED SHALLOW SUBSURFACE CORE STATION PROPOSED

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates Y W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WP3 1	0954	24	473324	1222032	YES	10	GY/BK	SC FSD	ST H_2S	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D R Hull

DUPLICATE

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST)
Sampling Personnel: D. Hughes M SHAW K PINE K TAYLOR
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/17/90
Weather: PART CLOUDY

WESTON Sample No.: SD-DR022-0000/1000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98344006/4007
Proposed Location: Intertidal; King County (Mansan)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
WQ4 1	1008	15	473319	1222031	NO — WASHOUT			(SAND)			
WQ5 2	1014	16	473319	1222030	YES	11	GY-BR	F-M SD SC	SL H_2S	TRACE VEGET	SL SHEEN ON SED SURF

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST) Sampling Personnel: D. Hughes M SHAW K PINE K TAYLOR

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s):

Date: 8/17/98 Weather: PART CLOUDY

WESTON Sample No.: SD-DR023-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98344008 Proposed Location: Intertidal; King County (Monson)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

TRIED TO COLLECT ADJACENT TO BARGE MOORED @ PIER; MOVED TO S END OF PIER FOR GR 5

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates Y W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WP6 1	1029	22	473317	1222031	NO — ROCKS IN JAWS						
WP8 2	1032		473318	1222030	NO — DIDN'T TRIP						
WP9 3	1036		473318	1222031	NO — DIDN'T TRIP						
WP4 4	1039		473318	1222030	NO — GRAVEL IN JAWS						
MM 5	1044	16	473315	1222028	YES	12	GY GRAY	SC SD-F	SL H_2S	NONE	SL SHEEN (¼" DIAM)

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D B Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST)
Sampling Personnel: D. Hughes MSHAW KLINE KTAHIGH
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kaluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/17/98
Weather: PART CLOUDY

WESTON Sample No.: SD-DR024-0000
Sampling Method: 0.1 m^2 van Veen
EPA Sample No.: 98344010 1
Proposed Location: Intertidal; King County (Utilities Warehouse)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W15 1	1118	17	473313	1222027	YES	12	GY-GR	SC EMSD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D. Hughes

CAN'T SEE BRANDON CSO DISCHARGE POINT

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST)
Sampling Personnel: D. Hughes M SHAW K PINE L TAYLOR
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100
Subcontractor(s):
Date: 8/17/98
Weather: PART CLOUDY

WESTON Sample No.: SD-DR025-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98344012
Proposed Location: Intertidal, S. Brandon St. CSO
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins
Split Collected? ☐ Yes ☒ No

CO-LOCATED SHALLOW SUBSURFACE CORE STATION PROPOSED

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates X W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W16 1	1130	18	473311	1222026	YES	11	BR-GY	SC F-SD	MOD H_2S	NONE	TRACE SHEEN (STREAKS)

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST) Sampling Personnel: D. Hughes M SHAW K PINE K TAHLIGH

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kaluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/17/98 Weather: PART CLOUDY

WESTON Sample No.: SD-DR026-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98344013 Proposed Location: Intertidal; King County (NW Gloss)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates Y W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W17	1	1142		473308	1222025	NO -	DIDN'T TRIP					
W18	2	1144		473309	1222025	NO -	DIDN'T TRIP					
W19	3	1148		473309	1222025	NO -	WASHOUT - GRAB			NOT COMPLETELY	SEALED	
W20	4	1154	NA	473308	1222025	YES	12	BR-GY	SC FMSD	M-ST H_2S	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST)
Sampling Personnel: D. Hughes M SHAW K PINE K TAHLGM
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kiluk or
Project No.: 4000-019-038-5100
Subcontractor(s): ——
Date: 8/17/98
Weather: OVERCAST

WESTON Sample No.: SD-DR027-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98344014
Proposed Location: Intertidal; King County (NW Glass)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates Y W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W22 1	1250		473306	1222024	NO —	ROCK IN JAWS					
W23 2	1254		473306	1222023	NO —	ROCK IN JAWS					
W24 3	1258	23	473306	1222024	YES	14	BR-SURF GY-BKSUB	SC F:SD	MOD H_2S	NONE	MIXED SLIGHTLY FARTHER OFFSHORE
											SLIGHT SHEEN ON SED SURFACE

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/17/98

Sampling Personnel: D. Hughes M SHAW K PINE K TANNOM
Sampling Vessel: M/V Kuluk
Subcontractor(s):
Weather: OVERCAST

WESTON Sample No.: SD-DR028-0000
EPA Sample No.: 98344015
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; King County (NW Glass)
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XN							
W25 1	1310		473303	1222022	NO-DIDN'T	TRIP					
W26 2	1311	16	473303	1222022	YES	16	BK-GY	SC F-SD	ST H_2S	NONE	MOD SHEENING

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST)
Sampling Personnel: D. Hughes MSHAW ~~K PINE K FAIRGHT~~
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kaluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/11/98
Weather: OVERCAST

WESTON Sample No.: SD-DR029-0000
Sampling Method: 0.1 m^2 van Veen
EPA Sample No.:
Proposed Location: Intertidal; King County (NW Glass)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins; Dioxins
Split Collected? ☐ Yes ☐ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			~~X~~ N	~~X~~ W							

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: _____

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST)
Sampling Personnel: D. Hughes MSHAW K PINE K TAHIGHI
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/17/98
Weather: PART SUNNY

WESTON Sample No.: SD-DR030-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98344018
Proposed Location: Intertidal; Ball Foster Glass
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
				~~X~~N	~~Y~~W							
W33	1	1357	17	473301	1222021	YES	10	BK-GY	SC/SD	ST H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: DR Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST) Sampling Personnel: D. Hughes M SHAW J SHANNON S FERNANDE

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/11/98 Weather: CLEAR

WESTON Sample No.: SD-DR031-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98334004 Proposed Location: Intertidal; Part of Seattle T105

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
				X N	X W							
W20	1	1417	720	473408	1222104	NO						DEBRIS IN JAWS
W21	2	1421	720	473410	1222107	NO						CABLE IN JAWS
W22	3	1436	720	473410	1222107	YES	8	BR-GY	SL SAND	SL H_2S	WOOD/ ROOTS	TARPAPER CLAMS, MUSSELS
												SL SHEEN

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: Deborah Hey

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST)
Sampling Personnel: D. Hughes M SHAW J SHANNON S FERNANDEZ
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/11/98
Weather: CLEAR

WESTON Sample No.: SD-DR032-0000
Sampling Method: 0.1 m^2 van Veen
EPA Sample No.: 98534003
Proposed Location: Intertidal; Part of Seattle T-105
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? · ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	Y W							
W19 1	1405	720	473405	1222100	YES	8	GY-BK	SC w/ SD (30)	SL H2S NONE	SHELL FRAGS	TAR PAPER PIECE ON SURFACE

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Mark Hey

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/11/98
Sampling Personnel: D. Hughes M SHAW J SHANNON S FERNANDEZ
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR033-0000
EPA Sample No.: 98334005
Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal, Part of Seattle T105
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins; Dioxins
Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
				N	W							
W23	1	1440	11	473404	1222100	NO						INCOMPLETE SEAL
W24	2	1442	12	473404	1222100	NO						DIDN'T TRIP
W25	3	1444	12	473404	1222100	NO						CHAINS FOULED
W26	4	1448	12	473404	1222100	NO						CHAINS FOULED
W27	5	1450		473404	1222100	NO						CHAINS FOULED
W28	6	1451		473404	1222100	NO						DIDN'T TRIP ✓ ME STA.
W29	7	1454	8	473402	1222059	NO						INSUF PENET SLIGH SAND
W30	8	1500	8	473402	1222059	NO						H_2O GRAB
W31	9	1503	NA	473402	1222059	YES	10	GRBK	SC-SD	NONE	NONE	MIXED STATION SLIGHTLY SA

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: DMark Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST) Sampling Personnel: D. Hughes M SHAW J SHANNON S FERNANDEZ

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/11/66 98 Weather: CLEAR

WESTON Sample No.: SD-DR03A-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98334007 Proposed Location: Intertidal; Lipsett Co. LLC/SW Duwamish SD

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates Y W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W33 1	1530	~~1530~~ 11	473400	1222059	YES	14	GY BK	SC-SD	SL H_2S	NONE	POLYCHAETES

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: Dana R Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/11/6098
Sampling Personnel: D. Hughes M SHAW J SHANNON S FERNANDE
Sampling Vessel: M/V Kuluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR035-0000
EPA Sample No.: 98334006
Sampling Method: 0.1 m² van Veen
Proposed Location: Intended; Lipsett Co LLC
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W32 1	1519	9	473358	1222058	YES	10	GY-BK	SL F-SD	SL+H2S	NONE	POLYCHAETE

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D B Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/12/98

Sampling Personnel: D. Hughes M SHAW J SHAW N LEW K TAYLOR
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR036-0000
EPA Sample No.: 98336000
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal, Birmingham Steel/SW Idaho SD
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
WΦ2 1	0729	9	473354	1222057	NO —	INSUF	PENETRATION		(2 cm)		
WΦ3 2	0732	10	473354	1222057	NO —	INSUF	PENETRATION		(H_2O GRAB)		
WΦ4 3	0735	>20	473354	1222056	NO —	DIDN'T TRIP					MOVED FARTHER OFFSHORE
WΦ5 4	0737	>20	473354	1222057	NO —	ROCK IN JAWS					
WΦ6 5	0741	>20	473354	1222056	YES	5	GY BK	M-C SD	NONE	SHELL FRAGS	BARNACLES

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: Debra A Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/18/98
Sampling Personnel: D. Hughes M SHAW J SHANNON L VANSELOW
Sampling Vessel: M/V Kuluk
Subcontractor(s):
Weather: OVERCAST

WESTON Sample No.: SD-DR037-0000
EPA Sample No.: 98344036
Sampling Method: 0.1 m^2 van Veen
Proposed Location: Intertidal; Birmingham Steel
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	Y W							
W22 1	1055	27	473353	1222055	NO -	KELP IN JAWS; GRAB			NOT SEALED.		METAL SCRAP; PLASTIC CUP ALSO
W23 2	1058	27	473352	1222055	NO -	H_2O GRAB					
W24 3	1101	27	473352	1222055	YES	9	GR-GY	SL/FSD	NONE	NONE	MOVED SLIGHTLY AWAY FROM PIER (~20')

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/31/98
Sampling Personnel: D. Hughes M SHAW J SHANNON A. LANCASTER
Sampling Vessel: M/V Kyluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR056-0000
EPA Sample No.: 98364000
Sampling Method: 0.1 m² van Veen
Proposed Location: Shal. Subtidal; Ash Grave Cement
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
WQ1 1	0757	>27	473402	1222050	YES	14	GY-GR	SC/F SD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST)
Sampling Personnel: D. Hughes M SHAW J SHANNON A LANCASTER
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/31/98
Weather: CLEAR

WESTON Sample No.: SD-DR057-0000
Sampling Method: 0.1 m^2 van Veen
EPA Sample No.: 98364001
Proposed Location: Shal. Subtidal, Part of Seattle T106
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W42 1	0809	>27	473353	1222049	YES	10	GY-GR	F-SD/SC	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI ROACH A (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/31/98

Sampling Personnel: D. Hughes MSHAW J SHANNON A LANKASTER
Sampling Vessel: M/V Kuluk
Subcontractor(s): ——
Weather: CLEAR

WESTON Sample No.: SD-DR058-0000
EPA Sample No.: 98310400 2
Sampling Method: 0.1 m² van Veen
Proposed Location: Shal. Subtidal, Part of Seattle T106
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WP3 1	0819	>27	473351	1222048	YES	6	GY-BK	F-C SD/SL	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST)
Sampling Personnel: D. Hughes DSHAW JSHANNON LVANSELOW
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kyluk
Project No.: 4000-019-038-5100
Subcontractor(s):
Date: 8/18/98
Weather: OVERCAST

WESTON Sample No.: SD-DR059-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98344027
Proposed Location: Shal. Subtidal, PAT of Seattle T108
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
W12 1	0852	23	473344	1222043	YES	11	BK	SC/F-SD	ST H_2S	NONE	HEAVY SHEEN ON SURF

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/18/98

Sampling Personnel: D. Hughes M SHAW J SHANNON L VANSELOW
Sampling Vessel: M/V Kaluk
Subcontractor(s): —
Weather: OVERCAST

WESTON Sample No.: SD-DR060-0000
EPA Sample No.: 98344029
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Shal Subtidal; Part of Seattle T108/Diagonal S.SD
Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates X/N	Coordinates Y/W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W14	1	0915	>27	473337	1222043	YES	10	GY-GR	SC/F-MSD	MOD H2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9 | 18 | 98

Sampling Personnel: D. Hughes M SHAW J SHANNON L VANSTON
Sampling Vessel: M/V Kaluk
Subcontractor(s):
Weather: OVERCAST

WESTON Sample No.: SD-DR061-0000
EPA Sample No.: 98344032

Sampling Method: 0.1 m² van Veen
Proposed Location: Shal Subtidal; Fed center S. (GSA)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W17 1	0943	727	473330	1222038	YES	11	GY-BR	SC/FMSD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hall

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST)
Sampling Personnel: D. Hughes MSHAW K PINE KTAHGEN
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kyluk
Project No.: 4000-019-038-5100
Subcontractor(s):
Date: 8/17/98
Weather: PART CLOUDY

WESTON Sample No.: SD-DR062-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98344009
Proposed Location: Shal Subtidal; Slip 1
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			~~X~~N	~~X~~W							
12 W~~06~~ 1	>27	1054	473319	1222032	YES	13	GY-GR	SC F-M SD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: DRHugh

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/17/98

Sampling Personnel: D. Hughes MSHAW K PINE KTAHIGHI
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: PART CLOUDY

WESTON Sample No.: SD-DR063-0000
EPA Sample No.: 98344010
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Shal Subtidal; KC (Manson/Utilities Whse)
Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W13	1	1104		473314	1222029	NO—	DIDN	T TRIP				
W14	2	1105	19	473315	1222029	YES	9	GR-GY	SC F-M SD	MOD H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: [signature]

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST) Sampling Personnel: D. Hughes M SHAW K PINE K TAMOM

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/17/98 Weather: PART CLOUDY

WESTON Sample No.: SD-DR064-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98340016 Proposed Location: Shallow Subtidal; KC (NW Gloss)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates XW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W27 1	1330		473306	1222025	NO –	DIDN'T TRIP					
W28 2	1331		473306	1222025	NO –	H_2O	GRAB				
W29 3	1334		473305	1222024	NO –	DIDN'T TRIP					
W30 4	1337		473306	1222025	NO –	DIDN'T TRIP					
W31 5	1340	>27	473305	1222025	YES	9	GY-BR	SC-SD	ST H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST) Sampling Personnel: D. Hughes M SHAW K DINE K TAMOM

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kiliuk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/17/98 Weather: PART CLOUDY

WESTON Sample No.: SD-DR06S-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 9834A017 Proposed Location: Shal Subtidal; KC (NW Bass)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins; Dioxins Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W32 1	1348	27	47 33 00	122 20 22	YES	15	GY-GR	SC P-M SD	MOD-ST H_2S	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel

F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum

SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST)
Sampling Personnel: D. Hughes M SHAW J SHANNON ~~DH~~ L VAN SEROW
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/18/98
Weather: OVERCAST

WESTON Sample No.: SD-DR066-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98384034
Proposed Location: Shal Subtidal, SW Dakota SD
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates X/N	Coordinates Y/W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W2Φ	1	1032	>27	473402	1222056	YES	15	GY-GR	F-M SD/SC	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: DR Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST)
Sampling Personnel: D. Hughes M SHAW J SHANNAN L VANSELOW
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/18/98
Weather: OVERCAST

WESTON Sample No.: SD-DR06T-0000
Sampling Method: 0.1 m^2 van Veen
EPA Sample No.: 98344035
Proposed Location: Shal Subtidal; SW Idaho SD
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W21 1	1045	22	473355	1222055	YES	8	BR-BR	F MSD/SC	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/18/98
Sampling Personnel: D. Hughes M SHAW J SHANNON LUAN SELBY
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: OVERCAST

WESTON Sample No.: SD-DR068-0000
EPA Sample No.: 98384037
Sampling Method: 0.1 m² van Veen
Proposed Location: Shallow Subtidal, Birmingham Steel
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins
Split Collected? ☐ Yes ☒ No

CO-LOCATED SHALLOW SUBSURFACE CORE STATION PROPOSED (MOVED SLIGHTLY SOUTH)

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates XW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
025 1	1111	>27	473352	1222054	YES	12	GY-GR	SL/F-SD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D. Hughes

* DUPLICATE

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST)
Sampling Personnel: D. Hughes M SHAW G SHANNON K TAHIGHI
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V ~~Kuluk~~ or
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/12/98
Weather: CLEAR

WESTON Sample No.: SD-DR069-0000/-1000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98334015/98334016
Proposed Location: Shal Subtidal; Birmingham Steel
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
				~~X~~N	~~X~~W							
W19	1	0924	>17 ~~N/A~~ 43	473347	1222051	YES	16	GY-GR	SC FSD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST) Sampling Personnel: D. Hughes M SHAW J SHANNON K TAYLOR

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kulluk or

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/12/98 Weather: CLEAR

WESTON Sample No.: SD-DR070-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98334017 Proposed Location: Shal Subtidal; PACCAR

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W24 1	0936	36	473341	1222049	YES	14	GY-GR	SL F-SD	SL H_2S	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel

F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum

SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D. Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/18/98

Sampling Personnel: D. Hughes M SHAW J SHANNON L VANSELOW
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: OVERCAST

WESTON Sample No.: SD-DR071-0000
EPA Sample No.: 9838 4038

Sampling Method: 0.1 m² van Veen
Proposed Location: Shallow Subtidal; Kellogg Isl.

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X N							
WZ0 1	1122	27	473333	1222044	YES	10	GY-GR	F-SD/SC	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D. Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REMEDIAL (WEST)
Sampling Personnel: D. Hughes M SHAW J SHANNON K TAMIGUCHI
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kyluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/12/98
Weather: CLEAR

WESTON Sample No.: SD-DR072-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98334020
Proposed Location: Shoal Subtidal; Kellogg Isl.
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
W25 1	1037	717	473330	1222042	YES	14	GY-GR	F-M SD SC	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/12/98

Sampling Personnel: D. Hughes M. SHAW J SHANNON K THIGPEN
Sampling Vessel: M/V Kaluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR073-0000
EPA Sample No.: 98334021

Sampling Method: 0.1 m² van Veen
Proposed Location: Shal Subtidal; Holman/Kellogg Isl.

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
W26 1	1047	717	473321	1222038	YES	12	GY-GR	SC F-SD	SL H_2S ~~NONE~~	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/12/98

Sampling Personnel: D. Hughes M SHAW J SHANNON C TAMBITI
Sampling Vessel: M/V Kaluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR074-0000
EPA Sample No.: 98334025
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Shal Subtidal; Holnam
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates Y/W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W30 1	1138	>17	473315	1222034	YES	16	GR-GY	F SD SC	SL H2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/12/98

Sampling Personnel: D. Hughes M SHAW J SHANNON K TAMOHI
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR075-0000
EPA Sample No.: 98334027
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Shal Subtidal; Alaska Marine Lines
Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates X/N	Coordinates Y/W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W32	1	1200	>17	473308	1222029	YES	17	GY-GR	SC FSD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/24/98

Sampling Personnel: D. Hughes M SHAW J SHANNON G THEASTER
Sampling Vessel: M/V Kuluk or
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR07b-0000
EPA Sample No.: 98354013

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Port of Seattle T105

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
WP1 1	1437	>27	473407	1222100	NO —	WASHOUT					
WP2 2	1441	>27	473408	1222100	YES	9	GR RED FLECK	SD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/24/98

Sampling Personnel: D. Hughes M SHAW J SHANNON & THRASHER
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR077-0000
EPA Sample No.: 98354017
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Pnt of Seattle T105
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates Y W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
wde 1	1530	727	473403	1222057	8	YES	GY	FSD/SC	SL H2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

PORE WATER

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST) Sampling Personnel: D. Hughes MSHAW J SHANNON A. LANCASTER

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 9/2/98 Weather: CLEAR

WESTON Sample No.: SD-DR038-0000/PW-DR038-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98364030/98364043 Proposed Location: Intertidal; Birmingham Steel

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins (SED) Metals; Organotins (PW) Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates XW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WØ1	1	0748	>27	473349.39	1222053.73	NO—	DIDN'T	TRIP				
WØ2	2	0751	>27	473349.37	1222053.75	YES	9	GY-GR	F.SD/SC	SLH2S	→	6" METAL SCRAP
WØ3	3	0759	>27	473349.36	1222053.71	YES	9	GY-GR	"	NONE	→	STICKS, METAL SCRAPS; SHEEN-MC TO HEAVY
WØ4	4	0811	>27	473349.37	1222053.66	YES	9					BUDWEISER CAN; KELP IN JAWS

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST) Sampling Personnel: D. Hughes M SHAW J SHANNON K TAMIGHT

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s):

Date: 8/12/98 Weather: CLEAR

WESTON Sample No.: SD-DR039-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98334009 Proposed Location: Intertidal; Birmingham Steel

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
				X N	X W							
WQ7	1	0751	717	473347	1222053	NO — DIDN'T TRIP						
WQ8	2	0755	717	473346	1222054	NO — CHAINS FOULED						
WQ9	3	0757	717	473346	1222054	YES	11	GYBK	SL F-SD	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: Dana R Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST)
Sampling Personnel: D. Hughes M SHAN J SHANNON K TAHBHI
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/12/98
Weather: CLEAR

WESTON Sample No.: SD-DR040-0000
Sampling Method: 0.1 m^2 van Veen
EPA Sample No.: 98334010
Proposed Location: Intertidal; Seattle Parks/PACCAR
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates Y W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W10 1	0809	>17	473343	1222057	NO	7					
W11 2	0816	717	473343	1222057	YES	11	GY-BK	SC F-SD	SL PETRO	NONE	SHEEN BLBS ON H2O SURF, SLIGHT (<1/2" DIAM) SHELL DEBRIS ON SED SURF; NAT WOOD FRAGS (MINIM); MUSSELSHELLS

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/12/98
Sampling Personnel: D. Hughes M SHAW J SHANNON K TAMBOM
Sampling Vessel: M/V Kuluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR041-0000
EPA Sample No.: 98334014
Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal, Port of Seattle (Kellogg Isl)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W18 1	0914	39	473341	1222053	YES	13	BR-GR	SC/F.SD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST) Sampling Personnel: D. Hughes M SHAW J SHANNON K TAHIOTT

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/12/98 Weather: CLEAR

WESTON Sample No.: SD-DR042-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98334012 Proposed Location: Intertidal; Seattle Parks/PACCAR

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins; Dioxins Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
				XN	YW							
W13	1	0842	14	473338	1222059	NO -	DIDN'T TRIP					
W14	2	0844	12	473338	1222059	NO -	WOOD CHUNK		IN JAWS			
W15	3	0846	11	473338	1222059	NO -	WOOD DEBRIS		IN JAWS			
W16	4	0848	15	473338	1222058	YES	15	GY BK	FSD/SC	SL H_2S	→	WOOD DEBRIS (NAT)

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D. Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST)
Sampling Personnel: D. Hughes M SHAW J SHANNON K TAHIGHI
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kaluk
Project No.: 4000-019-038-5100
Subcontractor(s):
Date: 8/12/98
Weather: CLEAR

WESTON Sample No.: SD-DR043-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98334011
Proposed Location: Intertidal; PACCAR (Kellogg Isl.)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates X W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
N12	1	0832	10	473336	1222056	YES	8	GY-GR	SC F SD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/12/98

Sampling Personnel: D. Hughes M SHAW J SHANNON K TAHIGHI
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR044-0000
EPA Sample No.: 98334013
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Kellogg Isl. (Port of Seattle)
Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
				~~X~~ N	~~X~~ W							
W17	1	0904	16	473338	122 2051	YES	12	BK-GY	SC F-SD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: [signature]

~~DUPLICATE~~

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/14/98

Sampling Personnel: D. Hughes M SHAW J SHANNON
Sampling Vessel: M/V Kaluk
Subcontractor(s): MULLINS
Weather: CLEAR

WESTON Sample No.: SD-DR045-0000/~~1000~~
EPA Sample No.: 98384009

Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Part of Sector T107/Kellogg Isl.

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W45 1	0945		473329.45	1222059.04	NO —	INSUF PENETRATION					
W46 2	0949		473329.65	1222059.61	NO —	INSUF PENETRATION					
	TEMPORARILY ABANDON STATION — NEED WEIGHTS BACK ON VAN VEEN										
W25 1	1437		473329.63	1222057.91	NO —	INSUF PENETRATION					
W26 2 30 V	1508		473330.64	1222058.72	NO —	WASHOUT					
W31 3	1510	11	473330.55	1222059.59	YES	8	GR-GY	F.M SD/SL	NONE	NONE	
	DUPLICATE DROPPED — INSUF SED VOLUME										

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST) Sampling Personnel: D. Hughes J SHANNON N SHAW K THIGPEN

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/12/98 Weather: CLEAR

WESTON Sample No.: SD-DR046-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98334019 Proposed Location: Intertidal, Port of Seattle (Kellogg Isl.)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins; Dioxins Split Collected? · ☐ Yes ☒ No

CO-LOCATED SHALLOW SUBSURFACE CORE STATION PROPOSED

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W23 1	1024	9	473329	1222041	NO —	WOOD	PLANK IN JAWS				
W24 2	1027	13	473330	1222041	YES	15	GY-BK	F SAND SC	NONE	NONE	2" COCKLE

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: Donna R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/14/98
Sampling Personnel: D. Hughes M SHAW J SHANNON
Sampling Vessel: M/V Kuluk
Subcontractor(s): MULLINS
Weather: CLEAR

WESTON Sample No.: SD-DR047-0000
EPA Sample No.: 98384000
Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Port of Seattle T107 (Kellogg Isl.)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins; Dioxins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
WP1 1	0933		473322.05	1222053.39	NO	INSUF PENETRATION					
WP3 2	0937		473322.03	1222053.20	NO	INSUF PENETRATION					
WP4 3	0940		473322.08	1222053.87	NO	INSUF PENETRATION					
W24	TEMPORARILY ABANDON STATION - NOT ENOUGH WEIGHT ON VAN VEEN										
1	1408	9	473322.28	1222053.95	NO	WASHOUT / GRAVEL					
W21 2	1410		473322.32	1222053.68	NO	INSUF PENETRATION					
W22 3	1414		473321.92	1222054.04	NO	INSUF PENETRATION					
W23 4	1417	9	473322.21	1222053.12	NO	"	"	"			
W24 5	1422	9	473323.03	1222054.59	YES	8	BR-GY	SY/F-SD	NONE	NONE	MOVED FURTHER NORTH

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hugh

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST) Sampling Personnel: D. Hughes M SHAW J SHANNON K TAYLOR

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kaluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/12/98 Weather: CLEAR

WESTON Sample No.: SD-DR048-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98334018 Proposed Location: Intertidal; Part of Seattle (Kellogg Isl.)/Holman

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	Y W							
W22 1	1014	7.7	473320	1222044	YES	8	GY-GR	SC	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D. Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST)
Sampling Personnel: D. Hughes M SHAW J SHANNON K TAYLOR
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kiluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/12/98
Weather: CLEAR

WESTON Sample No.: SD-DR049-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98334022
Proposed Location: Intertidal, Holman Inc.
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X	Coordinates Y	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W27 1	1056	27	473319	1222037	YES	10	GY-GR	SC F-SD	SL H_2S	NONE	SLIGHT SHEEN IN SED

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: Dennis R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

A LANCASTER

Project Name: Duwamish River SI REACH A (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: ~~8/12/98~~ 8/31/98
Sampling Personnel: D. Hughes M SHAW T SHANNON ~~K TANNER~~
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR050-0000
EPA Sample No.: ~~98334025~~ 98364016
Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Hylam Inc.
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
W13 1	0949	527	473317	1222036	YES	13	GY-GR	SC/F-SD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/12/98
Sampling Personnel: D. Hughes M SHAW J SHANNON K TAUGHT
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR051-0000
EPA Sample No.: 98334024
Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Holnam Inc.
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins; Dioxins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
W29 1	1122	717	473314	1222034	YES	12	GY-GR	SL F-SD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/12/98
Sampling Personnel: D. Hughes M SHAW J SHANNON K TAHMAN
Sampling Vessel: M/V Kyluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR052-0000
EPA Sample No.: 98334026
Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Holnam Inc.
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
(W31) 1	1147	>17	473310	1222032	YES	10	GR-GY	SC F-SD MIN	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

DUPLICATE

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST)
Sampling Personnel: D. Hughes M SHAW J SHANNON A LANCASTER
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/31/98
Weather: CLEAR

WESTON Sample No.: SD-DR053-0000/-1000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98364011 / 4012
Proposed Location: Intertidal; Alaska Marine Lines
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins
Split Collected? ☐ Yes ☒ No

COLLECTED ADJACENT TO MOORED BARGE; SOUTHERN END

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WLA 1	1002	27	473306	1222030	YES	9	GY-GR	SY/F-SD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (WEST) Sampling Personnel: D. Hughes J SHANNON M SHAW K TAYLOR

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/12/98 Weather: CLEAR

WESTON Sample No.: SD-DR054-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98334030 Proposed Location: Intertidal; Alaska Marine Lines

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins Split Collected? ☐ Yes ☒ No

CO-LOCATED SHALLOW SUBSURFACE CORE STATION PROPOSED

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
W36 1	1319	717	473304	1222028	YES	13	OLIVE GY	SC FSD	SL H_2S	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

POREWATER

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A (EAST) | Sampling Personnel: D. Hughes M SHAW J SHANNON A LANCASTER

Project Location: Duwamish River, Seattle, WA | Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 | Subcontractor(s):

Date: 9/2/98 | Weather: CLEARING

WESTON Sample No.: SD-DR055-0000 / PW-DR055-0000 | Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98364035 / 98364049 | Proposed Location: Shal. Subtidal, Harbor Island Marina

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins (SED) Metals; Organotins (PW) | Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
wq1 1	1040	>27	473406.55	1222051.37	YES	10	GR-GY	SC/F SD	NONE	NONE	
wq2 2	1050	>27	473406.55	1222051.29	YES	13	"	"	"	"	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/24/98

Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR07B-0000
EPA Sample No.: 98354096

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Lipsett Co LLC

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
1097 1	1520	>27	473359	1222055	YES	11	GY-GR	SY/F-SD	SL H2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/24/98

Sampling Personnel: D. Hughes M. SHAN J SHANNON G THRASHER
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR079-0000
EPA Sample No.: 98354015

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Birmingham Steel

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X	Coordinates Y	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
1	1510	> 27	473354	1222053	YES	13	GY-GR	SC/FSD	SL H2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/24/98

Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER
Sampling Vessel: M/V Kyluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR080-0000
EPA Sample No.: 98354014
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Birmingham Steel
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates Y N	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WP3 1	1454	727	473349	1222061							
WP5 2	1450	727	473349	1222050	YES	12	GY	SC/FSD	NINE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/31/98
Sampling Personnel: D. Hughes M SHAW J SHANNON A LANCASTER
Sampling Vessel: M/V Kaluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR081-0000
EPA Sample No.: 9836A003
Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; PACCAR/Pat of Seattle T108
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pesticides; Organotins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XW	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WQA 1	0832	>27	473345	1222047	NO	NOT SEATED					
W95 2	0836	727	473345	1222047	YES	8	BY-BK	F-CSD/GV	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: T R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/31/98

Sampling Personnel: D. Hughes M SHAW J SHANNON A LANCASTER
Sampling Vessel: M/V Kyluk
Subcontractor(s): ——
Weather: CLEAR

WESTON Sample No.: SD-DR082-0000
EPA Sample No.: 98364004

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Part of Seattle T.1D8

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
WP6 1	0847	27	473341	1222040	YES	9	GY-BK	SC/F SD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/31/98

Sampling Personnel: D. Hughes M SHAW J SHANNON A CANCASTER
Sampling Vessel: M/V Kaluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR083-0000
EPA Sample No.: 98364005
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Diag Arc S SD
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WP7 1	0857	>27	473334	1222044	YES	9	GY-BK	SL/F SD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/31/98

Sampling Personnel: D. Hughes M SHALD J SHANNON A LANCASTER
Sampling Vessel: M/V Kuluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR084-0000
EPA Sample No.: 98364006

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Fed Center S. (GSA)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WQ8 1	0906	>27	473331	1222041	Y	YES	GY-BK	SC/FSD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/31/98

Sampling Personnel: D. Hughes M SHAW J SHANNON A CANCASTER
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DRD85-0000
EPA Sample No.: 9836 4007

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Fed Centers. GSA

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
W09 1	0916	727	473327	1222038	YES	9	GY-BK	F-MSD/SC	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/31/98

Sampling Personnel: D. Hughes M SHAW J SHANNON A LANCASTER
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR086-0000
EPA Sample No.: 98364008

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Slip 1

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			Y/N	Y/N							
WI0 1	0925	>27	473322	1222035	NO —	MUD	/ROCK	IN JAWS			
WI1 2	0929	27	473321	1222035	YES	11	GY GR	FSD/SL	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/12/98

Sampling Personnel: D. Hughes M SHAW J SHANNON K FAHIGHT
Sampling Vessel: M/V Kaluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR087-0000
EPA Sample No.: 98334023

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; KC (Mansm)/Holnam

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X	Coordinates Y	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W28 1	1108	717	473318	1222033	YES	11	BK-GR	FSD SC	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D. Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/31/98

Sampling Personnel: D. Hughes M SHAW J SHANNON A LANCASTER
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR088-0000
EPA Sample No.: 98364009

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; S. Brandon CSO/Holman

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
1	0939	>27	473312	1222030	YES	8	GY-BK	SL/F.SD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D. Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/12/98

Sampling Personnel: D. Hughes M SHAN J SHANNON K THOMAS
Sampling Vessel: M/V Kuluk 2
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR089-0000
EPA Sample No.: ~~8/12/98~~ 98334028

Sampling Method: 0.1 m^2 van Veen
Proposed Location: Channel; KC(NW61ass)/Holman

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates Y W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W34 1	1300	717	4733.10	1222028	YES	9	BR-GY	SC FSD	MOD H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH A
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/12/98

Sampling Personnel: D. Hughes M SHAW J SHANNON K DAHLGREN
Sampling Vessel: M/V Kuluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR090-0000
EPA Sample No.: 98334029

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Alaska Marine Lines/NW Glass

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X/N	Y/N							
W35 1	1309	717	473304	122 20 25	YES	9	GY-GR	SC FSD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: DR Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/31/98
Sampling Personnel: D. Hughes M SHAW J SHANNON A LANCASTER
Sampling Vessel: M/V Kuluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR091-0000
EPA Sample No.: 98364013
Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; James Hardy Gypsum
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W15	1	1016	11	473257	1222019	NO	NOT	SEALED				
W16	2	1019	11	473257	1222019	NO	WASHOUT					
W17	3	1022	14	473257	1222019	NO	DIDN'T TRIP					
W18	4	1023	14	473257	1222019	NO	WASHOUT					
	5	1026	13	473257	1222019	NO	5	INSUF	PENET			MOVED 5' SOUTH
W19 W20	6	1030	13	473257	1222019	YES	7	BR-GY	F-M SD/SL	NONE	NONE	FEW SMALL (<1/4" DIA SHEEN DROPS ON SED SURF

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D. Hughes

~~* DUPLICATE~~

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST) Sampling Personnel: D. Hughes M SHAW K MATTHEW K PINE

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s):

Date: 8/17/98 / 8/27/98 Weather: PART SUNNY

WESTON Sample No.: ~~SD-DR092-0000/-1000~~ Sampling Method: 0.1 m² van Veen

EPA Sample No.: ~~48344020~~ 98354085 Proposed Location: Intertidal; James Hardy Gypsum

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOC; Pest; Organotin; Dioxin ~~(No Dioxin on Duplicate)~~ Split Collected? ☐ Yes ☒ No

SAMPLED ADJ TO OUTFALL PIPE (2' DIAM) ≈ 80' OFFSHORE

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates Y W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W35	1	1424		473252	1222017	NO-	INSUF	PENETRATION		(2-3cm)		
W36	2	1428		473252	1222017	NO-	DIDN'T	TRIP				
W37	3	1430		473252	1222017	NO-	CHAINS	FOULED				
W38	4	1433		473253	1222017	NO-	WASHOUT					
DUP	5	1438		473253	1222018	NO-	CHAINS	FOULED				MOVED SLIGHTLY OFFSHORE
W41	6	1444	>27	473252	1222017	NO-	WASHOUT					
8/27		TEMPORARILY ABANDON STATION										
W15	1	1449	27	473252	1222017	NO-	DIDN'T	TRIP				
W16	2	1450	>27	473252	1222018	YES	13	BROR	SC/FSD	NONE	NONE	SLIGHT SHEEN

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST) Sampling Personnel: D. Hughes & M SHAW K PINE K TAMOM

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kaluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/17/98 Weather: PART SUNNY

WESTON Sample No.: SD-DR093-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98344020 Proposed Location: Intertidal; James Hardy Gypsum

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	Y W							
W42 1	1455	7 21	473250	1222016	YES	8	GY-GR	SD-SC	MOD H_2S	NONE	SL SHEEN STREAKS

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D R Hoard

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Sampling Personnel: D. Hughes M SHAH J SHANNON A REAR
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kiluk
Project No.: 4000-019-038-5100
Subcontractor(s):
Date: 8/20/98
Weather: CLEAR

WESTON Sample No.: SD-DR094-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98344073
Proposed Location: Intertidal; Lone Star NW
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
WQ2 1	0912	21	473246	1222013	NO	H_2O	GRAB				
WQ3 2	0917	21	473246	1222013	YES	9	GY-BK	FSD/SC	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D. Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/20/98
Sampling Personnel: D. Hughes MSHAW J SHANNON A REAK
Sampling Vessel: M/V Kuluk
Subcontractor(s): ——
Weather: CLEAR

WESTON Sample No.: SD-DR095-0000
EPA Sample No.: 98344072
Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Slip 2 N. Side (Lone Star)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☒ Yes ☐ No LONE STAR

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X	Coordinates Y	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W41 1	0902	18	473240	1222012	YES	9	GY-BK	SC/FSD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

* POREWATER DUPLICATE

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/2/98
Sampling Personnel: D. Hughes M SHAW J SHANNON A LANCASTER
Sampling Vessel: M/V Kaluk
Subcontractor(s): —
Weather: PART CLOUDY / FOGGY

WESTON Sample No.: SD-DR096-0000 / PW-DR096-0000/-1000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98364032 / 98364045 / 4046
Proposed Location: Intertidal; Slip 2 N. Side (Lonestar)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins (SED)
Metals; Organotins (PW)
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	Y W							
WQ1 1	0900	14	473248.59	1222009.04	YES	9	GY-GR	FSD/SL	SL H_2S	NONE	SL SHEEN
WQ3 2	0909	18	473248.53	1222009.00	YES	9	"	"	"	"	
WQ4 3	0917	18	473248.55	1222009.00	YES	9	"	"	"	"	
WQ6 4	0924	18	473248.61	1222009.09	YES	9	"	"	"	"	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/20/98

Sampling Personnel: D. Hughes M SHAW J SHANNON A LEAK
Sampling Vessel: M/V Kuluk or —
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR097-0000
EPA Sample No.: 9834A074

Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Slip 2 head (Lone Star)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☒ Yes ☐ No (LONE STAR)

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	Y W							
WQA 1	0927		473250	1222006	NO-	DIDN'T TRIP					
WQS 2	0929	17	473250	1222006	YES	10	GY-BK	SC/F-MSD	MOD H_2S	→	WOOD DEBRIS (SMALL STICKS) - MOD; SMALL METAL FRAGMENTS - FEW

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

WESTON MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/20/98

Sampling Personnel: D. Hughes M SHAW J SHANNON A REAK
Sampling Vessel: M/V Kanuk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR098-0000
EPA Sample No.: 98344075

Sampling Method: 0.1 m² van Veen
Proposed Location: Slip 25 Side (Lone Star)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☒ Yes ☐ No
LONE STAR

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates X W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WQ6 1	0937		473249	1222006	NO — INSUF PENET; LARGE ROCKS (3 to 6') ON SURF						
WQ7 2	0941	17	473249	1222006	YES	10	GY-BR	SL/FM SD	NONE		

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/20/98

Sampling Personnel: D. Hughes M SHAW J SHANNON A REAF
Sampling Vessel: M/V Kuluk or
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR099-0000
EPA Sample No.: 98340076

Sampling Method: 0.1 m² van Veen
Proposed Location: Slip 2 S. Side (Lone Star)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☒ Yes ☐ No
LONE STAR

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WQ8 1	0949	NA	473247	1222007	YES	9	GY-GR	F-C SD GRAVEL	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST) Sampling Personnel: D. Hughes M SHAW J SHANNON AREAIL

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kulluk or

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/20/98 Weather: CLEAR

WESTON Sample No.: SD-DR100-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98344077 Proposed Location: Slip 2 S. Side (Hales Construction)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X/N	Y/W							
WP9 1	0958	10	1732433	1222011	YES	9	GY-GR	F-M SD/SL	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST) Sampling Personnel: D. Hughes M SHAW J SHANNON A REAR

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk or

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/20/98 Weather: CLEAR

WESTON Sample No.: SD-DR101-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98344078 Proposed Location: Slip 2 - Mouth

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Vocs; Pest; Organotins; Dioxin Split Collected? ☐ Yes ☒ No

CO-LOCATED SHALLOW SUBSURFACE CORE STATION PROPOSED

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
W1ϕ 1	1011	20	473244	1222012	YES	8	GYBK	SC/SD	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D. Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Sampling Personnel: D. Hughes MSHAW JSHANNON A-RUAK
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100
Subcontractor(s):
Date: 9/20/98
Weather: CLEAR

WESTON Sample No.: SD-DR102-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98344079
Proposed Location: Intertidal; Hales Construction
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	Y W							
W11 1	1026		973239	1222010	NO-	DIDN'T TRIP					
W12 2	1028	11	973239	1222011	YES	9	GR-GY	SC/SD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: DR Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Sampling Personnel: D. Hughes MSHAW JSHANNON LVANSELOW
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100
Subcontractor(s):
Date: 8/18/98
Weather: OVERCAST

WESTON Sample No.: SD-DR103-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98384039
Proposed Location: Intertidal; Hales Construction
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
W29 1	1143	727	473238	1222010	YES	17	GR-GY	SY/F-M SD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/18/98

Sampling Personnel: D. Hughes M SHAW J SHANNON L VANSOON
Sampling Vessel: M/V Kyluk
Subcontractor(s):
Weather: OVERCAST

WESTON Sample No.: SD-DR104-0000
EPA Sample No.: 98340397 40

Sampling Method: 0.1 m² van Veen
Proposed Location: Intervid 21; Marina / City of Seattle

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
W30 1	1153	21	473234	1222006	YES	14 (CTR)	GY-GR	F-MSD/SC	SL H_2S	ROOTS	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D. Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Sampling Personnel: D. Hughes M SHAW J SHANNON L JANSEN
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/19/98
Weather: CLEAR

WESTON Sample No.: SD-DR105-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98344057
Proposed Location: Intended; City of Seattle
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
W11 1	0950	NA	1173233	1222001	Yes	10	GR-GY	SC/FSD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/19/98

Sampling Personnel: D. Hughes MSHAW ISHANNON EVANSLOW
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR106-0000
EPA Sample No.: 98344054
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Slip 3; Silver Bay / Muckleshoots
Split Collected? ☐ Yes ☒ No

COLLECTED ADJ TO MOORED BARGE / TUGBOAT

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
WQ9 1	0909	17	473233	1221956	YES	11	GR-GY	SC/F-SD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hugh

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/19/98

Sampling Personnel: D. Hughes MSHAW JSHANNON LVANSELOW
Sampling Vessel: M/V Kiluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR107-0000
EPA Sample No.: 98344053

Sampling Method: 0.1 m² van Veen
Proposed Location: Slip 3; Schnitzer

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
WQ4 1	0844	20	473234	1221951	NO-	INSUF	PENET	(4-5cm SC) (GRAVEL TOP)			
WQ5 2	0847	21	473234	1221951	NO-	INSUF	PENET	(") (")			
WQ7 3	0850	18	473233	1221950	NO-	H_2O	GRAB				MOVED SLIGHTLY WEST (±20')
WQ8 4	0854	NA	473234	1221952	YES	7	GR-GY	SC/SD	SL H_2S	NONE	MOVED STERN FARTHER OFFSHORE

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: DR Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST) Sampling Personnel: D. Hughes M SHAW J SHANNON WANGELOW

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kiluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 9/19/98 Weather: CLEAR

WESTON Sample No.: SD-DR108-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98344052 Proposed Location: Slip 3; Northland Services

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
WP3 1	0834	20	473233	1221949	YES	10	GY-GR	SL/F-SD	SL H2S	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D B Hughes

POREWATER

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/1/98

Sampling Personnel: D. Hughes M SHAW J SHANNON A LANCASTER
Sampling Vessel: M/V Kuluk or
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR109-0000/PW-DR109-0000
EPA Sample No.: 98364029 / 98364042
Sampling Method: 0.1 m² van Veen
Proposed Location: Slip 3; Northland Services

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins (SED)
Metals; Organotins (PW)
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WQ7 1	1516		473233.17	1221953.62	YES	16	BY-GR	SC/F-SD	NONE	LIGHTBULB FIXTURE-PORCELAIN	
WQ8 2	1524	NA	473233.21	1221953.56	YES	14	"	"	NONE		

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/19/98
Sampling Personnel: D. Hughes M SHAW T SHANNON L VANDEW
Sampling Vessel: M/V Kuluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR110-0000
EPA Sample No.: 98344051
Sampling Method: 0.1 m² van Veen
Proposed Location: Slip 3; Nathland Services
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			N	W							
WP2 1	0822	19	473231	1221957	YES	9	GY-BK	SC/F SD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

* DUPLICATE

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/19/98

Sampling Personnel: D. Hughes M SHAW J SHANNON
Sampling Vessel: M/V Kaluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR111-0000 / -1000
EPA Sample No.: 98344055 / 4056

Sampling Method: 0.1 m² van Veen
Proposed Location: Slip 3 - Mouth

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Orgmotins; Dioxins (No Dioxin on Dup)
Split Collected? ☐ Yes ☒ No

CO-LOCATED SHALLOW SUBSURFACE CORE STATION PROPOSED

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	Y N							
WLP 1	0917	17	473232	1221959	YES	10	BR GY	SC/FSD	SLH2S	NONE	SL SHEEN ON SED SURF

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Sampling Personnel: D. Hughes M SHAW J SHANNON L VANBEEK
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Koluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/19/98
Weather: CLEAR

WESTON Sample No.: SD-DR112-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 9834.4050
Proposed Location: Intertidal; Fox Ave S. CSO/SD
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins
Split Collected? ☐ Yes ☒ No

CO-LOCATED SHALLOW SUBSURFACE CORE STATION PROPOSED

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	Y W							
1	0809	21	473229	1221956	YES	11	GY-GR	SC/F-SD	SL H_2S	NONE	SL SHEEN ON SED SURF

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D B Hughes

*DUPLICATE

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/19/90

Sampling Personnel: D. Hughes M SHAW J SHANNON L VANSELOW
Sampling Vessel: M/V Kuluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR113-0000/-1000
EPA Sample No.: 98340058/ 4059
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Nearshore Services
Split Collected? ☐ Yes ☒ No

COLLECTED ADJ TO MOORED BARGE (IMMED S ADJ TO DOLPHIN)

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
				′N	′W							
W12	1	1002		473227	1221954	NO –	CHAIN IN JAWS					
W13	2	1011	22	473227	1221954	NO –	PARTIAL WASHOUT					
W14	3	1015		473227	1221954	NO –	H_2O GRAB					
W15	4	1020	21	473227	1221953	NO –	INSUF PENET/PARTIAL WASHOUT					
W16	5	1025	-	473227	1221954	NO –	INSUF PENET/SANDBLAST GRIT NOTED					IN GRAB
W17	6	1031		473226	1221952	NO –	METAL ~~ROCK~~ IN JAWS					MOVED SOUTH
W18	7	1036	15	473226	1221952	YES	11	GY-BK	SC/SD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: DB Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/19/98
Sampling Personnel: D. Hughes M SHAW J SHANNON L VANSELOW
Sampling Vessel: M/V Kyluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR114-0000
EPA Sample No.: 1834 4060
Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; W.P. Gulmant
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

* COLLECTED @ LOCATION DR149 (DR149 COLLECTED @ DR114)

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W19 1	1047	15	473224	1221950	YES	11	GY-BK	SC/FSD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Sampling Personnel: D. Hughes M SHAW J SHANNON
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: ~~MV Iqaluk~~
Project No.: 4000-019-038-5100
Subcontractor(s): MULLINS
Date: 9/14/98
Weather: CLEAR

WESTON Sample No.: SD-DR115-0000
Sampling Method: 0.1 m^2 van Veen
EPA Sample No.: 98384003
Proposed Location: Intertid 21; Seattle Boiler Works
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins; Dioxins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W13 1	1111	11	473223.20	1221947.53	YES	15	GR-BY	F.M SD/GL	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST) Sampling Personnel: D. Hughes M SHAW J SHANNON LVANSELOW

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk or

Project No.: 4000-019-038-5100 Subcontractor(s):

Date: 8/18/98 Weather: OVERCAST

WESTON Sample No.: SD-DR116-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98344043 Proposed Location: Intertidal; Othello St. Warehouse

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X/N	X/W							
W02 1	1330	20	473221	1221941	YES	14	GY-BR	SL/F-SD	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D. Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST) | Sampling Personnel: D. Hughes M SHAW J SHANNON L VANSELOW
Project Location: Duwamish River, Seattle, WA | Sampling Vessel: M/V Kyluk
Project No.: 4000-019-038-5100 | Subcontractor(s):
Date: 8/18/98 | Weather: OVERCAST

WESTON Sample No.: SD-DR117-0000 | Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98344044 | Proposed Location: Intended; Othello St. Warehouse
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC | Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	Y W							
W43 1	1348	727	1273218	1221941	Yes	17	GY-GR	F-SD/SC	NONE	NONE	SMALL (1/4" DIAM) SHEEN DROPS ON SED SURF

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI (REACH B EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 2/18/98
Sampling Personnel: D. Hughes M SHAW J SHANNON L WANSELA
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: OVERCAST

WESTON Sample No.: SD-DA118-0000
EPA Sample No.: 9834-4045
Sampling Method: 0.1 m² van Veen
Proposed Location: Intermidal; Othello St. Warehouse
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates N	Coordinates W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WQ4 1	1358	24	473217	1221938	NO -	WASHOUT;		JAWS PARTIALLY OPEN			
WQ5 2	1400	24	473217	1221938	NO -	DIDN'T TRIP					
WQ6 3	1402	24	473217	1221938	NO -	ROCK IN JAW					
WQ7 4	1404	24	473216	1221938	YES	10	GY-GR	F-MSD/SC	NONE	NONE	MOVED SLIGHTLY OFFSHORE

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Sampling Personnel: D. Hughes M SHAW J SHANNON L VANSELOW
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk or
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/18/98
Weather: OVERCAST

WESTON Sample No.: SD-DR119-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98344046
Proposed Location: Intertidal; Othello St. Warehouse
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
				X N	X W							
W08	1	1416	727	473215	1221936	YES	17	GR-GY	FMSD/SC	SL H_2S	None	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: DR Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/12/98

Sampling Personnel: D. Hughes M SHAW J SHANNON K TAYLOR
Sampling Vessel: M/V KARLUK
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR120-0000
EPA Sample No.: 98334031
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Duwamish Shipyard
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W37 1	1330	717	473301	1222026	NO -	DIDN'T TRIP					
W38 2	1333	717	473301	1222026	NO -	DIDN'T TRIP					
W39 3	1340	717	473301	1227027	YES	10	BR-GY-GR	F.M SD SC	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST)
Sampling Personnel: D. Hughes M SHAW J SHAWN ON A. LANCASTER
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100
Subcontractor(s):
Date: 8/31/98
Weather: CLEAR

WESTON Sample No.: SD-DR121-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98364014
Proposed Location: Intertidal; Duwamish Shipyard
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Dioxins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W21 1	1044	27	473259	1222027	YES	10	GY-GR	SL/F-SD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/24/98

Sampling Personnel: D. Hughes M SHAW J SHANNON
Sampling Vessel: ~~MV Kuluk~~ X
Subcontractor(s): MULLINS
Weather: CLEAR

WESTON Sample No.: SD-DR122-0000
EPA Sample No.: 983B4001

Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Lone Star NW

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
WQB 1	1019	46	1273257.85	1222028.03	YES	12	GY-GR	FSD/SC	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/14/98
Sampling Personnel: D. Hughes M SHAW J SHANNON
Sampling Vessel: ~~MV Kaluk~~ or
Subcontractor(s): MULLINS
Weather: CLEAR

WESTON Sample No.: SD-DR123-0000
EPA Sample No.: 98384002
Sampling Method: 0.1 m² van Veen
Proposed Location: Intended; Lone Star NW
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins; Dioxins
Split Collected? ☐ Yes ☒ No

CO-LOCATED SHALLOW SUBSURFACE CORE STATION PROPOSED

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates Y W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WP9 1	1033	8	473256.22	1222029.68	YES	15	GY-BK	F-SD/SC	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D B Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5108
Date: 9/14/98 / 9/15/98
Sampling Personnel: D. Hughes M SHAW J SHANNON
Sampling Vessel: ~~MAHKAMUK~~ or
Subcontractor(s): MULLINS
Weather: CLEAR

WESTON Sample No.: SD-DR124-0000
EPA Sample No.: 9838 4010
Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Lone Star NW
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X_N	Coordinates Y_W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
9/14											
W10 1	1051	21	473254.95	1222026.24	NO — DIDN'T TRIP						
W11 2	1052	21	473254.92	1222026.26	NO — INSUF PENETRATION						
W12 3	1058	21	473254.92	1222026.30	NO — INSUF PENETRATION						
	TEMPORARILY ABANDON STATION — TIDE TOO HIGH TO ALLOW FOR US TO ADD										
	WEIGHTS BACK ON VAN VEEN & BE ABLE TO GET BACK UNDER CABLES TO GET OUT OF INLET										
	(NEED < 6.9' TIDE)										
9/15 1	0810	3	473254.50	1222026.48	YES	10	GY-GR	GV/F-MSD	SL H_2S	NONE	SLIGHT SHEEN

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/31/98

Sampling Personnel: D. Hughes M SHAW J SHANNON A LANCASTER
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR125-0000
EPA Sample No.: 98364015
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Lone Star NW
Split Collected? ☐ Yes ☒ No

COLLECTED ADJ TO N. END OF PIER - VESSEL BLOCKING ORIGINAL STATION

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W22	1	1052	>27	473258	1222026	NO -	WASH	OUT /	ROPE IN	JAWS		
W23	2	1055	>27	473258	1222027	NO -	DIDN'T	TRIP				
W24	3	1057	>27	473258	1222026	YES	10	GY-GR	F-MSD/SC	SL H2S		

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: DR Hughes

WESTON MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/12/98

Sampling Personnel: D. Hughes M SHAW S SHANNON (CTAMIGHT
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR12B-0000
EPA Sample No.: 98334033

Sampling Method: 0.1 m^2 van Veen
Proposed Location: Intertidal; Lone Star NW/SW Graham SD

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	Y W							
W41 1	1407	717	473254	1222024	NO -	DIDN'T	TRIP				
W42 2	1410	717	473253	1222024	NO -	DIDN'T	TRIP				
W43 3	1412	717	473254	1222024	YES	10	BR-GY GR	F-M SD SC	MOD H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D. Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST) Sampling Personnel: D. Hughes M SHAW J SHANNON K [illegible]

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kyluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/12/98 Weather: CLEAR

WESTON Sample No.: SD-DR127-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98334034 Proposed Location: Intertidal; Part of Seattle T115

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W44 1	1422	717	973252	1222033	YES	13	GY-GR	F.M SD SC	MOD H_2S	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/12/98

Sampling Personnel: D. Hughes M SHAW J SHANNON K TAYLOR
Sampling Vessel: M/V Kyluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR128-0000
EPA Sample No.: 98334035

Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Part of Seattle T115

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
WAS 1	1430	>17	473298	1222021	YES	14	GY GR	F.M SD SC	SL H2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/27/98

Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER
Sampling Vessel: M/V Kyluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR129-0000
EPA Sample No.: 98354082

Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Part of Seattle T115

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			✗N	✗W							
1	1359	>27	473244	1222019	YES	17	GR-GY	SL/FSD	NONE	NONE	

wf9

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/12/98
Sampling Personnel: D. Hughes M SHAW J SHANNON K THIGEN
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR130-0000
EPA Sample No.: 98334034
Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Part of Seattle T115
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W49 1	1503	717	1173241	1222018	YES	17	GY	SC FSD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

* DUPLICATE

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/13/98

Sampling Personnel: D. Hughes MSHAW JSHANNON CTAHIGHI
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR131-0000/-1000
EPA Sample No.: 98334038/4039
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Port of Seattle T115
Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
				XN	XN							
W02	1	0908	717	473237	122 2016	YES	10	SC FMSD	GR-GY	MOD H_2S	NONE	ORGANIC MATTER-ROOTS

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/13/98

Sampling Personnel: D. Hughes M.SHAW J SHANNON K TAMIGUCHI
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR132-0000
EPA Sample No.: 98334041

Sampling Method: 0.1 m² van Veen
Proposed Location: Intended; PNA of Seattle T115 (Seafreeze)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X/N	Coordinates X/W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WØ4 1	0926	717	473235	1222012	NO—	CHAINS FOULED					
WØ5 2	0928	717	473235	1222012	NO-	H_2O	GRAB	COARSE BOTTOM - LARGE ROCKS			
WØ6 3	0931	717	473235	1222012	NO-	H_2O	GRAB				
WØ7 4	0933	>17	473235	1222012	NO-	DIDN'T TRIP					MOVED STATION SLIGHTLY FARTHER OFFSHORE
DUP Ø 5	0935	>17	473236	1222013	YES	8	GY-GR	F-M SD SC	MOD H_2S	NONE	MOVED SLIGHTLY NORTH

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

POREWATER

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (NEST)
Sampling Personnel: D. Hughes M SHAW J SHANNON A LANCASTER
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 9/2/98
Weather: PART CLOUDY

WESTON Sample No.: SD-DR133-0000 / PW-DR133-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98364034 / 98364048
Proposed Location: Intertidal 21; Part of Seattle T115
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins (SED) Metals; Organotins (PW)
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WP1 1	1007	15	473232.99	1222008.02	YES	9	GY-GR	F-MSD/SC	SL H_2S	NONE	
WP2 2	1015	16	473232.91	1222007.85	YES	8	"	"	"	"	
WP3 3	1021	15	473232.98	1222007.98	YES	10	"	"	"	"	2" COCKLE

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D B Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/13/98

Sampling Personnel: D. Hughes M SHAW J SHANNON K TAYLOR
Sampling Vessel: M/V Kuluk or
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR134-0000
EPA Sample No.: 98334044

Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Part of Seattle T115

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X	Y							
W11 1	1000	717	473231	1222006	YES	11	BR-GR	SC-SD	ST H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D K Shaw

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/13/98
Sampling Personnel: D. Hughes M SHAW J SHANNON K THIMM
Sampling Vessel: M/V Kuluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR135-0000
EPA Sample No.: 98334046
Sampling Method: 0.1 m^2 van Veen
Proposed Location: Intertidal; Swan Bay Holdings
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W13 1	1017	13	473227	1222002	YES	10	GY-GR	F-SD SC	ST H_2S	—	TRACE ROOTS

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/13/98

Sampling Personnel: D. Hughes M SHAW J SHANNON K TAHIGHI
Sampling Vessel: M/V Kuluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR136-0000
EPA Sample No.: 98334048
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC ; Organotins

Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Swan Bay Holdings
Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates Y W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W15	1	1037	717	473224	1221957	YES	15	GY-GR	F-SD SC	ST H_2S	NONE	MOD SHEEN ON SEDS

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/13/98

Sampling Personnel: D. Hughes J SHANNON M SHAN K TAH IGHT
Sampling Vessel: M/V Kaluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR137-0000
EPA Sample No.: 98334050
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Swan Bay Holdings
Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W17	1	1054	18	473222	1221955	YES	13	GY-GR	F-MSD SC	MOD H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: DR Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

8/31 A. LANCASTER

Project Name: Duwamish River SI REACH B (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/13/98 / 8/31/98
Sampling Personnel: D. Hughes M SHAW J SHANNON K ~~TAYLOR~~
Sampling Vessel: M/V Kaluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR138-0000
EPA Sample No.: ~~98334051~~ 98364022
Sampling Method: 0.1 m² van Veen
Proposed Location: Shoal Subtidal; Trotsky Slough Mouth
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			N	W							
8/13											
W22 1	1114	17	473221	1221952	NO -	WASHOUT					
W23 2	1116	15	473221	1221952	NO -	DIDN'T TRIP					
W24 3	1118	17	473221	1221952	NO -	WASHOUT					
	—		TEMPORARILY ABANDON STATION					—			
			RETURN W/ DOUBLE VAN VEEN 2 LATER DATE								
8/31 W98 1	1434		473221	1221953	NO —	INSUF PENET.					
W99 2	1442	NA.	473221	1221953	YES	4-6	BR-RD	SD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST) | Sampling Personnel: D. Hughes M SHAW J SHANNON

Project Location: Duwamish River, Seattle, WA | Sampling Vessel: ~~M/V Kiliuk~~

Project No.: 4000-019-038-5100 | Subcontractor(s): MULLINS

Date: 9/14/98 | Weather: CLEAR

WESTON Sample No.: SD-DR139-0000 | Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98384004 | Proposed Location: Intermid 21; Trotsky Slough

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; pest; Organotins | Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W15	1	1125	10	473221.61	1221956.40	NO — H_2O GRAB						
W16	1	1127	10	473221.62	1221956.34	YES	12	BK-GY	F.M SD/SC	MOD H_2S	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: DRHughes

POREWATER

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST)
Sampling Personnel: D. Hughes M SHAW J SHANNON A LANCASTER
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kunuk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 9/1/98
Weather: CLEAR

WESTON Sample No.: SD-DR140-0000 / PW-DR140-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98364028 / 98364041
Proposed Location: Intertidal; Bayer/Halvorsen
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins (SED)
Metals; Organotins (PW)
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates XW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WP3 1	1435		473217.85	1221947.64	YES	10	BR-RED	SD	NONE	NONE	
WP4 2	1452		473217.85	1221947.53	NO —	DIDN'T TRIP					
WP5 3	1457		473217.77	1221947.45	YES	12	BR-RD	SD			
WP6 4	1504		473217.80	1221947.52	YES	10	BR-RD	SD			

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

* DUPLICATE

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: ~~8/13/98~~ 8/20/98

Sampling Personnel: D. Hughes M CHAN J SHANNON K TAHISH 8/13 A. REAK 8/20
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR141-0000/-1000
EPA Sample No.: 98~~3340~~ 34 4080/4081
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Boyer Alaska Barge Lines
Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates X W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
8/13 W28	1	1242	21	473217	1221946	NO –	INSUF PENET					
			*	TEMP ABANDON STATION – ADJACENT TO BARGE BEING MOVED BY TUG								
8/20 W13	1	1042		473217	1221946	NO –	DIDN'T	TRIP				
	2	1043		473217	1221946	NO –	DIDN'T	TRIP				
W15	3	1045	15	473217	1221946	YES	10	GY-BK	FSD/SC	SL H2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: ~~8/13/98~~ 8/20/98

Sampling Personnel: D. Hughes M SHAW J SHANNON K THOMSEN
Sampling Vessel: M/V Kuluk 2
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR142-0000
EPA Sample No.: ~~98334053~~ 98344083
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC (Pest; VOCs; Organotins; Dioxins) *

Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Boyer Marsh 2 Barge Line
* Split Collected? ☐ Yes ☒ No

CO-LOCATED SHALLOW SUBSURFACE CORE STATION PROPOSED (COLLECTED BTWN 2 MOORED BARGES)

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates XW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W17 W29 1	1104		473214	1221943	NO —	GRAB NOT SEALED; METAL SCRAP IN JAWS					
W18 2	1107	10	473215	1221943	NO —	INSUF PENET (≈2 cm)					
W19 3	1110		473215	1221942	NO —	DIDN'T TRIP					MOVED SLIGHTLY FARTHER OFFSHORE
W20 4	1112	13	473215	1221943	NO —	INSUF PENET (<2 cm) TUGBOAT SCOUR?					
W21 5	1115	NA	473215	1221943	YES	7	GY-BR RED FLECKS	M-C SAND	NONE	SHEEN DROPS ON SURF (MOD)	MOVED TOWARD RAMP DOLPHIN
	* DROPPED FROM LOCATION DUE TO MINIMAL SED VOLUME IN M-C SAND										

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/13/98 / 8/31/98
Sampling Personnel: D. Hughes M SHAW J SHANNON E TAHBOTH
Sampling Vessel: M/V Kaluk
Subcontractor(s): —
Weather: CLEAR / WINDY

WESTON Sample No.: SD-DR143-0000
EPA Sample No.: ~~98334053~~ 98334020
Sampling Method: 0.1 m² van Veen
Proposed Location: Intended; Halvorsen
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates X W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
8/13											
W29 1	1256		473212	1221939	NO –	DIDN'T TRIP					
W30 2	1259	14	473212	1221940	NO –	WATER GRAB					
W31 3	1302		473213	1221941	NO –	DIDN'T TRIP					
W32 4	1304		473213	1221940	NO –	DIDN'T TRIP					
W33 5	1307		473213	1221940	NO –	DIDN'T TRIP					
		ABANDON STATION – CAN'T GET GRAB									
8/20 1	1123		NA		NO –	DIDN'T TRIP					
W22 2	1126	12	473212	1221939	NO –	H_2O GRAB					
W23 3	1128		473212	1221938	NO –	DIDN'T TRIP / CHAINS FOULED					
		RE-ABANDON STATION – TRY W/ DOUBLE VAN						VEEN 2	LATER DATE		
8/31 W44 1	1403	NA	473213	1221940	YES	9	BR RST	F-LSD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/17/98

Sampling Personnel: D. Hughes M SHAW K PINE K TATHAM
Sampling Vessel: M/V Kuluk
Subcontractor(s):
Weather: PART SUNNY

WESTON Sample No.: SD-DR144-0000
EPA Sample No.: 98344019

Sampling Method: 0.1 m² van Veen
Proposed Location: Shoal Subtidal; James Hardy Gypsum

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates X W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W34 1	1412	>27	473257	1222020	YES	11	GY-BK	SC/F-SD	MOD-ST H2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: Deneah Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST) | Sampling Personnel: D. Hughes M SHAW E PINE K TAMIGAM
Project Location: Duwamish River, Seattle, WA | Sampling Vessel: M/V Kunuk 2
Project No.: 4000-019-038-5100 | Subcontractor(s): —
Date: 8/17/98 | Weather: OVERCAST / PART SUNNY

WESTON Sample No.: SD-DR145-0000 | Sampling Method: 0.1 m² van Veen
EPA Sample No.: ~~98344020~~ 98344021 | Proposed Location: Shal Subtidal; Lone Star / James Hardy
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC | Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates Y W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
43 W42 1	1508	27	473249	1222016	YES	11	GY-GR	SC-FSD	MUD H_2S	NONE	SMALL (1/4"-DIAM SHEEN DROPS ON SED SURF

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D B Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/19/98
Sampling Personnel: D. Hughes M SHAW J SHANNON L VANSELOW
Sampling Vessel: M/V Kaluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR146-0000
EPA Sample No.: 98344071
Sampling Method: 0.1 m² van Veen
Proposed Location: Sh>1 Subtidal; Slip 2 Mouth
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
W13 1	1454	27	473242	1222013	YES	15	GY-BR	F.MSD/SL	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

POREWATER

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Sampling Personnel: D. Hughes N SHAW J SHANNON A LANCASTER
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 9/2/98
Weather: FOGGY

WESTON Sample No.: SD-DR147-0000 / PW-DR147-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 99364033 / 99364047
Proposed Location: Shallow Subtidal; Gilman
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins (SED) Metals; Organotins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WP7 1	0944	15	473236.20	1222007.79	YES	13	GY-GR	F SD/SL	SL H_2S	NONE	SL SHEEN
WP8 2	0953	17	473236.37	1222007.73	YES	13	"	"	"	"	"

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/18/98

Sampling Personnel: D. Hughes M SHAW J SHANNON L VANSLAW
Sampling Vessel: M/V Kaluk
Subcontractor(s):
Weather: OVERCAST

WESTON Sample No.: SD-DR148-0000
EPA Sample No.: 9934-4041

Sampling Method: 0.1 m² van Veen
Proposed Location: Sht Subtid >1, Slip 3

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W31 1	1204	27	473230	1221959	YES	9	BK-GY	F MSD/SC	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D B Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Sampling Personnel: D. Hughes MSHAN JSHANNON LVANSELOW
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kyluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/19/98
Weather: CLEAR

WESTON Sample No.: SD-DR149-0000
Sampling Method: 0.1 m^2 van Veen
EPA Sample No.: 98344061
Proposed Location: Shal Subtidal; UP Gulmant
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

* COLLECTED @ LOCATION DR114 (DR114 CALECTED @ DR149)

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
W20 1	1056		473224	1221949	NO-	DIDN'T TRIP					
W21 2	1059	12	473223	1221949	YES	16	BY-GR	SL/SD	SL H_2S	NONE	
—											

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: DR Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/18/98

Sampling Personnel: D. Hughes M SHAW J SHANNON L VANSELOW
Sampling Vessel: M/V Kiluk
Subcontractor(s):
Weather: OVERCAST

WESTON Sample No.: SD-DR150-0000
EPA Sample No.: 98384042

Sampling Method: 0.1 m² van Veen
Proposed Location: Shell Subtidal; Othello St. Whse.

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
1	1320	>27	473219	1221944	YES	15	GY-GR	FMSD/SC	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (EAST)
Sampling Personnel: D. Hughes M SHAW J SHANNON L WAWSON
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kaluk
Project No.: 4000-019-038-5100
Subcontractor(s):
Date: 8/18/98
Weather: OVERCAST

WESTON Sample No.: SD-DR151-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98344047
Proposed Location: Shal Subtidal; Othello St. Whse.
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WDG 1	1428	>27	473214	122193	YES	17	GR GY	SY/FSD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/27/98

Sampling Personnel: D. Hughes M. SHAW J. SHANNON G. THRASHER
Sampling Vessel: M/V Kaluk
Subcontractor(s): —
Weather: CLEAR / WINDY

WESTON Sample No.: SD-DR152-0000
EPA Sample No.: 99354086

Sampling Method: 0.1 m² van Veen
Proposed Location: Sh21 Subfield 21; Part of SeaHk T115

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W17 1	1505	>27	4732.54	1222023	NO — OVER PENETRATED						
W18 2	1512	>27	473252	1222023	YES	17	GY	SC/FSD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

A. LANCASTER

Project Name: Duwamish River SI REACH B (WEST) | Sampling Personnel: D. Hughes M SHAW J SHANNON ~~E FAIRCHILD~~

Project Location: Duwamish River, Seattle, WA | Sampling Vessel: M/V Kyluk

Project No.: 4000-019-038-5100 | Subcontractor(s): —

Date: 8/12/98 / 8/27/98 / 8/31/98 | Weather: CLEAR

WESTON Sample No.: SD-DR153-0000 | Sampling Method: 0.1 m² van Veen

EPA Sample No.: ~~98334036~~ 98364017 | Proposed Location: Shal Subtidal; East of Seattle T115

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC | Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates Y W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
8/12 W46	1	1440	>27	473245	1222019	NO- DIDN'T TRIP						
W47	2	1445	>27	473246	1222019	NO- OVERPENETRATION						
W48	3	1455	>27	473246	1222019	NO - OVERPENETRATION						
W49	~~4~~			TEMPORARILY	ABANDON STATION - RETURN	W/FEWER VAN VEEN WEIGHTS						
8/27 W49	1	1408	>27	473247	1222020	NO - OVERPENETRATION						
W11	2	1414	>27	473248	1222020	NO- DIDN'T TRIP						
W12	3	1417	>27	473248	1222020	NO- OVERPENETRATION						
			TRIED	AGAIN	W/ WEIGHTED VAN VEEN;	RETURN LATER W/ MT WEIGHT						
8/31 W26	1	1130	>27	473246	1222020	NO - DIDN'T TRIP						
W27	2	1132	>27	473245	1222019	YES	17	GY-GR	SL/FSD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: DR Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST) Sampling Personnel: D. Hughes W Shaw JShannon E Tannehill

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/13/98 Weather: CLEAR

WESTON Sample No.: SD-DR154-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98334037 Proposed Location: Shal Subtidal; Part of Seattle T115

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins; Dioxins Split Collected? ☐ Yes ☒ No

RELOCATED SHALLOW SUBSURFACE CORE STATION PROPOSED

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
WP1 1	0745	NA	473239	122 20 16	YES	10	GY-GR	SL	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/13/98

Sampling Personnel: D. Hughes M SHAW T SHANNON K TAHIGH
Sampling Vessel: M/V ~~Kyluk~~ or
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR155-0000
EPA Sample No.: 98334042
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Shel Subtidal; Part of Seattle T115 (Sea Freeze)
Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
				~~X~~ N	~~Y~~ W							
WQ9	1	0945	7 17	473234	1222010	YES	10	BR-GY	SC F-SD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: DR Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/13/98

Sampling Personnel: D. Hughes M SHAW J SHANNON K TAYLOR
Sampling Vessel: M/V Kyuluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR15B-0000
EPA Sample No.: 98334049

Sampling Method: 0.1 m² van Veen
Proposed Location: Shallow Subtidal; Swan Bay Holdings

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			N	W							
W16 1	1046	>17	473224	1221956	YES	13	GR-GY	FSD SC	MOD H_2S	NONE	MOD SHEEN ON SEDS

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

8/31 A. LANCASTER

Project Name: Duwamish River SI REACH B (WEST)
Sampling Personnel: D. Hughes M SHAW J SHANNON K TAHIGHI
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V ~~Kuluk~~ Bv
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/13/98 / 8/31/98
Weather: CLEAR

WESTON Sample No.: SD-DR~~138~~ 157-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: ~~98334051~~ 98364021
Proposed Location: Intertidal; Trotsky (Mouth of Slough)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

CO-LOCATED SHALLOW SUBSURFACE CORE STATION PROPOSED

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates X W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W18	1	1104		473221	1221953	NO-	WASHOUT					
W19	2	1106		473221	1221953	NO-	DIDN'T	TRIP				
W20	3	1108		473221	1221953	NO-	DIDN'T	TRIP				
W21	4	1109		473221	1221953							MOVED SLIGHTLY FARTHER OFFSHORE
				TEMP ABANDON	STATION - RETURN	W/DOUBLE	VAN	VEEN				
8/31 W05	1	1416		473222	1221953	NO -	OVERPENETRATED					
W06	2	1422		473221	1221954	NO-	DIDN'T	TRIP				
W07	3	1423	NA	473221	1221954	YES	17	BK	F-MSD/SC	ST H_2S	TRACE NATURAL WOOD DEBRIS	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/20/98
Sampling Personnel: D. Hughes M SHAW J SHANNON A ROAK
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR158-0000
EPA Sample No.: 98AA4082
Sampling Method: 0.1 m² van Veen
Proposed Location: Shal Subtidal; Boyer Alaska Barge Line
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
W16 1	1052	17	473217	1221946	YES	10	GY-BK	F-M SD/SC	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B (WEST)
Sampling Personnel: D. Hughes M SHAW J SHANNON K TAYLOR T
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kaluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 9/3/98
Weather: CLEAR/WINDY

WESTON Sample No.: SD-DR159-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98334053
Proposed Location: Shell Subtidal; Halvorsen
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W34 1	1310	18	473212	1221938	YES	8	GY GR	SC F-M SD	MOD H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D. Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/12/98

Sampling Personnel: D. Hughes M SHAW J SHANNON K TAHIGHI
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR160-0000
EPA Sample No.: 98334032
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Duwamish Shipyard
Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates Y N	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W40	1	1355	>17	473300	1222025	YES	13	GY-GR	F-M SD SILT	SL H_2S	NONE	—

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/31/98

Sampling Personnel: D. Hughes M SHAW J SHANNON A LANCASTER
Sampling Vessel: M/V Kaluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR161-0000
EPA Sample No.: 98364016

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Lone Star

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
W25 1	1106	27	473254	1222021	YES	8	GY	SC	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/27/98
Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER
Sampling Vessel: M/V Kyuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR182-0000
EPA Sample No.: 98354084
Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Part of Sc2H1c T115.
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates Y W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W14 1	1436	27	473251	1222020	YES	12	GY-GR	SC/F-SD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/27/98

Sampling Personnel: D. Hughes M SHAW · J SHANNON & THRASHER
Sampling Vessel: M/V Kaluk or
Subcontractor(s): —
Weather: CLEAR / WINDY

WESTON Sample No.: SD-DR163-0000
EPA Sample No.: 98354083

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Port of Seattle T115

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC ; VOCs; Pest; Organotins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
W13 1	1426	27	473248	1222017	Y	10	GY-GR	SC/F-SD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/19/98

Sampling Personnel: D. Hughes M SHAW J SHANNON L VANSELOW
Sampling Vessel: M/V Kiluk
Subcontractor(s): —
Weather: CLEAR/WINDY

WESTON Sample No.: SD-DR164-0000
EPA Sample No.: 98344070
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel, Part of Seattle T115
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W12 1	1444	27	473239	1222014	YES	17	BRGY	FSD/SL	SLH2S	NONE	SHEEN ON SED SURF (SL)

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: Debra R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/13/98
Sampling Personnel: D. Hughes M SHAW J SHANNON K TAHDH
Sampling Vessel: M/V Kuluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR165-0000
EPA Sample No.: 18334040
Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Part of Seattle T115
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
WQ3 1	0910	17	973236	1222011	YES	11	F-U SD SC	GY-GR	MOD H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/13/98

Sampling Personnel: D. Hughes M SHAW. J SHANNON K TAHIGHI
Sampling Vessel: M/V Kuluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR166-0000
EPA Sample No.: 98334043
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; SeaFreeze (Pat T115)
Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
				XN	XW							
W1P	1	0952	717	473234	1222009	YES	9	GR-GY	F-M SD SC	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: DRHughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/13/98

Sampling Personnel: D. Hughes M SHAW J SHANNON K TATHAM
Sampling Vessel: M/V Kyluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR167-0000
EPA Sample No.: 98334045

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; 1st Ave S. Bridge

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W12 1	1008	717	473230	122 2001	YES	7	GY-GR	F-M SD SC	ST H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/13/98

Sampling Personnel: D. Hughes J SHANNON M SHAW K [illegible]
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR168-0000
EPA Sample No.: 98334047

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Swan Bay Holdings

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins; Dioxins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X	Coordinates Y	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W14 1	1025	717	473226	1221956	YES	11	GY-GR	F-SD SC	ST H_2S	TRACE ROOTS	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/13/98

Sampling Personnel: D. Hughes M SHAW J SHANNON K TANNER
Sampling Vessel: MV Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR169-0000
EPA Sample No.: 98334051
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Swan Bay Holdings
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates Y W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W25 1	1124	730	473223	1221953	YES	10	GR-GY	SC F-SD	MOD H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH B
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/13/98

Sampling Personnel: D. Hughes M SHAW J SHANNON K
Sampling Vessel: M/V Kaluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR170-0000
EPA Sample No.: 98334052
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Riverview Marina (Halvorsen)
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
W26 1	1137	730	473219	1221946	YES	10	GY-BK	F-M SD SC	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI LEACH B
Sampling Personnel: D. Hughes M SHAW J SHANNON L VANSELOW
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/19/98
Weather: CLEAR/WINDY

WESTON Sample No.: SD-DR171-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98344069
Proposed Location: Channel; Boyer Alaska Barge Lines/Halvorsen
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC ; Organotins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W41 1	1430	>27	473214	1221939	YES	12	GY-BR	SG/FSD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D B Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/18/98

Sampling Personnel: D. Hughes M SHAW J SHANNON L VANSELOW
Sampling Vessel: M/V Kyluk
Subcontractor(s): —
Weather: OVERCAST

WESTON Sample No.: SD-DR172-0000
EPA Sample No.: 98344048
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Puget Sound Truck Lines
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	Y W							
WQ 1	1438	11	473211	122193	YES	8	BR-RED Fuzz	SD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI (REACH C EAST) | Sampling Personnel: D. Hughes MSHAW JSHANNON LVANSELOW
Project Location: Duwamish River, Seattle, WA | Sampling Vessel: M/V Kaluk
Project No.: 4000-019-038-5100 | Subcontractor(s):
Date: 8/18/98 | Weather: NORLAST

WESTON Sample No.: SD-DR173-0000 | Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98344049 | Proposed Location: Intertidal; Puget Sound Track Lines
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC | Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates Y W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W11 1	1944	12	473209	1221928	YES	13	BR-GY	F-C SD/SC	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D B Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (LEAD) | Sampling Personnel: D. Hughes M SHAW J SHANNON
Project Location: Duwamish River, Seattle, WA | Sampling Vessel: M/V Kaluk
Project No.: 4000-019-038-5100 | Subcontractor(s): —
Date: 8/20/98 | Weather: CLEAR

WESTON Sample No.: SD-DR174-0000 | Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98344098 | Proposed Location: Intertidal; Puget Sound Track Lines
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC ; Organotins | Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
W16 1	1444	9	473207	1221924	NO —	½	GRAB				
W17 2	1446		473208	1221924	NO —	1" H_2O	GRAB				
W18 3	1448	10	473207	1221924	YES	16	GR-GY	FSD/SC	NONE	NONE	MOD SHEEN ON SED SURF

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D B Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/20/98
Sampling Personnel: D. Hughes M SHAW J SHANNON A PEAK
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR175-0000
EPA Sample No.: 98344097
Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Seattle Parks
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
5 WIA 1	1435	17	473205	1221920	YES	11	GY-GT	SC/FSD	NONE	NONE	SLIGHT SHEEN ON SED SURF

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

WESTON MANAGERS DESIGNERS/CONSULTANTS

* SPLIT FOR BOEING *

SURFACE SEDIMENT FIELD SAMPLE RECORD

A LANCASTER

Project Name: Duwamish River SI REACH C (EAST)
Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER

Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kyluk

Project No.: 4000-019-038-5100
Subcontractor(s): —

Date: 8/31/98
Weather: CLEAR

WESTON Sample No.: SD-DR176-0000
Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 9836.4019
Proposed Location: Slip 4; Crowley Marine

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☒ Yes ☐ No BOEING

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
WP3 1	1335	NA	473205	1221914	YES	17	GR-GY	SC/SD	NONE	NONE	MOD SHEEN BUBBLES (1/8" DIAM); SMALL CREOSOTE (?) BUBBLES - TRACE

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/24/98

Sampling Personnel: D. Hughes & MSHAW J SHANNON & THRASHER
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: OVERCAST

WESTON Sample No.: SD-DR177-0000
EPA Sample No.: 98354003

Sampling Method: 0.1 m² van Veen
Proposed Location: Slip 4; Crowley Marine

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☒ Yes ☐ No
BOEING

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates XW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WP7 1	0906	727	473208	1221910	NO —	DIDN'T TRIP					
WP8 2	0908	727	473208	1221910	NO —	GRAB NOT SEALED;		BARK IN	JAWS		
WP9 3	0912	727	473208	1221911	YES	9	GR-GY	FSD/SC	NONE	NONE	SMALL (1/4") DIAM SHEEN DROPS (FEW)

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D. Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

* DUPLICATE

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/24/98

Sampling Personnel: D. Hughes M SHAW J SHANNON C THRASHER
Sampling Vessel: M/V Kuluk BY
Subcontractor(s): —
Weather: OVERCAST

WESTON Sample No.: SD-DR178-0000/-1000
EPA Sample No.: 98354000 / 4001
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins

Sampling Method: 0.1 m² van Veen
Proposed Location: Slip 4 (Head); Pacific Terminals
Split Collected? [X] Yes [ ] ~~No~~ DKH
BOEING

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates X W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
1	0813	9	473212	1221908	YES	16	BK-GY	SC/FSD	ST H_2S	NONE	SLIGHT PETROLEUM SHEEN
	—										

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: DR Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/24/98
Sampling Personnel: D. Hughes M. SHAW J SHANNON G THRASHER
Sampling Vessel: M/V Kyuluk
Subcontractor(s): —
Weather: OVERCAST

WESTON Sample No.: SD-DR179-0000
EPA Sample No.: 9835 4002
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Sampling Method: 0.1 m² van Veen
Proposed Location: Slip 4; Pacific Terminals
Split Collected? ☒ Yes ☐ No BOEING

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates X W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WQ2	1	0841		473211	1221907	NO	DEBRIS (WOOD) IN JAWS					
WQ3	2	0844		473211	1221907	NO	H_2O GRAB					
WQ4	3	0847		473211	1221907	NO	DIDN'T TRIP					
WQ5	4	0849		473211	1221907	NO	DIDN'T TRIP					
	5	0851	11	473211	1221907	YES	9	BK-GY	SX/FM SD	MOD H_2S	NONE	
WQ1												

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/24/98

Sampling Personnel: D. Hughes MSHAW/SHANNON & THRASHER
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: OVERCAST

WESTON Sample No.: SD-DR180-0000
EPA Sample No.: 98354004

Sampling Method: 0.1 m² van Veen
Proposed Location: Slip 4; Pacific Terminals

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☒ Yes ☐ No BOEING

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W10 1	0926		473207	1221909	NO—	INSUF PENET					
W11 2	0930		473207	1221909	NO—	ROCK IN JAWS					
W12 3	0932		473207	1221909	NO—	SHACKLES FOULED					
W13 4	0937		473207	1221909	NO—	DIDN'T TRIP					
14 5	0940		473207	1221909	NO—	~~DIDN'T~~ CHAINS FOULED					STEEP SLOPE
W15 6	0943		473207	1221910	NO—	H2O GRAB					COLLECTED ≈ 50' OFFSHORE
W16 7	0948	14	473206	1221910	NO—	INSUF PENET					MOVED ≈ 50' TOWARD MOUTH
W17 8	0952	727	473206	1221911	NO—	CHAINS FOULED					
W18 9	0955		473206	1221911	½	8					
W19 10	1005		473206	1221911	NO—	CHAINS FOULED					
W20 11	1007	727	473206	1221911	YES	10	BR-SURF GY-BK	SL/SD/CLAY	SL H2S	→	WOOD DEBRIS TUBEWORMS

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D B Hughes

WESTON MANAGERS DESIGNERS/CONSULTANTS

* SPLIT FOR BOEING * (SED) POREWATER

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (EAST) Sampling Personnel: D. Hughes M SHAW J SHANNON A LANCASTER

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 9/1/98 Weather: CLEAR

WESTON Sample No.: SD-DR181-0000 / PW-DR181-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98364025 / 98364038 Proposed Location: Slip 4 (central)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins (SED) Split Collected? ☒ Yes ☐ No BOEING

Metals; Organotins (PW)

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WQ1 1	1022	21	473207.69	1221911.05	NO—	OVERPENETRATED; REMOVED				WEIGHTS	FROM GRAB
WQ2 2	1053	23	473207.68	1221910.96	YES	15					
WQ3 3	1102	24	473207.75	1221911.04	YES	17	GY-BK	SC/F-SD	NONE	NONE	SMALL SHEEN DROPS - FEW - ⅛" DIAM
WQ4 4	1115	21	473207.68	1221911.03	YES	15	"	"	"	"	"

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: DR Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (EAST) | Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER

Project Location: Duwamish River, Seattle, WA | Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 | Subcontractor(s):

Date: 8/24/98 | Weather: OVERCAST

WESTON Sample No.: SD-DR182-0000 | Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98354005 | Proposed Location: Slip 4; Boeing Co.

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC | Split Collected? ☒ Yes ☐ No BOEING

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W21 1	1023	17	473205	1221912	1/2	7	BK-SURF GY-BK SUB	F-MSD/SC			
W23 2	1031		473206	1221911	NO –	ROCK IN JAWS					
W24 3	1038	18	473205	1221912	YES	15	BK-GY	F-MSD/SC	NONE	NONE	SMALL SHEEN DROPLETS (<1/4") – FEW

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (EAST) | Sampling Personnel: D. Hughes MSHAW JSHANNON & THRASHER

Project Location: Duwamish River, Seattle, WA | Sampling Vessel: M/V Kalluk

Project No.: 4000-019-038-5100 | Subcontractor(s):

Date: 8/24/98 | Weather: OVERCAST

WESTON Sample No.: SD-DR183-0000 | Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98354006 | Proposed Location: Mouth of Slip 4

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins; Dioxins | Split Collected? ☒ Yes ☐ No BOEING

CO-LOCATED SUBSURFACE SEDIMENT CORE STATION PROPOSED

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X/N	Coordinates Y/W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W25 1	1056	20	473203	1221917	NO –	INSUF PENET / 1/2 GRAB					
W26 2	1100		473204	1221916	NO –	H_2O GRAB					
W27 3	1106	25	473203	1221917	YES	9	BK-GY	F.M SD/SL	MOD H_2S	NONE	MOVED IN-LINE W/DOLPHINS & MOORING

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

WESTON MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/19/98
Sampling Personnel: D. Hughes M SHAW J SHANNON L VANSELOW
Sampling Vessel: M/V Kaluk
Subcontractor(s):
Weather: CLEAR/WINDY

WESTON Sample No.: SD-DR04-0000
EPA Sample No.: 98344066
Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Jorgensen Forge
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
WQ1 1	1327		473136	1221833	NO —	DIDN'T TRIP					
WQ2 2	1330	20	473130	1221833	YES	13	GY-GR	SC/FSD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/19/90 / 8/27/98
Sampling Personnel: D. Hughes M SHAW J SHANNON L JANSEN G THRASHER
Sampling Vessel: M/V Kuluk or
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR219-0185-0000
EPA Sample No.: ~~98344064~~ 98354073
Sampling Method: 0.1 m² van Veen
Proposed Location: ~~Shotsabridge~~, Jurgensen Forge Intertidal
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth ~~to~~ Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W05 1	1345	23	473134	1221832	NO — ½ EMPTY						
W06 2	1350	25	473135	1221833	NO — ½ EMPTY						
			TEMP ABANDON STATION - TIDE: WIND TOO STRONG								
8/27 W32 1	1041	17	473132	1221832	YES	17	GY-GR	SC/FSD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: DR Hughes

WESTON MANAGERS DESIGNERS/CONSULTANTS

~~* DUPLICATE~~

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (EAST)
Sampling Personnel: D. Hughes M SHAW J SHANNON LVANSDON
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kaluk
Project No.: 4000-019-038-5100
Subcontractor(s):
Date: 8/19/98 / 8/27/98
Weather: CLEAR / WINDY

WESTON Sample No.: SD-DR18~~5~~6-0000/-1000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: ~~98340107/4068~~ 98354072/
Proposed Location: Intertidal; ~~Jayensen Forge~~ Boeing Co.; Isaacson
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; ~~Dst~~; Organotins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			~~X~~ N	~~X~~ W							
8/19 W03 1	1340		473135	1221832	NO-	DIDN'T TRIP					
W04 2	1341		473134	1221832	NO -	DIDN T TRIP					
			TEMPORARILY ABANDON STATION								
8/27 W30 1	1029	13	473132	1221630	YES	7	BR. BK	F-MSD/SC	NONE	NONE	
	*	DUPLICATE	DROPPED/INSUF SED VOLUME								

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: DRHug

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH 6 (EAST) Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/25/98 / 8/27/98 Weather: CLEAR

WESTON Sample No.: SD-DR187-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98354070 Proposed Location: Intertidal; 1522csm CSO/SD

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins; Dioxins Split Collected? ☐ Yes ☒ No

CO-LOCATED SUBSURFACE SEDIMENT CORE STATION PROPOSED

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	Y W							
1	DIDN'T	COLLECT	IN 8/25;	WENT	AGROUND						
1	0954	11	473127	1221828	YES	7	GY-BR	F-CSD/SL	NONE	NONE	MILKY FILMON H_2O ADJACENT TO OUTFALL

W24 8/27 W24

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

EJ

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/25/98
Sampling Personnel: D. Hughes M SHAW T SHANNON B THRASHER
Sampling Vessel: M/V Kaluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR188-0000
EPA Sample No.: 98254029
Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Boeing Co. (Thompson)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W19 1	1134	7	473123	1221827	NO — H_2O		GRAB				
W20 2	1136	7	473123	1221827	YES	17	GR-GY	SY/F-SD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST) Sampling Personnel: D. Hughes M SHAW J SHANNON

Project Location: Duwamish River, Seattle, WA Sampling Vessel: ~~MV Kulak~~ 2Y

Project No.: 4000-019-038-5100 Subcontractor(s): MULLINS

Date: 9/14/98 Weather: CLEAR

WESTON Sample No.: SD-DR189-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 9838.4005 Proposed Location: Intertidal; Hulen Construction Co.

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W17 1	1145	9	473211.20	1221938.13	YES	~~BR~~ GR	12	SC/FSD	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH 6 (WEST) Sampling Personnel: D. Hughes N SHAW JSHANNON KTAYLOR

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/13/98 Weather: CLEAR

WESTON Sample No.: SD-DR190-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98334055 Proposed Location: Intertidal; Wilkins

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC [VOCs; Pest; Organotins; Dioxins] Split Collected? ☐ Yes ☒ No

↳ INADVERTANTLY MISSED; ADDED TO DR221

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YN							
N36 1	1330	10	1732.08	122.1933	YES	15	GY-BR	SC F-M SD	MODH2S	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/13/98
Sampling Personnel: D. Hughes M SHAW J SHANNON K TATTOM
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR / WINDY

WESTON Sample No.: SD-DR191-0000
EPA Sample No.: 98334061
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Hurlen Const. Co.
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
WA7 1	1498	13	473206	1221929	YES	14	GY-GR	SD-SC	SL-MOD H_2S	NONE	SHEEN ON SED (SLIGHT)

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D B Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/13/98
Sampling Personnel: D. Hughes M SHAW J SHANNON K TAYLOR
Sampling Vessel: M/V Kuuk Jr.
Subcontractor(s): —
Weather: CLEAR/ WINDY

WESTON Sample No.: SD-DR192-0000
EPA Sample No.: 98334057
Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Hulen Construction
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins
Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates X	Coordinates Y	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W38	1	1354		473203	1221925	NO -	LOG IN	JAWS				
W39	2	1357		473203	1221924	NO -	~~WOOD~~	ROCK IN	JAWS			
W40	3	1400		473203	1221925	NO -	DIDN'T	TRIP				
W41	4	1402	14	473203	1221925	YES	10	GY-GR	SC F. MSD	MOD H2S	NONE	MOVED SLIGHTLY OFFSHORE

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST)
Sampling Personnel: D. Hughes M SHAW J SHANNON K TAHIGHI
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/13/98
Weather: CLEAR/WINDY

WESTON Sample No.: SD-DR193-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98334059
Proposed Location: Intertidal; METRO
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates XW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W43	1	1426		473201	1221921	NO –	DIDN'T TRIP					
W44	2	1427		473201	1221921	NO –	WASHOUT					
W45	3	1432	18	473201	1221920	8	YES	GR-GY	FSD/SC	MOD H_2S	NONE	MOVED SLIGHTLY FARTHER OFFSHORE

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST) Sampling Personnel: D. Hughes M SHAW J SHANNON A REAK

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/20/98 Weather: CLEAR

WESTON Sample No.: SD-DR194-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98344086 Proposed Location: Intertidal; Silver Bay Logging - Marine Div.

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
WQ1 1	1302		473159	1221917	NO —	DIDN'T TRIP					
WQ2 2	1303	22	473159	1221917	YES	17	GY-GR	SC/FSD	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST) Sampling Personnel: D. Hughes M SHAW J SHANNON & PEAK

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/20/98 Weather: CLEAR

WESTON Sample No.: SD-DR195-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98344089 Proposed Location: Intertidal; Silver Bay Logging - Marine Div.

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
WQ4 1	1319	10	~~5~~473156	1221914	YES	12	BR	F-C SD/SL	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/20/98
Sampling Personnel: D. Hughes M SHAW T SHANNON A. REAK
Sampling Vessel: M/V Koluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR196-0000
EPA Sample No.: 98344090
Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; City of Seattle
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X	Coordinates Y	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WQ5 1	1326		473155	1221911	NO	— EMPTY EXCEPT FOR ROOF SHINGLE					
WQ6 2	1328	9	473155	1221911	YES	16	BR	F-C SD/GR	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/20/98
Sampling Personnel: D. Hughes MSHAW J SHANNON A REAK
Sampling Vessel: M/V Kiniuk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR197-0000
EPA Sample No.: 98344092
Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; City of Seattle / Port of Seattle
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

POTENTIAL UPPER INTERTIDAL STATION

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
WQ8 1	1345	7	173153	1221909	YES	8	BR	FM SD/SL	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: DR Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST) | Sampling Personnel: D. Hughes M SHAW J CHANNON A LEAK

Project Location: Duwamish River, Seattle, WA | Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 | Subcontractor(s):

Date: 8/20/98 | Weather: CLEAR

WESTON Sample No.: SD-DR198-0000 | Sampling Method: 0.1 m² van Veen

EPA Sample No.: 9834094 | Proposed Location: Intertidal; T. Long (Residential)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC | Split Collected? ☐ Yes ☒ No

POTENTIAL UPPER INTERTIDAL STATION

Grab #	Time	Depth to Sed. (ft/m)	Coordinates Y N	Coordinates Y W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WIP 1	1404	6	~~473153~~ 473152	~~1221907~~ 1221907	YES	10	BR-GY-BK	F-CSD/SC	NONE	NONE	
/											

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST) Sampling Personnel: D. Hughes M SHAW J SHANNON A REAK

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s):

Date: 8/20/98 Weather: CLEAR

WESTON Sample No.: SD-DR199-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98344095 Proposed Location: Intertidal; T. Lang (Reidcentral)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins Split Collected? ☐ Yes ☒ No

POTENTIAL UPPER INTERTIDAL STATION

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
W11 1	1412	9	473151	1221905	YES	11	GY-GR	SC/FMSD	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/20/98
Sampling Personnel: D. Hughes MSHAW T SHANNON A REAL
Sampling Vessel: M/V Koluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR200-0000
EPA Sample No.: 98344096
Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Residential
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

POTENTIAL UPPER INTERTIDAL STATION

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X/N	Coordinates Y/W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W12 1	1420		473150	1221902	NO -	BRICK	IN JAWS				
W13 2	1422	9	473150	1221902	YES	13	GR-GY	F-MSD/SC	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D B Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

GTHRASHER

Project Name: Duwamish River SI REACH C (WEST)
Sampling Personnel: D. Hughes M SHAW T SHANNON A ~~REAK~~

Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100
Subcontractor(s): —

Date: ~~8/20/98~~ 8/27/98
Weather: CLEAR

WESTON Sample No.: SD-DR201-0000
Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98354004
Proposed Location: Intertidal; Marsden (Residential)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

POTENTIAL UPPER INTERTIDAL STATION

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WP1	1	0758		473148	1221901	NO —	H_2O	GRAB				
WP2	2	0759	13	473148	1221900	NO —	WASHOUT					
WP3	3	0801	13	473148	1221901	YES	13	DR-6Y	F-MSD/SC	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST) | Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER

Project Location: Duwamish River, Seattle, WA | Sampling Vessel: M/V Kiliuk

Project No.: 4000-019-038-5100 | Subcontractor(s): —

Date: 8/27/98 | Weather: CLEAR

WESTON Sample No.: SD-DR202-0000 | Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98354015 81 | Proposed Location: Intertidal; Templeton (Residential)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC | Split Collected? ☐ Yes ☒ No

POTENTIAL UPPER INTERTIDAL STATION

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WQ4	1	0808	10	473147	1221858	NO	— H_2O GRAB					
WQ5	2	0810		473147	1221858	NO	— GRAB NOT SEALED					
WQ6	3	0812		473147	1221858	NO	— WASHED OUT					
WQ7	4	0816	18	473147	1221857	YES	8 — *					MOVED FARTHER OFFSHORE
			*BASED ON MOVING OFFSHORE → STATION = DR226									
			*STATION DR202 ABANDONED — CAN'T GET SAMPLE - RETURN W/ WEIGHTS ON VANVEEN									
WQ8	1	1336	7	473149	1221902	YES	9	BR-GY	F.CSD/SL	NONE	MOD WOOD FRAGS IN JAWS (NATURAL DEBRIS)	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D B Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST) Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 9/27/98 Weather: CLEAR

WESTON Sample No.: SD-DR203-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 9935406 Proposed Location: Intertidal; HMH LLC

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins; Dioxins Split Collected? ☐ Yes ☒ No

POTENTIAL UPPER INTERTIDAL STATION

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	Y W							
WP8 1	0823	11	473146	1221855	YES	7	GREY	F-MSD/SL	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH 2 (WEST) Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s):

Date: 8/27/98 Weather: CLEAR

WESTON Sample No.: SD-DR204-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98354007-80 Proposed Location: Intertidal; Moberg (Residential)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

POTENTIAL UPPER INTERTIDAL STATION

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YN							
WQ9 1	0832	10	473145	1221854	NO	WASHOUT					
W10 2	0834	8	473145	1221854	NO	EMPTY; ROCK IN JAWS					
W11 3	0835	11	473145	1221854	NO	INSUF PENETRATION (1/8 GRAB)					
W12 4	0838	14	473145	1221854	NO	WASHOUT; ROCK IN JAWS					MOVED FARTHER OFFSHORE
W13 5	0840	13	473145	1221854	NO	INSUF PENETRATION; ROCKS/GRAVEL					NO.
W14 6	0844	19	473144	1221852	NO	MUD/ROCKS IN JAWS					MOVED UPCHANNEL ≈50 YARDS
W15 7	0846	17	473144	1221852	NO	INSUF PENETRATION					
	TEMPORARILY ABANDON STATION; RETURN LATER W/ MORE WEIGHT ON GRAB										
WQ7 1	1326	7	473145	1221854	YES	13	BR	F-MSD/SL	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST)
Sampling Personnel: D. Hughes J SHANNON MSHAW & THRASHER
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/27/98
Weather: CLEAR

WESTON Sample No.: SD-DR205-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98354078
Proposed Location: Intertidal; South Park Marina
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WQ4 1	1306	11	473142	1221849	NO	DIDN'T TRIP					
WQ5 2	1308	11	473142	1221849	YES	12	BR-SHEF GY-GR	SC/FSD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST) | Sampling Personnel: D. Hughes M SHAW T SHANNON G THRASHER

Project Location: Duwamish River, Seattle, WA | Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 | Subcontractor(s): —

Date: 9/27/98 | Weather: CLEAR

WESTON Sample No.: SD-DR06-0000 | Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98354077 | Proposed Location: Intertidal; Duwamish Mfg Q / S. Park Marina

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC ; VOCs ; Pest; Organotins ; Dioxins | Split Collected? ☐ Yes ☒ No

CO-LOCATED SUBSURFACE SEDIMENT CORE STATION PROPOSED

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
WQ1 1	1248	14	473137	1221839	NO — DIDN'T TRIP						
WQ2 2	1249	13	473137	1221839	NO — DIDN'T TRIP						
WQ3 3	1251	13	473137	1221839	YES	13	BK-GY	F-M SD/SC	MOD H2S	MOD WOOD (FIBROUS/STICKS)	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST) Sampling Personnel: D. Hughes M Shaw JShannon G Thrasher

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kanuk

Project No.: 4000-019-038-5100 Subcontractor(s):

Date: 8/27/98 Weather: CLEAR

WESTON Sample No.: SD-DR207-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98354076 Proposed Location: Intertidal; Duwamish Mfctg.

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W38 1	1120	10	473136	1221838	YES	9	BR-GY	F-CSD/SC	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST) Sampling Personnel: D. Hughes MSHAN J SHANNON G THEASTER

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s):

Date: 8/27/98 Weather: CLEAR

WESTON Sample No.: SD-DR208-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 9835.4074 Proposed Location: Intertidal; Duwamish Mfg. / Boeing (S. Park)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
				XN	YW							
W33	1	1054	8	473132	1221835	NO —	INSUF PENETRATION					
W34	2	1057	10	473132	1221835	NO —	INSUF PENETRATION					
W35	3	1059	12	473132	1221835	NO —	DIDN'T TRIP					
W36	4	1100	12	473133	1221835	YES	11	BR-GY	F-C SD/SL	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: DB Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST) Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s):

Date: 8/27/98 Weather: CLEAR

WESTON Sample No.: SD-DR209-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98054071 Proposed Location: Intermdt; Boeing (South Park)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W25 1	1004	3	473129	1221834	NO — INSUF PENETRATION						
W26 2	1008	5	473129	1221834	NO — INSUF PENETRATION						
	VAN VEEN ONLY ½ WEIGHTED; ADD 2 OTHER WEIGHTS BACK ON										
W27 3	1020		473130	1221834	NO — DIDN'T TRIP						
W28 4	1021	9	473130	1221834	YES	7	BR	M-CSD/SL	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH 1 (WEST) | Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER
Project Location: Duwamish River, Seattle, WA | Sampling Vessel: M/V Kaluk
Project No.: 4000-019-038-5100 | Subcontractor(s): —
Date: 8/25/98 | Weather: CLEAR

WESTON Sample No.: SD-DR210-0000 | Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98354031 | Proposed Location: Intertidal; Boeing (South Bnk)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins | Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/hg)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
122 1	1157	9	473126	1221832	YES	10	BR-GY	F-MSD/SC	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D B Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST) | Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER

Project Location: Duwamish River, Seattle, WA | Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 | Subcontractor(s):

Date: 8/25/98 | Weather: CLEAR

WESTON Sample No.: SD-DR211-0000 | Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98354030 | Proposed Location: Intertidal; Boeing (South Park)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC | Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			N	W							
W21 1	1148	NA	473124	1221832	YES	14	BR-GY	F.MSD/SL	SL. H_2S	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D B Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH 1 (EAST) | Sampling Personnel: D. Hughes M SHAW J SHANNON A KREAK

Project Location: Duwamish River, Seattle, WA | Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 | Subcontractor(s):

Date: 8/20/98 | Weather: CLEAR

WESTON Sample No.: SD-DR212-0000 | Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98344084 | Proposed Location: Shal Subtidal; Puget Sound Track Lines

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC | Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
W24 1	1140	10	473209	1221928	YES	8	GY-GR	F-M SD/SC	SL H_2S	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D B Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/20/98

Sampling Personnel: D. Hughes M SHAW J SHANNON A REAK
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR213-0000
EPA Sample No.: 98344085
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Shal Subtidal; Seattle Parks / Slip 4
Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates X W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W25	1	1149		473207	1221924	NO –	DIDN'T TRIP					
W26	2	1150		473207	1221924	NO –	DIDN'T TRIP					
W27	3	1151	9	473206	1221924	YES	16	GY-GR	F.M SD/SL	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: DR/dy

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/19/98
Sampling Personnel: D. Hughes M SHAW J SHANNON
Sampling Vessel: M/V Kulluk or
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR214-0000
EPA Sample No.: 98344062
Sampling Method: 0.1 m² van Veen
Proposed Location: Shal Subtidal; Boeing Co. (Plant 2)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
W22 1	1137	19	473159	1221914	YES	11	GR-GY	FSD/SC	SL H2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (EAST) Sampling Personnel: D. Hughes MSHAW JSHANNON

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 9/19/98 Weather: CLEAR

WESTON Sample No.: SD-DR215-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98344003 Proposed Location: Shallow Subtidal; Boeing Co. (Plant 2)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
W23 1	1145	13	473155	1221905	NO-D	DNT	TRIP				
W24 2	1148	NA	473154	1221904	YES	16	GR-GY	FSD/SC	SL H_2S	NONE	
	~~TEMP ABANDON STATION — TIDE & WIND TOO STRONG~~										

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (EAST)
Sampling Personnel: D. Hughes M SHAW I SHANNON A REAK
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kaluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/19/98 / 8/20/98
Weather: CLEAR / WINDY

WESTON Sample No.: SD-DR216-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: ~~98344064~~ 98344099
Proposed Location: Shal Subtidal; Boeing Co. (Plant 2)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X/N	Coordinates X/W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
8/19 W25 1	1204	19	473149	1221857	NO-	DIDN'T TRIP					
W26 2	1205		473149	1221856	NO-	DIDN'T TRIP					
W27 3	1206		473149	1221855	NO-	CHAINS FOULED					
W28 4	1210		473149	1221855	NO-	DIDN'T TRIP					
5	1214	13	473149	1221855	NO-	INSUF PENET					
W30 6	1218		473149	1221856	NO-	CHAINS FOULED					
		TEMPORARILY ABANDON STATION - FLOOD TIDE/CURRENT, & WIND									
		TOO STRONG TO GET ACCEPTABLE GRAB									
8/20 W29 1	1505	NA	473149	1221856	YES	14	BL-BY/BL	FSD/SL	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (EAST) Sampling Personnel: D. Hughes M SHAW J SHANNON

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/19/98 Weather: CLEAR

WESTON Sample No.: SD-DR217-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 9834 4065 Proposed Location: Shallow Subtidal; Boeing Co. (Plant 2)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W31 1	1224	13	473144	1221846	YES	10	BR-GY	F SD/SL	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (EAST) Sampling Personnel: D. Hughes M SHAW J SHANNON

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/19/98 Weather: CLEAR

WESTON Sample No.: SD-DR218-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98344064 Proposed Location: Shal Subtidal; boeing (o. (Plant 2)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			N	W							
W32 1	1235		473139	1221838	NO→D	DN'T	TRIP				
W33 2	1236	NA	473139	1221839	YES	12	GY-GR	FSD/SC	SL H2S	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/14/98

Sampling Personnel: D. Hughes M SHAW J SHANNON
Sampling Vessel: ~~MAY KATHY~~
Subcontractor(s): MULLINS
Weather: CLEAR

WESTON Sample No.: SD-DR219-0000
EPA Sample No.: 98384007

Sampling Method: 0.1 m^2 van Veen
Proposed Location: Shoal Subtidal; Jorgensen Forge

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
W19 1	1343	21	473132.32	1221831.38	YES	16	GY-GR	F-SD/SL	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/25/98
Sampling Personnel: D. Hughes M SHAW J SHANNON & THEA & HEK
Sampling Vessel: M/V Kuluk or
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR220-0000
EPA Sample No.: 98354033
Sampling Method: 0.1 m² van Veen
Proposed Location: Shoal Subtidal; Isaacson CSO/SD
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
W2A 1	1216	17	473126	1221829	YES	13	BR-GY	FM SD/SC	SL H_2S	NONE	—

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST) | Sampling Personnel: D. Hughes M SHAW J SHANNON K TANNOTT
Project Location: Duwamish River, Seattle, WA | Sampling Vessel: M/V Kyluk
Project No.: 4000-019-038-5100 | Subcontractor(s): —
Date: 8/13/98 | Weather: CLEAR

WESTON Sample No.: SD-DR221-0000 | Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98334056 | Proposed Location: Shal Subtidal; Hwlcn
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins; Dioxins | Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W37 1	1340	19	473208	1221931	17 YES		GY GR	SC F-M SD	MOD H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/13/98
Sampling Personnel: D. Hughes M SHAW J SHANN K JANSEN
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR/WINDY

WESTON Sample No.: SD-DR222-0000
EPA Sample No.: 98334058
Sampling Method: 0.1 m² van Veen
Proposed Location: Shal Subtidal; Harlem Const.
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WA2 1	1413	13	473202	1221923	YES	11	GR GY	F-SD-SC	MOD H_2S	TRACE ROOTS	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D K Hughes

WESTON MANAGERS DESIGNERS/CONSULTANTS

* DUPLICATE

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI (REACH C LWEST) Sampling Personnel: D. Hughes M SHAW J SHANNON A REAK

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk or

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/20/98 Weather: CLEAR

WESTON Sample No.: SD-DR223-0000/-1000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98344087 / 4088 Proposed Location: Shm Subtidal; Silver Bay - Marine Div.

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
WA3 1	1311	26	473158	1221914	Y	10	GY-GR	F-SD/GL	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/20/98

Sampling Personnel: D. Hughes M SHAW J SHANNON A REAK
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR22A-0000
EPA Sample No.: 98344091

Sampling Method: 0.1 m² van Veen
Proposed Location: Shal Subtidal / City of Seattle / Port of Seattle

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins; Dioxins
Split Collected? ☐ Yes ☒ No

CO-LOCATED SUBSURFACE SEDIMENT CORE STATION PROPOSED

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WQ1 1	1335	15	473154	1221909	YES	15	BK-BK	F>D/SC	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST) | Sampling Personnel: D. Hughes M SHAW J SHANNON A CLARK

Project Location: Duwamish River, Seattle, WA | Sampling Vessel: M/V Kaluk

Project No.: 4000-019-038-5100 | Subcontractor(s): —

Date: 8/20/98 | Weather: CLEAR

WESTON Sample No.: SD-DR225-0000 | Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98344093 | Proposed Location: Shal Subtidal; PNA of Seattle

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC | Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WQ9 1	1354	19	473153	1224907	YES	10	BK-GY	F SD/SC	SL H_2S	NONE	SLIGHT SHEEN ON SED SURF

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/27/90
Sampling Personnel: D. Hughes M SHAW J SHANNON O THRASHER
Sampling Vessel: M/V Kiluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR226-0000
EPA Sample No.: 98354065
Sampling Method: 0.1 m² van Veen
Proposed Location: Shoal Subtidal; Residential
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YN							
1	0816	18	473147	1221857	YES	0	GR-GY	F MSD/SL	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D. Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/27/98

Sampling Personnel: D. Hughes M SHAW J SHANNON & THRASHER
Sampling Vessel: M/V Kaluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR227-0000
EPA Sample No.: 98354079

Sampling Method: 0.1 m² van Veen
Proposed Location: Shal Subtidal; South Park Marina

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	Y W							
WQ6 1	1316	11	473143	1221849	YES	15	GY-BR	SC/F-SD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D A Hughes

POREWATER

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST)
Sampling Personnel: D. Hughes MSHAW J SHANNON A LANCASTER
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kaluk
Project No.: 4000-019-038-5100
Subcontractor(s):
Date: 9/1/98
Weather: CLEAR

WESTON Sample No.: SD-DR228-0000/PW-DR228-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98364027/98364040
Proposed Location: Shal Subtidal; South Park Marina
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins (SED)
Metals; Organotins (PW)
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WΦ1 1	1009		473140.81	1221844.75	NO — OVERPENETRATED						
	TEMP ABANDON — RETURN LATER W/FEWER WEIGHTS ON VAN VEEN										
WΦ1 1	1405		473140.92	1221844.80	YES	17	GY-BK	SC/F-SD	NONE	NONE	
WΦ2 2	1416		473140.94	1221844.91	YES	17	GY-BK	"	"	"	STRONG-MOD-OIL SURFACE

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/27/98

Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER
Sampling Vessel: M/V Kaluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR229-0000
EPA Sample No.: 99354075
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Shal Subtidal; Duwamish Mfg
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W37 1	1110	26	473137	1221837	YES	15	GY-BK	F-SD/SC	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/25/98
Sampling Personnel: D. Hughes M SHAW T SHANNON G THRASHER
Sampling Vessel: M/V Kuluk or
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR230-0000
EPA Sample No.: 98354032
Sampling Method: 0.1 m² van Veen
Proposed Location: Shal Subtidal; Boeing Co. (South Park)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates Y W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W23 1	1207	20	473127	1221831	YES	11	GY-BK	SC/FSD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/13/98

Sampling Personnel: D. Hughes M SHAW J SHANNON K TAMASHI
Sampling Vessel: M/V Kaluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR231-0000
EPA Sample No.: 98334054

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Hunters

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates XW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W35 1	1321	27	473212	1221936	YES	17	GY-GR	SC F-M SD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C.
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/13/98

Sampling Personnel: D. Hughes M SHAW J SHANNON K TAHIGAN
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR/WINDY

WESTON Sample No.: SD-DR232-0000
EPA Sample No.: 98334060

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Slip 4

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins

Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
				~~Y~~ N	~~Y~~ W							
W46	1	1440	24	473202	1221920	YES	11	GR-GY	F-SD/SC	MOD H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D K Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/18/98

Sampling Personnel: D. Hughes M SHAW J SHANNON L VAN SCOW
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR/WINDY

WESTON Sample No.: SD-DR233-0000
EPA Sample No.: 98344060
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Boeing (Plant 2)/Residential
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates Y W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W10 1	1416	NA	473151	1221902	YES	16	GY-GR	F-MSD/SC	SLH2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/19/98

Sampling Personnel: D. Hughes M SHAW J SHANNON L WINSLOW
Sampling Vessel: M/V Kuluk
Subcontractor(s):
Weather: CLEAR/WINDY

WESTON Sample No.: SD-DR234-0000
EPA Sample No.: 98344067

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; South Park Marina/Boeing (Pl. 2)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates XW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WQ7 1	1400	27	473143	1221847	NO - D	DN'T	TRIP				
WQ8 2	1403		473143	1221847	NO - D	DN'T	TRIP				
WQ9 3	1406	NA	473143	1221847	YES	13	BR-GY	F. M SD/SL	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH C
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/26/98

Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: MOSTLY CLEAR

WESTON Sample No.: SD-DR235-0000
EPA Sample No.: 98354063

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Boeing (South Park/Thompson)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			Y/N	Y/W							
W48 1	1500	19	473130	1221832	YES	16	GY-BK	SC/FSD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (EAST)
Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kaluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/25/98 / 8/27/98
Weather: CLEAR

WESTON Sample No.: SD-DR236-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: ~~98354070~~ 98354069
Proposed Location: Intertidal; Kenworth Motor
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates XW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
8/25 W12 1	1020	9	473120	1221825	NO —	INSUF PENETRATION / ½ GRAB					
W13 2	1023	8	473120	1221825	NO —	(DITTO)					MAY BE ON SLOPE
W14 3	1027	7	473120	1221825	NO	— ROCKS IN JAWS					
W15 4	1030		473119	1221825	NO —	¼ GRAB					MOVED SLIGHTLY UP-RIVER (~75')
	TEMPORARILY ABANDON - WEIGHTS NOT ON VAN VEEN; MAY BE INSUF WEIGHT										
8/27 W23 1	0943	10	473120	1221825	YES	7	BR-GY	F-C SD/SL	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/25/90

Sampling Personnel: D. Hughes M SHAW T SHANNON G THRASHER
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-D0237-0000
EPA Sample No.: 98354025

Sampling Method: 0.1 m^2 van Veen
Proposed Location: Intertidal; Kenworth Motor

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W1Φ 1	1001	12	473116	1221823	YES	11	BR-GR	FMSD/SC	M-H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH 0 (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/27/98
Sampling Personnel: D. Hughes M SHAW. J SHANNON G THRASHER
Sampling Vessel: M/V Kuluk
Subcontractor(s): ——
Weather: CLEAR

WESTON Sample No.: SD-DR238-0000
EPA Sample No.: 48354067
Sampling Method: 0.1 m² van Veen
Proposed Location: Intermd 1, Rhone-Poulenc
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins; Dioxins
Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
				X N	X W							
W16	1	0858	2	473113	1221820	NO—	DIDN'T TRIP					
W17	2	0859	2	473113	1221820	NO—	INSUF PENET					
W18	3	0902	4	473113	1221821	YES	8	GY-GR	F-MSD/SL	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (EAST)
Sampling Personnel: D. Hughes MSHAW J SHANNON & THRASHER
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kaluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/27/98
Weather: CLEAR

WESTON Sample No.: SD-DR239-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98354068
Proposed Location: Intertidal; Rhone Poulenc
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
W19 1	0914		473110	1221819	NO—	WOODY DEBRIS (STICKS) IN JAWS; NOT SEALED					
W20 2	0916	2	473110	1221819	NO—	INSUF PENETRATION					
W21 3	0918		473110	1221820	NO—	INSUF PENETRATION					
W22 4	0921	8	473110	1221820	YES	10	BR-SURF BK/GY	F-M SD/SL	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

WESTON MANAGERS DESIGNERS/CONSULTANTS

* ~~DUPLICATE~~

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/24/98

Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER
Sampling Vessel: M/V Kuluk
Subcontractor(s):
Weather: OVERCAST

WESTON Sample No.: SD-DR24Y-0000/~~1000~~
EPA Sample No.: 98354011

Sampling Method: 0.1 m² van Veen
Proposed Location: Slip 6 (~~Head~~) (North); Rhone Poulenc

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; ~~dioxin; Pest; Organotins~~

Split Collected? [X] Yes ☐ No BOEING

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W32 1	1221	14	473108	1221815	YES	+3	BR-SURF GY-GR	SL/F-SD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (EAST)
Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/24/98
Weather: NE/CAST

WESTON Sample No.: SD-DR241-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98354008 9
Proposed Location: Slip 6 (North); Rhone Poulenc
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☒ Yes ☐ No BOEING

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W30 1	1159	16	473110	1221810	YES	12	BK-GY	SC/F-SD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

WESTON MANAGERS DESIGNERS/CONSULTANTS

* DUPLICATE

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (EAST)
Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/24/98
Weather: OVERCAST

WESTON Sample No.: SD-DR2[illegible]-0000/-1000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98354007 / 4008
Proposed Location: Slip 6 (North) Pharo Pontoon Head
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC VOC Pest Organotins
Split Collected? ☒ Yes ☐ No BOEING

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates XW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W28 1	1132	19	473110	1221810	—	RE-SAMPLE / DIFFERENTIAL CORRECTION LOST POWER					
W29 2	1136	18	473109	1221808	YES	13	BK-GY	SD/SC	SLH2S	NONE	
			~~473110~~								

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (EAST)
Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100
Subcontractor(s):
Date: 8/24/98
Weather: OVERCAST

WESTON Sample No.: SD-DR243-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98354010
Proposed Location: Slip 6 (South); Boeing Duwamish Center
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☒ Yes ☐ No BOEING

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	Y W							
W31 1	1211	16	473108	1221810	YES	13	BR-SURF GY-GR	SC/FSD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

WESTON MANAGERS DESIGNERS/CONSULTANTS

*SPLIT FOR BOEING (SED)

POREWATER

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/1/98

Sampling Personnel: D. Hughes M SHEAN J SHANNON A LANCASTER
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR244-0000 / PW-DR244-0000
EPA Sample No.: 98364024 / 98364037
Sampling Method: 0.1 m² van Veen
Proposed Location: Slip 6 (center)
Analyses: SED = Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins
PW = Metals; Organotins
Split Collected? ☒ Yes ☐ No BOEING

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
WQ1 1	0828	NA	473108.73	1221812.20	YES	15	GY BR/BK	SC/F SD	NONE	NONE	
WQ2 2	0841	20	473108.81	1221812.25	YES	14	"	"	"	"	
WQ3 5	0854	18	473108.71	1221812.18	YES	13	"	"	"	"	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/24/98
Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER
Sampling Vessel: M/V Kuluk
Subcontractor(s):
Weather: OVERCAST

WESTON Sample No.: SD-DR245-0000
EPA Sample No.: 98354012
Sampling Method: 0.1 m² van Veen
Proposed Location: Slip 6 (South); Boeing Developm Center
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☒ Yes ☐ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W33 1	1234	14	473106	1221015	YES	13	GR-BY	SC/F-SD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

WESTON MANAGERS DESIGNERS CONSULTANTS

* SPLIT FOR BOEING

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (EAST)
Sampling Personnel: D. Hughes M SHAW J SHANNON G THEALHEIMER
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100
Subcontractor(s):
Date: 8/24/98 / 8/31/98
Weather: OVERCAST / PART SUNNY

WESTON Sample No.: SD-DR246-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: ~~98354018~~ 98364018
Proposed Location: Slip 6 (Mouth)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins; Dioxins
Split Collected? ☒ Yes ☐ No BOEING

CO-LOCATED SUBSURFACE SEDIMENT CORE STATION PROPOSED

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	Y W							
8/24 W34	1	1246		473107	1221819	NO -	OVERPENETRATION				
W35	2	1252	9	473107	1221819	NO -	OVERPENETRATION				
W36	3	1258	8	473107	1221819	NO -	OVERPENETRATION				
				TEMP ABANDON	STATION - RETURN	AT LATER	DATE				
				W/ LESS	WEIGHT	ON VAN VEEN					
W41	1	1308		473106	1221818	NO -	OVERPENETRATION				
W42	2	1311		473106	1221818	YES	17	GY-GR	SC/F-SD	NONE	NONE

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REDHD (EAST) Sampling Personnel: D. Hughes M SHAW J SHANNON ~~OTHERS~~

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 Subcontractor(s):

Date: 8/26/98 Weather: CLEARING / PART CLOUDY

WESTON Sample No.: SD-DR247-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98354059 Proposed Location: Intertidal; Boeing Develop Center

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
WQ2 1	1413	7	473103	1221818	YES	17	GR-GY	FSD/SC	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D. Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/26/98
Sampling Personnel: D. Hughes MSUAN J SHANNON & THRASHER
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: PART CLOUDY

WESTON Sample No.: SD-DR248-0000
EPA Sample No.: 98354058
Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal, Boeing Developt Center
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			Y/N	Y/W							
WQ1 1	1405	9	473101	1221817	YES	17	GR-GY	SC/SD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (EAST) | Sampling Personnel: D. Hughes N SHAW J SHANNON G THRASHER

Project Location: Duwamish River, Seattle, WA | Sampling Vessel: M/V Kuluk

Project No.: 4000-019-038-5100 | Subcontractor(s): —

Date: 8/26/98 | Weather: CLEAR

WESTON Sample No.: SD-DR249-0000 | Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98354.052 | Proposed Location: Intermdal; City Light

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins | Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WQU 1	1207	9	473056	1221817	YES	11	GY-GR	SC/F SD	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D B Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/26/98
Sampling Personnel: D. Hughes M SHAW J SHANNON C THRASHER
Sampling Vessel: M/V Kuluk
Subcontractor(s):
Weather: OVERCAST

WESTON Sample No.: SD-DR250-0000
EPA Sample No.: 98354050
Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Boeing Duwlop Center
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WQ3 1	1144	≈8.10	473052	1221814	YES	9	BRGY	F-MSD/SC	SL H2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D A Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/26/98

Sampling Personnel: D. Hughes M SHAW J SHANNON & TH ASHME
Sampling Vessel: M/V Kaluk
Subcontractor(s):
Weather: OVERCAST

WESTON Sample No.: SD-DR-251-0000
EPA Sample No.: 98354043

Sampling Method: 0.1 m² van Veen
Proposed Location: Interurban; Boeing Developer Center

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC ; Organotins

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates Y W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W16 1	0944	10	473051	1221814	YES	9	GY-BR	FSD/SC	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/26/98

Sampling Personnel: D. Hughes M SHAW J SHANNON B THRASHER
Sampling Vessel: M/V Kaluk
Subcontractor(s): —
Weather: OVERCAST

WESTON Sample No.: SD-DR252-0000
EPA Sample No.: 98354038

Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Boeing Develop Center

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X/N	Coordinates Y/W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WQ9 1	0901	18	473046	1221810	NO	DIDN'T TRIP					
WQ4 2	0904	13	473047	1221810	YES	11	GY-BR	F-M-C SD/SL	NONE	NONE	TRACE SHEEN DROPS (< ¼" DIAM)

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH 2 (EAST) Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk or

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/24/98 Weather: OVERCAST

WESTON Sample No.: SD-DR253-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98354037 Proposed Location: Intermid 21; Boeing Develop Center

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC ; Organotins Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X/N	Y/W							
WQ8 1	0854	15	473046	1221804	YES	13	BR-GY	F-SD/SL	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI (REACH D LEAST)
Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Kuluk
Project No.: 4000-019-038-5100
Subcontractor(s): ——
Date: 8/26/98
Weather: OVERCAST

WESTON Sample No.: SD-DR254-0000
Sampling Method: 0.1 m^2 van Veen
EPA Sample No.: 98354036
Proposed Location: Intertidal; Boeing Develop Center
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			Y N	Y W							
WP7 1	0844	19	473045	1221801	YES	8	BR w/ RED FLECKS	SD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH 0 (EAST) Sampling Personnel: D. Hughes M SHAW J SHANNON

Project Location: Duwamish River, Seattle, WA Sampling Vessel: ~~MV Kyluk~~ or

Project No.: 4000-019-038-5100 Subcontractor(s): MULLINS

Date: 9/15/98 Weather: CLEAR

WESTON Sample No.: SD-DR255-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98384019 Proposed Location: Intertidal; Boeing Develop Center

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☒ Yes ☐ No BOEING

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
WH 1	1044	2	473044.10	1221754.31	YES	10	BR-GY	F-SD/SC	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (EAST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/15/98

Sampling Personnel: D. Hughes M SHAW J SHANNON
Sampling Vessel: MV Kuluk
Subcontractor(s): MULKINS
Weather: CLEAR

WESTON Sample No.: SD-DR256-0000
EPA Sample No.: 98384016

Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Norfolk CSO

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins; Dioxins
Split Collected? ☒ Yes ☐ No BOEING

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates Y W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
DUP 1	0949	2	473042.35	1221750.78	YES	15	BR-GY	F-MSD/SL	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (EAST)
Sampling Personnel: D. Hughes M SHAW. J. SHANNON
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: ~~MAY Kellak~~ BY
Project No.: 4000-019-038-5100
Subcontractor(s): MULLINS
Date: 9/15/98
Weather: CLEAR

WESTON Sample No.: SD-DR257-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98384015
Proposed Location: Intertidal; Boeing Develop Center/Natoll
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☒ Yes ☐ No BOEING

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	Y N							
WP6 1	0937	2	1730240	1221746.56	YES	12	BR-RED	SD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/25/98
Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER
Sampling Vessel: M/V Kaluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR258-0000
EPA Sample No.: 98354026
Sampling Method: 0.1 m² van Veen
Proposed Location: Interval 21, Sea-King Ind. Park
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC, VOCs, Pest, Organotins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
WHO 1	1035	11	473119	1221830	YES	11	BR-GR	F-MSD/SL	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/25/98

Sampling Personnel: D. Hughes M SHAW J SHANNON & THRASHER
Sampling Vessel: M/V Kuluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR259-0000
EPA Sample No.: 98354023

Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Sea King Industrial Park

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☒ No

COLLECTED ADJACENT TO MOORED BARGES (APPEAR TO BE RELATIVELY "PERMANENT" FEATURE)

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
WQ8 1	0937	NA	473115	1221827	YES	13	GY-GR	SC/FSD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

POREWATER

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (WEST) Sampling Personnel: D. Hughes M. SHAW J. SHANNON A. LANCASTER

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kuluk or

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 9/1/98 / 9/2/98 Weather: CLEAR

WESTON Sample No.: SD-DR260-0000 / PW-DR260-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: ~~98364025~~ / ~~98364038~~ 98364036 / 98364050 Proposed Location: Intertidal; Duwamish Yacht Club

SED-

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins Split Collected? ☐ Yes ☒ No

PW = Metals; Organotins

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X/N	Coordinates X/W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WP1 1	0951	13	473111.99	1221828.51	NO —	OVER PENETRATED					
WP2 2	0957		473111.98	1221828.36	NO —	OVERPENETRATED)					
	<TEMPORARILY ABANDON STATION — RETURN LATER w/ LESS WEIGHT										
	ON THE		VAN VEEN								
WP1 1	1321		473111.92	1221828.96	NO —	DIDN'T TRIP					
WP2 2	1324		473111.92	1221829.05	½ GRAB ACCEPTABLE						
					~~17~~	~~BR~~ 17	BR-SURF GY-BK	SC/FSD			
WP3 3	1330		473111.93	1221829.04	YES (¼)	17	"	"			
WP4 4	1336		473111.89	1221828.96	NO —	DIDN'T TRIP					
WP5 5	1339		473111.90	1221828.93	NO —	"	"				
WP6 6	1342		473111.89	1221829.04	NO —	OVERPENETRATED					
WP7 7	1347		473111.93	1221828.95	NO —	DIDN'T TRIP					
WP8&9 8	1352		473112.17	1221828.16	NO —	DIDN'T TRIP					
9/2		RE-ABANDON / DOUBLE VAN VEEN W/OUT WEIGHTS STILL TOO HEAVY									
WP1 1	1142	11	473111.51	1221828.99	YES	15	BR-SURF GY-BK	SC	SL H_2S	NONE	
WP2 2	1148	11	473111.55	1221828.97	YES	16	"	"	"	"	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: DR Hughes

pg. 2 of 2

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/2/98

Sampling Personnel: D. Hughes M CHAN J SHANNON A CANCASTER
Sampling Vessel: M/V Karluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR260-0000/PW-DR260-0000
EPA Sample No.: 98364036/98364050
Sampling Method: 0.1 m² van Veen
Proposed Location: Intended; Duwamish Yacht Club
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WP3 3	1153	11	473111.55	1221829.01	YES	16	BR-SHAF GY-BK	SC	SL H_2S	NONE	
WP4 4	1158	11	473111.58	1221828.97	YES	17	"	"	"	"	
~~WP5 5~~											

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/25/98
Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER
Sampling Vessel: M/V Kiliuk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR261-0000
EPA Sample No.: 98354021
Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Duwamish Yacht Club
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
WQ6 1	0916	25	473108	1221826	YES	17	GY-BK	SC/FSD	NONE	NONE	SLIGHT SHEEN ON SED SURF

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

POREWATER

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (WEST) Sampling Personnel: D. Hughes M SHAW J. SHANNON A. LANCASTER

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Kaituk

Project No.: 4000-019-038-5100 Subcontractor(s): ——

Date: 9/1/98 Weather: CLEAR

WESTON Sample No.: SD-DR262-0000 / PW-DR262-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98364026 / 98364038 Proposed Location: Intertidal; Delta Marine

Analyses: SED = Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins Split Collected? ☐ Yes ☒ No

PW = Metals; Organotins

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
PS 1	1138	15	473106.36	1221825.42	YES	12	BR-BK	SC/F SD	NONE	NONE	
PW 2	1144	15	473106.35	1221825.43	NO – OVERPENETRATED						
PS 3	1147	15	473106.34	1221825.40	NO – ½ OVERPENETRATED				½	WASHOUT	
PW 4	1152	16	473106.34	1221825.47	YES	16	BR-BK	SC/F SD	MOD H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/26/98

Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER
Sampling Vessel: M/V Kaluk
Subcontractor(s):
Weather: OVERCAST

WESTON Sample No.: SD-DR264-0000
EPA Sample No.: 98354056

Sampling Method: 0.1 m^2 van Veen
Proposed Location: Intertidal; Seattle City Light (North)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins; Dioxins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
W11 1	1245	NA	473100	1221822	YES	10	BROY	F-M SD/SL	SLH2S.	NONE	FEW SMALL (<1/4") SHEEN DROPLETS

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

~~* DUPLICATE~~

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (WEST)
Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Karluk
Project No.: 4000-019-038-5100
Subcontractor(s):
Date: 8/24/99
Weather: OVERCAST

WESTON Sample No.: SD-DR265-0000~~7-1000~~
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98354053/~~4054~~
Proposed Location: Intertidal; Seattle City Light (NAth)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	Y W							
WØ7 1	1218	NA	473055	1221821	NO —	½ GRAB					
WØ8 2	1222	11	473056	1221821	NO —	INSUF PENET; SLOPED					
WØ9 3	1226	9	473055	1221821	YES	7	BR	F-MSD/SL	SL H_2S	NONE	
		DUPLICATE NOT COLLECTED DUE TO LIMITED SED VOLUME									

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (WEST) Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Karluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/26/98 Weather: MERCAST

WESTON Sample No.: SD-DR266-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98354049 Proposed Location: Intertidal; Seattle City Light (North)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
1	1134	12	473051	1221820	YES	13	BR-GR	SC/FSD	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D K Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH 2 (WEST)
Sampling Personnel: D. Hughes M SHANNON J SHANNON G THRASHER
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Karluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/26/98
Weather: OVERCAST

WESTON Sample No.: SD-DR267-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98354D42
Proposed Location: Intertidal; Seattle City Light (North)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
W15 1	0937	NA	473049	1221819	YES	9	BR	F-MSD/SL	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (WEST) Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Karluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/26/98 Weather: NORCAST

WESTON Sample No.: SD-DR26B-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98354041 Proposed Location: Intertidal; T. Kent/Turning Basin

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
WA 1	0929	11	473046	1221818	YES	10	GR-GY	F-C SD/GR	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI (REACH D (WEST)) Sampling Personnel: D. Hughes M SHAW J SHANNON & THRASHER

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Karluk

Project No.: 4000-019-038-5100 Subcontractor(s):

Date: 8/26/98 Weather: OVERCAST

WESTON Sample No.: SD-DR269-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98354040 Proposed Location: Intertidal; Turning Basin

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W12 1	0920	11	473044	1221817	NO	INSUF	PENET				
W13 2	0923	13	473044	1221816	YES	7	BR	F-CSD/SL	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (WEST) Sampling Personnel: D. Hughes M SHAW J. SHANNON & THRASHER

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Karluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/26/98 Weather: OVERCAST

WESTON Sample No.: SD-DR270-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98354039 Proposed Location: Intertidal; Turning Basin

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
W11 1	0912	11	473043	1221814	YES	8	BR-GY	F-MSD/SL	SL H_2S	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/15/98

Sampling Personnel: D. Hughes M SHAW J SHANNON
Sampling Vessel: ~~M/V Kanuk~~
Subcontractor(s): MULLINS
Weather: CLEAR

WESTON Sample No.: SD-DR271-0000
EPA Sample No.: 98304020

Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Turning Basin

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
W12 1	1223	6	473041.21	1221805.80	NO —	STICKS IN		JAWS;	NO MUD		
W13 2	1225	6	473040.94	1221805.83	YES	15	GR-BR	F-M SD/sl	NONE	STICKS-MAT (SLIGHT)	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hugh

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/24/98
Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER
Sampling Vessel: M/V Karluk
Subcontractor(s): —
Weather: OVERCAST

WESTON Sample No.: SD-DR272-0000
EPA Sample No.: 98354034
Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Turning Basin
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			~~Y~~N	Y~~W~~							
1	0817	12	473043	1221804	YES	8	BR-GY	F-MSD/S	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/26/98
Sampling Personnel: D. Hughes M SHAW J SHANNON G TARAFHOR
Sampling Vessel: M/V Karluk
Subcontractor(s): —
Weather: OVERCAST

WESTON Sample No.: SD-DR273-0000
EPA Sample No.: 98354035
Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal; Boeing Co. (Oxbow)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
WQV 1	0835	14	473043	1221801	YES	9	BR	F-MSD/S	SL H_2S	NONE	SMALL (¼" DIAM) SHEEN DROPS - FEW

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D B Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/15/98
Sampling Personnel: D. Hughes M SHAW J SHANNON
Sampling Vessel: ~~MV Karluk~~
Subcontractor(s): MULLINS
Weather: CLEAR

WESTON Sample No.: SD-DR274-0000
EPA Sample No.: 98384018
Sampling Method: 0.1 m² van Veen
Proposed Location: Intertidal 1; Boeing Co. (Oxbow)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☒ Yes ☐ No BOEING

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			YN	YW							
WΦ9 1	1021	4.5	473041.88	1221756.37	NO—	WASHOUT					
WΦ 2	1024	4.5	473041.88	1221756.39	YES	15	GR-GY	SC/F-SD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (WEST) Sampling Personnel: D. Hughes M SHAW J SHANNON

Project Location: Duwamish River, Seattle, WA Sampling Vessel: ~~MV Karluk~~

Project No.: 4000-019-038-5100 Subcontractor(s): MULLINS

Date: 9/15/98 Weather: CLEAR

WESTON Sample No.: SD-DR275-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98384017 Proposed Location: Intertidal; Boeing Co. (Oxbow)

Analyses: Metals; BNAs; PCBs (Aroc/Conq); GS; TOC Split Collected? ☒ Yes ☐ No BOEING

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			YN	YW							
1	1007	4.5	473040.37	1221752.26	YES	15	BR-GR	SL/F-SD	SL H2S	NONE	

WQB

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: DR Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (WEST)
Sampling Personnel: D. Hughes MSHAW J SHANNON
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: ~~MV Kanuk~~
Project No.: 4000-019-038-5100
Subcontractor(s): MULLINS
Date: 9/15/98
Weather: CLEAR

WESTON Sample No.: SD-DR276-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98384014
Proposed Location: Intertidal, Boeing Co. (Oxbow)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☒ Yes ☐ No BOEING

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			Y/N	X/W							
WQS 1	0925	9	473039.19	1221748.02	YES	16	~~GY-GR~~	SC/F-SD	NONE	NONE	HEAVY SHEEN ON H_2O SURF

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (EAST) Sampling Personnel: D. Hughes MSHAW JSHANNON GTHRASHER

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Karluk

Project No.: 4000-019-038-5100 Subcontractor(s):

Date: 8/25/98 Weather: CLEAR

WESTON Sample No.: SD-DR277-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98354027 Proposed Location: Shal. Subt; Kenwath Motor

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
W11 1	1012	27	473119	1221826	YES	16	BR-GY	F.M SD/SC	SL H_2S	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (EAST) Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Karluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/26/98 Weather: CLEARING / PART SUNNY

WESTON Sample No.: SD-DR278-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98354062 Proposed Location: Shal. Subt.; Rhone Poulenc

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	Y W							
WQ6 1	1443	12	473111	1221822	NO	OVERPENETRATED					
WQ7 2	1449	13	473111	1221822	YES	17	GY-GR	SC/FSD	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (EAST) Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Karluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/26/98 Weather: PART SUNNY

WESTON Sample No.: SD-DR279-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98354061 Proposed Location: Shal Subt; Mouth Slip 6

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
WQ4 1	1435	14	473105	1221820	YES	12	GR-GY	SC/FSD	SL H_2S	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (EAST) Sampling Personnel: D. Hughes M SHAW J SHANNON & TRASHER

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Karluk

Project No.: 4000-019-038-5100 Subcontractor(s):

Date: 8/26/98 Weather: OVER CAST

WESTON Sample No.: SD-DR280-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98354057 Proposed Location: Shal. Subt.; Boeing Co. (Develop Center)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
W12 1	1254	10	473059	1221817	YES	16	GR-GY	SY/F-SD	SL H_2S	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (EAST)
Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER
Project Location: Duwamish River, Seattle, WA
Sampling Vessel: M/V Karluk
Project No.: 4000-019-038-5100
Subcontractor(s): —
Date: 8/26/98
Weather: OVERCAST

WESTON Sample No.: SD-DR2B1-0000
Sampling Method: 0.1 m² van Veen
EPA Sample No.: 98354051
Proposed Location: Shor. Subt.; Boeing Co. (Develop. Center)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
WQ4 1	1154		473053	1221815	NO	CHAINS FOULED					
WQ5 2	1157	NA	473053	1221816	YES	17	GY-BK	SL/F SD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (WEST) | Sampling Personnel: D. Hughes M SHAW J SHANNON B THRASHER

Project Location: Duwamish River, Seattle, WA | Sampling Vessel: M/V Karluk

Project No.: 4000-019-038-5100 | Subcontractor(s):

Date: 8/25/98 | Weather: CLEAR

WESTON Sample No.: SD-DR282-0000 | Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98354028 | Proposed Location: Shal. Subt.; Sea King Indust.

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC | Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
WLB 1	1127	26	473120	1221828	YES	13	GY-BK	F-MSD/CC	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (WEST) Sampling Personnel: D. Hughes MSHAW JSHANNON GTHRASHER

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Karluk

Project No.: 4000-019-038-5100 Subcontractor(s): —

Date: 8/25/98 Weather: CLEAR

WESTON Sample No.: SD-DR283-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98354022 Proposed Location: Shal. Subt.; Duwamish Yacht Club

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
WQ7 1	0925	23	473111	1221824	YES	17	GY-GR	SC/FSD	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel

F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum

SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (WEST) Sampling Personnel: D. Hughes M SHAN J SHANNON G THRASHER

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Karluk

Project No.: 4000-019-038-5100 Subcontractor(s): ——

Date: ~~98354020~~ 8/25/98 Weather: CLEAR

WESTON Sample No.: SD-DR284-0000 Sampling Method: 0.1 m² van Veen

EPA Sample No.: 98354020 Proposed Location: Shal. Subt.; Duwamish Yacht Club

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins; Dioxins Split Collected? ☐ Yes ☒ No

CO-LOCATED SHALLOW SUBSURFACE SEDIMENT CORE STATION PROPOSED

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
WQ45 1	0903	27	473108	1221825	YES	13	BK-GY	FSD/SC	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/25/98

Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER
Sampling Vessel: M/V Karluk
Subcontractor(s):
Weather: CLEAR

WESTON Sample No.: SD-DR285-0000
EPA Sample No.: 98354019

Sampling Method: 0.1 m² van Veen
Proposed Location: Shal. Subt.; Delta Marine

Analyses: Metals; BNAs; PCBs (Aroc/Conc); GS; TOC

Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
WQ2 1	0824		473105	1221824	NO –	OVERPENETRATED					
		REMOVED 2 WEIGHTS			FROM	VAN VEEN GRAB					
WQ3 2	0836		473105	1221824	NO –	OVER PENETRATED					
		REMOVED REMAINING 2 WEIGHTS FROM VAN VEEN GRAB									
WQ4 3	0852	727	473105	1221824	YES	17	GR-GY	SC	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

¥ DUPLICATE

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D (WEST)
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/26/90

Sampling Personnel: D. Hughes M SHAW J SHANNON & THEATHER
Sampling Vessel: M/V Karluk
Subcontractor(s):
Weather: OVERCAST

WESTON Sample No.: SD-DR28b-0000/-1000
EPA Sample No.: 98354054/4055

Sampling Method: 0.1 m² van Veen
Proposed Location: Shal. Subtidal; Seattle City Light (North)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☐ Yes ☐ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
W10 1	1235	7	473059	1221821	YES	10	BR	SC/F-SD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D. Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI (REACH D (WEST)) Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER

Project Location: Duwamish River, Seattle, WA Sampling Vessel: M/V Karluk

Project No.: 4000-019-038-5100 Subcontractor(s):

Date: 8/26/98 Weather: OVERCAST

WESTON Sample No.: SD-DR287-0000 Sampling Method: 0.1 m^2 van Veen

EPA Sample No.: 98354048 Proposed Location: Shal. Subt.; Seattle City Light (North)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates X W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WQ1 1	1124	12	473049	1221819	YES	10	BR-GR	F-MSD/SC	NONE	NONE	

Color Codes

BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes

SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes

H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:

Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/25/98

Sampling Personnel: D. Hughes M SHAN J SHANNON G THRASHER
Sampling Vessel: M/V Karluk
Subcontractor(s): —
Weather: CLEAR

WESTON Sample No.: SD-DR288-0000
EPA Sample No.: 98354024

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Sea King / Kenwaath

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; Organotins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
WQ9 1	0948	727	473116	1221825	YES	12	BR-GY	F.M SD/SL	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/26/98
Sampling Personnel: D. Hughes M SHAW J SHANNON B THRASHER
Sampling Vessel: M/V Karluk
Subcontractor(s): —
Weather: PART SUNNY

WESTON Sample No.: SD-DR289-0000
EPA Sample No.: 98354060
Sampling Method: 0.1 m^2 van Veen
Proposed Location: Channel; Seattle City Light/Boeing Co
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			N	W							
WQ3 1	1420	25	473102	1221820	YES	8	BK-GY	SL/FSD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH 1
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/26/98
Sampling Personnel: D. Hughes M SHAW J SHANNON & THRASHER
Sampling Vessel: M/V Karluk
Subcontractor(s): —
Weather: OVERCAST

WESTON Sample No.: SD-DR290-0000
EPA Sample No.: 98354047
Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Seattle City Light/Boeing Co.
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates X/N	Coordinates Y/W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W19 1	1013	26	473050	1221816	NO —	OVERPENETRATION					
W20 2	1020	25	473050	1221816	NO —	DIDN'T TRIP					
W21 3	1021	26	473049	1221816	NO —	OVERPENETRATION					
W22 4	1029	25	473049	1221817	YES	17	GY-BK	SY/F-SD	SL H_2S	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/26/98
Sampling Personnel: D. Hughes M SHAW J SHANNON G TYRASHER
Sampling Vessel: M/V Karluk
Subcontractor(s): —
Weather: OVERCAST

WESTON Sample No.: SD-DR291-0000
EPA Sample No.: 9835404V
Sampling Method: 0.1 m² van Veen
Proposed Location: Turning Basin
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins; Dioxins
Split Collected? ☐ Yes ☒ No

CO-LOCATED SHALLOW SUBSURFACE SEDIMENT CORE STATION PROPOSED

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
W18 1	1002	25	473040	1221815	YES	14	GY-BK	F-M SD/SL	SL H_2S	NONE	HEAVY SHEEN ON SED SURF

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

WESTON
MANAGERS DESIGNERS/CONSULTANTS

* DUPLICATE

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/26/98

Sampling Personnel: D. Hughes M SHAW J SHANNON G THRASHER
Sampling Vessel: M/V Karluk
Subcontractor(s):
Weather: OVERCAST

WESTON Sample No.: SD-DR292-0000/-1000
EPA Sample No.: 98354044/4045
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Sampling Method: 0.1 m² van Veen
Proposed Location: Turning Basin
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
WIFT-1	0952	NA	473044	1221812	YES	15	GY-BK	SC/FSD	ST TPH	NONE	HEAVY SHEEN ON SED SURF
											MAT WOOD @ BOTTOM (TWIGS/ STICKS)

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 8/26/98 / 9/14/98
Sampling Personnel: D. Hughes M SHAW T SHANNON
Sampling Vessel: M/V Karluk
Subcontractor(s): / MULLINS
Weather: OVERCAST

WESTON Sample No.: SD-DR293-0000
EPA Sample No.: ~~98354035~~ 98384006
Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Boeing Co (Develop/Oxbow)
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	Y N							
W02 1	0826	16	473042	1221802	NO —	WASHOUT					
W03 2	0828		473044	1221801	NO —	DIDN'T TRIP					
W04 3	0830	19	473044	1221801	NO —	WASHOUT					
W05 4	0832	18	473044	1221801	NO —	EMPTY GRAB					
			TEMP ABANDON STATION - VAN VEEN MAY HAVE INSUF WEIGHT								
9/14 W10 1	1322	10	473043.33	1221801.22	YES	15	GR-BR	F-MSD/SL	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI ROACH D
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/15/98

Sampling Personnel: D. Hughes M SHAW J SHANNON
Sampling Vessel: ~~MV Kariuk~~
Subcontractor(s): MULLINS
Weather: PART CLOUDY

WESTON Sample No.: SD-DR294-0000
EPA Sample No.: 98384011

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Boeing Pedestrian Bridge

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☒ Yes ☐ No BOEING

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates XW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WDR 1	0841	4	473049.94	1221758.52	YES	10	BR-RD	SD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Ridley

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/15/98

Sampling Personnel: D. Hughes M SHAW. J SHANNON
Sampling Vessel: ~~MV Karluk~~
Subcontractor(s): MULLINS
Weather: PART CLOUDY

WESTON Sample No.: SD-DR295-0000
EPA Sample No.: 98384012

Sampling Method: 0.1 m^2 van Veen
Proposed Location: Channel; Boeing Co. (Oxbow/Develop)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? [X] Yes [ ] No BOEING

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
WP3 1	0856	4	473042.02	1221753.20	YES	13	BR-RED	SD	NONE	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI REACH D
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/15/98

Sampling Personnel: D. Hughes M SHAW J SHANNON
Sampling Vessel: ~~MV Kanuk~~
Subcontractor(s): MULLINS
Weather: CLEARING

WESTON Sample No.: SD-DR296-0000
EPA Sample No.: 98384013

Sampling Method: 0.1 m² van Veen
Proposed Location: Channel; Boeing Co (Develop/Oxbow)

Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC

Split Collected? ☒ Yes ☐ No BOEING

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	XW							
WQA 1	0912	6	473040.24	1221748.44	YES	15	BR-RED	SD	NONE	NONE	@ 3" SAND LAYER

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI BKGD REACH
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/16/98
Sampling Personnel: D. Hughes M SHAW J SHANNON
Sampling Vessel: ~~MV Karluk~~
Subcontractor(s): MULLINS
Weather: CLEAR

WESTON Sample No.: SD-DR297-0000
EPA Sample No.: 98384021
Sampling Method: 0.1 m² van Veen
Proposed Location: Background Intertidal
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth ~~to~~ Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
WP1 1	0950	4	473030.20	1221733.16	NO —	STICK IN JAWS					
WP3 2	0952	2	473030.34	1221733.34	NO —	WASHOUT / STICK IN JAWS					
WP4 3	0955	5	473030.34	1221733.09	NO —	CHAINS FOULED					MOVED SLIGHTLY FARTHER OFFSHORE
WP5 4	0957	5	473030.37	1221732.98	YES	15	BR RED	SD	SL FISH	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

POREWATER

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI BEGD REACH
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/11/98
Sampling Personnel: D. Hughes M SHAW J SHANNON
Sampling Vessel: ~~M/V Karluk~~
Subcontractor(s): MULLINS
Weather: CLEAR

WESTON Sample No.: SD-DR298-0000/PW-DR298-0000
EPA Sample No.: 98384022 / 98384026
Sampling Method: 0.1 m² van Veen
Proposed Location: Background Intertidal
Analyses: SED= Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins; Dioxins
PW = Metals; Organotins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			X N	X W							
WQ6 1	1012	9	473027.93	1221731.46	YES	15	BR-RED	SD	NONE	NONE	
WQ7 2	1018	10	473029.92	1221731.54	YES	14	"	"	"	"	
WQ8 3	1021	10	473027.98	1221731.46	YES	15	"	"	"	"	
WQ9 4	1024	10	473027.93	1221731.44	YES	14	"	"	"	"	
WQ10 5	1028	10	473027.97	1221731.40	YES	14	"	"	"	"	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI BEGD REACH
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/16/98
Sampling Personnel: D. Hughes M SHAW J SHANNON
Sampling Vessel: ~~MV Karluk~~
Subcontractor(s): MULLINS
Weather: CLEAR

WESTON Sample No.: SD-DR299-0000
EPA Sample No.: 98384024
Sampling Method: 0.1 m² van Veen
Proposed Location: Background Intertidal
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins
Split Collected? ☐ Yes ☒ No

	Grab #	Time	Depth to Sed. (ft/m)	Coordinates X N	Coordinates X W	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
W16	1	1128	6	473023.41	1221736.05	NO	H_2O	GRAB	(HIT ROCK)			
W17	2	1132	5	473023.30	1221734.08	NO	DIDN'T SEAL					
W18	3	1133		473023.21	1221735.96	NO	HIT ROCK					
W19	4	1135	75	473023.15	1221736.19	NO	INSUF PENET (SLOPE)					
W20	5	1138		473022.94	1221735.98	NO	WASHOUT					MOVED FARTHER OFFSHORE
W21	6	1140	10	473022.83	1221735.90	NO	WASHOUT					
W22	7	1142	10.5	473022.53	1221736.42	YES	14	BR-RED	SD	SL FISH	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

WESTON MANAGERS DESIGNERS/CONSULTANTS

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI BRED REACH
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/16/98
Sampling Personnel: D. Hughes MSHAW JSHANNON
Sampling Vessel: ~~MAV Karluk~~
Subcontractor(s): MULLINS
Weather: CLEAR

WESTON Sample No.: SD-DR300-0000
EPA Sample No.: 98384025
Sampling Method: 0.1 m² van Veen
Proposed Location: Background Intertidal
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates		Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
			XN	YW							
W23 1	1156	~~10~~ 12	473020.72	1221736.44	NO — WASHOUT						
W24 2	1158	12	473020.77	1221736.43	NO — WASHOUT						
W25 3	1159	12	473020.81	1221736.33	YES	15	BR-RED	SD	SL FISH	NONE	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

POREWATER

SURFACE SEDIMENT FIELD SAMPLE RECORD

Project Name: Duwamish River SI BKGD REACH
Project Location: Duwamish River, Seattle, WA
Project No.: 4000-019-038-5100
Date: 9/16/98
Sampling Personnel: D. Hughes M SHAW J SHANNON
Sampling Vessel: ~~MV Karluk~~
Subcontractor(s): MULLINS
Weather: CLEAR

WESTON Sample No.: SD-DR301-0000/PW-DR301-0000
EPA Sample No.: 98384023 / 98384027
SED=
Analyses: Metals; BNAs; PCBs (Aroc/Cong); GS; TOC; VOCs; Pest; Organotins; Dioxins
PW= Metals; Organotins
Sampling Method: 0.1 m² van Veen
Proposed Location: Background Channel
Split Collected? ☐ Yes ☒ No

Grab #	Time	Depth to Sed. (ft/m)	Coordinates XN	Coordinates YW	Grab Accpt. ?	Penet. Depth (cm)	Color	Texture	Odor	Debris	Other
WQ1 1	1054	9	473025.75	1221732.81	YES	14	BR-RED	SD	SL FISH	NONE	
W12 2	1058	10	473025.68	1221732.86	YES	15	"	"	"	NONE	
W13 3	1101	10	473025.76	1221732.94	YES	14	"	"	"	"	
W14 4	1104	~~10~~ 8	473025.62	1221733.29	YES	13	"	"	"	"	
W15 5	1107	8	473025.74	1221733.04	YES	14	"	"	"	"	

Color Codes
BR = Brown
BK = Black
GY = Gray
GR = Green
RST = Rust

Texture Codes
SC = Silt/Clay
SD = Sand
GR = Granule
PB = Pebble
GV = Gravel
F = Fine
M = Medium
C = Coarse

Odor Codes
H2S = Sulfide
TPH = Petroleum
SL = Slight
M = Moderate
ST = Strong

Other:
Include presence of biota, debris, or redox layer

Sampler Signature: D R Hughes

APPENDIX B

CORE LOG DESCRIPTION

REACH A
DIAGONAL WAY

CORE DESCRIPTION

WESTON
MANAGERS DESIGNERS/CONSULTANTS

Project Name: DUWAMISH RIVER SI
Project No.: 4000-019-038-5100
Project Location: SEATTLE, WA
Core Method: GRAVITY CORER (4")

Field Log by: S. Fernández Lab Log by:

		Field	Lab
Tide Level (MLLW)	Date	9/22/99	
Depth to Mud	S. Time	0944	
Mud Line Elev.	E. Time	0947	

Core Number	DR008
Drive Length, ft.	5', 3"
Recover Length, ft.	3', 7" 43"
Recovery Efficiency	

DESCRIPTION OF CORE TUBES & TESTS (based on core tube lengths, feet)

Tube No. Ln, ft.	FIELD End Description	Spl No. & Test	LABORATORY Sample Description
1	Clayey Silt, Bluish black saturated, sewer odor, sheen, 60/40		
2	1)		
3	2) Clay - gray & brown mottled red plastic, Bluish black		
4	3 4		
5	1) As above		
6			
7	2) Clay with some & Silt - 80/20, Bluish black, saturated, red plasticity, brown & gray mottling, no stain or odor 80/10/10		
8			
9			
10	3) Sand with silt & clay, Bluish black fine grained, sheen & hydrocarbon odor (diesel), saturated 70/20/10		
11			
12			
13	4) Clayey SILT, Bluish black with brown and grey mottling, slight hydrocarbon odor, no sheen, saturated		
14			
15			

(based on in-situ depths, feet)

Interpreted Summary Log (1)	Acquisition Data (2)	Blows/Ft. (3)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

1. The summary log is an interpretation based on samples, blow counts, acquisition data, and interpolation. The recovery efficiency is a rough indication of the general confidence of the summary log. Variation between what is shown and actual conditions should be expected.
2. 11/9 (83%): Penetration Depth, ft./Corresponding Sample Recovery, ft. (Corresponding Total Recovery Efficiency, percent)
3. Blows/ft. are the number of hammer strikes required to drive the core tube 1 foot.

FIELD SAMPLING PLAN Expected Mudline Elev: Expected Thickness of Recent Sediment:

Tube Segment			Actual Recovery				Chain-of-Custody of Core Tube Sections Transfer Tube Sections from Field to Lab
No.	In Situ Depth	Ln.	Total % R	Core Tube Depth	Length	Segment % R	
A							Relinquished By:
B							Received By:
C							Date:
D							Time:
							Comments:

LAB: SAMPLES SELECTED FOR TESTING

SAMPLE		Sample Depth	
Number	Test	Tube	In-Situ
98394014	0-2		
98394015	2-3', 7"		

COMMENTS

95-1128.FRM

REACH A
SLIP 1 (MOUTH)

CORE DESCRIPTION

WESTON
MANAGERS DESIGNERS/CONSULTANTS

Project Name: DUWAMISH RIVER SI
Project No.: 4000-019-038-5100
Project Location: SEATTLE, WA
Core Method GRAVITY CORER (4")

Field Log by: S. Fernández Lab Log by:

		Field	Lab
Tide Level (MLLW)	Date	9/22/98	
Depth to Mud	S. Time	0837	
Mud Line Elev.	E. Time	0841	

Core Number	DR021
Drive Length, ft.	5', 3"
Recover Length, ft.	4', 5" 52"
Recovery Efficiency	84%

DESCRIPTION OF CORE TUBES & TESTS (based on core tube lengths, feet)

Tube No. Ln. ft.	FIELD End Description	Spl No. & Test	LABORATORY Sample Description
_1	Silty Clay, Bluish black saturated, med. plasticity, no stain or odor, some mottling (70/30)		
_2			
_3 ≈5"	Clay, Bluish black, with grey mottling		
_4 ≈16"	Silty Clay, Bluish black saturated, med plasticity, no stain or odor		
_5	Clayey SILT, Bluish black, strong diesel like odor, sheen, sat. 70/30		
_6	TD = 4", 5"		
_7			
_8			
_9			
_10			
_11			
_12			
_13			
_14			
_15			

(based on in-situ depths, feet)

Interpreted Summary Log (1)	Acquisition Data (2)	Blows/Ft. (3)
_1		
_2		
_3		
_4		
_5		
_6		
_7		
_8		
_9		
_10		
_11		
_12		
_13		
_14		
_15		

1. The summary log is an interpretation based on samples, blow counts, acquisition data, and interpolation. The recovery efficiency is a rough indication of the general confidence of the summary log. Variation between what is shown and actual conditions should be expected.
2. 11/9 (83%): Penetration Depth, ft./Corresponding Sample Recovery, ft. (Corresponding Total Recovery Efficiency, percent)
3. Blows/ft. are the number of hammer strikes required to drive the core tube 1 foot.

FIELD SAMPLING PLAN Expected Mudline Elev: Expected Thickness of Recent Sediment:

Tube Segment			Actual Recovery				Chain-of-Custody of Core Tube Sections Transfer Tube Sections from Field to Lab
No.	In Situ Depth	Ln.	Total % R	Core Tube Depth	Length	Segment % R	
A							Relinquished By:
B							Received By:
C							Date:
D							Time:
							Comments:

LAB: SAMPLES SELECTED FOR TESTING

SAMPLE		Sample Depth	
Number	Test	Tube	In-Situ
98394012	0-2		
98394013	2-4		

COMMENTS

95-1128.FRM

REACH A
BRANDON CSO

CORE DESCRIPTION

WESTON MANAGERS DESIGNERS/CONSULTANTS

Project Name: DUWAMISH RIVER SI
Project No.: 4000-019-038-5100
Project Location: SEATTLE WA
Core Method GRAVITY CORER (4")

Field Log by: S Fernández Lab Log by:

		Field	Lab
Tide Level (MLLW)	Date 5/21/98		
Depth to Mud	S. Time	1537	
Mud Line Elev.	E. Time	1540	

Core Number	DR025
Drive Length, ft.	5', 3"
Recover Length, ft.	4', 3"
Recovery Efficiency	81%

DESCRIPTION OF CORE TUBES & TESTS (based on core tube lengths, feet)

Tube No. Ln. ft.	FIELD End Description	Spl No. & Test	LABORATORY Sample Description
_1	Silty Clay with some sand (in layer = 1/2" thick - med grain med) slight hydrocarbon odor in sand, Bluish Black, sat & v slight [illegible] mottling (grey).		
_2			
_3			
_4			
_5	TD= 4', 3"		
_6			
_7			
_8			
_9			
_10			
_11			
_12			
_13			
_14			
_15			

(based on in-situ depths, feet)

Interpreted Summary Log (1)	Acquisition Data (2)	Blows/Ft. (3)
_1		
_2		
_3		
_4		
_5		
_6		
_7		
_8		
_9		
_10		
_11		
_12		
_13		
_14		
_15		

1. The summary log is an interpretation based on samples, blow counts, acquisition data, and interpolation. The recovery efficiency is a rough indication of the general confidence of the summary log. Variation between what is shown and actual conditions should be expected.
2. 11/9 (83%): Penetration Depth, ft./Corresponding Sample Recovery, ft. (Corresponding Total Recovery Efficiency, percent)
3. Blows/ft. are the number of hammer strikes required to drive the core tube 1 foot.

FIELD SAMPLING PLAN Expected Mudline Elev: Expected Thickness of Recent Sediment:

Tube Segment			Actual Recovery				Chain-of-Custody of Core Tube Sections Transfer Tube Sections from Field to Lab
No.	In Situ Depth	Ln.	Total % R	Core Tube Depth	Length	Segment % R	
A							Relinquished By:
B							Received By:
C							Date:
D							Time:
							Comments:

LAB: SAMPLES SELECTED FOR TESTING

SAMPLE		Sample Depth	
Number	Test	Tube	In-Situ
98394010	0-2'		
98394011	2-4'		

COMMENTS

95-1128.FRM

REACH A
KELLOGG ISLAND

CORE DESCRIPTION

Project Name: DUWAMISH RIVER SI
Project No.: 4000-019-038-5100
Project Location: SEATTLE, WA
Core Method GRAVITY CORER (4")

Field Log by: S. Fernandez Lab Log by:

		Field	Lab
Tide Level (MLLW)	Date	9/21/98	
Depth to Mud	S. Time	1952	
Mud Line Elev.	E. Time	1455	

Core Number	DR046 (Replicate -44)
Drive Length, ft.	5', 3"
Recover Length, ft.	4', 5" 53"
Recovery Efficiency	84 %

DESCRIPTION OF CORE TUBES & TESTS (based on core tube lengths, feet)

Tube No. Ln. ft.	FIELD End Description	Spl No. & Test	LABORATORY Sample Description
_1	① Silty clay, Bluish black, no stain or odor and plasticity - Wood fragments		
_2			
_3	②		
_4	③		
_5	TD 4'9"		
_6	② Clay with trace silt, Bluish black with gray brown mottling, med to high plasticity saturated, no stain or odor		
_7			
_8			
_9			
_10	③ Same as ①		
_11			
_12			
_13			
_14			
_15			

(based on in-situ depths, feet)

Interpreted Summary Log (1)	Acquisition Data (2)	Blows/Ft. (3)
_1		
_2		
_3		
_4		
_5		
_6		
_7		
_8		
_9		
_10		
_11		
_12		
_13		
_14		
_15		

1. The summary log is an interpretation based on samples, blow counts, acquisition data, and interpolation. The recovery efficiency is a rough indication of the general confidence of the summary log. Variation between what is shown and actual conditions should be expected.
2. 11/9 (83%): Penetration Depth, ft./Corresponding Sample Recovery, ft. (Corresponding Total Recovery Efficiency, percent)
3. Blows/ft. are the number of hammer strikes required to drive the core tube 1 foot.

FIELD SAMPLING PLAN Expected Mudline Elev: Expected Thickness of Recent Sediment:

Tube Segment No.	Tube Segment In Situ Depth	Tube Segment Ln.	Actual Recovery Total % R	Actual Recovery Core Tube Depth	Actual Recovery Length	Actual Recovery Segment % R	Chain-of-Custody of Core Tube Sections Transfer Tube Sections from Field to Lab
A							Relinquished By:
B							Received By:
C							Date:
D							Time:
							Comments:

LAB: SAMPLES SELECTED FOR TESTING

SAMPLE Number	SAMPLE Test	Sample Depth Tube	Sample Depth In-Situ
98394023	0-2		
98394024	2-4		

COMMENTS

95-1128.FRM

REACH A
DUWAMISH SHIPYARD

CORE DESCRIPTION

Project Name: DUWAMISH RIVER SI
Project No.: 4000-019-038-5100
Project Location: SEATTLE, WA
Core Method GRAVITY CORER (4")

Field Log by: S. Fernandez Lab Log by:		Field	Lab
Tide Level (MLLW)	Date	9/21/98	
Depth to Mud	S. Time	1514	
Mud Line Elev.	E. Time	1514	

Core Number	DR05A
Drive Length, ft.	5', 3"
Recover Length, ft.	4'5" 53'
Recovery Efficiency	84%

DESCRIPTION OF CORE TUBES & TESTS (based on core tube lengths, feet)

Tube No. Ln. ft.	FIELD End Description	Spl No. & Test	LABORATORY Sample Description
_1	clayey SILT with some SAND (in strings)		
_2	Bluish black (2.5/1, 5B), very slight		
_3	hydrocarbon smell (in one) no stain, some		
_4	mottling (gray), wood		
_5	fragments. TD=4',5"		
_6			
_7			
_8			
_9			
_10			
_11			
_12			
_13			
_14			
_15			

(based on in-situ depths, feet)

Interpreted Summary Log (1)	Acquisition Data (2)	Blows/Ft. (3)
_1		
_2		
_3		
_4		
_5		
_6		
_7		
_8		
_9		
_10		
_11		
_12		
_13		
_14		
_15		

1. The summary log is an interpretation based on samples, blow counts, acquisition data, and interpolation. The recovery efficiency is a rough indication of the general confidence of the summary log. Variation between what is shown and actual conditions should be expected.
2. 11/9 (83%): Penetration Depth, ft./Corresponding Sample Recovery, ft. (Corresponding Total Recovery Efficiency, percent)
3. Blows/ft. are the number of hammer strikes required to drive the core tube 1 foot.

FIELD SAMPLING PLAN Expected Mudline Elev: Expected Thickness of Recent Sediment:

Tube Segment: No.	*In Situ* Depth	Ln.	Actual Recovery: Total % R	Core Tube Depth	Length	Segment % R	Chain-of-Custody of Core Tube Sections Transfer Tube Sections from Field to Lab
A							Relinquished By:
B							Received By:
C							Date:
D							Time:
							Comments:

LAB: SAMPLES SELECTED FOR TESTING

SAMPLE Number	SAMPLE Test	Sample Depth Tube	Sample Depth In-Situ
98394008	0-2'		
98394009	2-4'		

COMMENTS

CORE DESCRIPTION

WESTON
MANAGERS DESIGNERS/CONSULTANTS

Project Name: Duwamish River SI
Project No.: 04000-019-038-5100
Project Location: Seattle, WA
Core Method: Gravity Corer (4")

Field Log by: S Fernández Lab Log by:		Field	Lab
Tide Level (MLLW)	Date	9/22/98	
Depth to Mud	S. Time	1044	
Mud Line Elev.	E. Time	1047	

Core Number	DR068
Drive Length, ft.	5', 3"
Recover Length, ft.	2', 4" 28
Recovery Efficiency	

DESCRIPTION OF CORE TUBES & TESTS (based on core tube lengths, feet)

Tube No. Ln, ft.	FIELD End Description	Spl No. & Test	LABORATORY Sample Description
_1	(1)	<13"	
_2	(2)	<23"	
_3	(3)	28"	
_4	(1) Clayey SILT, Bluish black, slight hydrocarbon odor (diesel) sat,		
_5			
_6			
_7	(2) SAND with silt, clay & gravel, (70 15, 10, 5), Angular gravel, Fine grained sand, sat, no stain or odor.		
_8			
_9			
_10	(3) Clay with trace silt (95/5), Gray, (10YR, 5/1), high plasticity, no stain or odor, sat color banding & mottling		
_11			
_12			
_13			
_14			
_15			

(based on in-situ depths, feet)

Interpreted Summary Log (1)	Acquisition Data (2)	Blows/Ft. (3)
_1		
_2		
_3		
_4		
_5		
_6		
_7		
_8		
_9		
_10		
_11		
_12		
_13		
_14		
_15		

1. The summary log is an interpretation based on samples, blow counts, acquisition data, and interpolation. The recovery efficiency is a rough indication of the general confidence of the summary log. Variation between what is shown and actual conditions should be expected.
2. 11/9 (83%): Penetration Depth, ft./Corresponding Sample Recovery, ft. (Corresponding Total Recovery Efficiency, percent)
3. Blows/ft. are the number of hammer strikes required to drive the core tube 1 foot.

FIELD SAMPLING PLAN Expected Mudline Elev: Expected Thickness of Recent Sediment:

Tube Segment			Actual Recovery				Chain-of-Custody of Core Tube Sections Transfer Tube Sections from Field to Lab
No.	In Situ Depth	Ln.	Total % R	Core Tube Depth	Length	Segment % R	
A							Relinquished By:
B							Received By:
C							Date:
D							Time:
							Comments:

LAB: SAMPLES SELECTED FOR TESTING

SAMPLE		Sample Depth	
Number	Test	Tube	In-Situ
98394016	0-2		

COMMENTS

95-1128.FRM

REACH B
SLIP 2 (MOUTH)

CORE DESCRIPTION

Project Name: DUWAMISH RIVER SI
Project No.: 4000-019-038-5100
Project Location: SEATTLE WA
Core Method GRAVITY CORER (4")

Field Log by: S. Fernandez Lab Log by:

		Field	Lab
Tide Level (MLLW)	Date	9/21/98	
Depth to Mud	S. Time	1450	
Mud Line Elev.	E. Time	1453	

Core Number	DR101
Drive Length, ft.	5', 3"
Recover Length, ft.	3' 11" (47")
Recovery Efficiency	75%

DESCRIPTION OF CORE TUBES & TESTS (based on core tube lengths, feet)

Tube No. Ln. ft.	FIELD End Description	Spl No. & Test	LABORATORY Sample Description
_1	Silty CLAY, Bluish black (2.5/1, 5B) no stain or odor, saturated, wood fragments.		
_2			
_3			
_4	TD - 3'11"		
_5			
_6			
_7			
_8			
_9			
_10			
_11			
_12			
_13			
_14			
_15			

(based on in-situ depths, feet)

Interpreted Summary Log (1)	Acquisition Data (2)	Blows/FL (3)
_1		
_2		
_3		
_4		
_5		
_6		
_7		
_8		
_9		
_10		
_11		
_12		
_13		
_14		
_15		

1. The summary log is an interpretation based on samples, blow counts, acquisition data, and interpolation. The recovery efficiency is a rough indication of the general confidence of the summary log. Variation between what is shown and actual conditions should be expected.
2. 11/9 (83%): Penetration Depth, ft./Corresponding Sample Recovery, ft. (Corresponding Total Recovery Efficiency, percent)
3. Blows/ft. are the number of hammer strikes required to drive the core tube 1 foot.

FIELD SAMPLING PLAN Expected Mudline Elev: Expected Thickness of Recent Sediment:

Tube Segment: No.	In Situ Depth	Ln.	Actual Recovery: Total % R	Core Tube Depth	Length	Segment % R	Chain-of-Custody of Core Tube Sections Transfer Tube Sections from Field to Lab
A							Relinquished By:
B							Received By:
C							Date:
D							Time:
							Comments:

LAB: SAMPLES SELECTED FOR TESTING

SAMPLE Number	SAMPLE Test	Sample Depth Tube	Sample Depth In-Situ
9839 4006	0-2		
9839 4007	2-3', 11"		

COMMENTS

REACH B
SLIP 3 (MOUTH)

CORE DESCRIPTION

Project Name: DUWAMISH RIVER SI
Project No.: 4000-019-038-5100
Project Location: SEATTLE, WA
Core Method GRAVITY CORER (4")

Field Log by: S. Fernández Lab Log by:

		Field	Lab
Tide Level (MLLW)	Date	9/21/94	
Depth to Mud	S. Time	1414	
Mud Line Elev.	E. Time	1415	

Core Number	DR106 (Replacement DR)
Drive Length, ft.	5'3"
Recover Length, ft.	3'4"
Recovery Efficiency	64%

DESCRIPTION OF CORE TUBES & TESTS (based on core tube lengths, feet)

Tube No. Ln. ft.	FIELD End Description	Spl No. & Test	LABORATORY Sample Description
_1	Silty Clay, Bluish black (2.5/1, 5B), no odor or stain saturated, mottling near surface wood & shell fragments towards bottom.		
_2			
_3			
_4			
_5			
_6			
_7			
_8			
_9			
_10			
_11			
_12			
_13			
_14			
_15			

(based on in-situ depths, feet)

Interpreted Summary Log (1)	Acquisition Data (2)	Blows/Ft. (3)
_1		
_2		
_3		
_4		
_5		
_6		
_7		
_8		
_9		
_10		
_11		
_12		
_13		
_14		
_15		

1. The summary log is an interpretation based on samples, blow counts, acquisition data, and interpolation. The recovery efficiency is a rough indication of the general confidence of the summary log. Variation between what is shown and actual conditions should be expected.
2. 11/9 (83%): Penetration Depth, ft./Corresponding Sample Recovery, ft. (Corresponding Total Recovery Efficiency, percent)
3. Blows/ft. are the number of hammer strikes required to drive the core tube 1 foot.

FIELD SAMPLING PLAN Expected Mudline Elev: Expected Thickness of Recent Sediment:

Tube Segment No.	Tube Segment *In Situ* Depth	Tube Segment Ln.	Actual Recovery Total % R	Actual Recovery Core Tube Depth	Actual Recovery Length	Actual Recovery Segment % R	Chain-of-Custody of Core Tube Sections Transfer Tube Sections from Field to Lab
A							Relinquished By:
B							Received By:
C							Date:
D							Time:
							Comments:

LAB: SAMPLES SELECTED FOR TESTING

SAMPLE Number	SAMPLE Test	Sample Depth Tube	Sample Depth In-Situ
9839 4004	0-2		
9839 4005	2-3'4"		

COMMENTS

95-1128.FRM

REACH B
FOX AVE CSO

CORE DESCRIPTION

WESTON
MANAGERS DESIGNERS/CONSULTANTS

Project Name: DUWAMISH RIVER SI
Project No.: 4000-019-038-5100
Project Location: SEATTLE, WA
Core Method GRAVITY CORERS (4")

Field Log by: S. Fernández Lab Log by:

		Field	Lab
Tide Level (MLLW)	Date	9/21/98	
Depth to Mud	S. Time	1330	
Mud Line Elev.	E. Time	1332	

Core Number	DR112
Drive Length, ft.	5', 3"
Recover Length, ft.	4', 4"
Recovery Efficiency	84%

DESCRIPTION OF CORE TUBES & TESTS (based on core tube lengths, feet)

Tube No. Ln, ft.	FIELD End Description	Spl No. & Test	LABORATORY Sample Description
_1	Clayey SILT, Bluish black (2.5/1 5B) no odor or stain, saturated, some mottling (60/40)		
_2			
_3			
_4	— mottling		
_5			
_6			
_7			
_8			
_9			
_10			
_11			
_12			
_13			
_14			
_15			

(based on in-situ depths, feet)

Interpreted Summary Log (1)	Acquisition Data (2)	Blows/Ft. (3)
_1		
_2		
_3		
_4		
_5		
_6		
_7		
_8		
_9		
_10		
_11		
_12		
_13		
_14		
_15		

1. The summary log is an interpretation based on samples, blow counts, acquisition data, and interpolation. The recovery efficiency is a rough indication of the general confidence of the summary log. Variation between what is shown and actual conditions should be expected.
2. 11/9 (83%): Penetration Depth, ft./Corresponding Sample Recovery, ft. (Corresponding Total Recovery Efficiency, percent)
3. Blows/ft. are the number of hammer strikes required to drive the core tube 1 foot.

FIELD SAMPLING PLAN Expected Mudline Elev: Expected Thickness of Recent Sediment:

Tube Segment			Actual Recovery				Chain-of-Custody of Core Tube Sections Transfer Tube Sections from Field to Lab
No.	In Situ Depth	Ln.	Total % R	Core Tube Depth	Length	Segment % R	
A							Relinquished By:
B							Received By:
C							Date:
D							Time:
							Comments:

LAB: SAMPLES SELECTED FOR TESTING

SAMPLE		Sample Depth	
Number	Test	Tube	In-Situ
98394002	0-2'		
98394003	2-4'		

COMMENTS

95-1128.FRM

REACH B
LONESTAR (WEST)

CORE DESCRIPTION

Project Name: DUWAMISH RIVER SI
Project No.: 4000-019-038-5100
Project Location: SEATTLE, WA
Core Method GRAVITY CORER (4")

Field Log by:	Lab Log by:	Field	Lab
Tide Level (MLLW)	Date		
Depth to Mud	S. Time		
Mud Line Elev.	E. Time		

Core Number	DR123
Drive Length, ft.	
Recover Length, ft.	
Recovery Efficiency	

DESCRIPTION OF CORE TUBES & TESTS (based on core tube lengths, feet)

Tube No. Ln. ft.	FIELD End Description	Spl No. & Test	LABORATORY Sample Description
_1			
_2			
_3			
_4			
_5			
_6			
_7			
_8			
_9			
_10			
_11			
_12			
_13			
_14			
_15			

(based on in-situ depths, feet)

Interpreted Summary Log (1)	Acquisition Data (2)	Blows/Ft. (3)
_1		
_2		
_3		
_4		
_5		
_6		
_7		
_8		
_9		
_10		
_11		
_12		
_13		
_14		
_15		

BOAT CANNOT ACCESS SAMPLING LOCATION BEHIND PIERS — DROPPED

1. The summary log is an interpretation based on samples, blow counts, acquisition data, and interpolation. The recovery efficiency is a rough indication of the general confidence of the summary log. Variation between what is shown and actual conditions should be expected.
2. 11/9 (83%): Penetration Depth, ft./Corresponding Sample Recovery, ft. (Corresponding Total Recovery Efficiency, percent)
3. Blows/ft. are the number of hammer strikes required to drive the core tube 1 foot.

FIELD SAMPLING PLAN Expected Mudline Elev: Expected Thickness of Recent Sediment:

Tube Segment			Actual Recovery				Chain-of-Custody of Core Tube Sections Transfer Tube Sections from Field to Lab
No.	*In Situ* Depth	Ln.	Total % R	Core Tube Depth	Length	Segment % R	
A							Relinquished By:
B							Received By:
C							Date:
D							Time:
							Comments:

LAB: SAMPLES SELECTED FOR TESTING

SAMPLE		Sample Depth	
Number	Test	Tube	In-Situ

COMMENTS

95-1128.FRM

1055

REACH B
TROTSKY SLOUGH

CORE DESCRIPTION

Project Name: Duwamish River, ST
Project No.: 04000-019-038-5100
Project Location: Seattle, WA
Core Method Gravity Corer

(RA 12" DR 13')

Field Log by: S. Fernandez Lab Log by:

		Field	Lab
Tide Level (MLLW)	Date	9/23/96	
Depth to Mud	S. Time	1045	
Mud Line Elev.	E. Time	1048	

Core Number	DR 137
Drive Length, ft.	5' 3"
Recover Length, ft.	4' 3" (51")
Recovery Efficiency	

DESCRIPTION OF CORE TUBES & TESTS (based on core tube lengths, feet)

Tube No. Ln. ft.	FIELD End Description	Spl No. & Test	LABORATORY Sample Description
_1 5"	Sand ①		
_2	Silty Clay, Bluish black, low plasticity no strong odors, nothing (75/25)		
_3			
_4	TD 4'3"		
_5			
_6	① SAND with, silt, clay & trace gravel, gravel 2-3 mm diameter in layer @ 5" from top (subrounded), sand is fine grained		
_7			
_8			
_9			
_10			
_11			
_12			
_13			
_14			
_15			

(based on in-situ depths, feet)

Interpreted Summary Log (1)	Acquisition Data (2)	Blows/Ft. (3)
_1		
_2		
_3		
_4		
_5		
_6		
_7		
_8		
_9		
_10		
_11		
_12		
_13		
_14		
_15		

1. The summary log is an interpretation based on samples, blow counts, acquisition data, and interpolation. The recovery efficiency is a rough indication of the general confidence of the summary log. Variation between what is shown and actual conditions should be expected.
2. 11/9 (83%): Penetration Depth, ft./Corresponding Sample Recovery, ft. (Corresponding Total Recovery Efficiency, percent)
3. Blows/ft. are the number of hammer strikes required to drive the core tube 1 foot.

FIELD SAMPLING PLAN Expected Mudline Elev: Expected Thickness of Recent Sediment:

Tube Segment			Actual Recovery				Chain-of-Custody of Core Tube Sections Transfer Tube Sections from Field to Lab
No.	In Situ Depth	Ln.	Total % R	Core Tube Depth	Length	Segment % R	
A							Relinquished By:
B							Received By:
C							Date:
D							Time:
							Comments:

LAB: SAMPLES SELECTED FOR TESTING

SAMPLE		Sample Depth	
Number	Test	Tube	In-Situ
98394027	0-2		
98394038	2-4		
98394029	0-2 DUP	See other 109	
98394030	2-4 DUP		

COMMENTS

95-1128.FRM

*Duplicate

CORE DESCRIPTION

Project Name: Duwamish River ST Project Location: Seattle WA
Project No.: 10422 - 019 - 028 - 5100 Core Method Gravity Corer

Field Log by: S. Fernandez Lab Log by:		Field	Lab
Tide Level (MLLW)	Date	5/23/98	
Depth to Mud	S. Time	1055	
Mud Line Elev.	E. Time	1055	

Core Number	DR 137 - Duplicate
Drive Length, ft.	5', 3"
Recover Length, ft.	4', 7" 55%
Recovery Efficiency	

DESCRIPTION OF CORE TUBES & TESTS (based on core tube lengths, feet)

Tube No. Ln. ft.	FIELD End Description	Spl No. & Test	LABORATORY Sample Description
_1	Silty CLAY, Bluish black, moist, no stain or odor, wood frag. marks, tape plasticity		
_2			
_3			
_4			
_5	TD=4' 7"		
_6			
_7			
_8			
_9			
_10			
_11			
_12			
_13			
_14			
_15			

(based on in-situ depths, feet)

Interpreted Summary Log (1)	Acquisition Data (2)	Blows/Ft. (3)
_1		
_2		
_3		
_4		
_5		
_6		
_7		
_8		
_9		
_10		
_11		
_12		
_13		
_14		
_15		

1. The summary log is an interpretation based on samples, blow counts, acquisition data, and interpolation. The recovery efficiency is a rough indication of the general confidence of the summary log. Variation between what is shown and actual conditions should be expected.
2. 11/9 (83%): Penetration Depth, ft./Corresponding Sample Recovery, ft. (Corresponding Total Recovery Efficiency, percent)
3. Blows/ft. are the number of hammer strikes required to drive the core tube 1 foot.

FIELD SAMPLING PLAN Expected Mudline Elev: Expected Thickness of Recent Sediment:

Tube Segment			Actual Recovery				Chain-of-Custody of Core Tube Sections Transfer Tube Sections from Field to Lab
No.	In Situ Depth	Ln.	Total % R	Core Tube Depth	Length	Segment % R	
A							Relinquished By:
B							Received By:
C							Date:
D							Time:
							Comments:

LAB: SAMPLES SELECTED FOR TESTING

SAMPLE		Sample Depth	
Number	Test	Tube	In-Situ
98394029	0-2		
98394036	2-4		

COMMENTS

95-1128.FRM

REACH B
PORT T115

CORE DESCRIPTION

Project Name: DUWAMISH RIVER SI
Project No.: 4000-019-038-5100
Project Location: SEATTLE, WA
Core Method GRAVITY CORER (4")

Field Log by:	Lab Log by:	Field	Lab
Tide Level (MLLW)	Date		
Depth to Mud	S. Time		
Mud Line Elev.	E. Time		

Core Number	DR154
Drive Length, ft.	
Recover Length, ft.	No recovery
Recovery Efficiency	NA

DESCRIPTION OF CORE TUBES & TESTS (based on core tube lengths, feet)

Tube No. Ln. ft.	FIELD End Description	Spl No. & Test	LABORATORY Sample Description
_1			
_2			
_3			
_4			
_5			
_6			
_7			
_8			
_9			
_10			
_11			
_12			
_13			
_14			
_15			

COULD NOT COLLECT - NOR COULD ACCEPTABLE CORE BE OBTAINED D NEARBY DR131

(based on in-situ depths, feet)

Interpreted Summary Log (1)	Acquisition Data (2)	Blows/Ft. (3)
_1		
_2		
_3		
_4		
_5		
_6		
_7		
_8		
_9		
_10		
_11		
_12		
_13		
_14		
_15		

1. The summary log is an interpretation based on samples, blow counts, acquisition data, and interpolation. The recovery efficiency is a rough indication of the general confidence of the summary log. Variation between what is shown and actual conditions should be expected.
2. 11/9 (83%): Penetration Depth, ft./Corresponding Sample Recovery, ft. (Corresponding Total Recovery Efficiency, percent)
3. Blows/ft. are the number of hammer strikes required to drive the core tube 1 foot.

FIELD SAMPLING PLAN Expected Mudline Elev: Expected Thickness of Recent Sediment:

Tube Segment			Actual Recovery				Chain-of-Custody of Core Tube Sections Transfer Tube Sections from Field to Lab
No.	In Situ Depth	Ln.	Total % R	Core Tube Depth	Length	Segment % R	
A							Relinquished By:
B							Received By:
C							Date:
D							Time:
							Comments:

LAB: SAMPLES SELECTED FOR TESTING

SAMPLE		Sample Depth	
Number	Test	Tube	In-Situ

COMMENTS

95-1128.FRM

REPLI B
ALASKA BARGELINE

CORE DESCRIPTION

Project Name: Duwamish River SI
Project No.: 04000-019-038-5100-00
Project Location: Seattle, WA
Core Method: Gravity Cores (4")

Field Log by: S. Fernández	Lab Log by:	Field	Lab
Tide Level (MLLW)	Date	9/23/98	
Depth to Mud	S. Time	1230	
Mud Line Elev.	E. Time	1233	

Core Number	DR 171 (replic F)
Drive Length, ft.	5' 3"
Recover Length, ft.	4', 7" 55"
Recovery Efficiency	87%

DESCRIPTION OF CORE TUBES & TESTS (based on core tube lengths, feet)

Tube No. Ln. ft.	FIELD End Description	Spl No. & Test	LABORATORY Sample Description
_1	Silty Clay, Bluish black, low plasticity, sat, no stain or odor, mottling in upper 6", wood fragments		
_2			
_3			
_4			
_5	TD 4', 7"		
_6			
_7			
_8			
_9			
_10			
_11			
_12			
_13			
_14			
_15			

(based on in-situ depths, feet)

Interpreted Summary Log (1)	Acquisition Data (2)	Blows/Ft. (3)
_1		
_2		
_3		
_4		
_5		
_6		
_7		
_8		
_9		
_10		
_11		
_12		
_13		
_14		
_15		

1. The summary log is an interpretation based on samples, blow counts, acquisition data, and interpolation. The recovery efficiency is a rough indication of the general confidence of the summary log. Variation between what is shown and actual conditions should be expected.
2. 11/9 (83%): Penetration Depth, ft./Corresponding Sample Recovery, ft. (Corresponding Total Recovery Efficiency, percent)
3. Blows/ft. are the number of hammer strikes required to drive the core tube 1 foot.

FIELD SAMPLING PLAN Expected Mudline Elev: Expected Thickness of Recent Sediment:

Tube Segment			Actual Recovery				Chain-of-Custody of Core Tube Sections Transfer Tube Sections from Field to Lab
No.	In Situ Depth	Ln.	Total % R	Core Tube Depth	Length	Segment % R	
A							Relinquished By:
B							Received By:
C							Date:
D							Time:
							Comments:

LAB: SAMPLES SELECTED FOR TESTING

SAMPLE		Sample Depth	
Number	Test	Tube	In-Situ
9839 4033	0-2		
9839 4034	2-4		

COMMENTS

95-1128.FRM

REACH C
SLIP 4 (MOUTH)

CORE DESCRIPTION

Project Name: DUWAMISH RIVER SI
Project No.: 4000-019-038-5100
Project Location: SEATTLE WA
Core Method GRAVITY CORER (4")

Field Log by: S. Fernandez Lab Log by:		Field	Lab
Tide Level (MLLW)	Date	9/22/94	
Depth to Mud	S. Time		
Mud Line Elev.	E. Time		

Core Number	DR183 179 sub
Drive Length, ft.	Abandoned
Recover Length, ft.	
Recovery Efficiency	

DESCRIPTION OF CORE TUBES & TESTS (based on core tube lengths, feet)

Tube No. Ln. ft.	FIELD End Description	Spl No. & Test	LABORATORY Sample Description
_1			
_2			
_3			
_4			
_5			
_6			
_7			
_8			
_9			
_10			
_11			
_12			
_13			
_14			
_15			

COULD NOT OBTAIN DR183, NOR POTENTIAL REPLACEMENTS DR181 or DR179

(based on in-situ depths, feet)

Interpreted Summary Log (1)	Acquisition Data (2)	Blows/ft. (3)
_1		
_2		
_3		
_4		
_5		
_6		
_7		
_8		
_9		
_10		
_11		
_12		
_13		
_14		
_15		

1. The summary log is an interpretation based on samples, blow counts, acquisition data, and interpolation. The recovery efficiency is a rough indication of the general confidence of the summary log. Variation between what is shown and actual conditions should be expected.
2. 11/9 (83%): Penetration Depth, ft./Corresponding Sample Recovery, ft. (Corresponding Total Recovery Efficiency, percent)
3. Blows/ft. are the number of hammer strikes required to drive the core tube 1 foot.

FIELD SAMPLING PLAN Expected Mudline Elev: Expected Thickness of Recent Sediment:

Tube Segment			Actual Recovery				Chain-of-Custody of Core Tube Sections Transfer Tube Sections from Field to Lab
No.	In Situ Depth	Ln.	Total % R	Core Tube Depth	Length	Segment % R	
A							Relinquished By:
B							Received By:
C							Date:
D							Time:
							Comments:

LAB: SAMPLES SELECTED FOR TESTING

SAMPLE		Sample Depth	
Number	Test	Tube	In-Situ

COMMENTS

95-1128.FRM

REACH C
SOUTH PARK MARIN

CORE DESCRIPTION

Project Name: DUWAMISH RIVER SI
Project No.: 4000-019-038-5100
Project Location: SEATTLE, WA
Core Method GRAVITY CORER (4")

Field Log by: S. Fernandez Lab Log by:

		Field	Lab
Tide Level (MLLW)	Date	9/22/98	
Depth to Mud	S. Time	1335	
Mud Line Elev.	E. Time	1338	

Core Number	DR2016
Drive Length, ft.	5', 3"
Recover Length, ft.	4', 3"
Recovery Efficiency	81%

DESCRIPTION OF CORE TUBES & TESTS (based on core tube lengths, feet)

Tube No. Ln. ft.	FIELD End Description	Spl No. & Test	LABORATORY Sample Description
_1	Silty Clay, bluish black, mod to low plasticity, no odor or stain, some sand stringers (fine grained), coal fragment.		
_2			
_3			
_4			
_5	TD 4', 3"		
_6			
_7			
_8			
_9			
_10			
_11			
_12			
_13			
_14			
_15			

(based on in-situ depths, feet)

Interpreted Summary Log (1)	Acquisition Data (2)	Blows/FT. (3)
_1		
_2		
_3		
_4		
_5		
_6		
_7		
_8		
_9		
_10		
_11		
_12		
_13		
_14		
_15		

1. The summary log is an interpretation based on samples, blow counts, acquisition data, and interpolation. The recovery efficiency is a rough indication of the general confidence of the summary log. Variation between what is shown and actual conditions should be expected.
2. 11/9 (83%): Penetration Depth, ft/Corresponding Sample Recovery, ft. (Corresponding Total Recovery Efficiency, percent)
3. Blows/ft. are the number of hammer strikes required to drive the core tube 1 foot.

FIELD SAMPLING PLAN Expected Mudline Elev: Expected Thickness of Recent Sediment:

Tube Segment			Actual Recovery				Chain-of-Custody of Core Tube Sections Transfer Tube Sections from Field to Lab
No.	In Situ Depth	Ln.	Total % R	Core Tube Depth	Length	Segment % R	
A							Relinquished By:
B							Received By:
C							Date:
D							Time:
							Comments:

LAB: SAMPLES SELECTED FOR TESTING

SAMPLE		Sample Depth	
Number	Test	Tube	In-Situ
98394D21	0-2		
98394D22	2-4		

COMMENTS

95-1128.FRM

REACH C
ISAACSON CSC

CORE DESCRIPTION

WESTON MANAGERS DESIGNERS/CONSULTANTS

Project Name: Duwamish River SI
Project No.: 04000-019-038-5100
Project Location: Seattle, WA
Core Method: Gravity Corer (4") (Replaced DR187)

Field Log by: S. Fernández Lab Log by:

		Field	Lab
Tide Level (MLLW)	Date	9/23/98	
Depth to Mud	S. Time	1140	
Mud Line Elev.	E. Time	1143	

Core Number	DR 220
Drive Length, ft.	5', 3"
Recover Length, ft.	4', 6" 54"
Recovery Efficiency	86%

DESCRIPTION OF CORE TUBES & TESTS (based on core tube lengths, feet)

Tube No. Ln. ft.	FIELD End Description	Spl No. & Test	LABORATORY Sample Description
_1	Silty Clay, bluish black, sat, no strain or odor, low plasticity, mottling on top 6". wood frag.		
_2			
_3			
_4			
_5	TD - 4', 6"		
_6			
_7			
_8			
_9			
_10			
_11			
_12			
_13			
_14			
_15			

(based on in-situ depths, feet)

Interpreted Summary Log (1)	Acquisition Data (2)	Blows/Ft. (3)
_1		
_2		
_3		
_4		
_5		
_6		
_7		
_8		
_9		
_10		
_11		
_12		
_13		
_14		
_15		

1. The summary log is an interpretation based on samples, blow counts, acquisition data, and interpolation. The recovery efficiency is a rough indication of the general confidence of the summary log. Variation between what is shown and actual conditions should be expected.
2. 11/9 (83%): Penetration Depth, ft./Corresponding Sample Recovery, ft. (Corresponding Total Recovery Efficiency, percent)
3. Blows/ft. are the number of hammer strikes required to drive the core tube 1 foot.

FIELD SAMPLING PLAN Expected Mudline Elev: Expected Thickness of Recent Sediment:

Tube Segment			Actual Recovery				Chain-of-Custody of Core Tube Sections Transfer Tube Sections from Field to Lab
No.	In Situ Depth	Ln.	Total % R	Core Tube Depth	Length	Segment % R	
A							Relinquished By:
B							Received By:
C							Date:
D							Time:
							Comments:

LAB: SAMPLES SELECTED FOR TESTING

SAMPLE		Sample Depth	
Number	Test	Tube	In-Situ
98394031	0-2		
98394032	2-4		

COMMENTS

95-1128.FRM

REACH C
BOAT RAMP (?)

CORE DESCRIPTION

Project Name: DUWAMISH RIVER SI
Project No.: 4000-019-038-5100
Project Location: SEATTLE WA
Core Method GRAVITY CORER (4")

Field Log by: S. Fernandez Lab Log by:

		Field	Lab
Tide Level (MLLW)	Date	9/21/98	
Depth to Mud	S. Time	1210	
Mud Line Elev.	E. Time	1215	

Core Number	DR224
Drive Length, ft.	5', 3"
Recover Length, ft.	3', 4"
Recovery Efficiency	65%

DESCRIPTION OF CORE TUBES & TESTS (based on core tube lengths, feet)

Tube No. Ln. ft.	FIELD End Description	Spl No. & Test	LABORATORY Sample Description
_1	Clayey SILT, Bluish black (2.5/1 5B) no odor or stains, saturated, some gray mottling. 60/40		
_2			
_3			
_4			
_5			
_6			
_7			
_8			
_9			
_10			
_11			
_12			
_13			
_14			
_15			

(based on in-situ depths, feet)

Interpreted Summary Log (1)	Acquisition Data (2)	Blows/Ft. (3)
_1		
_2		
_3		
_4		
_5		
_6		
_7		
_8		
_9		
_10		
_11		
_12		
_13		
_14		
_15		

1. The summary log is an interpretation based on samples, blow counts, acquisition data, and interpolation. The recovery efficiency is a rough indication of the general confidence of the summary log. Variation between what is shown and actual conditions should be expected.
2. 11/9 (83%): Penetration Depth, ft/Corresponding Sample Recovery, ft. (Corresponding Total Recovery Efficiency, percent)
3. Blows/ft. are the number of hammer strikes required to drive the core tube 1 foot.

FIELD SAMPLING PLAN Expected Mudline Elev: Expected Thickness of Recent Sediment:

Tube Segment			Actual Recovery				Chain-of-Custody of Core Tube Sections Transfer Tube Sections from Field to Lab
No.	In Situ Depth	Ln.	Total % R	Core Tube Depth	Length	Segment % R	
A							Relinquished By:
B							Received By:
C							Date:
D							Time:
							Comments:

LAB: SAMPLES SELECTED FOR TESTING

SAMPLE		Sample Depth	
Number	Test	Tube	In-Situ
S839 4000	0-2		
9839 4001	2-3', 4"		

COMMENTS

REACH D
MOUTH SLIP 6

CORE DESCRIPTION

Project Name: DUWAMISH RIVER SI
Project No.: 4000-019-038-5100
Project Location: SEATTLE, WA
Core Method GRAVITY CORER (4")

Field Log by: S. Fernandez Lab Log by:		Field	Lab
Tide Level (MLLW)	Date	9/22/98	
Depth to Mud	S. Time	1234	
Mud Line Elev.	E. Time	1237	

Core Number	DR246
Drive Length, ft.	5', 3"
Recover Length, ft.	4', 8" 4.75"
Recovery Efficiency	89 %

DESCRIPTION OF CORE TUBES & TESTS (based on core tube lengths, feet)

Tube No. Ln. ft.	FIELD End Description	Spl No. & Test	LABORATORY Sample Description
_1	Silty Clay, Bluish black, med. plasticity saturated, no stain or odor, bioturbation. (@ 120)		
_2			
_3			
_4			
_5	TD = 4', 8"		
_6			
_7			
_8			
_9			
_10			
_11			
_12			
_13			
_14			
_15			

(based on in-situ depths, feet)

Interpreted Summary Log (1)	Acquisition Data (2)	Blows/Ft. (3)
_1		
_2		
_3		
_4		
_5		
_6		
_7		
_8		
_9		
_10		
_11		
_12		
_13		
_14		
_15		

1. The summary log is an interpretation based on samples, blow counts, acquisition data, and interpolation. The recovery efficiency is a rough indication of the general confidence of the summary log. Variation between what is shown and actual conditions should be expected.
2. 11/9 (83%): Penetration Depth, ft./Corresponding Sample Recovery, ft. (Corresponding Total Recovery Efficiency, percent)
3. Blows/ft. are the number of hammer strikes required to drive the core tube 1 foot.

FIELD SAMPLING PLAN Expected Mudline Elev: Expected Thickness of Recent Sediment:

Tube Segment			Actual Recovery				Chain-of-Custody of Core Tube Sections Transfer Tube Sections from Field to Lab
No.	*In Situ* Depth	Ln.	Total % R	Core Tube Depth	Length	Segment % R	
A							Relinquished By:
B							Received By:
C							Date:
D							Time:
							Comments:

LAB: SAMPLES SELECTED FOR TESTING

SAMPLE		Sample Depth	
Number	Test	Tube	In-Situ
98394017	0-2		
98394018	2-4		

COMMENTS

95-1128.FRM

REACH D
TURNING BASIN

CORE DESCRIPTION

WESTON MANAGERS DESIGNERS/CONSULTANTS

Project Name: DUWAMISH RIVER SI
Project No.: 4000-019-038-5100
Project Location: SEATTLE, WA
Core Method: GRAVITY CORER (4")

Field Log by: S. Fernández Lab Log by:

		Field	Lab
Tide Level (MLLW)	Date	9/23/98	
Depth to Mud	S. Time	0953	
Mud Line Elev.	E. Time	0956	

Core Number	~~DR29T~~ 29Z ~~subst~~ 26G
Drive Length, ft.	5', 3"
Recover Length, ft.	4', 7" 55"
Recovery Efficiency	87%

DESCRIPTION OF CORE TUBES & TESTS (based on core tube lengths, feet)

Tube No. Ln. ft.	FIELD End Description	Spl No. & Test	LABORATORY Sample Description
1	Silty Clay with some sand, bluish black, no stain or odor, sand in stringers		
2			
3	Sand with SILT & Clay, Bluish black, fine grained, no stain or odor, sgt, subangular (50, 25, 25)		
4			
5	TD - 4', 7"		
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

(based on in-situ depths, feet)

Interpreted Summary Log (1)	Acquisition Data (2)	Blows/Ft. (3)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

1. The summary log is an interpretation based on samples, blow counts, acquisition data, and interpolation. The recovery efficiency is a rough indication of the general confidence of the summary log. Variation between what is shown and actual conditions should be expected.
2. 11/9 (83%): Penetration Depth, ft./Corresponding Sample Recovery, ft. (Corresponding Total Recovery Efficiency, percent)
3. Blows/ft. are the number of hammer strikes required to drive the core tube 1 foot.

FIELD SAMPLING PLAN Expected Mudline Elev: Expected Thickness of Recent Sediment:

Tube Segment No.	Tube Segment In Situ Depth	Tube Segment Ln.	Actual Recovery Total % R	Actual Recovery Core Tube Depth	Actual Recovery Length	Actual Recovery Segment % R	Chain-of-Custody of Core Tube Sections Transfer Tube Sections from Field to Lab
A							Relinquished By:
B							Received By:
C							Date:
D							Time:
							Comments:

LAB: SAMPLES SELECTED FOR TESTING

SAMPLE Number	SAMPLE Test	Sample Depth Tube	Sample Depth In-Situ
98394025	0-2		
98394026	2-4		

COMMENTS

95-1128.FRM

REACH D
DUWAMISH YACHT CLUB

CORE DESCRIPTION

Project Name: DUWAMISH RIVER SI
Project No.: 4000-019-038-5100
Project Location: SEATTLE, WA
Core Method GRAVITY CORER (4")

Field Log by: S. Fernandez Lab Log by:

		Field	Lab
Tide Level (MLLW)	Date	9/22/98	
Depth to Mud	S. Time	1306	
Mud Line Elev.	E. Time	1309	

Core Number	DR284
Drive Length, ft.	5', 3"
Recover Length, ft.	4', 8" 5"
Recovery Efficiency	89%

DESCRIPTION OF CORE TUBES & TESTS (based on core tube lengths, feet)

Tube No. Ln. ft.	FIELD End Description	Spl No. & Test	LABORATORY Sample Description
_1	Clayey SILT with sand		
_2	Bluish black, med plasticity, sand fine grained in		
_3	stringers, saturated no stain or odor.		
_4			
_5	TD - 4', 8"		
_6			
_7			
_8			
_9			
_10			
_11			
_12			
_13			
_14			
_15			

(based on in-situ depths, feet)

Interpreted Summary Log (1)	Acquisition Data (2)	Blows/Ft. (3)
_1		
_2		
_3		
_4		
_5		
_6		
_7		
_8		
_9		
_10		
_11		
_12		
_13		
_14		
_15		

1. The summary log is an interpretation based on samples, blow counts, acquisition data, and interpolation. The recovery efficiency is a rough indication of the general confidence of the summary log. Variation between what is shown and actual conditions should be expected.
2. 11/9 (83%): Penetration Depth, ft/Corresponding Sample Recovery, ft. (Corresponding Total Recovery Efficiency, percent)
3. Blows/ft. are the number of hammer strikes required to drive the core tube 1 foot.

FIELD SAMPLING PLAN Expected Mudline Elev: Expected Thickness of Recent Sediment:

Tube Segment No.	Tube Segment *In Situ* Depth	Tube Segment Ln.	Actual Recovery Total % R	Actual Recovery Core Tube Depth	Actual Recovery Length	Actual Recovery Segment % R	Chain-of-Custody of Core Tube Sections Transfer Tube Sections from Field to Lab
A							Relinquished By:
B							Received By:
C							Date:
D							Time:
							Comments:

LAB: SAMPLES SELECTED FOR TESTING

SAMPLE Number	SAMPLE Test	Sample Depth Tube	Sample Depth In-Situ
983940 19	0-2		
983940 20	2-4		

COMMENTS

APPENDIX C

STATION COORDINATES

Table C-1—Duwamish River X & Y Coordinates by Station

Station	EPA Sample	N*	W*	X-Coordinate	Y-Coordinate
DR001	98364023	47 34 08.01	122 20 43.86	1267138.3490	211182.0841
DR002	98334002	47 34 04.83	122 20 45.80	1266999.0100	210862.5517
DR003	98334001	47 34 01.81	122 20 47.17	1266899.0650	210558.4604
DR004	98334000	47 33 58.73	122 20 46.74	1266922.4120	210245.8643
DR005	98344022	47 33 54.53	122 20 47.09	1266890.0480	209820.8593
DR006	98344023	47 33 51.79	122 20 46.80	1266904.4740	209542.8953
DR007	98344024	47 33 48.72	122 20 45.72	1266972.4110	209230.4361
DR008	98344025	47 33 47.02	122 20 44.78	1267033.4790	209056.9522
DR009	98344026	47 33 45.96	122 20 43.28	1267134.2200	208947.5486
DR010	98384000	47 33 42.08	122 20 42.14	1267204.6660	208552.9531
DR011	98344028	47 33 39.71	122 20 43.14	1267131.3790	208314.2098
DR012	98344030	47 33 34.86	122 20 39.96	1267339.7830	207818.6016
DR013	98344031	47 33 32.57	122 20 38.51	1267434.6580	207584.6630
DR014	98344033	47 33 29.08	122 20 37.09	1267525.0920	207229.2002
DR015	98344000	47 33 25.74	122 20 33.92	1267735.8350	206886.5791
DR016	98344001	47 33 25.35	122 20 31.64	1267891.4120	206844.0040
DR017	98344002	47 33 25.37	122 20 26.15	1268267.9310	206838.6518
DR018	98364031	47 33 24.09	122 20 27.41	1268178.9850	206710.6752
DR019	98344004	47 33 22.31	122 20 27.00	1268203.5690	206529.8030
DR020	98344003	47 33 22.55	122 20 23.41	1268450.2350	206549.2943
DR021	98344005	47 33 24.09	122 20 32.62	1267821.7040	206717.6787
DR022	98344006	47 33 19.28	122 20 30.82	1267935.5880	206227.9855
DR023	98344008	47 33 15.93	122 20 28.84	1268064.7210	205885.9551
DR024	98344011	47 33 13.42	122 20 27.71	1268137.2330	205630.1631
DR025	98344012	47 33 11.32	122 20 26.30	1268229.7630	205415.5299
DR026	98344013	47 33 08.65	122 20 25.55	1268275.9010	205144.0403
DR027	98344014	47 33 06.46	122 20 24.46	1268346.3110	204920.7202
DR028	98344015	47 33 03.39	122 20 22.56	1268470.5290	204607.1651
DR030	98344018	47 33 01.71	122 20 21.77	1268521.3790	204435.9135
DR031	98334004	47 34 10.36	122 21 07.49	1265522.9800	211452.0555
DR032	98334003	47 34 05.31	122 21 00.25	1266009.2620	210930.6801
DR033	98334005	47 34 02.09	122 20 59.32	1266066.5950	210603.2247
DR034	98334007	47 34 00.78	122 20 59.35	1266061.9230	210470.5571
DR035	98334006	47 33 58.06	122 20 58.66	1266103.8010	210194.0781
DR036	98334008	47 33 54.91	122 20 56.70	1266231.8990	209872.3230
DR037	98344036	47 33 52.78	122 20 55.07	1266339.4100	209654.3444
DR038	98364030	47 33 49.37	122 20 53.75	1266423.1160	209307.1157
DR039	98334009	47 33 46.50	122 20 54.11	1266392.7070	209016.8594
DR040	98334010	47 33 43.54	122 20 57.28	1266169.4400	208721.2806
DR041	98334014	47 33 41.85	122 20 53.75	1266408.1170	208545.3100
DR042	98334012	47 33 38.55	122 20 58.25	1266092.9680	208217.0845
DR043	98334011	47 33 36.00	122 20 56.25	1266225.0210	207956.0577
DR044	98334013	47 33 38.63	122 20 51.19	1266577.2360	208215.6560
DR045	98384009	47 33 30.55	122 20 59.59	1265985.1100	207408.4639
DR046	98334019	47 33 30.98	122 20 47.85	1266791.0200	207436.1748
DR047	98384008	47 33 23.63	122 20 54.59	1266314.1740	206700.6860
DR048	98334018	47 33 20.83	122 20 44.56	1266996.4170	206403.5033
DR049	98334022	47 33 19.58	122 20 37.80	1267457.5120	206267.7672
DR050	98364010	47 33 17.65	122 20 36.96	1267511.2800	206071.1197

Table C-1—Duwamish River X & Y Coordinates by Station

Station	EPA Sample	N*	W*	X-Coordinate	Y-Coordinate
DR051	98334024	47 33 14.03	122 20 34.43	1267677.5890	205700.9942
DR052	98334026	47 33 10.08	122 20 32.73	1267786.3260	205298.5561
DR053	98364011	47 33 06.26	122 20 30.36	1267941.2770	204908.3874
DR054	98334030	47 33 04.50	122 20 28.38	1268073.5770	204727.4305
DR055	98364035	47 34 06.55	122 20 51.37	1266620.5540	211044.3060
DR056	98364000	47 34 02.70	122 20 50.92	1266643.7320	210653.6785
DR057	98364001	47 33 53.79	122 20 49.49	1266724.0180	209749.1309
DR058	98364002	47 33 51.00	122 20 48.89	1266759.5980	209465.6835
DR059	98344027	47 33 44.01	122 20 43.77	1267096.7400	208750.6660
DR060	98344029	47 33 37.36	122 20 43.26	1267118.4720	208076.3070
DR061	98344032	47 33 30.79	122 20 38.50	1267431.8030	207404.3283
DR062	98344009	47 33 19.37	122 20 32.46	1267823.2990	206239.3082
DR063	98344010	47 33 15.40	122 20 29.30	1268032.1220	205832.8821
DR064	98344016	47 33 05.84	122 20 25.20	1268294.3300	204858.9055
DR065	98344017	47 33 00.50	122 20 22.74	1268452.4530	204314.6377
DR066	98344034	47 34 02.05	122 20 56.87	1266234.4920	210595.8628
DR067	98344035	47 33 55.25	122 20 55.94	1266284.6870	209905.7399
DR068	98344037	47 33 52.00	122 20 54.11	1266403.6770	209574.0312
DR069	98344015	47 33 47.47	122 20 51.56	1266569.4890	209111.6824
DR070	98334017	47 33 41.66	122 20 49.60	1266692.3010	208520.4618
DR071	98344038	47 33 33.36	122 20 44.88	1266999.4220	207673.2740
DR072	98334020	47 33 30.41	122 20 42.70	1267143.0380	207371.4894
DR073	98334021	47 33 21.76	122 20 38.36	1267423.4440	206489.3640
DR074	98334025	47 33 15.00	122 20 34.25	1267691.8610	205799.0170
DR075	98334027	47 33 08.91	122 20 29.83	1267982.8880	205176.1308
DR076	98354013	47 34 08.06	122 21 00.52	1265996.2430	211209.6307
DR077	98354017	47 34 03.66	122 20 57.71	1266180.1140	210760.0967
DR078	98354016	47 33 59.12	122 20 55.98	1266289.6660	210297.8402
DR079	98354015	47 33 54.83	122 20 53.27	1266466.9160	209859.5875
DR080	98354014	47 33 49.94	122 20 50.94	1266616.9240	209361.0667
DR081	98364003	47 33 45.93	122 20 47.93	1266815.3200	208950.7775
DR082	98364004	47 33 41.99	122 20 46.64	1266895.9240	208549.9003
DR083	98364005	47 33 34.64	122 20 44.13	1267053.4000	207801.9324
DR084	98364006	47 33 31.03	122 20 41.48	1267227.9320	207432.6543
DR085	98364007	47 33 27.33	122 20 38.98	1267392.0060	207054.4624
DR086	98364008	47 33 21.06	122 20 35.47	1267620.2400	206414.5613
DR087	98334023	47 33 18.68	122 20 33.73	1267734.8350	206171.1165
DR088	98364009	47 33 12.17	122 20 30.26	1267959.8720	205506.9603
DR089	98334028	47 33 10.01	122 20 28.57	1268071.4850	205285.8717
DR090	98334029	47 33 04.74	122 20 25.94	1268241.3960	204748.4649
DR091	98364013	47 32 57.37	122 20 19.57	1268663.6630	203993.3007
DR092	98354085	47 32 52.91	122 20 18.23	1268746.7300	203539.6860
DR093	98344020	47 32 50.35	122 20 16.66	1268849.3420	203278.2413
DR094	98344073	47 32 46.74	122 20 13.58	1269053.4470	202908.4033
DR095	98344072	47 32 46.03	122 20 12.09	1269154.2400	202834.4803
DR096	98364032	47 32 48.59	122 20 09.04	1269368.5040	203089.7331
DR097	98344074	47 32 50.54	122 20 06.77	1269528.0570	203284.2369
DR098	98344075	47 32 49.30	122 20 06.69	1269531.0920	203158.5125
DR099	98344076	47 32 47.62	122 20 07.91	1269444.0910	202989.9547

Table C-1—Duwamish River X & Y Coordinates by Station

Station	EPA Sample	N*	W*	X-Coordinate	Y-Coordinate
DR100	98344077	47 32 43.71	122 20 11.19	1269211.3800	202598.2484
DR101	98344078	47 32 44.52	122 20 12.72	1269108.0390	202682.3552
DR102	98344079	47 32 39.62	122 20 11.00	1269216.3190	202183.6594
DR103	98344039	47 32 38.15	122 20 10.70	1269233.9880	202034.3402
DR104	98344040	47 32 34.79	122 20 06.05	1269546.3020	201687.7304
DR105	98344057	47 32 33.23	122 20 01.30	1269869.0430	201523.3398
DR106	98344054	47 32 33.51	122 19 56.24	1270216.6850	201544.9404
DR107	98344053	47 32 34.18	122 19 52.56	1270470.4340	201607.8986
DR108	98344052	47 32 33.14	122 19 49.59	1270672.1100	201498.5772
DR109	98364029	47 32 33.17	122 19 53.62	1270395.7320	201506.9968
DR110	98344051	47 32 31.18	122 19 57.81	1270104.3910	201310.9995
DR111	98344055	47 32 32.63	122 19 59.59	1269985.1550	201460.2704
DR112	98344050	47 32 29.77	122 19 56.34	1270202.4440	201166.1957
DR113	98344058	47 32 26.70	122 19 52.95	1270428.9300	200850.6626
DR114	98344060	47 32 24.00	122 19 50.30	1270605.3900	200573.6025
DR115	98384003	47 32 23.20	122 19 47.53	1270793.8310	200488.8624
DR116	98344043	47 32 21.22	122 19 41.64	1271193.9790	200280.4256
DR117	98344044	47 32 18.99	122 19 41.35	1271209.4840	200054.1302
DR118	98344045	47 32 16.95	122 19 38.13	1271426.3640	199843.1791
DR119	98344046	47 32 15.28	122 19 36.99	1271501.2850	199672.4824
DR120	98334031	47 33 01.60	122 20 27.13	1268153.5500	204431.9687
DR121	98364014	47 32 59.82	122 20 27.80	1268104.0650	204252.5477
DR122	98384001	47 32 57.85	122 20 28.05	1268083.0080	204053.3145
DR123	98384002	47 32 56.22	122 20 29.68	1267967.9770	203890.3797
DR124	98384010	47 32 54.50	122 20 26.48	1268184.0390	203711.8359
DR125	98364015	47 32 58.69	122 20 26.94	1268160.8050	204136.9183
DR126	98334033	47 32 54.11	122 20 24.71	1268304.6640	203669.9495
DR127	98334034	47 32 52.09	122 20 23.56	1268379.5330	203463.7706
DR128	98334035	47 32 48.33	122 20 21.57	1268508.5680	203080.1950
DR129	98354082	47 32 44.67	122 20 19.61	1268635.7480	202706.7910
DR130	98334036	47 32 41.33	122 20 18.32	1268717.6110	202366.7040
DR131	98334039	47 32 37.71	122 20 16.88	1268809.2120	201998.0510
DR132	98334041	47 32 36.11	122 20 13.12	1269063.9550	201830.9226
DR133	98364034	47 32 32.99	122 20 08.02	1269407.6120	201508.0204
DR134	98334044	47 32 31.97	122 20 06.39	1269517.4040	201402.5075
DR135	98334046	47 32 27.91	122 20 02.37	1269785.1360	200985.8321
DR136	98334048	47 32 24.79	122 19 57.91	1270084.9180	200663.7983
DR137	98334050	47 32 22.69	122 19 55.42	1270251.5830	200447.7315
DR138	98364022	47 32 21.51	122 19 53.90	1270353.5250	200326.1617
DR139	98384004	47 32 21.62	122 19 56.34	1270186.3600	200340.5651
DR140	98364028	47 32 17.85	122 19 47.64	1270775.7440	199947.0305
DR141	98344080	47 32 17.49	122 19 46.73	1270837.4610	199909.3468
DR142	98344083	47 32 15.06	122 19 43.49	1271054.9430	199658.8561
DR143	98364020	47 32 13.25	122 19 40.70	1271242.7790	199471.7763
DR144	98344019	47 32 57.02	122 20 20.51	1268598.4980	203959.1057
DR145	98344021	47 32 49.04	122 20 16.98	1268824.7980	203145.9620
DR146	98344071	47 32 42.34	122 20 13.92	1269021.4150	202463.1204
DR147	98364033	47 32 36.20	122 20 07.79	1269429.7370	201832.8991
DR148	98344041	47 32 30.18	122 19 59.30	1270000.2100	201211.6870

Table C-1—Duwamish River X & Y Coordinates by Station

Station	EPA Sample	N*	W*	X-Coordinate	Y-Coordinate
DR149	98344061	47 32 23.96	122 19 49.11	1270686.9430	200567.9620
DR150	98344042	47 32 19.61	122 19 44.22	1271013.8230	200120.7647
DR151	98344047	47 32 14.14	122 19 36.36	1271542.2620	199556.1564
DR152	98354086	47 32 52.93	122 20 23.48	1268386.6860	203548.7587
DR153	98364017	47 32 45.41	122 20 19.87	1268619.3810	202782.1050
DR154	98334037	47 32 39.17	122 20 16.47	1268840.2270	202145.4053
DR155	98334042	47 32 34.09	122 20 10.46	1269242.4170	201622.7234
DR156	98334049	47 32 24.97	122 19 56.89	1270155.2430	200680.6698
DR157	98364021	47 32 21.73	122 19 54.02	1270345.7270	200348.6089
DR158	98344082	47 32 17.32	122 19 46.34	1270863.8800	199891.6048
DR159	98334053	47 32 12.40	122 19 38.37	1271400.9500	199382.5633
DR160	98334032	47 33 00.96	122 20 25.91	1268235.9530	204365.4949
DR161	98364016	47 32 54.21	122 20 21.52	1268523.6550	203675.7965
DR162	98354084	47 32 51.59	122 20 20.21	1268608.3110	203408.6213
DR163	98354083	47 32 48.88	122 20 17.71	1268774.4110	203130.7325
DR164	98344070	47 32 39.42	122 20 14.57	1268971.0480	202168.1835
DR165	98334040	47 32 36.78	122 20 11.36	1269186.0050	201896.4377
DR166	98334043	47 32 34.72	122 20 09.02	1269342.4390	201684.6161
DR167	98334045	47 32 30.71	122 20 01.37	1269859.2630	201268.1465
DR168	98334047	47 32 26.31	122 19 56.60	1270177.7810	200816.0300
DR169	98334051	47 32 23.56	122 19 53.11	1270411.7610	200532.7805
DR170	98334052	47 32 19.96	122 19 46.34	1270869.0810	200159.0485
DR171	98344069	47 32 14.50	122 19 39.75	1271310.4100	199597.1411
DR172	98344048	47 32 11.99	122 19 31.34	1271882.4200	199331.6708
DR173	98344049	47 32 09.88	122 19 28.40	1272079.9690	199114.0083
DR174	98344098	47 32 07.89	122 19 24.80	1272323.0370	198907.6275
DR175	98344097	47 32 05.31	122 19 20.97	1272580.7330	198641.1747
DR176	98364019	47 31 06.48	122 18 18.15	1276776.5290	192598.4795
DR177	98354003	47 32 08.26	122 19 11.04	1273267.7550	198926.8515
DR178	98354000	47 32 12.79	122 19 08.50	1273450.8700	199382.3965
DR179	98354002	47 32 11.47	122 19 07.66	1273505.9150	199247.5617
DR180	98354004	47 32 06.89	122 19 11.21	1273253.4110	198788.2894
DR181	98364025	47 32 07.68	122 19 10.96	1273272.1080	198867.9888
DR182	98354005	47 32 05.84	122 19 12.30	1273176.5770	198683.3642
DR183	98354006	47 32 03.77	122 19 17.82	1272793.8220	198480.9845
DR184	98344066	47 31 36.35	122 18 33.38	1275789.3830	195644.4777
DR185	98354073	47 31 36.14	122 18 32.85	1275825.3410	195622.5061
DR186	98354072	47 31 32.86	122 18 30.82	1275958.2610	195287.5548
DR187	98354070	47 31 27.39	122 18 28.10	1276134.2820	194729.8392
DR188	98354029	47 31 23.61	122 18 27.55	1276164.6850	194346.1832
DR189	98384005	47 32 11.20	122 19 38.13	1271415.0540	199260.6782
DR190	98334055	47 32 08.49	122 19 33.19	1271748.6280	198979.5663
DR191	98334061	47 32 06.21	122 19 29.98	1271964.3690	198744.3216
DR192	98334057	47 32 03.92	122 19 25.73	1272251.4450	198506.6841
DR193	98334059	47 32 01.65	122 19 20.79	1272585.9070	198270.1608
DR194	98344086	47 31 59.26	122 19 17.70	1272793.2180	198023.9413
DR195	98344089	47 31 56.99	122 19 14.17	1273030.9570	197789.2971
DR196	98344090	47 31 55.57	122 19 11.36	1273220.9670	197641.7192
DR197	98344092	47 31 53.82	122 19 09.48	1273346.5280	197461.9446

Table C-1—Duwamish River X & Y Coordinates by Station

Station	EPA Sample	N*	W*	X-Coordinate	Y-Coordinate
DR198	98344094	47 31 52.39	122 19 07.11	1273506.3360	197313.9394
DR199	98344095	47 31 51.40	122 19 05.06	1273645.0510	197210.9333
DR200	98344096	47 31 50.03	122 19 02.81	1273796.7470	197069.1677
DR201	98354064	47 31 48.80	122 19 01.11	1273910.9830	196942.3136
DR202	98354081	47 31 49.75	122 19 02.53	1273815.4110	197040.4318
DR203	98354066	47 31 46.01	122 18 55.80	1274269.8650	196652.6520
DR204	98354080	47 31 45.65	122 18 54.80	1274337.7750	196614.8608
DR205	98354078	47 31 42.46	122 18 49.83	1274672.5610	196285.1342
DR206	98354077	47 31 37.35	122 18 39.90	1275343.9530	195754.3690
DR207	98354076	47 31 36.34	122 18 38.63	1275429.1300	195650.3777
DR208	98354074	47 31 33.11	122 18 35.59	1275631.4430	195319.1589
DR209	98354071	47 31 30.34	122 18 34.25	1275718.0070	195036.7801
DR210	98354031	47 31 26.66	122 18 32.63	1275822.0180	194661.8456
DR211	98354030	47 31 24.72	122 18 32.00	1275861.4800	194464.4849
DR212	98344084	47 32 09.19	122 19 28.93	1272042.2550	199044.8129
DR213	98344085	47 32 06.98	122 19 24.57	1272337.0310	198815.1347
DR214	98344062	47 31 59.86	122 19 14.34	1273024.9130	198080.2670
DR215	98344063	47 31 54.64	122 19 04.83	1273667.1640	197538.8561
DR216	98344099	47 31 49.57	122 18 56.15	1274252.7980	197013.7596
DR217	98344065	47 31 44.64	122 18 46.40	1274912.1520	196501.4520
DR218	98344064	47 31 39.46	122 18 39.07	1275405.0080	195967.0288
DR219	98384007	47 31 32.32	122 18 31.38	1275918.7870	195233.5869
DR220	98354033	47 31 26.77	122 18 29.57	1276032.2080	194668.9633
DR221	98334056	47 32 08.13	122 19 31.24	1271881.6980	198940.5022
DR222	98334058	47 32 02.84	122 19 23.24	1272420.1550	198393.9669
DR223	98344087	47 31 58.49	122 19 14.90	1272983.8100	197942.2222
DR224	98344091	47 31 54.73	122 19 09.32	1273359.2860	197553.9199
DR225	98344093	47 31 53.73	122 19 07.40	1273489.0590	197450.0718
DR226	98354065	47 31 47.92	122 18 57.91	1274128.8210	196848.9333
DR227	98354079	47 31 43.31	122 18 49.91	1274668.7280	196371.3489
DR228	98364027	47 31 40.92	122 18 44.80	1275014.6880	196122.4874
DR229	98354075	47 31 37.23	122 18 37.77	1275489.8700	195739.4062
DR230	98354032	47 31 27.82	122 18 31.43	1275906.6150	194777.7803
DR231	98334054	47 32 12.15	122 19 36.13	1271554.1280	199354.2542
DR232	98334060	47 32 02.35	122 19 20.88	1272581.1040	198341.1935
DR233	98344068	47 31 51.96	122 19 02.08	1273850.6040	197263.7199
DR234	98344067	47 31 43.26	122 18 47.49	1274834.6750	196363.0895
DR235	98354063	47 31 30.30	122 18 32.31	1275851.0480	195030.1745
DR236	98354069	47 31 20.70	122 18 25.54	1276296.9670	194048.7434
DR237	98354025	47 31 16.39	122 18 23.93	1276399.0870	193610.0031
DR238	98354067	47 31 13.84	122 18 21.27	1276576.6820	193348.1810
DR239	98354068	47 31 10.28	122 18 20.27	1276638.4050	192986.2219
DR240	98354011	47 31 08.40	122 18 15.00	1276996.4210	192788.8519
DR241	98354009	47 31 10.04	122 18 10.80	1277287.8250	192949.4850
DR242	98354007	47 31 09.87	122 18 08.04	1277476.9030	192928.6465
DR243	98354010	47 31 08.21	122 18 10.97	1277272.6180	192764.3195
DR244	98364024	47 31 08.73	122 18 12.20	1277189.2140	192818.6106
DR245	98354012	47 31 06.84	122 18 15.72	1276943.9890	192631.7605
DR246	98364018	47 31 06.64	122 18 18.06	1276783.0150	192614.5702

Table C-1—Duwamish River X & Y Coordinates by Station

Station	EPA Sample	N*	W*	X-Coordinate	Y-Coordinate
DR247	98354059	47 31 03.28	122 18 18.19	1276767.5830	192274.3558
DR248	98354058	47 31 01.14	122 18 17.97	1276778.5350	192057.2742
DR249	98354052	47 30 56.77	122 18 17.14	1276827.0320	191613.4817
DR250	98354050	47 30 52.19	122 18 14.87	1276973.9540	191146.5259
DR251	98354043	47 30 51.70	122 18 14.50	1276998.3990	191096.4010
DR252	98354038	47 30 47.16	122 18 10.39	1277271.6950	190631.0865
DR253	98354037	47 30 46.07	122 18 06.24	1277554.4190	190515.2263
DR254	98354036	47 30 45.33	122 18 01.36	1277887.9260	190433.8717
DR255	98384019	47 30 44.10	122 17 54.31	1278369.4280	190300.0471
DR256	98384016	47 30 42.35	122 17 50.78	1278608.3370	190118.1514
DR257	98384015	47 30 40.46	122 17 46.56	1278894.3410	189921.1754
DR258	98354026	47 31 19.90	122 18 30.44	1275959.1670	193974.1425
DR259	98354023	47 31 15.89	122 18 27.86	1276128.4270	193564.5162
DR260	98364036	47 31 11.51	122 18 28.99	1276042.3790	193122.2864
DR261	98354021	47 31 08.95	122 18 26.90	1276180.8370	192860.1973
DR262	98364026	47 31 06.36	122 18 25.42	1276277.3780	192595.8718
DR263	98354018	47 31 00.22	122 18 23.21	1276417.1360	191970.9548
DR264	98354056	47 31 00.93	122 18 22.54	1276464.4940	192042.0012
DR265	98354053	47 30 55.90	122 18 21.79	1276506.2130	191531.4516
DR266	98354049	47 30 51.95	122 18 20.04	1276618.6610	191128.9983
DR267	98354042	47 30 49.76	122 18 19.20	1276672.0680	190906.0373
DR268	98354041	47 30 46.24	122 18 18.17	1276735.9390	190548.0913
DR269	98354040	47 30 44.08	122 18 16.86	1276821.6660	190327.5528
DR270	98354039	47 30 43.08	122 18 14.68	1276969.3540	190223.3873
DR271	98384020	47 30 40.94	122 18 05.83	1277572.6420	189994.9939
DR272	98354034	47 30 44.47	122 18 01.56	1277872.5380	190347.0110
DR273	98354035	47 30 43.49	122 18 01.49	1277875.4490	190247.6403
DR274	98384018	47 30 41.88	122 17 56.39	1278222.3830	190077.8682
DR275	98384017	47 30 40.37	122 17 52.26	1278502.9380	189919.5001
DR276	98384014	47 30 39.19	122 17 48.02	1278791.6840	189794.4232
DR277	98354027	47 31 19.51	122 18 26.30	1276242.5050	193929.1894
DR278	98354062	47 31 11.79	122 18 22.89	1276461.5350	193142.6336
DR279	98354061	47 31 05.75	122 18 20.40	1276620.7030	192527.4807
DR280	98354057	47 30 59.90	122 18 17.97	1276776.1330	191931.6559
DR281	98354051	47 30 53.15	122 18 16.34	1276874.9240	191245.7075
DR282	98354028	47 31 20.71	122 18 28.57	1276089.0620	194053.7399
DR283	98354022	47 31 11.36	122 18 26.74	1276196.4940	193104.1320
DR284	98354020	47 31 08.61	122 18 25.16	1276299.5860	192823.4664
DR285	98354019	47 31 05.39	122 18 24.39	1276346.1820	192496.2523
DR286	98354054	47 30 59.08	122 18 21.85	1276508.2610	191853.6804
DR287	98354048	47 30 49.87	122 18 19.36	1276661.2990	190917.3909
DR288	98354024	47 31 16.94	122 18 25.99	1276258.7910	193668.4281
DR289	98354060	47 31 02.27	122 18 20.64	1276597.4870	192175.2543
DR290	98354047	47 30 49.67	122 18 17.29	1276802.9820	190894.4126
DR291	98354046	47 30 46.22	122 18 15.23	1276937.6860	190542.2068
DR292	98354044	47 30 44.87	122 18 12.43	1277127.2490	190401.7723
DR293	98384006	47 30 43.33	122 18 01.22	1277893.6720	190231.0782
DR294	98384011	47 30 43.94	122 17 58.52	1278080.1650	190289.3422
DR295	98384012	47 30 42.02	122 17 53.20	1278441.6020	190087.8818

Table C-1—Duwamish River X & Y Coordinates by Station

Station	EPA Sample	N*	W*	X-Coordinate	Y-Coordinate
DR296	98384013	47 30 40.24	122 17 48.44	1278764.8800	189901.3420
DR297	98384021	47 30 30.37	122 17 32.98	1279807.0430	188881.3060
DR298	98384022	47 30 27.93	122 17 31.46	1279906.6900	188632.1427
DR299	98384024	47 30 22.53	122 17 36.42	1279555.8490	188091.5511
DR300	98384025	47 30 20.81	122 17 36.33	1279558.7200	187917.1886
DR301	98384023	47 30 25.75	122 17 32.81	1279809.8360	188413.0539

Corresponding ArcView data = allcoord.dbf, a corrected version of newcoor.dbf.
* = degrees, minutes, seconds.

APPENDIX D

CONTACT LIST

Table D-1—Duwamish River SI Contact Log

Contact name	Affiliation	Phone Number	Dates	Subject/Result
Tuan Vu	Washington Department of Ecology (Ecology)	(360) 407-7449	4/16/98; 5/3/98; 5/4/98; 5/14/98	Transmittal of SEDQUAL
Vicki Evans	Seattle Public Utilities	(206) 684-8857	4/21/98; 4/22/98; 5/11/98; 5/12/98; 5/14/98	Compilation and transmittal of Duwamish GIS coverage
Stephanie Stirling	U.S. Army Corps of Engineers (Corps); Seattle District	(206) 764-6945	5/11/98; 5/12/98	Ownership of submerged and intertidal aquatic lands within the Duwamish study area
Alex Sumeri	Corps; Seattle District	(206) 764-3402	5/11/98; 5/12/98	Ownership of submerged and intertidal aquatic lands within the Duwamish study area
Lawrence McCrone	Exponent	(425) 643-9803	5/12/98; 5/18/98; 5/20/98	Transmittal of Duwamish Waterway Phase 1 Characterization (Boeing) Data
George Blomberg	Port of Seattle; Environmental Management Division	(206) 728-3194	5/12/98; 5/13/98; 5/14/98	Ownership of submerged and intertidal aquatic lands within the Duwamish study area
Martha Turvey	Ecology NW Region	(425) 649-7208	5/12/1998	Sediment data from Duwamish.
Theresa Michelsen	Avocet Consulting	(425) 487-6277	5/12/1998	Sediment data from Duwamish. Gave several contacts @ NOAA (Bob Taylor), ACOE (Dave Kendall or Stephanie Sterling), EPA RCRA (Silvia Burgess).
Stephanie Sterling	ACOE	(206) 764-6945	5/12/98, 5/27/98, 5/28/98	Sediment data from Duwamish. Referred to by Theresa Michelsen.
Rick Huey	EPA Region 10	(425) 649-7256	5/12/98, 5/28/98	New version of SEDQUAL.
Russ McMillan	Ecology SW Region	(360) 407-6254	5/12/1998	Sediment data from Duwamish. Contacted by KS. Referred to Martha Turvey (Ecology).

Table D-1—Duwamish River SI Contact Log

Contact name	Affiliation	Phone Number	Dates	Subject/Result
Silvia Burgess	EPA Region 10 RCRA	(206) 553-1200	5/12/1998	Rhone-Poulenc Duwamish Data. referred to the new Rhone-Poulenc EPA RCRA PM (Christy Brown).
Robert Taylor	NOAA	(206) 526-4565	5/19/1998	Legal Counsel, Damage Assessment and Restoration group
Chris Beaverson	NOAA	(206) 553-2101	5/19/98, 5/28/98	Availability of Duwamish Project Samples.
Christy Brown	EPA Region 10 RCRA	(206) 553-8506	5/19/1998	Sediment data from Duwamish.
Betty Bookheim / Tim Goodman	WA DNR Sediment Section	(360) 902-1100	5/19/98, 5/29/98	Sediment data from Duwamish. WA DNR Sediment Section, referred to by Susan Cook WA DNR South Puget Sound Region.
Susan Cook	WA DNR South Puget Sound	1-800-527-3305	5/19/1998	Sediment data from Duwamish. Provided contacts at other sate DNR offices (Mary Berret and Betty Bookheim)
George Blomberg	Port of Seattle	(206) 728-3194	5/19/1998	Sediment data from Duwamish.
Pat Romberg	METRO - King County DNR	(206) 296-8251	5/29/1998	Sediment data from Duwamish mentioned by Chris Beaverson and questions about CSO reports obtained from transportation library.
Mary Berret	WA DNR South Puget Sound Region	(360) 902-1111 ext 1904547	5/28/98, 5/29/98	Referred to by Susan Cook. Most of the data is held privately (i.e., Boeing). Referred to NOAA, Port of Seattle, and Ecology.

Table D-1—Duwamish River SI Contact Log

Contact name	Affiliation	Phone Number	Dates	Subject/Result
Anne Bailey	EcoChem	(206) 233-9332	5/28/98; 5/29/98; 6/3/98; 6/9/98	Transmittal of NOAA 1997 PCB data
Craig Homan	METRO KC DNR Water Quality	(206) 296-8249	5/29/1998	Referred to by the METRO KC Transportation and Natural Resources Library. Copied Norfolk and Diagonal CSO studies.
Pat Romberg	METRO KC DNR Water Quality	(206) 299-8251	5/29/1998	Norfolk and Diagonal CSO studies are out already. Should be in SEDQUAL (not).
Chris Beaverson	National Oceanic and Atmospheric Administration (NOAA)	(206) 553-2101	6/1/1998	Use of NOAA 1997 PCB data and potential other Duwamish data sources
John Miller	NOAA Damage Assessment and Restoration Program ; secretary for the Elliott Bay/Duwamish Restoration Program	(206) 526-4362	6/2/98, 6/4/98	Referred to by Pat Romberg.
Pat Romberg	King County Department of Natural Resources (KCDNR)	(206) 296-8251	6/5/98; 6/8/98	Status of Norfolk CSO cleanup and use of Norfolk and Diagonal Way CSO/SD data
Randy Schuman	METRO KC DNR Water Quality	(206) 296-8243	6/5/1998	Referred to by Pat Romberg. They have some data that was collected for modeling purposes near South Park, Kellogg Island, Brandon, 8th Ave, and Ham Creek. The data was collected from 13 different locations around those sites and composited into one sample.

Table D-1—Duwamish River SI Contact Log

Contact name	Affiliation	Phone Number	Dates	Subject/Result
Glen St. Ammant	Muckleshoot Tribe-Tribal Fisheries Department	(253) 931-0652 ext. 130	6/5/98, 6/10/98	
Sydney Munger	KCDNR	(206) 296-1970	6/9/1998	Status/availability of KCDNR Water Quality Assessment data
Christy Brown	EPA Region 10 (RCRA)	(206) 553-8506	6/9/1998	Availability of sediment data for Rhone-Poulenc facility
Sandy O'Neill	WA Fish and Wildlife Dept.	(360) 902-2843	6/10/1998	Referred to by Chris Beaverson.

APPENDIX E

STATISTICAL SUMMARY AND DATA LISTING

SURFACE SEDIMENT

DATA QUALIFIER LISTING

H – EPA data qualifier indicating a high bias

I – Results or quantitation limit are elevated due to analytical interference.

J – The analyte was positively identified and detected; however, the concentration is an estimated value because the result is less than the quantitation limit or quality control criteria were not met.

K – EPA data qualifier representing an unknown bias.

L – EPA data qualifier indicating a low bias.

Q – EPA data qualifier indicating that the result is estimated because the concentration is below the Contract Required Quantitation Limits (CRQLs).

T – When present in data qualifier, indicates value was summed from other constituents by software. Result was not present in original laboratory reports.

U – The analyte was not detected at the given concentration limit.

Sample Identification Qualifier

CC – When presented as a suffix in the sample identification number, CC indicates that a duplicate sample was collected at that respective location. It also indicates that these results are not present in original laboratory reports. Concentrations provided in the data listing tables were selected by comparing primary and duplicate samples using computer software. Only the most conservative values were selected to represent the results for that particular station.

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APPENDIX E-1

PESTICIDES/PCBS (SURFACE SEDIMENT)

Duwamish River Sediment Investigation - Statistics for Surface Sediment Results for Pesticides/PCBs

Constituent	Number of Samples Analyzed	Number of Detections	Detection Frequency (%)	Minimum Detected Value	Maximum Detected Value	Sample Number of Maximum Detected Value	Arithmetic Mean	Median Value
Pesticides/PCBs (ug/kg)								
4,4'-DDD	47	7	14.9	2.00	840.00	SD-DR178-0000-CC	24.106	2.000
4,4'-DDE	47	7	14.9	1.00	370.00	SD-DR178-0000-CC	13.957	2.000
4,4'-DDT	47	5	10.6	2.00	1670.00	SD-DR178-0000-CC	41.702	2.000
Aldrin	47	0	0.0	n/a	n/a		2.191	1.000
alpha-BHC	47	0	0.0	n/a	n/a		2.191	1.000
alpha-Chlordane	47	1	2.1	26.00	26.00	SD-DR178-0000-CC	3.255	1.000
beta-BHC	47	1	2.1	13.00	13.00	SD-DR178-0000-CC	2.255	1.000
Dieldrin	47	3	6.4	13.00	280.00	SD-DR178-0000-CC	10.489	2.000
Endosulfan I	47	0	0.0	n/a	n/a		4.297	1.000
Endosulfan II	47	0	0.0	n/a	n/a		10.936	2.000
Endosulfan Sulfate	47	0	0.0	n/a	n/a		8.638	2.000
Endrin	47	0	0.0	n/a	n/a		8.574	2.000
Endrin Aldehyde	47	2	4.3	14.00	130.00	SD-DR178-0000-CC	7.659	2.000
Endrin Ketone	47	0	0.0	n/a	n/a		8.404	2.000
gamma-BHC (Lindane)	47	0	0.0	n/a	n/a		2.191	1.000
gamma-Chlordane	47	2	4.3	1.00	204.00	SD-DR178-0000-CC	6.829	1.000
Heptachlor	47	0	0.0	n/a	n/a		2.191	1.000
Heptachlor Epoxide	47	3	6.4	1.00	2.00	SD-DR301-0000	4.829	1.000
Methoxychlor	47	6	12.8	2.00	99.00	SD-DR178-0000-CC	4.617	1.000
Toxaphene	47	0	0.0	n/a	n/a		158.957	25.000
Aroclor 1016	300	0	0.0	n/a	n/a		20.100	20.000
Aroclor 1221	300	0	0.0	n/a	n/a		40.033	40.000
Aroclor 1232	300	0	0.0	n/a	n/a		20.100	20.000
Aroclor 1242	300	39	13.0	20.00	2400.00	SD-DR157-0000	46.863	20.000
Aroclor 1248	300	0	0.0	n/a	n/a		20.100	20.000
Aroclor 1254	300	266	88.7	20.00	9400.00	SD-DR271-0000	169.756	59.000
Aroclor 1260	300	256	85.3	20.00	12000.00	SD-DR207-0000	142.873	53.000
Total PCB	300	272	90.7	20.00	12000.00	SD-DR207-0000	333.826	115.500
Pesticides/PCBs - TOCN (ug/kg)								
Total PCB (TOCN)	274	258	94.2	551.00	379000.00	SD-DR207-0000	14450.682	5400.000
PCB Congeners (ug/kg)								
2',3,4,4',5-Pentachlorobiphenyl (PCB123)	300	0	0.0	n/a	n/a		1.660	1.000
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	300	51	17.0	1.00	27.00	SD-DR217-0000	1.406	1.000

Bold text indicates constituent was detected one or more times.
n/a - Not Applicable

Duwamish River Sediment Investigation - Statistics for Surface Sediment Results for Pesticides/PCBs

Constituent	Number of Samples Analyzed	Number of Detections	Detection Frequency (%)	Minimum Detected Value	Maximum Detected Value	Sample Number of Maximum Detected Value	Arithmetic Mean	Median Value
PCB Congeners (ug/kg)								
2,2',3,3',4,4',5,6-Octachlorobiphenyl (P	300	39	13.0	1.00	49.00	SD-DR207-0000	1.533	1.000
2,2',3,3',4,4',5-Heptachlorobiphenyl (PC	300	227	75.7	1.00	320.00	SD-DR207-0000	5.903	2.000
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB12	300	146	48.7	1.00	126.00	SD-DR271-0000	2.906	1.000
2,2',3,4',5,5',6-Heptachlorobiphenyl (PC	300	250	83.3	1.00	360.00	SD-DR207-0000	5.983	3.000
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB13	300	261	87.0	1.00	920.00	SD-DR207-0000	20.238	8.000
2,2',3,4,4',5,5'-Heptachlorobiphenyl (PC	300	265	88.3	1.00	750.00	SD-DR207-0000	10.550	4.000
2,2',3,5'-Tetrachlorobiphenyl (PCB44)	300	203	67.7	1.00	190.00	SD-DR178-0000-CC	4.860	1.000
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB15	300	278	92.7	1.00	900.00	SD-DR207-0000	15.610	6.000
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)	300	261	87.0	1.00	410.00	SD-DR271-0000	11.136	4.000
2,2',5,5'-Tetrachlorobiphenyl (PCB52)	300	224	74.7	1.00	890.00	SD-DR178-0000-CC	10.896	3.000
2,2',5-Trichlorobiphenyl (PCB18)	285	87	30.5	1.00	170.00	SD-DR178-0000-CC	3.087	1.000
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB16	300	45	15.0	1.00	30.00	SD-DR271-0000	1.506	1.000
2,3',4,4',5-Pentachlorobipheny (PCB118)	300	272	90.7	1.00	411.00	SD-DR271-0000	9.710	4.000
2,3',4,4'-Tetrachlorobiphenyl (PCB66)	300	200	66.7	1.00	440.00	SD-DR178-0000-CC	15.003	6.000
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB15	300	11	3.7	1.00	21.00	SD-DR271-0000	1.286	1.000
2,3,3',4,4',5,5'-Heptachlorobiphenyl (PC	300	10	3.3	1.00	11.00	SD-DR207-0000	1.110	1.000
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156	300	97	32.3	1.00	76.00	SD-DR271-0000	2.156	1.000
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)	300	184	61.3	1.00	229.00	SD-DR271-0000	4.270	1.000
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	300	6	2.0	1.00	5.00	SD-DR139-0000	1.286	1.000
2,4,4'-Trichlorobiphenyl (PCB28)	300	163	54.3	1.00	160.00	SD-DR157-0000	4.320	1.000
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB16	300	0	0.0	n/a	n/a		1.063	1.000
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	300	10	3.3	1.00	3.00	SD-DR123-0000	1.270	1.000
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	300	2	0.7	3.00	3.00	SD-DR251-0000	1.323	1.000
3,4,4',5-Tetrachlorobiphenyl (PCB81)	300	0	0.0	n/a	n/a		1.063	1.000
Decachlorobiphenyl (PCB209)	300	12	4.0	1.00	3.00	SD-DR030-0000	1.046	1.000

Bold text indicates constituent was detected one or more times.
n/a - Not Applicable

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

	Station ID:	DR001	DR002	DR003	DR004	DR005	DR006
	Sample ID:	SD-DR001-0000	SD-DR002-0000	SD-DR003-0000	SD-DR004-0000	SD-DR005-0000	SD-DR006-0000
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD			2 U			3	
4,4'-DDE			2 UI			3 UI	
4,4'-DDT			3 UI			2	
Aldrin			1 UJ			1 UJ	
alpha-BHC			1 U			1 U	
alpha-Chlordane			1 U			1 U	
beta-BHC			1 U			1 U	
Dieldrin			3 UIJ			5 UIJ	
Endosulfan I			1 U			1 U	
Endosulfan II			2 U			2 U	
Endosulfan Sulfate			2 U			2 U	
Endrin			2 U			2 UJ	
Endrin Aldehyde			2 U			2 U	
Endrin Ketone			2 U			2 U	
gamma-BHC (Lindane)			1 U			1 UJ	
gamma-Chlordane			2 UI			1 U	
Heptachlor			1 U			1 UJ	
Heptachlor Epoxide			2 UI			4 UI	
Methoxychlor			1 U			1 U	
Toxaphene			150 UI			10 U	
Aroclor 1016		20 U	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	55
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR001 / SD-DR001-0000 / 0 to 10 cm	DR002 / SD-DR002-0000 / 0 to 10 cm	DR003 / SD-DR003-0000 / 0 to 10 cm	DR004 / SD-DR004-0000 / 0 to 10 cm	DR005 / SD-DR005-0000 / 0 to 10 cm	DR006 / SD-DR006-0000 / 0 to 10 cm
Aroclor 1254		46	85	149	83	81	139
Aroclor 1260		53	101 J	118 J	85 J	87 J	121 J
Total PCB		99 T	186 T	267 T	168 T	168 T	315 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		3290 T	8050 T	12600 T	6560 T	7300 T	11600 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 UJ	1 U	2 UI	1 U	1 U	2 UI
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 UJ	1	2	3	1 U	1
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 UJ	1	1 U	1 U	1 U	1 U
2,2',3,3',4,4',5-Heptachlorobiphenyl		2 J	4	5 UI	4 UI	3	5
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 J	2	2	2 UI	1	2
2,2',3,4',5,5',6-Heptachlorobiphenyl		3 J	4	5 UI	6 UI	4	6
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		7 J	12	14	10	11	18
2,2',3,4,4',5,5'-Heptachlorobiphenyl		4 J	7	8 UI	8 UI	6	8
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1 J	2	3	2	2	5
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		6 J	10 UI	11 UI	8 UI	9	13
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		3 J	6	9	5	7	11
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		2 J	3	5	3 UI	4	8 UI
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 J	2 J	1 UJ	1	4
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 UJ	2 UI	2 UI	1 U	1 U	1
2,3',4,4',5-Pentachlorobipheny (PCB118)		3 J	5	8	5 UI	5	9
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		4 J	8	11	7 UI	7	14
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 UJ	1 U	1 U	1 U	1 U	1 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 UJ	1 U	1 U	1 U	1 U	1 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 UJ	1	1	2 UI	1 U	2 J
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1 J	2	3	2	2	4

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Station ID:	DR001	DR002	DR003	DR004	DR005	DR006
Sample ID:	SD-DR001-0000	SD-DR002-0000	SD-DR003-0000	SD-DR004-0000	SD-DR005-0000	SD-DR006-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	1 UJ	1 U	1 U	1 U	1 U	1 U
2,4,4'-Trichlorobiphenyl (PCB28)	1 J	2	4	2	2	6
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	1 U	1 U	1 U	1 U	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	1 UJ	1 U	1 U	1 U	1 U	1 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	1 UJ	1 U	1 U	1 U	1 U	2 UI
3,4,4',5-Tetrachlorobiphenyl (PCB81)	1 U	1 U	1 U	1 U	1 U	1 U
Decachlorobiphenyl (PCB209)	1 UJ	1 U	1 U	1 U	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

	Station ID:	DR007	DR008	DR009	DR010	DR011	DR012
	Sample ID:	SD-DR007-0000	SD-DR008-0000	SD-DR009-0000	SD-DR010-0000	SD-DR011-0000	SD-DR012-0000
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD			10 UI			10 UI	
4,4'-DDE			15 UI			5 UI	
4,4'-DDT			10 UI			10 UI	
Aldrin			5 UIJ			5 UIJ	
alpha-BHC			5 UI			5 UI	
alpha-Chlordane			5 UI			6 UI	
beta-BHC			5 UI			5 UI	
Dieldrin			15 UIJ			10 UIJ	
Endosulfan I			5 UI			5 UI	
Endosulfan II			10 UI			15 UI	
Endosulfan Sulfate			20 UI			10 UI	
Endrin			10 UIJ			10 UIJ	
Endrin Aldehyde			10 UI			10 UI	
Endrin Ketone			10 UI			10 UI	
gamma-BHC (Lindane)			5 UIJ			5 UIJ	
gamma-Chlordane			5 UI			6 UI	
Heptachlor			5 UIJ			5 UIJ	
Heptachlor Epoxide			12 UI			5 UI	
Methoxychlor			5 UI			5 UI	
Toxaphene			500 UI			50 UI	
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 UJ
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 UJ
Aroclor 1242		20 U	90	92	20 U	194	20 UJ
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR007	DR008	DR009	DR010	DR011	DR012
	Sample ID:	SD-DR007-0000	SD-DR008-0000	SD-DR009-0000	SD-DR010-0000	SD-DR011-0000	SD-DR012-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Aroclor 1254		89	192	164	36	593	40 J
Aroclor 1260		84 J	146 J	142 J	38	750 J	45 J
Total PCB		173 T	428 T	398 T	74 T	1537 T	85 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		4970 T			5290 T	61700 T	3680 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 U	2 UI	2 UI	1 U	4 UI	1 UJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 U	2	2	1 U	3	1 UJ
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 U	1 U	1 U	1 U	5	1 UJ
2,2',3,3',4,4',5-Heptachlorobiphenyl		3	6	6	2	29	2 J
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 U	3	3	1 UJ	10	1 UJ
2,2',3,4',5,5',6-Heptachlorobiphenyl		4	7	6	2	28	2 J
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		11	20	20	5	120	5 J
2,2',3,4,4',5,5'-Heptachlorobiphenyl		6	10	10	3	48	3 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		2	8	7	1 J	19	1 UJ
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		11	15	16	4	99	5 J
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		9	15	13	3 J	43	3 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		7 UI	13 UI	12 UI	2 J	32	2 UIJ
2,2',5-Trichlorobiphenyl (PCB18)		1	5	6	1 UJ	13	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 U	1 U	2	1 U	6	1 UJ
2,3',4,4',5-Pentachlorobipheny (PCB118)		7	12	11	2	32	2 J
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		9	19	18	4	44	4 UIJ
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 U	1 U	1 U	1 U	1 U	1 UJ
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 U	1 U	1 U	1	1 UJ
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 U	2	2	1 U	8	1 UJ
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1	5	5	1	16	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR007 SD-DR007-0000 0 to 10 cm	DR008 SD-DR008-0000 0 to 10 cm	DR009 SD-DR009-0000 0 to 10 cm	DR010 SD-DR010-0000 0 to 10 cm	DR011 SD-DR011-0000 0 to 10 cm	DR012 SD-DR012-0000 0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 U	1 U	1	1 U	3 UI	1 UJ
2,4,4'-Trichlorobiphenyl (PCB28)		4	11	10	2 J	19	2 UIJ
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 U	1 U	1 U	1 U	1 U	1 UJ
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 U	1 U	1 U	1 U	1 UJ	1 UJ
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 U	2 UI	2 UI	1 UJ	2 UIJ	1 UJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 U	1 U	1 U	1 U	1 U	1 UJ
Decachlorobiphenyl (PCB209)		2	1 U	1 U	1 U	1 U	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

	Station ID:	DR013	DR014	DR015	DR016	DR017	DR018
	Sample ID:	SD-DR013-0000	SD-DR014-0000	SD-DR015-0000	SD-DR016-0000	SD-DR017-0000	SD-DR018-0000
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD							
4,4'-DDE							
4,4'-DDT							
Aldrin							
alpha-BHC							
alpha-Chlordane							
beta-BHC							
Dieldrin							
Endosulfan I							
Endosulfan II							
Endosulfan Sulfate							
Endrin							
Endrin Aldehyde							
Endrin Ketone							
gamma-BHC (Lindane)							
gamma-Chlordane							
Heptachlor							
Heptachlor Epoxide							
Methoxychlor							
Toxaphene							
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 UJ	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 UJ	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 UJ	20 U	20 U	30
Aroclor 1248		20 U	20 U	20 UJ	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Station ID:	DR013	DR014	DR015	DR016	DR017	DR018
Sample ID:	SD-DR013-0000	SD-DR014-0000	SD-DR015-0000	SD-DR016-0000	SD-DR017-0000	SD-DR018-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Aroclor 1254	42	36	38 J	53	50	128
Aroclor 1260	45 J	41 J	45 J	65 J	71 J	107 J
Total PCB	87 T	77 T	83 T	118 T	121 T	265 T
Pesticides/PCBs - TOCN (ug/kg)						
Total PCB (TOCN)	4030 T	3140 T	3170 T	4230 T	4420 T	12000 T
PCB Congeners (ug/kg)						
2',3,4,4',5-Pentachlorobiphenyl (PCB123)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1
2,2',3,3',4,4',5,6-Octachlorobiphenyl	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
2,2',3,3',4,4',5-Heptachlorobiphenyl	2 J	2 J	2 J	2 J	3 J	5
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	2
2,2',3,4',5,5',6-Heptachlorobiphenyl	2 J	2 J	3 J	3 J	3 J	5
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)	5 J	5 J	5 J	6 J	7 J	16
2,2',3,4,4',5,5'-Heptachlorobiphenyl	3 J	3 J	4 J	4 J	5 J	7
2,2',3,5'-Tetrachlorobiphenyl (PCB44)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	3
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)	5 J	5 J	5 J	7 J	7 J	11
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)	3 J	2 J	3 J	4 J	4 J	9
2,2',5,5'-Tetrachlorobiphenyl (PCB52)	2 UIJ	2 UIJ	3 UIJ	3 UIJ	3 UIJ	5
2,2',5-Trichlorobiphenyl (PCB18)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
2,3',4,4',5-Pentachlorobipheny (PCB118)	3 J	2 J	3 J	3 J	3 J	7
2,3',4,4'-Tetrachlorobiphenyl (PCB66)	5 UIJ	4 UIJ	5 UIJ	5 UIJ	5 UIJ	10
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	3

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR013	DR014	DR015	DR016	DR017	DR018
	Sample ID:	SD-DR013-0000	SD-DR014-0000	SD-DR015-0000	SD-DR016-0000	SD-DR017-0000	SD-DR018-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
2,4,4'-Trichlorobiphenyl (PCB28)		2 UIJ	2 UIJ	2 UIJ	2 UIJ	2 UIJ	3
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
Decachlorobiphenyl (PCB209)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

	Station ID:	DR019	DR020	DR021	DR022	DR023	DR024
	Sample ID:	SD-DR019-0000	SD-DR020-0000	SD-DR021-0000	SD-DR022-0000-CC	SD-DR023-0000	SD-DR024-0000
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD				4			
4,4'-DDE				3 UI			
4,4'-DDT				2 U			
Aldrin				1 UJ			
alpha-BHC				1 U			
alpha-Chlordane				1 U			
beta-BHC				1 U			
Dieldrin				5 UIJ			
Endosulfan I				1 U			
Endosulfan II				3 UI			
Endosulfan Sulfate				2 U			
Endrin				2 UJ			
Endrin Aldehyde				2 U			
Endrin Ketone				2 U			
gamma-BHC (Lindane)				1 UJ			
gamma-Chlordane				1 U			
Heptachlor				1 UJ			
Heptachlor Epoxide				4 UI			
Methoxychlor				1 U			
Toxaphene				10 U			
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 UJ	20 UJ	20 U
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Station ID:	DR019	DR020	DR021	DR022	DR023	DR024
Sample ID:	SD-DR019-0000	SD-DR020-0000	SD-DR021-0000	SD-DR022-0000-CC	SD-DR023-0000	SD-DR024-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Aroclor 1254	82	99	71	43	26	100
Aroclor 1260	80	70 J	71 J	43 J	41 J	80
Total PCB	162 T	169 T	142 T	86 T	67 T	180 T
Pesticides/PCBs - TOCN (ug/kg)						
Total PCB (TOCN)	6210 T	6210 T	4580 T	5410 T	2670 T	7170 T
PCB Congeners (ug/kg)						
2',3,4,4',5-Pentachlorobiphenyl (PCB123)	1 UJ	2 UIJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5,6-Octachlorobiphenyl	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5-Heptachlorobiphenyl	3 J	3 J	3 J	2 J	1 J	3 J
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)	2 J	1 J	1 J	1 UJ	1 UJ	2 J
2,2',3,4',5,5',6-Heptachlorobiphenyl	4 J	3 J	3 J	2 J	2 J	4 J
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)	11 J	10 J	8 J	5 J	4 J	11 J
2,2',3,4,4',5,5'-Heptachlorobiphenyl	5 J	5 J	5 J	3 J	3 J	6 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)	2 J	2 J	1 J	1 UJ	1 UJ	2 J
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)	9 J	9 J	8 J	5 J	5 J	8 J
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)	6 J	6 J	4 J	2 J	2 J	5 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)	4 UIJ	4 UIJ	3 UIJ	2 UIJ	2 UIJ	3 J
2,2',5-Trichlorobiphenyl (PCB18)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3',4,4',5-Pentachlorobipheny (PCB118)	5 J	7 J	4 J	3 J	2 J	5 J
2,3',4,4'-Tetrachlorobiphenyl (PCB66)	6 UIJ	8 UIJ	7 UIJ	4 UIJ	3 UIJ	9 UIJ
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5,5'-Heptachlorobiphenyl	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)	1 J	1 J	1 UJ	1 UJ	1 UJ	1 J
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)	2 J	2 J	2 J	1 UJ	1 UJ	2 J

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Station ID:	DR019	DR020	DR021	DR022	DR023	DR024
Sample ID:	SD-DR019-0000	SD-DR020-0000	SD-DR021-0000	SD-DR022-0000-CC	SD-DR023-0000	SD-DR024-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,4,4'-Trichlorobiphenyl (PCB28)	3 UIJ	2 UIJ	3 UIJ	1 UJ	1 UJ	2 J
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Decachlorobiphenyl (PCB209)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR025	DR026	DR027	DR028	DR030	DR031
	Sample ID:	SD-DR025-0000	SD-DR026-0000	SD-DR027-0000	SD-DR028-0000	SD-DR030-0000	SD-DR031-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD		2 U					
4,4'-DDE		3 UI					
4,4'-DDT		3 UIJ					
Aldrin		1 UJ					
alpha-BHC		1 U					
alpha-Chlordane		1 U					
beta-BHC		1 U					
Dieldrin		3 UIJ					
Endosulfan I		1 U					
Endosulfan II		6 UI					
Endosulfan Sulfate		2 U					
Endrin		2 UJ					
Endrin Aldehyde		2 U					
Endrin Ketone		2 U					
gamma-BHC (Lindane)		1 UJ					
gamma-Chlordane		1 U					
Heptachlor		1 UJ					
Heptachlor Epoxide		3 UI					
Methoxychlor		1 U					
Toxaphene		180 UI					
Aroclor 1016		20 U	20 U	20 U	20 U	20 U	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	753	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR025 SD-DR025-0000 0 to 10 cm	DR026 SD-DR026-0000 0 to 10 cm	DR027 SD-DR027-0000 0 to 10 cm	DR028 SD-DR028-0000 0 to 10 cm	DR030 SD-DR030-0000 0 to 10 cm	DR031 SD-DR031-0000 0 to 10 cm
Aroclor 1254		106	160	165	118	2900	240
Aroclor 1260		104	119	125	89	1140	102 J
Total PCB		210 T	279 T	290 T	207 T	4793 T	342 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		7420 T	8610 T	11600 T	8520 T	172000 T	16500 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 UJ	2 UIJ	2 UIJ	1 UJ	30 UIJ	3 UI
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 J	1 UJ	1 J	1 UJ	7 J	1
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 UJ	1 UJ	1 J	1 UJ	10 J	1
2,2',3,3',4,4',5-Heptachlorobiphenyl		4 J	5 J	6 J	4 J	65 J	4
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		2 J	2 J	3 J	2 J	41 J	4
2,2',3,4',5,5',6-Heptachlorobiphenyl		5 J	5 J	6 UIJ	4 J	58 J	4
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		12 J	15 J	18 J	12 J	260 J	21
2,2',3,4,4',5,5'-Heptachlorobiphenyl		7 J	8 J	9 J	7 J	110 J	7
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		2 J	3 J	4 J	2 J	88 J	3
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		10 J	11 J	13 J	9 J	170 J	12
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		7 J	8 J	8 J	6 J	180 J	11
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		4 J	5 J	6 J	4 J	140 J	7
2,2',5-Trichlorobiphenyl (PCB18)		1 J	2 J	2 J	1 J	52 J	1 J
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		2 UIJ	1 UJ	2 UIJ	1 UJ	16 J	1
2,3',4,4',5-Pentachlorobipheny (PCB118)		6 J	7 J	9 J	6 J	170 J	14
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		9 J	11 J	14 J	10 J	300 UIJ	15 UI
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 UJ	1 UJ	1 UJ	1 UJ	6 UIJ	1 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	3 UIJ	1 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 J	2 J	3 UIJ	1 J	31 J	3
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		2 J	3 J	4 J	2 J	81 J	7

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR025	DR026	DR027	DR028	DR030	DR031
	Sample ID:	SD-DR025-0000	SD-DR026-0000	SD-DR027-0000	SD-DR028-0000	SD-DR030-0000	SD-DR031-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 UJ	1 UJ	1 UJ	1 UJ	20 UIJ	2 UI
2,4,4'-Trichlorobiphenyl (PCB28)		2 J	3 J	4 J	3 J	120 J	1
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 U	1 U	1 U	1 U	10 UI	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 UJ	1 UJ	1 UJ	1 UJ	10 UIJ	1 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 UJ	1 UJ	1 UJ	1 UJ	20 UIJ	1 U
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 UJ	1 UJ	1 UJ	1 UJ	10 UIJ	1 U
Decachlorobiphenyl (PCB209)		1 U	1 U	1 U	1 U	3	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

	Station ID:	DR032	DR033	DR034	DR035	DR036	DR037
	Sample ID:	SD-DR032-0000	SD-DR033-0000	SD-DR034-0000	SD-DR035-0000	SD-DR036-0000	SD-DR037-0000
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD			2 U				
4,4'-DDE			5 UI				
4,4'-DDT			2 U				
Aldrin			1 UJ				
alpha-BHC			1 U				
alpha-Chlordane			2 UI				
beta-BHC			1 U				
Dieldrin			4 UIJ				
Endosulfan I			1 U				
Endosulfan II			2 U				
Endosulfan Sulfate			3 UI				
Endrin			3 UI				
Endrin Aldehyde			2 U				
Endrin Ketone			3 UI				
gamma-BHC (Lindane)			1 U				
gamma-Chlordane			1 U				
Heptachlor			1 U				
Heptachlor Epoxide			1 U				
Methoxychlor			1 U				
Toxaphene			10 U				
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Station ID:	DR032	DR033	DR034	DR035	DR036	DR037
Sample ID:	SD-DR032-0000	SD-DR033-0000	SD-DR034-0000	SD-DR035-0000	SD-DR036-0000	SD-DR037-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Aroclor 1254	72	140	196	302	66 J	42
Aroclor 1260	68 J	85 J	151 J	214 J	20 U	41 J
Total PCB	140 T	225 T	347 T	516 T	66 T	83 T
Pesticides/PCBs - TOCN (ug/kg)						
Total PCB (TOCN)	7820 T	13100 T	18900 T	22500 T	1960 T	4110 T
PCB Congeners (ug/kg)						
2',3,4,4',5-Pentachlorobiphenyl (PCB123)	1 U	2 UI	2 UI	3 UI	1 U	1 UJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	1 U	1	1	2	1 U	1 UJ
2,2',3,3',4,4',5,6-Octachlorobiphenyl	1 U	1 U	1	2	1 U	1 UJ
2,2',3,3',4,4',5-Heptachlorobiphenyl	2	4	5	9	1 U	2 J
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)	1 U	2	2	4	1 U	1 UJ
2,2',3,4',5,5',6-Heptachlorobiphenyl	3	4	5	8	1 U	2 J
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)	7	14	16	37	3	5 J
2,2',3,4,4',5,5'-Heptachlorobiphenyl	4	7	8	13	1 U	3 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)	1	2	4	6	4	1 UJ
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)	6	9	12	18	2	5 J
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)	3	7	9	15	4	4 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)	2	4	6	9	5	2 UIJ
2,2',5-Trichlorobiphenyl (PCB18)	1 UJ	1 J	2 J	3 J	1	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)	1 U	1	1	2	1 U	1 UJ
2,3',4,4',5-Pentachlorobipheny (PCB118)	3	7	9	15	3	2 J
2,3',4,4'-Tetrachlorobiphenyl (PCB66)	5	11 UI	14	22 UI	8	4 UIJ
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)	1 U	1 U	1 U	1 U	1 U	1 UJ
2,3,3',4,4',5,5'-Heptachlorobiphenyl	1 U	1 U	1 U	1 U	1 U	1 UJ
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)	1 U	1	2	3	1 U	1 UJ
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)	1	3	4	7	1	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Station ID:	DR032	DR033	DR034	DR035	DR036	DR037
Sample ID:	SD-DR032-0000	SD-DR033-0000	SD-DR034-0000	SD-DR035-0000	SD-DR036-0000	SD-DR037-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	1 U	1 U	1 U	1 U	1 U	1 UJ
2,4,4'-Trichlorobiphenyl (PCB28)	1	2	4	6	2	1 UJ
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	1 U	1 U	1 U	1 U	1 U	1 UJ
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	1 U	1 U	1 U	1 U	1 U	1 UJ
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	1 U	1 U	1 U	2 UI	1 U	1 UJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)	1 U	1 U	1 U	1 U	1 U	1 UJ
Decachlorobiphenyl (PCB209)	1 U	1 U	1 U	1 U	1 U	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR038	DR039	DR040	DR041	DR042	DR043
	Sample ID:	SD-DR038-0000	SD-DR039-0000	SD-DR040-0000	SD-DR041-0000	SD-DR042-0000	SD-DR043-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD						3 UI	
4,4'-DDE						2 UI	
4,4'-DDT						3 UI	
Aldrin						1 UJ	
alpha-BHC						1 U	
alpha-Chlordane						2 UI	
beta-BHC						1 U	
Dieldrin						2 UJ	
Endosulfan I						1 U	
Endosulfan II						6 UI	
Endosulfan Sulfate						2 U	
Endrin						2 U	
Endrin Aldehyde						2 U	
Endrin Ketone						2 U	
gamma-BHC (Lindane)						1 U	
gamma-Chlordane						2 UI	
Heptachlor						1 U	
Heptachlor Epoxide						1 U	
Methoxychlor						1 U	
Toxaphene						10 U	
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		52	20 U	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR038 / SD-DR038-0000 / 0 to 10 cm	DR039 / SD-DR039-0000 / 0 to 10 cm	DR040 / SD-DR040-0000 / 0 to 10 cm	DR041 / SD-DR041-0000 / 0 to 10 cm	DR042 / SD-DR042-0000 / 0 to 10 cm	DR043 / SD-DR043-0000 / 0 to 10 cm
Aroclor 1254		146	71	20 U	94	81	166
Aroclor 1260		138 J	104	776	128	101	104
Total PCB		336 T	175 T	776 T	222 T	182 T	270 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		12800 T	7200 T		9140 T		
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		2 UI	1 U	1 U	1 U	1 U	2 UI
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1	1 U	4	1	1 U	1 U
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 U	1	7	1	1	1 U
2,2',3,3',4,4',5-Heptachlorobiphenyl		6	4	35	6	5	5
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		2	1 U	3	2	1	3
2,2',3,4',5,5',6-Heptachlorobiphenyl		6	6	34	6	6	4
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		21	11	76	15	12	16
2,2',3,4,4',5,5'-Heptachlorobiphenyl		9	8	77	10	9	8
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		5	1	2	2	2	3
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		13	10	92	12	12	12
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		10	6	23	6	5	9
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		7	3	11	4	3	5
2,2',5-Trichlorobiphenyl (PCB18)		3	1 U	1 U	1 U	1 U	1 U
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1	1 U	3	1	1 U	1 U
2,3',4,4',5-Pentachlorobipheny (PCB118)		9	4	7	6	5	9
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		13	7 UI	24	10 UI	7	12
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 U	1 U	1 U	1 U	1 U	1 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 U	1	1 U	1 U	1 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		2	1 U	4	2	1	1
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		4	1	19 UI	3	2	4

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR038 SD-DR038-0000 0 to 10 cm	DR039 SD-DR039-0000 0 to 10 cm	DR040 SD-DR040-0000 0 to 10 cm	DR041 SD-DR041-0000 0 to 10 cm	DR042 SD-DR042-0000 0 to 10 cm	DR043 SD-DR043-0000 0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 U	1 U	2 UI	1 U	1 U	1 U
2,4,4'-Trichlorobiphenyl (PCB28)		5	2	1	2	1	2
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 U	1 U	1 U	1 U	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 U	1 U	1 U	1 U	1 U	1 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 U	1 U	1 U	1 U	1 U	1 U
3,4,4',5-Tetrachlorobiphenyl (PCB81)		2 UI	1 U	1 U	1 U	1 U	1 U
Decachlorobiphenyl (PCB209)		1 U	1 U	1 U	1 U	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR044	DR045	DR046	DR047	DR048	DR049
	Sample ID:	SD-DR044-0000	SD-DR045-0000	SD-DR046-0000	SD-DR047-0000	SD-DR048-0000	SD-DR049-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD					2 U		
4,4'-DDE					1 U		
4,4'-DDT					2 UJ		
Aldrin					1 UJ		
alpha-BHC					1 U		
alpha-Chlordane					1 U		
beta-BHC					1 U		
Dieldrin					2 UJ		
Endosulfan I					1 U		
Endosulfan II					2 U		
Endosulfan Sulfate					2 U		
Endrin					2 UJ		
Endrin Aldehyde					2 U		
Endrin Ketone					2 U		
gamma-BHC (Lindane)					1 UJ		
gamma-Chlordane					1 U		
Heptachlor					1 UJ		
Heptachlor Epoxide					1		
Methoxychlor					1 U		
Toxaphene					10 U		
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR044	DR045	DR046	DR047	DR048	DR049
	Sample ID:	SD-DR044-0000	SD-DR045-0000	SD-DR046-0000	SD-DR047-0000	SD-DR048-0000	SD-DR049-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Aroclor 1254		68	57	38	96	40	56
Aroclor 1260		63	50	42	62	48	64
Total PCB		131 T	107 T	80 T	158 T	88 T	120 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		6300 T	3660 T	3540 T	11300 T	4330 T	4550 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 U	1 U	1 U	1 U	1 U	1 U
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	1 U
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	1 U
2,2',3,3',4,4',5-Heptachlorobiphenyl		3	2	2	3	2	3
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1	1 J	1 U	2 J	1 U	1
2,2',3,4',5,5',6-Heptachlorobiphenyl		3	3	2	3	3	4
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		9	8	6 UI	11	7 UI	9 UI
2,2',3,4,4',5,5'-Heptachlorobiphenyl		5	4	4	4	4	5
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1	2 J	1 U	2 J	1 U	1
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		8	6	5	8	6	8
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		4	4 J	2	6 J	2	5
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		3	3 J	1	3 J	2	2
2,2',5-Trichlorobiphenyl (PCB18)		1 U	1 UJ	1 U	1 UJ	1 U	1 U
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 U	1 U	1 U	1 U	1 U	1 U
2,3',4,4',5-Pentachlorobipheny (PCB118)		4	4	3	6	3	4
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		7	6	4 UI	8	5 UI	6
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 U	1 U	1 U	1 U	1 U	1 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	1 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1	1 U	1 U	1	1 U	1 U
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		2	2	1 U	3	1	1

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR044 / SD-DR044-0000 / 0 to 10 cm	DR045 / SD-DR045-0000 / 0 to 10 cm	DR046 / SD-DR046-0000 / 0 to 10 cm	DR047 / SD-DR047-0000 / 0 to 10 cm	DR048 / SD-DR048-0000 / 0 to 10 cm	DR049 / SD-DR049-0000 / 0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 U	1 U	1 U	1 U	1 U	1 U
2,4,4'-Trichlorobiphenyl (PCB28)		2	2 UIJ	1 U	3 J	1 U	2
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 U	1 U	1 U	1 U	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 U	1 U	1 U	1 U	1 U	1 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 U	1 UJ	1 U	1 UJ	1 U	1 U
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 U	1 U	1 U	1 U	1 U	1 U
Decachlorobiphenyl (PCB209)		1 U	1 U	1 U	1 U	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

	Station ID:	DR050	DR051	DR052	DR053	DR054	DR055
	Sample ID:	SD-DR050-0000	SD-DR051-0000	SD-DR052-0000	SD-DR053-0000-CC	SD-DR054-0000	SD-DR055-0000
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD					2 U		
4,4'-DDE					1		
4,4'-DDT					4 J		
Aldrin					1 UJ		
alpha-BHC					1 U		
alpha-Chlordane					1 U		
beta-BHC					1 U		
Dieldrin					2 UJ		
Endosulfan I					1 U		
Endosulfan II					2 U		
Endosulfan Sulfate					2 U		
Endrin					2 UJ		
Endrin Aldehyde					2 U		
Endrin Ketone					2 U		
gamma-BHC (Lindane)					1 UJ		
gamma-Chlordane					1 U		
Heptachlor					1 UJ		
Heptachlor Epoxide					1 U		
Methoxychlor					1 U		
Toxaphene					40 UI		
Aroclor 1016		20 UJ	50 UJI	20 UJ	20 UJ	20 UJ	20 UJ
Aroclor 1221		40 U	50 UJI	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	50 UJI	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	50 UJI	20 U	33	20 U	20 U
Aroclor 1248		20 U	50 UJI	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR050 SD-DR050-0000 0 to 10 cm	DR051 SD-DR051-0000 0 to 10 cm	DR052 SD-DR052-0000 0 to 10 cm	DR053 SD-DR053-0000-CC 0 to 10 cm	DR054 SD-DR054-0000 0 to 10 cm	DR055 SD-DR055-0000 0 to 10 cm
Aroclor 1254		130	50 UJI	63	104	50	94
Aroclor 1260		110 J	50 UJI	75	120 J	47	120
Total PCB		240 T	50 UT	138 T	257 T	97 T	214 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)			1810 UT	5390 T	9180 T	4110 T	
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 U	2 UI	1 U	1 U	1 UJ	1 U
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1	1 U	1 U	1 U	1 U	1 U
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 U	1 U	1 U	1 U	1 UJ	1
2,2',3,3',4,4',5-Heptachlorobiphenyl		4	2	3	4	3 J	5
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		2	1 U	1	2	1 J	2 J
2,2',3,4',5,5',6-Heptachlorobiphenyl		5	1	4	5	3 J	5
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		17	5	10	13	8 J	14
2,2',3,4,4',5,5'-Heptachlorobiphenyl		7	3	6	7	4 J	8
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		3	2	1	3	1 J	5 J
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		12	4	8	9	6 J	11
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		9	1 U	3	7	3 J	8 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		6	1	3	4	2 J	5 UIJ
2,2',5-Trichlorobiphenyl (PCB18)		2	1 U	1 U	3	1 UJ	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 U	1 U	1 U	1 U	1 UJ	1 U
2,3',4,4',5-Pentachlorobipheny (PCB118)		8	2	5	7	3	6
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		16 UI	5	8	18 UI	6 UI	10
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 U	1 U	1 U	1 U	1 UJ	1 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 U	1 U	1 U	1 UJ	1 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		2	1 U	1	1	1 UJ	1
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		4	1	2	4	2 J	3

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Station ID:	DR050	DR051	DR052	DR053	DR054	DR055
Sample ID:	SD-DR050-0000	SD-DR051-0000	SD-DR052-0000	SD-DR053-0000-CC	SD-DR054-0000	SD-DR055-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	1 U	1 U	1 U	1 U	1 UJ	1 U
2,4,4'-Trichlorobiphenyl (PCB28)	3	1	2	2	2 J	3 J
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	1 U	2 UI	1 U	1 U	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	1 U	1	1 U	1 U	1 U	2
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	1 U	1 U	1 U	1 U	1 U	1 UJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)	1 U	1 U	1 U	1 U	1 UJ	1 U
Decachlorobiphenyl (PCB209)	1 U	1 U	1 U	1 U	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR056	DR057	DR058	DR059	DR060	DR061
	Sample ID:	SD-DR056-0000	SD-DR057-0000	SD-DR058-0000	SD-DR059-0000	SD-DR060-0000	SD-DR061-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD							
4,4'-DDE							
4,4'-DDT							
Aldrin							
alpha-BHC							
alpha-Chlordane							
beta-BHC							
Dieldrin							
Endosulfan I							
Endosulfan II							
Endosulfan Sulfate							
Endrin							
Endrin Aldehyde							
Endrin Ketone							
gamma-BHC (Lindane)							
gamma-Chlordane							
Heptachlor							
Heptachlor Epoxide							
Methoxychlor							
Toxaphene							
Aroclor 1016		20 U	20 U	20 UJ	20 UJ	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	22	78	41	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR056 SD-DR056-0000 0 to 10 cm	DR057 SD-DR057-0000 0 to 10 cm	DR058 SD-DR058-0000 0 to 10 cm	DR059 SD-DR059-0000 0 to 10 cm	DR060 SD-DR060-0000 0 to 10 cm	DR061 SD-DR061-0000 0 to 10 cm
Aroclor 1254		31	59	906 J	88	57	68
Aroclor 1260		29	58	160 J	81 J	45 J	77 J
Total PCB		60 T	139 T	1144 T	210 T	102 T	145 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		3170 T	7770 T	127000 T	7690 T	5280 T	5470 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 UJ	1 UJ	7 UI	1 U	1 UJ	1 UJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 UJ	1 J	1 U	1 U	1 UJ	1 UJ
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 UJ	1 UJ	1 U	1 U	1 UJ	1 UJ
2,2',3,3',4,4',5-Heptachlorobiphenyl		1 J	2 J	12 J	3	1 J	3 J
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 UJ	1 J	16 J	2	1 UJ	1 UJ
2,2',3,4',5,5',6-Heptachlorobiphenyl		1 J	2 J	6 J	4	1 J	4 J
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		4 J	8 J	84 J	12	5 J	9 J
2,2',3,4,4',5,5'-Heptachlorobiphenyl		2 J	3 J	13 J	6	2 J	6 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1 UJ	2 J	18 J	3	1 J	1 J
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		3 J	5 J	40 J	10	4 J	9 J
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		3 J	4 J	61 J	7	3 J	4 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		1 J	3 J	35 J	6 UI	3 UIJ	3 UIJ
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 J	4 UI	3	1 UJ	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 UJ	1 UJ	5 J	1	1 UJ	1 UJ
2,3',4,4',5-Pentachlorobipheny (PCB118)		2 J	4 J	58 J	6	3 J	4 J
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		3 J	5 J	63 J	10	5 UI	7 UIJ
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 UJ	1 UJ	2	1 U	1 UJ	1 UJ
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 UJ	1 UJ	1 U	1 U	1 UJ	1 UJ
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 UJ	1 UJ	9 J	1 U	1 UJ	1 UJ
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1 UJ	2 J	30 J	3	1 J	1 J

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Station ID:	DR056	DR057	DR058	DR059	DR060	DR061
Sample ID:	SD-DR056-0000	SD-DR057-0000	SD-DR058-0000	SD-DR059-0000	SD-DR060-0000	SD-DR061-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	1 UJ	1 UJ	2 UI	1 U	1 UJ	1 UJ
2,4,4'-Trichlorobiphenyl (PCB28)	1 UJ	2 J	7 UI	5	2 UIJ	2 UIJ
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	1 U	1 U	1 U	1 U	1 UJ	1 UJ
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	1 UJ	1 UJ	1 U	1 U	1 UJ	1 UJ
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	1 UJ	1 UJ	2 UI	1 U	1 UJ	1 UJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)	1 U	1 U	1 U	1 U	1 UJ	1 UJ
Decachlorobiphenyl (PCB209)	1 UJ	1 UJ	1 U	1 U	1 UJ	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR062	DR063	DR064	DR065	DR066	DR067
	Sample ID:	SD-DR062-0000	SD-DR063-0000	SD-DR064-0000	SD-DR065-0000	SD-DR066-0000	SD-DR067-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD							2 U
4,4'-DDE							1 U
4,4'-DDT							2 U
Aldrin							1 UJ
alpha-BHC							1 U
alpha-Chlordane							1 U
beta-BHC							1 U
Dieldrin							2 UJ
Endosulfan I							1 U
Endosulfan II							3 UI
Endosulfan Sulfate							2 U
Endrin							2 UJ
Endrin Aldehyde							2 U
Endrin Ketone							2 U
gamma-BHC (Lindane)							1 UJ
gamma-Chlordane							1 U
Heptachlor							1 UJ
Heptachlor Epoxide							1 U
Methoxychlor							1 U
Toxaphene							10 U
Aroclor 1016		20 UJ	20 U	20 U	20 U	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR062 SD-DR062-0000 0 to 10 cm	DR063 SD-DR063-0000 0 to 10 cm	DR064 SD-DR064-0000 0 to 10 cm	DR065 SD-DR065-0000 0 to 10 cm	DR066 SD-DR066-0000 0 to 10 cm	DR067 SD-DR067-0000 0 to 10 cm
Aroclor 1254		56	126	131	105	32	20 U
Aroclor 1260		54 J	176	96	80	45 J	20 UJ
Total PCB		110 T	302 T	227 T	185 T	77 T	40 UT
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		5050 T	11500 T	8800 T	7680 T	3420 T	4880 UT
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 UJ	1 UJ	2 UIJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 UJ	1 J	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 UJ	2 J	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5-Heptachlorobiphenyl		3 J	8 J	4 J	4 J	2 J	1 UJ
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 UJ	2 J	2 J	2 J	1 UJ	1 UJ
2,2',3,4',5,5',6-Heptachlorobiphenyl		3 J	7 J	5 J	4 J	2 J	1 UJ
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		8 J	18 UIJ	14 J	10 J	4 J	2 J
2,2',3,4,4',5,5'-Heptachlorobiphenyl		5 J	12 J	7 J	6 J	3 J	1 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1 J	2 J	3 J	3 J	1 UJ	1 UJ
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		7 J	14 J	11 J	8 J	4 J	2 J
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		4 J	7 J	6 J	5 J	1 J	1 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		3 UIJ	4 J	4 J	4 J	2 UIJ	1 UJ
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 J	1 J	2 J	1 UJ	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 UJ	1 J	1 J	1 UJ	1 UJ	1 UJ
2,3',4,4',5-Pentachlorobipheny (PCB118)		4 J	7 J	8 J	6 J	2 J	1 J
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		7 UIJ	11 UIJ	11 J	9 J	4 UIJ	2 UIJ
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 UJ	2 J	1 J	1 J	1 UJ	1 UJ
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1 J	3 J	3 J	2 J	1 UJ	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Station ID:	DR062	DR063	DR064	DR065	DR066	DR067
Sample ID:	SD-DR062-0000	SD-DR063-0000	SD-DR064-0000	SD-DR065-0000	SD-DR066-0000	SD-DR067-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,4,4'-Trichlorobiphenyl (PCB28)	2 UIJ	3 J	3 J	3 J	1 UJ	1 UJ
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	1 UJ	1 U	1 U	1 U	1 UJ	1 UJ
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Decachlorobiphenyl (PCB209)	1 UJ	1 U	1 U	1 U	1 UJ	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

	Station ID:	DR068	DR069	DR070	DR071	DR072	DR073
	Sample ID:	SD-DR068-0000	SD-DR069-0000-CC	SD-DR070-0000	SD-DR071-0000	SD-DR072-0000	SD-DR073-0000
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD							
4,4'-DDE							
4,4'-DDT							
Aldrin							
alpha-BHC							
alpha-Chlordane							
beta-BHC							
Dieldrin							
Endosulfan I							
Endosulfan II							
Endosulfan Sulfate							
Endrin							
Endrin Aldehyde							
Endrin Ketone							
gamma-BHC (Lindane)							
gamma-Chlordane							
Heptachlor							
Heptachlor Epoxide							
Methoxychlor							
Toxaphene							
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR068	DR069	DR070	DR071	DR072	DR073
	Sample ID:	SD-DR068-0000	SD-DR069-0000-CC	SD-DR070-0000	SD-DR071-0000	SD-DR072-0000	SD-DR073-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Aroclor 1254		40	60	66	30	52	73
Aroclor 1260		53 J	59	70	38 J	62	81
Total PCB		93 T	119 T	136 T	68 T	114 T	154 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		3940 T	6260 T	7770 T	3150 T	5210 T	6180 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 UJ	1 U	1 U	1 UJ	1 U	1 U
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 UJ	1 U	1 U	1 UJ	1 U	1 U
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 UJ	1 U	1 U	1 UJ	1 U	1 U
2,2',3,3',4,4',5-Heptachlorobiphenyl		2 J	3	3	1 J	3	4
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 UJ	1	1	1 UJ	1 U	1
2,2',3,4',5,5',6-Heptachlorobiphenyl		2 J	4	4	2 J	4	4
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		1 UJ	9 UI	10 UI	4 UIJ	8	11
2,2',3,4,4',5,5'-Heptachlorobiphenyl		3 J	5	5	3 J	5	6
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1 UJ	1	1	1 UJ	1	2
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		4 J	7	8	4 J	8	9
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		2 J	3	4	2 J	4	4
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		2 UIJ	3	3	2 UIJ	2	3
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 U	1 U	1 UJ	1 U	1 U
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 UJ	1 U	1 U	1 UJ	1 U	1 U
2,3',4,4',5-Pentachlorobipheny (PCB118)		2 J	4	5	2 J	4	5
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		4 UIJ	7 UI	8 UI	3 UIJ	6 UI	8 UI
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 UJ	1 U	1 U	1 UJ	1 U	1 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 UJ	1 U	1 U	1 UJ	1 U	1 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 UJ	1	1	1 UJ	1 U	1
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1 UJ	2	2	1 UJ	1	2

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR068	DR069	DR070	DR071	DR072	DR073
	Sample ID:	SD-DR068-0000	SD-DR069-0000-CC	SD-DR070-0000	SD-DR071-0000	SD-DR072-0000	SD-DR073-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 UJ	1 U	1 U	1 UJ	1 U	1 U
2,4,4'-Trichlorobiphenyl (PCB28)		1 UJ	2	2	1 UJ	1	2
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 UJ	1 U	1 U	1 UJ	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 UJ	1 U	1 U	1 UJ	1 U	1 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 UJ	1 U	1 U	1 UJ	1 U	1 U
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 UJ	1 U	1 U	1 UJ	1 U	1 U
Decachlorobiphenyl (PCB209)		1 UJ	1 U	1 U	1 UJ	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR074	DR075	DR076	DR077	DR078	DR079
	Sample ID:	SD-DR074-0000	SD-DR075-0000	SD-DR076-0000	SD-DR077-0000	SD-DR078-0000	SD-DR079-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD							
4,4'-DDE							
4,4'-DDT							
Aldrin							
alpha-BHC							
alpha-Chlordane							
beta-BHC							
Dieldrin							
Endosulfan I							
Endosulfan II							
Endosulfan Sulfate							
Endrin							
Endrin Aldehyde							
Endrin Ketone							
gamma-BHC (Lindane)							
gamma-Chlordane							
Heptachlor							
Heptachlor Epoxide							
Methoxychlor							
Toxaphene							
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	20
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR074 SD-DR074-0000 0 to 10 cm	DR075 SD-DR075-0000 0 to 10 cm	DR076 SD-DR076-0000 0 to 10 cm	DR077 SD-DR077-0000 0 to 10 cm	DR078 SD-DR078-0000 0 to 10 cm	DR079 SD-DR079-0000 0 to 10 cm
Aroclor 1254		62	55	20 U	63	64	88
Aroclor 1260		65	63	20 UJ	57 J	57 J	79 J
Total PCB		127 T	118 T	40 UT	120 T	121 T	187 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		5160 T	5110 T		7450 T	5850 T	8580 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 U	1 U	1 U	1 U	1 U	1 U
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	1 U
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	1 U
2,2',3,3',4,4',5-Heptachlorobiphenyl		3	3	1 U	2	2	4
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1	1 U	1 U	1	1	2
2,2',3,4',5,5',6-Heptachlorobiphenyl		4	3	1 U	3	3	4
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		9	8	1 U	8	8	12
2,2',3,4,4',5,5'-Heptachlorobiphenyl		5	5	1 U	4	4	6
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1	1	1 UJ	2 J	2 J	3 J
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		8	7	1 U	6	6	9
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		4	3	1 UJ	3 J	3 J	4 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		3	2	1 UJ	3 J	3 J	4 J
2,2',5-Trichlorobiphenyl (PCB18)		1 U	1 U	1 UJ	1 J	1 UJ	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 U	1 U	1 U	1 U	1 U	1 U
2,3',4,4',5-Pentachlorobipheny (PCB118)		5	4	1 U	4	4	6
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		6	6	1 U	6	5	8
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 U	1 U	1 U	1 U	1 U	1 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	1 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1	1	1 U	1 U	1 U	1
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		2	1	1 U	2	2	2

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Station ID:	DR074	DR075	DR076	DR077	DR078	DR079
Sample ID:	SD-DR074-0000	SD-DR075-0000	SD-DR076-0000	SD-DR077-0000	SD-DR078-0000	SD-DR079-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	1 U	1 U	1 U	1 U	1 U	1 U
2,4,4'-Trichlorobiphenyl (PCB28)	2	1	1 UJ	2 J	2 J	3 J
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	1 U	1 U	1 U	1 U	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	1 U	1 U	1 U	1 U	1	2
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	1 U	1 U	1 U	1 U	1 U	1 U
3,4,4',5-Tetrachlorobiphenyl (PCB81)	1 U	1 U	1 U	1 U	1 U	1 U
Decachlorobiphenyl (PCB209)	1 U	1 U	1 U	1 U	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR080 SD-DR080-0000 0 to 10 cm	DR081 SD-DR081-0000 0 to 10 cm	DR082 SD-DR082-0000 0 to 10 cm	DR083 SD-DR083-0000 0 to 10 cm	DR084 SD-DR084-0000 0 to 10 cm	DR085 SD-DR085-0000 0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD			4 UI				
4,4'-DDE			8				
4,4'-DDT			30 UIJ				
Aldrin			1 UJ				
alpha-BHC			1 U				
alpha-Chlordane			1 U				
beta-BHC			1 U				
Dieldrin			2 UJ				
Endosulfan I			1 U				
Endosulfan II			2 U				
Endosulfan Sulfate			2 U				
Endrin			2 UJ				
Endrin Aldehyde			2 U				
Endrin Ketone			2 U				
gamma-BHC (Lindane)			1 UJ				
gamma-Chlordane			2 UI				
Heptachlor			1 UJ				
Heptachlor Epoxide			2 UI				
Methoxychlor			1 U				
Toxaphene			1 UI				
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	336	57	113	58	118
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR080	DR081	DR082	DR083	DR084	DR085
	Sample ID:	SD-DR080-0000	SD-DR081-0000	SD-DR082-0000	SD-DR083-0000	SD-DR084-0000	SD-DR085-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Aroclor 1254		80	753	191	252	152	183
Aroclor 1260		95 J	384 J	182 J	202 J	116 J	112 J
Total PCB		175 T	1473 T	430 T	567 T	326 T	413 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		9620 T	82800 T	21800 T	24800 T	26500 T	32000 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 U	5 UI	2 UI	1 U	1 U	1 U
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		3	2	2	1	1 U	1 U
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 U	3	2	1	1 U	1 U
2,2',3,3',4,4',5-Heptachlorobiphenyl		4	26	9	6	4	4
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		2	11	3	3	2	3
2,2',3,4',5,5',6-Heptachlorobiphenyl		5	15	8	7	5	5
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		11	73	27	20	15	16
2,2',3,4,4',5,5'-Heptachlorobiphenyl		7	29	13	9	6	7
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		2 J	29	5	6	4	8
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		9	43	17	14	11	11
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		3 J	48	13	13	10	11
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		3 J	39	8	9	7	9
2,2',5-Trichlorobiphenyl (PCB18)		1 J	19	3	5	4	7 UI
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 U	6	2	2	1	1 U
2,3',4,4',5-Pentachlorobipheny (PCB118)		4	42	11	10	7	9
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		6	68	16	16	14 UI	19 UI
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 U	1	2 UI	1 U	1 U	1 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1	1 U	1 U	1 U	1 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1	7	2	2	1	2
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		2	22	5	5	3	4

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR080	DR081	DR082	DR083	DR084	DR085
	Sample ID:	SD-DR080-0000	SD-DR081-0000	SD-DR082-0000	SD-DR083-0000	SD-DR084-0000	SD-DR085-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 U	2 UI	1 U	1 U	1 U	1 U
2,4,4'-Trichlorobiphenyl (PCB28)		2 J	35	5	8	6	11
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 U	1 U	1 U	1 U	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		2	1 U	1 U	1 U	1 U	1 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 U	4 UI	1 U	1 U	1 U	1 U
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 U	1 U	1 U	1 U	1 U	1 U
Decachlorobiphenyl (PCB209)		1	2	1 U	1 U	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

	Station ID:	DR086	DR087	DR088	DR089	DR090	DR091
	Sample ID:	SD-DR086-0000	SD-DR087-0000	SD-DR088-0000	SD-DR089-0000	SD-DR090-0000	SD-DR091-0000
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD			10 UI				
4,4'-DDE			6 UI				
4,4'-DDT			10 UI				
Aldrin			5 UJ				
alpha-BHC			5 UI				
alpha-Chlordane			7 UI				
beta-BHC			5 UI				
Dieldrin			10 UIJ				
Endosulfan I			5 UI				
Endosulfan II			20 UI				
Endosulfan Sulfate			10 UI				
Endrin			10 UI				
Endrin Aldehyde			10 UI				
Endrin Ketone			10 UI				
gamma-BHC (Lindane)			5 UI				
gamma-Chlordane			5 UI				
Heptachlor			5 UI				
Heptachlor Epoxide			10 UI				
Methoxychlor			5 UI				
Toxaphene			270 UI				
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 UJ	20 UJ	20 U
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	154	300	33	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR086 SD-DR086-0000 0 to 10 cm	DR087 SD-DR087-0000 0 to 10 cm	DR088 SD-DR088-0000 0 to 10 cm	DR089 SD-DR089-0000 0 to 10 cm	DR090 SD-DR090-0000 0 to 10 cm	DR091 SD-DR091-0000 0 to 10 cm
Aroclor 1254		62	309	468	142	39	24
Aroclor 1260		54 J	233	242 J	96	27	21
Total PCB		116 T	696 T	1010 T	271 T	66 T	45 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		5890 T	41700 T	60100 T	14100 T	3100 T	5230 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 U	4 UI	1 U	2 UIJ	1 UJ	1 UJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 U	3	2	1	1 U	1 UJ
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 U	2	2	1 J	1 UJ	1 UJ
2,2',3,3',4,4',5-Heptachlorobiphenyl		1	12	8	6 J	1 UJ	1 UJ
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 U	5	6	3 J	1 UJ	1 UJ
2,2',3,4',5,5',6-Heptachlorobiphenyl		3	12	9	6 J	1 J	1 J
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		5	40 UI	36	19 UIJ	5 UIJ	3 J
2,2',3,4,4',5,5'-Heptachlorobiphenyl		4	20	14	9 J	2 J	2 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1	11	19	5 J	1 J	1 UJ
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		4	27	24	12 J	3 J	2 J
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		3	22	28	10 J	2 J	2 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		2	17	25	7 J	2 J	1 J
2,2',5-Trichlorobiphenyl (PCB18)		1 U	8	17 UI	2 J	1 UJ	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 U	3	2	2 J	1 UJ	1 UJ
2,3',4,4',5-Pentachlorobipheny (PCB118)		3	23	22	10	2	2 J
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		5 UI	35	39	15 UI	4 UI	2 UIJ
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 U	1 U	1	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 U	1 U	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 U	5	4	2 J	1 UJ	1 UJ
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1	11	10	5 J	1 UJ	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR086	DR087	DR088	DR089	DR090	DR091
	Sample ID:	SD-DR086-0000	SD-DR087-0000	SD-DR088-0000	SD-DR089-0000	SD-DR090-0000	SD-DR091-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 U	2 UI	2 UI	1 UJ	1 UJ	1 UJ
2,4,4'-Trichlorobiphenyl (PCB28)		2	16	28	4 J	1 J	1 UJ
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 U	1 U	1 U	1 U	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 U	1 U	1 U	1 U	1 U	1 UJ
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 U	3 UI	1 U	1 U	1 U	1 UJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 U	1 U	1 U	1 UJ	1 UJ	1 U
Decachlorobiphenyl (PCB209)		1 U	1 U	1	1 U	1 U	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR092 SD-DR092-0000 0 to 10 cm	DR093 SD-DR093-0000 0 to 10 cm	DR094 SD-DR094-0000 0 to 10 cm	DR095 SD-DR095-0000 0 to 10 cm	DR096 SD-DR096-0000 0 to 10 cm	DR097 SD-DR097-0000 0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD		2 U					
4,4'-DDE		1 U					
4,4'-DDT		2 UJ					
Aldrin		1 UJ					
alpha-BHC		1 U					
alpha-Chlordane		1 U					
beta-BHC		1 U					
Dieldrin		2 UJ					
Endosulfan I		1 U					
Endosulfan II		2 U					
Endosulfan Sulfate		2 U					
Endrin		2 UJ					
Endrin Aldehyde		2 U					
Endrin Ketone		2 U					
gamma-BHC (Lindane)		1 UJ					
gamma-Chlordane		1 U					
Heptachlor		1 UJ					
Heptachlor Epoxide		1 U					
Methoxychlor		1 U					
Toxaphene		20 UI					
Aroclor 1016		20 UJ	20 U	20 UJ	20 UJ	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	113	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR092 / SD-DR092-0000 / 0 to 10 cm	DR093 / SD-DR093-0000 / 0 to 10 cm	DR094 / SD-DR094-0000 / 0 to 10 cm	DR095 / SD-DR095-0000 / 0 to 10 cm	DR096 / SD-DR096-0000 / 0 to 10 cm	DR097 / SD-DR097-0000 / 0 to 10 cm
Aroclor 1254		40	117	180	53	82	64
Aroclor 1260		24	106	100 J	38 J	90 J	62 J
Total PCB		64 T	223 T	393 T	91 T	172 T	126 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		9140 T	8750 T	38500 T	4190 T	8820 T	4210 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 UJ	1 UJ	2 UI	1 UJ	1 U	1 UJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 UJ	1 J	1 UJ	1 UJ	1 U	1 UJ
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ
2,2',3,3',4,4',5-Heptachlorobiphenyl		5 UIJ	4 J	4 J	2 J	4	2 J
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 UJ	2 J	3 J	1 UJ	2	1 J
2,2',3,4',5,5',6-Heptachlorobiphenyl		2 J	5 J	5 J	2 J	4	3 J
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		4	12 J	16	6	12	8
2,2',3,4,4',5,5'-Heptachlorobiphenyl		2 J	8 J	7 J	3 J	5	4 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1 J	2 J	10 J	2 J	2	2 J
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		3 J	10 J	11	4	8	6
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		3 J	7 J	12 J	2 J	6	4 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		2 J	4 J	11 J	2 J	3	2 J
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 J	6 J	1 UJ	1 U	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ
2,3',4,4',5-Pentachlorobipheny (PCB118)		2 J	7 J	10	3	5	4
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		3 J	11 UIJ	20 J	5 J	7	6 J
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 UJ	1 J	1 J	1 UJ	1 U	1 UJ
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1 UJ	2 J	5 J	1 J	2	2 J

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR092	DR093	DR094	DR095	DR096	DR097
	Sample ID:	SD-DR092-0000	SD-DR093-0000	SD-DR094-0000	SD-DR095-0000	SD-DR096-0000	SD-DR097-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ
2,4,4'-Trichlorobiphenyl (PCB28)		1 J	3 J	13 J	2 J	2	1 J
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 UJ	1 U	1 U	1 U	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 U	1 UJ	1 UJ	1 UJ	1 U	1 UJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ
Decachlorobiphenyl (PCB209)		1 UJ	1 U	1 UJ	1 UJ	1 U	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR098	DR099	DR100	DR101	DR102	DR103
	Sample ID:	SD-DR098-0000	SD-DR099-0000	SD-DR100-0000	SD-DR101-0000	SD-DR102-0000	SD-DR103-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD					2 U		
4,4'-DDE					3 UI		
4,4'-DDT					2 U		
Aldrin					1 U		
alpha-BHC					1 U		
alpha-Chlordane					1 U		
beta-BHC					1 U		
Dieldrin					2 U		
Endosulfan I					1 U		
Endosulfan II					2 U		
Endosulfan Sulfate					2 U		
Endrin					2 U		
Endrin Aldehyde					2 U		
Endrin Ketone					2 U		
gamma-BHC (Lindane)					1 U		
gamma-Chlordane					1 U		
Heptachlor					1 U		
Heptachlor Epoxide					1 U		
Methoxychlor					2		
Toxaphene					160 UI		
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 UJ	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 UJ	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 UJ	20 U	41
Aroclor 1248		20 U	20 U	20 U	20 UJ	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR098	DR099	DR100	DR101	DR102	DR103
	Sample ID:	SD-DR098-0000	SD-DR099-0000	SD-DR100-0000	SD-DR101-0000	SD-DR102-0000	SD-DR103-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Aroclor 1254		37	32	20 U	20 UJ	64	44
Aroclor 1260		32 J	20 UJ	20 UJ	20 UJ	44 J	157 J
Total PCB		69 T	32 T	40 UT	40 UT	108 T	242 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		3750 T	1930 T	6560 UT	2310 UT	5020 T	8520 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	4 UIJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 J
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5-Heptachlorobiphenyl		1 J	1 UJ	1 UJ	1 UJ	2 J	9 J
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 UJ	1 UJ	1 UJ	1 UJ	1 J	7 J
2,2',3,4',5,5',6-Heptachlorobiphenyl		2 J	1 UJ	1 UJ	1 J	2 J	6 J
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		5	3	2	3 J	8	55 J
2,2',3,4,4',5,5'-Heptachlorobiphenyl		2 J	1 J	1 UJ	2 J	3 J	13 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1 J	1 UJ	1 UJ	1 UJ	2 J	7 J
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		4	2	2	2 J	6	41 J
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		3 J	1 J	1 UJ	1 UJ	3 J	44 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		2 J	1 J	1 UJ	1 J	4 J	16 J
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 UJ	1 UJ	1 UJ	3 J	2 J
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	3 J
2,3',4,4',5-Pentachlorobipheny (PCB118)		3	2	1	2 J	4	44 J
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		4 J	2 J	2 J	2 J	6 J	50 J
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 J
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	6 J
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1 UJ	1 UJ	1 UJ	1 UJ	2 J	11 J

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR098 SD-DR098-0000 0 to 10 cm	DR099 SD-DR099-0000 0 to 10 cm	DR100 SD-DR100-0000 0 to 10 cm	DR101 SD-DR101-0000 0 to 10 cm	DR102 SD-DR102-0000 0 to 10 cm	DR103 SD-DR103-0000 0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	2 UIJ
2,4,4'-Trichlorobiphenyl (PCB28)		1 UJ	1 UJ	1 UJ	1 UJ	4 J	4 J
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 U	1 U	1 U	1 UJ	1 U	1 UJ
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Decachlorobiphenyl (PCB209)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR104 SD-DR104-0000 0 to 10 cm	DR105 SD-DR105-0000 0 to 10 cm	DR106 SD-DR106-0000 0 to 10 cm	DR107 SD-DR107-0000 0 to 10 cm	DR108 SD-DR108-0000 0 to 10 cm	DR109 SD-DR109-0000 0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD							
4,4'-DDE							
4,4'-DDT							
Aldrin							
alpha-BHC							
alpha-Chlordane							
beta-BHC							
Dieldrin							
Endosulfan I							
Endosulfan II							
Endosulfan Sulfate							
Endrin							
Endrin Aldehyde							
Endrin Ketone							
gamma-BHC (Lindane)							
gamma-Chlordane							
Heptachlor							
Heptachlor Epoxide							
Methoxychlor							
Toxaphene							
Aroclor 1016		20 UJ	20 UJ	20 U	20 U	20 U	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	32
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR104	DR105	DR106	DR107	DR108	DR109
	Sample ID:	SD-DR104-0000	SD-DR105-0000	SD-DR106-0000	SD-DR107-0000	SD-DR108-0000	SD-DR109-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Aroclor 1254		91	69	131	172	154	140
Aroclor 1260		86 J	55 J	96	124	104	105 J
Total PCB		177 T	124 T	227 T	296 T	258 T	277 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		6280 T	5990 T	9340 T	11800 T	11100 T	11800 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 UJ	1 UJ	1 UJ	2 UIJ	2 UIJ	1 U
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
2,2',3,3',4,4',5-Heptachlorobiphenyl		3 J	2 J	4 J	5 J	4 J	5
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 UJ	1 UJ	2 J	3 J	3 J	2
2,2',3,4',5,5',6-Heptachlorobiphenyl		4 J	3	4 J	5 J	5 J	5
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		9 J	7 J	12 J	17 J	14 J	16
2,2',3,4,4',5,5'-Heptachlorobiphenyl		6 J	5	7 J	8 J	7 J	7
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		2 J	2 J	3 J	4 J	3 J	4
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		9 J	7 J	8 J	12 J	10 J	11
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		6 J	6 J	5 J	7 J	7 J	9
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		5 J	4 J	4 J	5 J	5 J	5
2,2',5-Trichlorobiphenyl (PCB18)		1 J	1 J	2 J	2 J	2 J	2
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 UJ	1 U	1 UJ	1 J	1 UJ	1 U
2,3',4,4',5-Pentachlorobipheny (PCB118)		5 J	4	6 J	9 J	8 J	8
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		9 UIJ	8	10 UIJ	14 UIJ	12 UIJ	11
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 UJ	1 UJ	1 UJ	2 J	1 J	1
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1 J	2 J	3 J	4 J	3 J	3

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR104	DR105	DR106	DR107	DR108	DR109
	Sample ID:	SD-DR104-0000	SD-DR105-0000	SD-DR106-0000	SD-DR107-0000	SD-DR108-0000	SD-DR109-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
2,4,4'-Trichlorobiphenyl (PCB28)		4 UIJ	3 J	4 J	4 J	4 J	4
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 UJ	1 U	1 U	1 U	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
Decachlorobiphenyl (PCB209)		1 UJ	1 U	1 U	1 U	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

	Station ID:	DR110	DR111	DR112	DR113	DR114	DR115
	Sample ID:	SD-DR110-0000	SD-DR111-0000-CC	SD-DR112-0000	SD-DR113-0000-CC	SD-DR114-0000	SD-DR115-0000
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD			67 J				
4,4'-DDE			5				
4,4'-DDT			3				
Aldrin			1 UJ				
alpha-BHC			1 U				
alpha-Chlordane			3 UI				
beta-BHC			1 U				
Dieldrin			3 UIJ				
Endosulfan I			1 U				
Endosulfan II			2 U				
Endosulfan Sulfate			2 U				
Endrin			3 UIJ				
Endrin Aldehyde			2 U				
Endrin Ketone			2 U				
gamma-BHC (Lindane)			1 UJ				
gamma-Chlordane			1 U				
Heptachlor			1 UJ				
Heptachlor Epoxide			1 U				
Methoxychlor			1 U				
Toxaphene			10 U				
Aroclor 1016		20 U	20 U	20 U	20 UJ	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 UJ	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 UJ	20 U	20 U
Aroclor 1242		20 U	56	20 U	283 J	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 UJ	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR110	DR111	DR112	DR113	DR114	DR115
	Sample ID:	SD-DR110-0000	SD-DR111-0000-CC	SD-DR112-0000	SD-DR113-0000-CC	SD-DR114-0000	SD-DR115-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Aroclor 1254		170	153	142	1160 J	113	85
Aroclor 1260		114	102	101	584 J	76 J	57
Total PCB		284 T	311 T	243 T	2027 T	189 T	142 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		10600 T	14100 T	9200 T	74500 T	7530 T	10900 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		2 UIJ	2 UIJ	2 UIJ	8 UIJ	1 UJ	1 U
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 UJ	1 J	1 UJ	4	1 U	1 U
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 UJ	1 UJ	1 UJ	6 J	1 UJ	1 U
2,2',3,3',4,4',5-Heptachlorobiphenyl		5 J	5 J	4 J	32 J	4 J	2
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		3 J	3 J	2 J	20 J	2 J	1 J
2,2',3,4',5,5',6-Heptachlorobiphenyl		5 J	5 J	5 J	29	4	3
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		16 J	15 J	14 J	160 J	13 J	9
2,2',3,4,4',5,5'-Heptachlorobiphenyl		8 J	8 J	8 J	53	6	4
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		4 J	4 J	4 J	30 J	3 J	2 J
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		12 J	10 J	10 J	120 J	11 J	6
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		7 J	7 J	7 J	110 J	7 J	5 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		6 J	6 J	6 J	82 J	6 J	4 J
2,2',5-Trichlorobiphenyl (PCB18)		2 J	3 J	2 J	18 J	2 J	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 UJ	1 UJ	1 UJ	9 J	1 J	1 U
2,3',4,4',5-Pentachlorobipheny (PCB118)		9 J	9 J	8 J	110 J	8	5
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		14 UIJ	13 UIJ	12 UIJ	120 J	12	7
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 UJ	1 UJ	1 UJ	4 J	1 UJ	1 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 UJ	1 UJ	1 UJ	1	1 U	1 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 J	2 J	1 UJ	18 J	1 J	1 U
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		4 J	4 J	3 J	36 J	2 J	2

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR110	DR111	DR112	DR113	DR114	DR115
	Sample ID:	SD-DR110-0000	SD-DR111-0000-CC	SD-DR112-0000	SD-DR113-0000-CC	SD-DR114-0000	SD-DR115-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 UJ	1 UJ	1 UJ	4 UIJ	1 UJ	1
2,4,4'-Trichlorobiphenyl (PCB28)		4 J	5 J	4 J	40 J	4 J	3 J
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 U	1 U	1 U	1 U	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 UJ	1 UJ	1 UJ	2 UIJ	2 UIJ	1 UJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
Decachlorobiphenyl (PCB209)		1 U	1 U	1 U	1	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR116 SD-DR116-0000 0 to 10 cm	DR117 SD-DR117-0000 0 to 10 cm	DR118 SD-DR118-0000 0 to 10 cm	DR119 SD-DR119-0000 0 to 10 cm	DR120 SD-DR120-0000 0 to 10 cm	DR121 SD-DR121-0000 0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD		2 U					
4,4'-DDE		2 UI					
4,4'-DDT		2 U					
Aldrin		1 UJ					
alpha-BHC		1 U					
alpha-Chlordane		2 UI					
beta-BHC		1 U					
Dieldrin		2 UJ					
Endosulfan I		1 U					
Endosulfan II		6 UI					
Endosulfan Sulfate		2 U					
Endrin		4 UIJ					
Endrin Aldehyde		2 U					
Endrin Ketone		2 U					
gamma-BHC (Lindane)		1 UJ					
gamma-Chlordane		1 U					
Heptachlor		1 UJ					
Heptachlor Epoxide		1 U					
Methoxychlor		1 U					
Toxaphene		10 U					
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 UJ	20 UJ	20 U
Aroclor 1221		40 UJ	40 UJ	40 UJ	40 UJ	40 U	40 U
Aroclor 1232		20 UJ	20 UJ	20 UJ	20 UJ	20 U	20 U
Aroclor 1242		20 UJ	20 UJ	20 UJ	20 UJ	20 U	20 U
Aroclor 1248		20 UJ	20 UJ	20 UJ	20 UJ	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR116	DR117	DR118	DR119	DR120	DR121
	Sample ID:	SD-DR116-0000	SD-DR117-0000	SD-DR118-0000	SD-DR119-0000	SD-DR120-0000	SD-DR121-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Aroclor 1254		82 J	108 J	21 J	199 J	92	46
Aroclor 1260		75 J	96 J	32 J	191 J	96	52
Total PCB		157 T	204 T	53 T	390 T	188 T	98 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		6210 T	7850 T	1890 T	14500 T	6760 T	4100 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 UJ	1 UJ	1 UJ	2 UIJ	2 UIJ	1 UJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 J	1	1 UJ
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 J	1 J	1 UJ
2,2',3,3',4,4',5-Heptachlorobiphenyl		3 J	4 J	1 J	7 J	4 J	2 J
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 J	2 J	1 UJ	3 J	2 J	1 UJ
2,2',3,4',5,5',6-Heptachlorobiphenyl		3 J	4 J	2 J	7 J	5 J	3 J
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		9 J	13 J	3 J	24 J	13 J	7 J
2,2',3,4,4',5,5'-Heptachlorobiphenyl		5 J	6 J	3 J	12 J	8 J	4 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		2 J	3 J	1 UJ	5 J	3 J	1 J
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		7 J	10 J	5 J	17 J	9 J	5 J
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		5 J	6 J	2 J	12 J	5 J	3 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		3 J	6 J	2 UIJ	10 J	4 J	2 J
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 J	1 UJ	2 J	1 UJ	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 UJ	1 UJ	1 UJ	1 J	1 UJ	1 UJ
2,3',4,4',5-Pentachlorobipheny (PCB118)		4 J	6 J	2 J	11 J	7	3 J
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		5 J	9 J	2 UIJ	14 J	10 UI	2 UIJ
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 J	2 J	1 UJ	3 J	2 J	1 UJ
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		2 J	3 J	1 UJ	5 J	3 J	1 J

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Station ID:	DR116	DR117	DR118	DR119	DR120	DR121
Sample ID:	SD-DR116-0000	SD-DR117-0000	SD-DR118-0000	SD-DR119-0000	SD-DR120-0000	SD-DR121-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,4,4'-Trichlorobiphenyl (PCB28)	2 J	2 J	1 UJ	3 J	2 J	1 J
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
Decachlorobiphenyl (PCB209)	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR122	DR123	DR124	DR125	DR126	DR127
	Sample ID:	SD-DR122-0000	SD-DR123-0000	SD-DR124-0000	SD-DR125-0000	SD-DR126-0000	SD-DR127-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD			6				
4,4'-DDE			4 UI				
4,4'-DDT			4 UIJ				
Aldrin			1 UJ				
alpha-BHC			1 U				
alpha-Chlordane			1 U				
beta-BHC			1 U				
Dieldrin			4 UIJ				
Endosulfan I			1 U				
Endosulfan II			2 U				
Endosulfan Sulfate			2 U				
Endrin			2 UJ				
Endrin Aldehyde			4 UI				
Endrin Ketone			2 U				
gamma-BHC (Lindane)			1 UJ				
gamma-Chlordane			3 UI				
Heptachlor			1 UJ				
Heptachlor Epoxide			1 U				
Methoxychlor			1 U				
Toxaphene			10 U				
Aroclor 1016		20 UJ	20 UJ	20 U	20 U	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR122 SD-DR122-0000 0 to 10 cm	DR123 SD-DR123-0000 0 to 10 cm	DR124 SD-DR124-0000 0 to 10 cm	DR125 SD-DR125-0000 0 to 10 cm	DR126 SD-DR126-0000 0 to 10 cm	DR127 SD-DR127-0000 0 to 10 cm
Aroclor 1254		60	678	90	82	79	92
Aroclor 1260		63	222	71	69	102	87
Total PCB		123 T	900 T	161 T	151 T	181 T	179 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		5640 T	37200 T	5790 T	5300 T	5860 T	6440 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 U	6 UI	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 U	1	1 UJ	1 UJ	1	1 U
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 U	2 UI	1 UJ	1 UJ	1 J	1 J
2,2',3,3',4,4',5-Heptachlorobiphenyl		2	9	3 J	3 J	6 J	5 J
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 J	5 J	1 J	1 J	2 J	2 J
2,2',3,4',5,5',6-Heptachlorobiphenyl		3	10	3 J	3 J	6 J	5 J
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		8	36	8 J	9 J	14 UIJ	14 J
2,2',3,4,4',5,5'-Heptachlorobiphenyl		4	14	4 J	5 J	10 J	9 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1 J	48 J	1 J	2 J	2 J	3 J
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		7	27	5 J	7 J	10 J	9 J
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		5 J	42 J	4 J	4 J	4 J	5 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		3 J	48 J	2 J	3 J	4 J	4 J
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 UJ	1 UJ	1 J	2 J	1 J
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 U	2	1 UJ	1 UJ	1 UJ	1 UJ
2,3',4,4',5-Pentachlorobipheny (PCB118)		4	40	3 J	4 J	6	6
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		5	88	5 J	8 UIJ	9 UI	10 UI
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 U	4	1 UJ	1 UJ	1 J	1 J
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1	27	1 J	2 J	3 J	3 J

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Station ID:	DR122	DR123	DR124	DR125	DR126	DR127
Sample ID:	SD-DR122-0000	SD-DR123-0000	SD-DR124-0000	SD-DR125-0000	SD-DR126-0000	SD-DR127-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	1 U	3	1 UJ	1 UJ	1 UJ	1 UJ
2,4,4'-Trichlorobiphenyl (PCB28)	1 UJ	20 J	1 J	2 J	3 J	3 J
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	1 U	1 U	1 UJ	1 U	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	1	3	1 UJ	1 UJ	1 U	1 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	1 UJ	7 UJI	1 UJ	1 UJ	1 U	1 U
3,4,4',5-Tetrachlorobiphenyl (PCB81)	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ
Decachlorobiphenyl (PCB209)	1 U	1 U	1 UJ	1 UJ	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

	Station ID:	DR128	DR129	DR130	DR131	DR132	DR133
	Sample ID:	SD-DR128-0000	SD-DR129-0000	SD-DR130-0000	SD-DR131-0000-CC	SD-DR132-0000	SD-DR133-0000
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD							
4,4'-DDE							
4,4'-DDT							
Aldrin							
alpha-BHC							
alpha-Chlordane							
beta-BHC							
Dieldrin							
Endosulfan I							
Endosulfan II							
Endosulfan Sulfate							
Endrin							
Endrin Aldehyde							
Endrin Ketone							
gamma-BHC (Lindane)							
gamma-Chlordane							
Heptachlor							
Heptachlor Epoxide							
Methoxychlor							
Toxaphene							
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	26	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR128	DR129	DR130	DR131	DR132	DR133
	Sample ID:	SD-DR128-0000	SD-DR129-0000	SD-DR130-0000	SD-DR131-0000-CC	SD-DR132-0000	SD-DR133-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Aroclor 1254		87	95	82	57	64	42
Aroclor 1260		80	96	75	40 J	65 J	37
Total PCB		167 T	217 T	157 T	97 T	129 T	79 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		5590 T	8130 T	5470 T	9240 T	4450 T	10400 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 UJ	1 UJ	2 UIJ	1 UJ	1 UJ	1 U
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 U	1 UJ	1 U	1 UJ	1 UJ	1 U
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
2,2',3,3',4,4',5-Heptachlorobiphenyl		5 J	7 J	4 J	3 J	4 J	2
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		2 J	2 J	2 J	1 J	1 J	1 UJ
2,2',3,4',5,5',6-Heptachlorobiphenyl		4 UIJ	4 J	4 J	3 J	4 J	2
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		8 UIJ	13	13 J	9 J	10 J	4
2,2',3,4,4',5,5'-Heptachlorobiphenyl		7 J	8 J	7 J	4 J	7 J	2 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		2 J	3 J	2 J	2 J	2 J	1 UJ
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		9 J	9 J	9 J	7 J	8 J	4
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		5 J	7 J	6 J	5 J	4 J	2 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		4 J	4 J	4 J	4 UIJ	4 J	2 J
2,2',5-Trichlorobiphenyl (PCB18)		1 J	1 J	1 J	1 UJ	1 J	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
2,3',4,4',5-Pentachlorobipheny (PCB118)		6	6 J	6	4 J	5 J	2
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		10 UI	9 J	10	6 J	7 J	3 J
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 J	1 J	1 J	1 UJ	1 UJ	1 U
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		3 UIJ	2 J	3 J	1 J	1 J	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Station ID:	DR128	DR129	DR130	DR131	DR132	DR133
Sample ID:	SD-DR128-0000	SD-DR129-0000	SD-DR130-0000	SD-DR131-0000-CC	SD-DR132-0000	SD-DR133-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
2,4,4'-Trichlorobiphenyl (PCB28)	3 J	2 J	3 J	1 J	2 J	1 UJ
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	1 U	1 UJ	1 U	1 UJ	1 UJ	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	1 U	1 UJ	1 U	1 UJ	1 UJ	1 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
Decachlorobiphenyl (PCB209)	1 U	1 UJ	1 U	1 U	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR134	DR135	DR136	DR137	DR138	DR139
	Sample ID:	SD-DR134-0000	SD-DR135-0000	SD-DR136-0000	SD-DR137-0000	SD-DR138-0000	SD-DR139-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD							33
4,4'-DDE							140
4,4'-DDT							11 UIJ
Aldrin							10 UIJ
alpha-BHC							10 UI
alpha-Chlordane							10 UI
beta-BHC							10 UI
Dieldrin							17 J
Endosulfan I							10 UI
Endosulfan II							10 UI
Endosulfan Sulfate							10 UI
Endrin							10 UIJ
Endrin Aldehyde							50 UI
Endrin Ketone							10 UI
gamma-BHC (Lindane)							10 UIJ
gamma-Chlordane							11 UI
Heptachlor							10 UIJ
Heptachlor Epoxide							11 UI
Methoxychlor							10 UI
Toxaphene							100 UI
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 UJ	20 U	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	92	610
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR134 SD-DR134-0000 0 to 10 cm	DR135 SD-DR135-0000 0 to 10 cm	DR136 SD-DR136-0000 0 to 10 cm	DR137 SD-DR137-0000 0 to 10 cm	DR138 SD-DR138-0000 0 to 10 cm	DR139 SD-DR139-0000 0 to 10 cm
Aroclor 1254		56	180	38	98	63	1050
Aroclor 1260		52 J	80 J	41 J	83 J	32	1180
Total PCB		108 T	260 T	79 T	181 T	187 T	2840 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		4290 T	12700 T	3100 T	8230 T		95900 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 UJ	2 UIJ	1 UJ	5 UIJ	1 UJ	7 UI
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 UJ	1 UJ	1 UJ	3 J	1 UJ	4
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 UJ	1 UJ	1 UJ	4 J	1 UJ	7
2,2',3,3',4,4',5-Heptachlorobiphenyl		3 J	4 J	2 J	20 J	1 J	31
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 J	3 J	1 UJ	6 J	1 UJ	11 J
2,2',3,4',5,5',6-Heptachlorobiphenyl		4 J	5 J	2 J	23 J	2 J	32
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		9 J	17 J	6 J	57 J	5 J	140
2,2',3,4,4',5,5'-Heptachlorobiphenyl		5 J	8 J	4 J	38 J	3 J	93
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		2 J	5 J	1 J	16 J	5 J	44 J
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		8 J	13 J	5 J	50 J	4 J	120
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		4 J	11 J	3 J	30 J	4 J	87 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		4 J	10 J	3 J	32 J	5 J	100 J
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	2 J	1 UJ	7 J	5 J	24 UIJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 UJ	1 UJ	1 UJ	3 J	1 UJ	3
2,3',4,4',5-Pentachlorobipheny (PCB118)		4 J	12 J	3 J	31 J	3 J	44
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		7 J	18 J	5 J	54 J	8 J	160
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 J	2 J	1 UJ	5 J	1 UJ	7
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		2 J	4 J	1 UJ	11 J	2 J	22

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR134	DR135	DR136	DR137	DR138	DR139
	Sample ID:	SD-DR134-0000	SD-DR135-0000	SD-DR136-0000	SD-DR137-0000	SD-DR138-0000	SD-DR139-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 UJ	1 UJ	1 UJ	5 UIJ	1 UJ	5
2,4,4'-Trichlorobiphenyl (PCB28)		2 J	4 J	1 J	13 J	6 J	110 J
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		2 UIJ	1 UJ	1 UJ	3 UIJ	1 UJ	6 UJI
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
Decachlorobiphenyl (PCB209)		1 U	1 U	1 U	1 U	1 UJ	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

	Station ID:	DR140	DR141	DR142	DR143	DR144	DR145
	Sample ID:	SD-DR140-0000	SD-DR141-0000-CC	SD-DR142-0000	SD-DR143-0000	SD-DR144-0000	SD-DR145-0000
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD							
4,4'-DDE							
4,4'-DDT							
Aldrin							
alpha-BHC							
alpha-Chlordane							
beta-BHC							
Dieldrin							
Endosulfan I							
Endosulfan II							
Endosulfan Sulfate							
Endrin							
Endrin Aldehyde							
Endrin Ketone							
gamma-BHC (Lindane)							
gamma-Chlordane							
Heptachlor							
Heptachlor Epoxide							
Methoxychlor							
Toxaphene							
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 U	20 U	20 U
Aroclor 1221		40 U	40 U	40 UJ	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 UJ	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 UJ	20 U	20 U	28
Aroclor 1248		20 U	20 U	20 UJ	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR140 SD-DR140-0000 0 to 10 cm	DR141 SD-DR141-0000-CC 0 to 10 cm	DR142 SD-DR142-0000 0 to 10 cm	DR143 SD-DR143-0000 0 to 10 cm	DR144 SD-DR144-0000 0 to 10 cm	DR145 SD-DR145-0000 0 to 10 cm
Aroclor 1254		20 U	43	20 UJ	25	187	94
Aroclor 1260		20 UJ	25 J	20 UJ	20 U	121	82
Total PCB		40 UT	68 T	40 UT	25 T	308 T	204 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)			3000 T		3050 T	16700 T	8290 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 U	1 UJ	1 UJ	1 UJ	2 UIJ	1 UJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 U	1 UJ	1 UJ	1 UJ	1 J	1 UJ
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5-Heptachlorobiphenyl		1 U	1 J	1 UJ	1 UJ	5 J	4 J
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 U	1 UJ	1 UJ	1 UJ	3 J	1 J
2,2',3,4',5,5',6-Heptachlorobiphenyl		1 U	2 J	1 UJ	1 UJ	5 J	4 J
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		1 U	5	2	1 UJ	17 J	10 J
2,2',3,4,4',5,5'-Heptachlorobiphenyl		1 U	2 J	1 UJ	1 J	9 J	6 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1 U	1 UJ	1 UJ	1 UJ	6 J	2 J
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		1 U	4	1	2 J	12 J	8 J
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		1 U	2 J	1 UJ	1 J	11 J	6 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		1 U	3 J	1 J	1 UJ	8 J	4 J
2,2',5-Trichlorobiphenyl (PCB18)		1 U	1 UJ	1 UJ	1 UJ	4 J	1 J
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 U	1 UJ	1 UJ	1 UJ	1 J	1 UJ
2,3',4,4',5-Pentachlorobipheny (PCB118)		1 U	3	1	1 J	10 J	5 J
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		1 U	4 J	2 J	3 UIJ	18 UIJ	9 UIJ
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 U	1 UJ	1 UJ	1 UJ	2 J	1 J
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1 U	1 J	1 UJ	1 UJ	4 J	2 J

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR140 SD-DR140-0000 0 to 10 cm	DR141 SD-DR141-0000-CC 0 to 10 cm	DR142 SD-DR142-0000 0 to 10 cm	DR143 SD-DR143-0000 0 to 10 cm	DR144 SD-DR144-0000 0 to 10 cm	DR145 SD-DR145-0000 0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,4,4'-Trichlorobiphenyl (PCB28)		1 U	1 J	1 J	1 UJ	8 UIJ	4 UIJ
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 U	1 U	1 U	1 U	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 U	1 UJ	1 UJ	1 U	1 UJ	1 UJ
Decachlorobiphenyl (PCB209)		1 U	1 UJ	1 UJ	1 UJ	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR146	DR147	DR148	DR149	DR150	DR151
	Sample ID:	SD-DR146-0000	SD-DR147-0000	SD-DR148-0000	SD-DR149-0000	SD-DR150-0000	SD-DR151-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD							
4,4'-DDE							
4,4'-DDT							
Aldrin							
alpha-BHC							
alpha-Chlordane							
beta-BHC							
Dieldrin							
Endosulfan I							
Endosulfan II							
Endosulfan Sulfate							
Endrin							
Endrin Aldehyde							
Endrin Ketone							
gamma-BHC (Lindane)							
gamma-Chlordane							
Heptachlor							
Heptachlor Epoxide							
Methoxychlor							
Toxaphene							
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 UJ
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 UJ
Aroclor 1242		20 U	85	45	20 U	20 U	20 UJ
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR146 SD-DR146-0000 0 to 10 cm	DR147 SD-DR147-0000 0 to 10 cm	DR148 SD-DR148-0000 0 to 10 cm	DR149 SD-DR149-0000 0 to 10 cm	DR150 SD-DR150-0000 0 to 10 cm	DR151 SD-DR151-0000 0 to 10 cm
Aroclor 1254		67	138	151	50	77	166 J
Aroclor 1260		58 J	122	83 J	45 J	60 J	159 J
Total PCB		125 T	345 T	279 T	95 T	137 T	325 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		4750 T	12700 T		4730 T	6280 T	12100 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 UJ	1 U	2 UIJ	1 UJ	1 UJ	2 UIJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 U	1 U	1 UJ	1 U	1 UJ	1 J
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 UJ	1	1 UJ	1 UJ	1 UJ	1 J
2,2',3,3',4,4',5-Heptachlorobiphenyl		2 J	5	2 J	2 J	2 J	7 J
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 UJ	2 J	1 UJ	1 UJ	1 J	3 J
2,2',3,4',5,5',6-Heptachlorobiphenyl		3	6	3 J	3	2 J	7 J
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		7 J	17	15 UI	6 J	7 UIJ	22 J
2,2',3,4,4',5,5'-Heptachlorobiphenyl		4	9	5 J	4	4 J	11 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		2 J	7 J	4 J	1 J	2 J	4 J
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		6 J	13	9 J	6 J	5 J	16 J
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		5 J	11 J	8 J	5 J	4 J	11 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		3 J	10 J	8 J	4 J	4 UIJ	8 J
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	6 J	3 UIJ	1 J	1 UJ	2 J
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 J
2,3',4,4',5-Pentachlorobipheny (PCB118)		4	9	7 J	3	4 J	10 J
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		6	17	15 UIJ	6	7 UIJ	14 J
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 U	1 UJ	1 U	1 UJ	1 UJ
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 UJ	2	1 UJ	1 UJ	1 UJ	3 J
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1 J	4	2 J	1 UJ	1 J	4 J

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR146	DR147	DR148	DR149	DR150	DR151
	Sample ID:	SD-DR146-0000	SD-DR147-0000	SD-DR148-0000	SD-DR149-0000	SD-DR150-0000	SD-DR151-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 UJ
2,4,4'-Trichlorobiphenyl (PCB28)		2 J	10 J	4 UIJ	3 J	2 UIJ	4 J
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 U	1 U	1 UJ	1 U	1 UJ	1 UJ
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 UJ
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 UJ	2 UIJ	1 UJ	1 UJ	1 UJ	1 UJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 UJ
Decachlorobiphenyl (PCB209)		1 U	1 U	1 UJ	1 U	1 UJ	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR152	DR153	DR154	DR155	DR156	DR157
	Sample ID:	SD-DR152-0000	SD-DR153-0000	SD-DR154-0000	SD-DR155-0000	SD-DR156-0000	SD-DR157-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD		2 U		2 U			
4,4'-DDE		1 U		1 U			
4,4'-DDT		2 UJ		2 U			
Aldrin		1 UJ		1 UJ			
alpha-BHC		1 U		1 U			
alpha-Chlordane		1 U		1 U			
beta-BHC		1 U		1 U			
Dieldrin		2 UJ		2 UJ			
Endosulfan I		1 U		1 U			
Endosulfan II		2 U		2 U			
Endosulfan Sulfate		2 U		3 UI			
Endrin		2 UJ		2 U			
Endrin Aldehyde		2 U		2 U			
Endrin Ketone		2 U		2 U			
gamma-BHC (Lindane)		1 UJ		1 U			
gamma-Chlordane		1 U		1 U			
Heptachlor		1 UJ		1 U			
Heptachlor Epoxide		1 U		2 UI			
Methoxychlor		1 U		1 U			
Toxaphene		45 UI		10 U			
Aroclor 1016		20 UJ	20 U	20 UJ	20 UJ	20 UJ	20 U
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	2400
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR152 SD-DR152-0000 0 to 10 cm	DR153 SD-DR153-0000 0 to 10 cm	DR154 SD-DR154-0000 0 to 10 cm	DR155 SD-DR155-0000 0 to 10 cm	DR156 SD-DR156-0000 0 to 10 cm	DR157 SD-DR157-0000 0 to 10 cm
Aroclor 1254		67	64	57	43	51	1330
Aroclor 1260		57	49	44 J	63 J	41 J	977
Total PCB		124 T	113 T	101 T	106 T	92 T	4707 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		5230 T	5160 T	4330 T	3930 T	3350 T	
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	12 UIJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	5 J
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	9 J
2,2',3,3',4,4',5-Heptachlorobiphenyl		5 UIJ	2 J	3 J	3 J	2 J	48 J
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 J	1 UJ	1 J	1 UJ	1 UJ	18 J
2,2',3,4',5,5',6-Heptachlorobiphenyl		3 J	2 J	3 J	4 J	3 J	41 J
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		10	7 J	8 J	8 J	6 J	120 J
2,2',3,4,4',5,5'-Heptachlorobiphenyl		4 J	3 J	4 J	6 J	4 J	70 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		2 J	2 UJ	1 J	1 J	2 J	130 J
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		7 J	5 J	6 J	8 J	6 J	92 J
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		5 J	3 J	5 J	4 J	3 J	100 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		3 J	3 UJ	3 J	3 J	3 J	150 J
2,2',5-Trichlorobiphenyl (PCB18)		1 J	1 UJ	1 UJ	1 UJ	1 UJ	120 J
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	5 J
2,3',4,4',5-Pentachlorobipheny (PCB118)		5 J	3 J	4 J	4 J	4 J	75 J
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		6 J	7 UIJ	6 J	5 J	6 J	190 J
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	7 UIJ
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	2 J
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	12 J
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		2 J	2 J	2 J	1 UJ	1 J	50 J

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR152	DR153	DR154	DR155	DR156	DR157
	Sample ID:	SD-DR152-0000	SD-DR153-0000	SD-DR154-0000	SD-DR155-0000	SD-DR156-0000	SD-DR157-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	4 UIJ
2,4,4'-Trichlorobiphenyl (PCB28)		2 J	2 UJ	1 J	1 J	2 J	160 J
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 U	1 UJ	1 UJ	1 UJ	1 UJ	15 UIJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U
Decachlorobiphenyl (PCB209)		1 UJ	1 UJ	1 U	1 U	1 U	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR158 SD-DR158-0000 0 to 10 cm	DR159 SD-DR159-0000 0 to 10 cm	DR160 SD-DR160-0000 0 to 10 cm	DR161 SD-DR161-0000 0 to 10 cm	DR162 SD-DR162-0000 0 to 10 cm	DR163 SD-DR163-0000 0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD							2 U
4,4'-DDE							1 U
4,4'-DDT							2 UJ
Aldrin							1 UJ
alpha-BHC							1 U
alpha-Chlordane							1 U
beta-BHC							1 U
Dieldrin							2 UJ
Endosulfan I							1 U
Endosulfan II							2 U
Endosulfan Sulfate							2 U
Endrin							2 UJ
Endrin Aldehyde							2 U
Endrin Ketone							2 U
gamma-BHC (Lindane)							1 UJ
gamma-Chlordane							1 U
Heptachlor							1 UJ
Heptachlor Epoxide							1 U
Methoxychlor							1 U
Toxaphene							30 UI
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 U	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	24	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR158 SD-DR158-0000 0 to 10 cm	DR159 SD-DR159-0000 0 to 10 cm	DR160 SD-DR160-0000 0 to 10 cm	DR161 SD-DR161-0000 0 to 10 cm	DR162 SD-DR162-0000 0 to 10 cm	DR163 SD-DR163-0000 0 to 10 cm
Aroclor 1254		49	65	57	24	69	45
Aroclor 1260		26 J	53 J	58	20 U	53	27
Total PCB		75 T	118 T	115 T	24 T	146 T	72 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		5950 T	4280 T	4770 T	836 T	7680 T	3130 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 UJ	1 UJ	1 U	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5-Heptachlorobiphenyl		1 J	3 J	3 J	1 UJ	3 J	5 UIJ
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 UJ	1 J	1 J	1 UJ	1 J	1 UJ
2,2',3,4',5,5',6-Heptachlorobiphenyl		1 J	3 J	3 J	1 UJ	3 J	3 J
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		5	9 J	8 UIJ	2 J	9	5
2,2',3,4,4',5,5'-Heptachlorobiphenyl		2 J	5 J	5 J	1 J	4 J	3 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		2 J	1 J	2 J	1 UJ	2 J	1 J
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		4	7 J	6 J	1 J	6 J	3 J
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		2 J	3 J	3 J	1 J	6 J	3 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		2 J	3 J	2 J	1 UJ	4 J	2 J
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 UJ	1 UJ	1 UJ	1 J	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3',4,4',5-Pentachlorobipheny (PCB118)		3	5 J	4	1 J	4 J	3 J
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		4 J	7 J	6 UI	1 J	6 J	4 J
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 UJ	1 J	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1 J	2 J	2 J	1 UJ	2 J	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Station ID:	DR158	DR159	DR160	DR161	DR162	DR163
Sample ID:	SD-DR158-0000	SD-DR159-0000	SD-DR160-0000	SD-DR161-0000	SD-DR162-0000	SD-DR163-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,4,4'-Trichlorobiphenyl (PCB28)	1 UJ	1 J	2 J	1 UJ	2 J	1 J
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	1 U	1 UJ	1 U	1 U	1 UJ	1 UJ
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	1 UJ	1 UJ	1 U	1 UJ	1 UJ	1 UJ
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	1 UJ	1 UJ	1 U	1 UJ	1 U	1 U
3,4,4',5-Tetrachlorobiphenyl (PCB81)	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 UJ
Decachlorobiphenyl (PCB209)	1 UJ	1 U	1 U	1 UJ	1 UJ	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR164 SD-DR164-0000 0 to 10 cm	DR165 SD-DR165-0000 0 to 10 cm	DR166 SD-DR166-0000 0 to 10 cm	DR167 SD-DR167-0000 0 to 10 cm	DR168 SD-DR168-0000 0 to 10 cm	DR169 SD-DR169-0000 0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD						2	
4,4'-DDE						1 U	
4,4'-DDT						3 UI	
Aldrin						1 UJ	
alpha-BHC						1 U	
alpha-Chlordane						2 UI	
beta-BHC						1 U	
Dieldrin						2 UJ	
Endosulfan I						1 U	
Endosulfan II						2 U	
Endosulfan Sulfate						2 U	
Endrin						6 UI	
Endrin Aldehyde						2 U	
Endrin Ketone						2 U	
gamma-BHC (Lindane)						1 U	
gamma-Chlordane						1 U	
Heptachlor						1 U	
Heptachlor Epoxide						1 U	
Methoxychlor						1 U	
Toxaphene						160 UI	
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR164 SD-DR164-0000 0 to 10 cm	DR165 SD-DR165-0000 0 to 10 cm	DR166 SD-DR166-0000 0 to 10 cm	DR167 SD-DR167-0000 0 to 10 cm	DR168 SD-DR168-0000 0 to 10 cm	DR169 SD-DR169-0000 0 to 10 cm
Aroclor 1254		34	35	60	99	74	35
Aroclor 1260		30 J	22 J	35 J	40 J	46 J	30 J
Total PCB		64 T	57 T	95 T	139 T	120 T	65 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		2480 T	2420 T	6460 T	9080 T	3870 T	3230 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5-Heptachlorobiphenyl		1 J	1 J	2 J	2 J	2 J	1 J
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 UJ	1 UJ	1 UJ	1 J	1 UJ	1 UJ
2,2',3,4',5,5',6-Heptachlorobiphenyl		2	1 J	2 J	3 J	3 J	2 J
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		4 J	3 J	6 J	9 J	7 J	4 J
2,2',3,4,4',5,5'-Heptachlorobiphenyl		2	2 J	3 J	4 J	4 J	3 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1 UJ	1 J	2 J	3 J	2 J	1 UJ
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		4 J	3 J	5 J	8 J	6 J	3 J
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		2 J	3 J	3 J	6 J	4 J	1 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		2 J	2 J	4 J	7 J	4 J	2 J
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 UJ	2 J	2 J	1 J	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3',4,4',5-Pentachlorobipheny (PCB118)		2	2 J	4 J	7 J	5 J	2 J
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		3	3 J	7 J	12 J	8 J	3 J
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 UJ	1 UJ	1 UJ	1 J	1 UJ	1 UJ
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1 UJ	1 UJ	2 J	3 J	2 J	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR164	DR165	DR166	DR167	DR168	DR169
	Sample ID:	SD-DR164-0000	SD-DR165-0000	SD-DR166-0000	SD-DR167-0000	SD-DR168-0000	SD-DR169-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,4,4'-Trichlorobiphenyl (PCB28)		1 J	2 J	3 J	4 J	2 J	1 UJ
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Decachlorobiphenyl (PCB209)		1 U	1 U	1 U	1 U	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR170 SD-DR170-0000 0 to 10 cm	DR171 SD-DR171-0000 0 to 10 cm	DR172 SD-DR172-0000 0 to 10 cm	DR173 SD-DR173-0000 0 to 10 cm	DR174 SD-DR174-0000 0 to 10 cm	DR175 SD-DR175-0000 0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD							
4,4'-DDE							
4,4'-DDT							
Aldrin							
alpha-BHC							
alpha-Chlordane							
beta-BHC							
Dieldrin							
Endosulfan I							
Endosulfan II							
Endosulfan Sulfate							
Endrin							
Endrin Aldehyde							
Endrin Ketone							
gamma-BHC (Lindane)							
gamma-Chlordane							
Heptachlor							
Heptachlor Epoxide							
Methoxychlor							
Toxaphene							
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 UJ	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 UJ	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 UJ	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 UJ	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR170 SD-DR170-0000 0 to 10 cm	DR171 SD-DR171-0000 0 to 10 cm	DR172 SD-DR172-0000 0 to 10 cm	DR173 SD-DR173-0000 0 to 10 cm	DR174 SD-DR174-0000 0 to 10 cm	DR175 SD-DR175-0000 0 to 10 cm
Aroclor 1254		28	58	20 UJ	33	332	52
Aroclor 1260		23 J	45 J	20 UJ	29 J	162	68
Total PCB		51 T	103 T	40 UT	62 T	494 T	120 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		2500 T	4170 T		7130 T	31100 T	6900 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 UJ	1 UJ	1 UJ	1 UJ	3 UIJ	1 UJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 UJ	1 U	1 UJ	1 UJ	1 J	1 UJ
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 J	1 UJ
2,2',3,3',4,4',5-Heptachlorobiphenyl		1 J	2 J	1 UJ	1 J	7 J	3 J
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 UJ	1 UJ	1 UJ	1 UJ	5 J	1 UJ
2,2',3,4',5,5',6-Heptachlorobiphenyl		1 J	2	1 UJ	1 J	7 J	3 J
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		3 J	6 J	1 UJ	4 J	32 J	8 J
2,2',3,4,4',5,5'-Heptachlorobiphenyl		2 J	4	1 UJ	2 J	11 J	5 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1 UJ	1 J	1 UJ	1 UJ	5 J	1 J
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		3 J	5 J	1 UJ	4 J	21 J	7 J
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		1 UJ	4 J	1 UJ	1 J	24 J	5 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		2 J	3 J	1 UJ	1 J	12 J	3 J
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 UJ	1 UJ	1 UJ	1 UJ	1 J	1 UJ
2,3',4,4',5-Pentachlorobipheny (PCB118)		2 J	3	1 UJ	2 J	19 J	3 J
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		3 J	5	1 UJ	3 UIJ	21 J	5 J
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 UJ	1 UJ	1 UJ	1 UJ	4 J	1 UJ
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1 UJ	1 UJ	1 UJ	1 UJ	8 J	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR170 SD-DR170-0000 0 to 10 cm	DR171 SD-DR171-0000 0 to 10 cm	DR172 SD-DR172-0000 0 to 10 cm	DR173 SD-DR173-0000 0 to 10 cm	DR174 SD-DR174-0000 0 to 10 cm	DR175 SD-DR175-0000 0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,4,4'-Trichlorobiphenyl (PCB28)		1 UJ	1 J	1 UJ	1 UJ	2 J	1 UJ
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 UJ
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Decachlorobiphenyl (PCB209)		1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR176	DR177	DR178	DR179	DR180	DR181
	Sample ID:	SD-DR176-0000	SD-DR177-0000	SD-DR178-0000-CC	SD-DR179-0000	SD-DR180-0000	SD-DR181-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD				840			
4,4'-DDE				370 J			
4,4'-DDT				1670			
Aldrin				10 UI			
alpha-BHC				10 UI			
alpha-Chlordane				26			
beta-BHC				13			
Dieldrin				280			
Endosulfan I				100 UI			
Endosulfan II				200 UI			
Endosulfan Sulfate				200 UI			
Endrin				200 UI			
Endrin Aldehyde				130			
Endrin Ketone				200 UI			
gamma-BHC (Lindane)				10 UI			
gamma-Chlordane				204			
Heptachlor				10 UI			
Heptachlor Epoxide				100 UI			
Methoxychlor				99			
Toxaphene				3700 UI			
Aroclor 1016		20 U	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	76	1600 J	446	59	136
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR176 SD-DR176-0000 0 to 10 cm	DR177 SD-DR177-0000 0 to 10 cm	DR178 SD-DR178-0000-CC 0 to 10 cm	DR179 SD-DR179-0000 0 to 10 cm	DR180 SD-DR180-0000 0 to 10 cm	DR181 SD-DR181-0000 0 to 10 cm
Aroclor 1254		149	417	4500	2300	339	1220
Aroclor 1260		70	139 J	944 J	612 J	129 J	316 J
Total PCB		219 T	632 T	7044 T	3358 T	527 T	1672 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		8360 T	22000 T	205000 T	119000 T	20000 T	71500 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 UJ	5 UI	31 UI	20 UI	5 UI	10 U
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 UJ	3	7	4	1 U	10 U
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 UJ	2 UI	6	4	1 U	10 U
2,2',3,3',4,4',5-Heptachlorobiphenyl		3 J	6	47	26	6	24
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		3 J	7	71 J	29	6	18
2,2',3,4',5,5',6-Heptachlorobiphenyl		4 J	7	35	24	6	13
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		15 J	38	400	200	32	100
2,2',3,4,4',5,5'-Heptachlorobiphenyl		5 J	9	83 J	37	9	24
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		6 J	15 J	190 J	94 J	11 J	40
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		10 J	23	260	140	21	64
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		8 J	20 J	310 J	120 J	19 J	74
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		13 J	44 J	890 J	310 J	37 J	120
2,2',5-Trichlorobiphenyl (PCB18)		2 J	5 J	170 J	52 J	4 J	10 U
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 UJ	2	15	8	2	10 U
2,3',4,4',5-Pentachlorobipheny (PCB118)		8 J	23	280	140	18	65
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		18 UIJ	38	440	230	30	120
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 UJ	1 U	10	4	1	10 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 UJ	1 U	2	5 UI	1 U	10 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		2 J	4	36	17	3	10 U
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		3 J	9	92	37	6	20

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Station ID:	DR176	DR177	DR178	DR179	DR180	DR181
Sample ID:	SD-DR176-0000	SD-DR177-0000	SD-DR178-0000-CC	SD-DR179-0000	SD-DR180-0000	SD-DR181-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	1 UJ	2 UI	12 UI	6 UI	2 UI	10 U
2,4,4'-Trichlorobiphenyl (PCB28)	2 J	6 J	120 J	27 J	4 J	12
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	1 U	1 U	1 U	1 U	1 U	10 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	1 UJ	1 U	4 UI	2 UI	1 U	10 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	1 UJ	1 UJ	6 UI	5 UI	1 UJ	10 U
3,4,4',5-Tetrachlorobiphenyl (PCB81)	1 U	1 U	1 U	1 U	1 U	10 U
Decachlorobiphenyl (PCB209)	1 UJ	1 U	1	1 U	1 U	10 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR182	DR183	DR184	DR185	DR186	DR187
	Sample ID:	SD-DR182-0000	SD-DR183-0000	SD-DR184-0000	SD-DR185-0000	SD-DR186-0000	SD-DR187-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD			20 UI			3 UI	10 UI
4,4'-DDE			10 UI			4	5 UI
4,4'-DDT			25 UI			20 UIJ	10 UIJ
Aldrin			10 UI			1 UJ	5 UI
alpha-BHC			10 UI			1 U	5 UI
alpha-Chlordane			10 UI			1 U	5 UI
beta-BHC			10 UI			1 U	5 UI
Dieldrin			13			2 UJ	10 UIJ
Endosulfan I			10 UI			1 U	5 UI
Endosulfan II			20 UI			2 U	10 UI
Endosulfan Sulfate			20 UI			2 U	10 UI
Endrin			20 UI			2 UJ	10 UIJ
Endrin Aldehyde			20 UI			2 U	10 UI
Endrin Ketone			20 UI			2 U	10 UI
gamma-BHC (Lindane)			10 UI			1 UJ	5 UIJ
gamma-Chlordane			10 UI			8 UI	5 UI
Heptachlor			10 UI			1 UJ	5 UI
Heptachlor Epoxide			10 UI			1 U	5 UI
Methoxychlor			10 UI			1 U	5 UI
Toxaphene			170 UI			90 UI	190 UI
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 UJ	20 U	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR182	DR183	DR184	DR185	DR186	DR187
	Sample ID:	SD-DR182-0000	SD-DR183-0000	SD-DR184-0000	SD-DR185-0000	SD-DR186-0000	SD-DR187-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Aroclor 1254		234	61	82	45	450	164
Aroclor 1260		84 J	61 J	57 J	30	728	82
Total PCB		318 T	122 T	139 T	75 T	1178 T	246 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)			6780 T	6290 T	3830 T	58600 T	12900 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		2 UI	1 U	1 UJ	1 UJ	4 UIJ	2 UIJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 U	1 U	1 U	1 UJ	20 J	1 UJ
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 U	1 U	1 UJ	1 UJ	4 J	1 UJ
2,2',3,3',4,4',5-Heptachlorobiphenyl		4	3	2 J	1 J	18 J	7 UIJ
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		4	1	1 UJ	1 J	9 J	4 J
2,2',3,4',5,5',6-Heptachlorobiphenyl		5	3	2	1 J	24 J	3 J
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		22	9	6 J	6	89	21
2,2',3,4,4',5,5'-Heptachlorobiphenyl		6	4	4	2 J	36 J	7 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		8 J	2 J	1 UJ	1 J	7 J	3 J
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		14	7	5 J	4 J	42 J	12 J
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		16 J	3 J	3 J	10 UIJ	34 J	10 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		22 J	2 J	2 J	2 J	14 J	6 J
2,2',5-Trichlorobiphenyl (PCB18)		2 J	1 UJ	1 UJ	1 UJ	2 J	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1	1 U	1 UJ	1 UJ	3 J	1 UJ
2,3',4,4',5-Pentachlorobipheny (PCB118)		13	4	3	3 J	27 J	11 J
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		21	5	4	4 J	28 J	12 J
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 U	1 U	1 UJ	1 UJ	2 J	1 UJ
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 U	1 U	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		2	1 U	1 UJ	1 UJ	6 J	2 J
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		5	2	1 UJ	1 J	13 J	5 J

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR182 SD-DR182-0000 0 to 10 cm	DR183 SD-DR183-0000 0 to 10 cm	DR184 SD-DR184-0000 0 to 10 cm	DR185 SD-DR185-0000 0 to 10 cm	DR186 SD-DR186-0000 0 to 10 cm	DR187 SD-DR187-0000 0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 U	1 U	1 UJ	1 UJ	2 UIJ	1 UJ
2,4,4'-Trichlorobiphenyl (PCB28)		3 J	2 J	1 J	1 UJ	1 J	1 UJ
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 U	1 U	1 U	1 UJ	1 UJ	1 UJ
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 UJ	1 UJ	1 UJ	1 U	1 U	1 U
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ
Decachlorobiphenyl (PCB209)		1 U	1 U	1 U	1 UJ	2 J	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR188 SD-DR188-0000 0 to 10 cm	DR189 SD-DR189-0000 0 to 10 cm	DR190 SD-DR190-0000 0 to 10 cm	DR191 SD-DR191-0000 0 to 10 cm	DR192 SD-DR192-0000 0 to 10 cm	DR193 SD-DR193-0000 0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD						2 U	
4,4'-DDE						2 UI	
4,4'-DDT						2 U	
Aldrin						1 UJ	
alpha-BHC						1 U	
alpha-Chlordane						1 U	
beta-BHC						1 U	
Dieldrin						2 UJ	
Endosulfan I						1 U	
Endosulfan II						3 UI	
Endosulfan Sulfate						2 U	
Endrin						3 UI	
Endrin Aldehyde						2 U	
Endrin Ketone						2 U	
gamma-BHC (Lindane)						1 U	
gamma-Chlordane						1 U	
Heptachlor						1 U	
Heptachlor Epoxide						1 U	
Methoxychlor						1 U	
Toxaphene						10 U	
Aroclor 1016		20 U	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR188 / SD-DR188-0000 / 0 to 10 cm	DR189 / SD-DR189-0000 / 0 to 10 cm	DR190 / SD-DR190-0000 / 0 to 10 cm	DR191 / SD-DR191-0000 / 0 to 10 cm	DR192 / SD-DR192-0000 / 0 to 10 cm	DR193 / SD-DR193-0000 / 0 to 10 cm
Aroclor 1254		58	51	28	44	69	66
Aroclor 1260		46	42	28 J	33	43	52
Total PCB		104 T	93 T	56 T	77 T	112 T	118 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		5940 T	6740 T	2950 T	3520 T	4260 T	9750 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 U	1 U	1 UJ	1 U	1 U	1 U
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5-Heptachlorobiphenyl		2 UI	2	1 J	2 UIJ	2 J	2 J
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1	1 UJ	1 UJ	1 UJ	1 J	1 J
2,2',3,4',5,5',6-Heptachlorobiphenyl		2	3	2 J	2 UIJ	2 J	2 J
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		6	6	4 J	5 UIJ	8 UIJ	8 UIJ
2,2',3,4,4',5,5'-Heptachlorobiphenyl		2	4	2 J	3 UIJ	4 J	4 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1 J	2 J	1 UJ	1 J	2 J	2 J
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		4	5	4 J	4 UIJ	5 J	5 J
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		4	3 J	1 UJ	2 UIJ	3 J	4 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		2 J	3 J	2 J	2 J	3 J	3 J
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ
2,3',4,4',5-Pentachlorobipheny (PCB118)		3	3	2 J	3 UI	4	4
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		4	4	4 UIJ	4 UI	7 UI	7 UI
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1	1 U	1 UJ	1 UJ	2 J	2 J

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Station ID:	DR188	DR189	DR190	DR191	DR192	DR193
Sample ID:	SD-DR188-0000	SD-DR189-0000	SD-DR190-0000	SD-DR191-0000	SD-DR192-0000	SD-DR193-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ
2,4,4'-Trichlorobiphenyl (PCB28)	1 UJ	1 UJ	1 UJ	1 UJ	1 J	2 J
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	1 U	1 U	1 UJ	1 U	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	1 U	1 U	1 UJ	1 U	1 U	1 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	1 U	1 UJ	1 UJ	1 U	1 U	1 U
3,4,4',5-Tetrachlorobiphenyl (PCB81)	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ
Decachlorobiphenyl (PCB209)	1 U	1 U	1 U	1 U	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

	Station ID:	DR194	DR195	DR196	DR197	DR198	DR199
	Sample ID:	SD-DR194-0000	SD-DR195-0000	SD-DR196-0000	SD-DR197-0000	SD-DR198-0000	SD-DR199-0000
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD							
4,4'-DDE							
4,4'-DDT							
Aldrin							
alpha-BHC							
alpha-Chlordane							
beta-BHC							
Dieldrin							
Endosulfan I							
Endosulfan II							
Endosulfan Sulfate							
Endrin							
Endrin Aldehyde							
Endrin Ketone							
gamma-BHC (Lindane)							
gamma-Chlordane							
Heptachlor							
Heptachlor Epoxide							
Methoxychlor							
Toxaphene							
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR194	DR195	DR196	DR197	DR198	DR199
	Sample ID:	SD-DR194-0000	SD-DR195-0000	SD-DR196-0000	SD-DR197-0000	SD-DR198-0000	SD-DR199-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Aroclor 1254		80	28 J	59	36	34	28
Aroclor 1260		75	36 J	56	62	51	41
Total PCB		155 T	64 T	115 T	98 T	85 T	69 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		5070 T	4670 T	9830 T	7540 T	5520 T	4760 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5-Heptachlorobiphenyl		3 J	1 J	2 J	2 J	2 J	2 J
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 J	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,4',5,5',6-Heptachlorobiphenyl		4 J	2 J	2 J	3 J	2 J	2 J
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		9 J	4 J	7 J	6 J	6 J	5 J
2,2',3,4,4',5,5'-Heptachlorobiphenyl		6 J	3 J	4 J	5 J	3 J	3 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		2 J	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		8 J	4 J	5 J	5 J	5 J	4 J
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		6 J	2 J	4 J	3 J	2 J	2 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		4 J	1 J	2 J	1 J	1 J	1 J
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3',4,4',5-Pentachlorobipheny (PCB118)		4 J	2 J	3 J	2 J	2 J	2 J
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		6 J	2 J	4 J	2 J	2 J	2 J
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1 J	1 UJ	1 J	1 UJ	1 UJ	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR194	DR195	DR196	DR197	DR198	DR199
	Sample ID:	SD-DR194-0000	SD-DR195-0000	SD-DR196-0000	SD-DR197-0000	SD-DR198-0000	SD-DR199-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,4,4'-Trichlorobiphenyl (PCB28)		1 J	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Decachlorobiphenyl (PCB209)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR200	DR201	DR202	DR203	DR204	DR205
	Sample ID:	SD-DR200-0000	SD-DR201-0000	SD-DR202-0000	SD-DR203-0000	SD-DR204-0000	SD-DR205-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD					2 U		
4,4'-DDE					1 U		
4,4'-DDT					2 UJ		
Aldrin					1 UJ		
alpha-BHC					1 U		
alpha-Chlordane					1 U		
beta-BHC					1 U		
Dieldrin					2 UJ		
Endosulfan I					1 U		
Endosulfan II					2 U		
Endosulfan Sulfate					2 U		
Endrin					2 UJ		
Endrin Aldehyde					2 U		
Endrin Ketone					2 U		
gamma-BHC (Lindane)					1 UJ		
gamma-Chlordane					1 U		
Heptachlor					1 UJ		
Heptachlor Epoxide					1 U		
Methoxychlor					1 U		
Toxaphene					45 UJ		
Aroclor 1016		20 UJ	20 UJ	20 U	20 UJ	20 U	20 U
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR200 SD-DR200-0000 0 to 10 cm	DR201 SD-DR201-0000 0 to 10 cm	DR202 SD-DR202-0000 0 to 10 cm	DR203 SD-DR203-0000 0 to 10 cm	DR204 SD-DR204-0000 0 to 10 cm	DR205 SD-DR205-0000 0 to 10 cm
Aroclor 1254		30	488	56	51	20 U	20 U
Aroclor 1260		53	167	42	50	40	35
Total PCB		83 T	655 T	98 T	101 T	40 T	35 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		4800 T	38500 T	6240 T	9530 T	3670 T	1580 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 UJ	5 UIJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5-Heptachlorobiphenyl		2 J	11 J	2 J	3 J	2 J	1 J
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 UJ	12 J	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,4',5,5',6-Heptachlorobiphenyl		3 J	7 J	2 J	2 J	2 J	2 J
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		5 J	67	6 J	7	4 J	3 J
2,2',3,4,4',5,5'-Heptachlorobiphenyl		4 J	13 J	3 J	4 J	3 J	3 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1 UJ	7 J	1 J	1 UJ	1 UJ	1 UJ
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		5 J	32 J	4 J	5 J	3 J	3 J
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		3 J	36 J	3 J	5 J	1 J	1 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		1 UJ	15 J	2 J	2 J	1 UJ	1 UJ
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 UJ	3 J	1 UJ	1 UJ	1 UJ	1 UJ
2,3',4,4',5-Pentachlorobipheny (PCB118)		2 J	38 J	3 J	3 J	1 J	1 UJ
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		2 J	33 J	4 UIJ	4 J	1 UJ	1 UJ
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 UJ	2 J	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 UJ	7 J	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1 UJ	18 J	1 J	1 J	1 UJ	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Station ID:	DR200	DR201	DR202	DR203	DR204	DR205
Sample ID:	SD-DR200-0000	SD-DR201-0000	SD-DR202-0000	SD-DR203-0000	SD-DR204-0000	SD-DR205-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,4,4'-Trichlorobiphenyl (PCB28)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	1 UJ	1 UJ	1 U	1 UJ	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	1 UJ	1 U	1 UJ	1 U	1 UJ	1 UJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)	1 UJ	1 UJ	1 U	1 UJ	1 U	1 U
Decachlorobiphenyl (PCB209)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR206	DR207	DR208	DR209	DR210	DR211
	Sample ID:	SD-DR206-0000	SD-DR207-0000	SD-DR208-0000	SD-DR209-0000	SD-DR210-0000	SD-DR211-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD		10 U					
4,4'-DDE		5 U					
4,4'-DDT		10 UJ					
Aldrin		5 UJ					
alpha-BHC		5 U					
alpha-Chlordane		5 U					
beta-BHC		5 U					
Dieldrin		10 UJ					
Endosulfan I		5 U					
Endosulfan II		10 U					
Endosulfan Sulfate		10 U					
Endrin		10 UJ					
Endrin Aldehyde		10 U					
Endrin Ketone		10 U					
gamma-BHC (Lindane)		5 UJ					
gamma-Chlordane		5 U					
Heptachlor		5 UJ					
Heptachlor Epoxide		5 U					
Methoxychlor		5 U					
Toxaphene		190 UI					
Aroclor 1016		20 U	20 U	20 UJ	20 UJ	20 U	20 U
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR206 SD-DR206-0000 0 to 10 cm	DR207 SD-DR207-0000 0 to 10 cm	DR208 SD-DR208-0000 0 to 10 cm	DR209 SD-DR209-0000 0 to 10 cm	DR210 SD-DR210-0000 0 to 10 cm	DR211 SD-DR211-0000 0 to 10 cm
Aroclor 1254		29	700 UI	102	30	245	31
Aroclor 1260		176	12000	286	37	130	25
Total PCB		205 T	12000 T	388 T	67 T	375 T	56 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		6900 T	379000 T	30100 T	6500 T	25900 T	3590 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 UJ	1 UJ	1 UJ	1 UJ	3 UI	1 U
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 UJ	21 J	1 UJ	1 UJ	1 U	1 U
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 J	49 J	2 J	1 UJ	1 U	1 U
2,2',3,3',4,4',5-Heptachlorobiphenyl		6 J	320 J	15 J	2 J	7 UI	1 U
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 UJ	43 J	2 J	1 UJ	5	1 U
2,2',3,4',5,5',6-Heptachlorobiphenyl		8 J	360 J	13 J	2 J	4	1 U
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		15 J	920 J	32	5	29	3
2,2',3,4,4',5,5'-Heptachlorobiphenyl		12 J	750 J	24 J	3 J	7	1
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1 UJ	5 J	1 J	1 UJ	2 J	1 UJ
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		14 J	900 J	27 J	4 J	16	2
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		5 J	220 J	13 J	5 UIJ	14	2
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		1 UJ	19 J	2 J	1 UJ	4 J	1 UJ
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 J	1 UJ	1 UJ	1 UJ	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 UJ	19 J	1 UJ	1 UJ	2	1 U
2,3',4,4',5-Pentachlorobipheny (PCB118)		1 J	36 J	5 J	2 J	18	1 U
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		5 UIJ	250 UIJ	11 J	2 J	11	2
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 UJ	27 UIJ	2 UIJ	1 UJ	1 U	1 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 UJ	11 J	1 UJ	1 UJ	1 U	1 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 UJ	35 J	1 J	1 UJ	3	1 U
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1 UJ	1 UJ	2 J	1 UJ	8	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR206	DR207	DR208	DR209	DR210	DR211
	Sample ID:	SD-DR206-0000	SD-DR207-0000	SD-DR208-0000	SD-DR209-0000	SD-DR210-0000	SD-DR211-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 UJ	10 UlJ	1 UJ	1 UJ	1 U	1 U
2,4,4'-Trichlorobiphenyl (PCB28)		1 UJ	2 J	1 UJ	1 UJ	1 UJ	1 UJ
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 U	1 U	1 UJ	1 UJ	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 UJ	1 UJ	1 U	1 U	1 U	1 U
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 U	1 U	1 UJ	1 UJ	1 U	1 U
Decachlorobiphenyl (PCB209)		1 UJ	1 J	1 UJ	1 UJ	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR212	DR213	DR214	DR215	DR216	DR217
	Sample ID:	SD-DR212-0000	SD-DR213-0000	SD-DR214-0000	SD-DR215-0000	SD-DR216-0000	SD-DR217-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD							20 UI
4,4'-DDE							15 UI
4,4'-DDT							40 UI
Aldrin							1 UJ
alpha-BHC							1 U
alpha-Chlordane							25 UI
beta-BHC							1 U
Dieldrin							20 UIJ
Endosulfan I							10 UI
Endosulfan II							110 UI
Endosulfan Sulfate							20 UI
Endrin							20 UIJ
Endrin Aldehyde							20 UI
Endrin Ketone							20 UI
gamma-BHC (Lindane)							1 UJ
gamma-Chlordane							10 UI
Heptachlor							1 UJ
Heptachlor Epoxide							10 UI
Methoxychlor							10 UI
Toxaphene							100 UI
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ
Aroclor 1221		40 UJ	40 UJ	40 U	40 U	40 U	40 U
Aroclor 1232		20 UJ	20 UJ	20 U	20 U	20 U	20 U
Aroclor 1242		20 UJ	20 UJ	20 U	20 U	20 U	20 U
Aroclor 1248		20 UJ	20 UJ	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR212	DR213	DR214	DR215	DR216	DR217
	Sample ID:	SD-DR212-0000	SD-DR213-0000	SD-DR214-0000	SD-DR215-0000	SD-DR216-0000	SD-DR217-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Aroclor 1254		25 J	70 J	67	48	111	1300 UI
Aroclor 1260		52 J	66 J	44 J	59 J	202	4200 J
Total PCB		77 T	136 T	111 T	107 T	313 T	4200 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		5130 T	10900 T	7250 T	4950 T	14700 T	251000 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	6 UIJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 UJ	1 UJ	1 U	1 U	1 J	27
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	2 J	40 J
2,2',3,3',4,4',5-Heptachlorobiphenyl		2 J	2 J	2 J	2 J	6 J	170 J
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 UJ	1 J	1 UJ	1 UJ	2 J	14 J
2,2',3,4',5,5',6-Heptachlorobiphenyl		4 J	3 J	3	4	8 J	190
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		4	9	7 J	6 J	15 J	250 J
2,2',3,4,4',5,5'-Heptachlorobiphenyl		4 J	4 J	4	5	13 J	350
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1 UJ	2 J	1 J	1 UJ	2 J	10 J
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		4	7	6 J	7 J	13 J	240 J
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		1 UJ	5 J	5 J	2 J	9 J	83 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		1 UJ	3 J	4 J	3 J	5 J	22 J
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	3 J
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	7 J
2,3',4,4',5-Pentachlorobipheny (PCB118)		1	5	4	3	6 J	37
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		2 J	6 J	6	4	8 J	53
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 UJ	1 UJ	1 U	1 U	1 UJ	5
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 UJ	1 UJ	1 UJ	1 UJ	1 J	16 J
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1 UJ	2 J	1 J	1 UJ	2 J	11 J

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR212	DR213	DR214	DR215	DR216	DR217
	Sample ID:	SD-DR212-0000	SD-DR213-0000	SD-DR214-0000	SD-DR215-0000	SD-DR216-0000	SD-DR217-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	5 UIJ
2,4,4'-Trichlorobiphenyl (PCB28)		1 UJ	1 UJ	1 J	1 J	1 J	7 J
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 U	1 U	1 U	1 U	1 UJ	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	50 UIJ
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Decachlorobiphenyl (PCB209)		1 UJ	1 UJ	1 U	1 U	1 UJ	1

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR218 SD-DR218-0000 0 to 10 cm	DR219 SD-DR219-0000 0 to 10 cm	DR220 SD-DR220-0000 0 to 10 cm	DR221 SD-DR221-0000 0 to 10 cm	DR222 SD-DR222-0000 0 to 10 cm	DR223 SD-DR223-0000-CC 0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD					2 U		
4,4'-DDE					2 UI		
4,4'-DDT					2 U		
Aldrin					1 UJ		
alpha-BHC					1 U		
alpha-Chlordane					2 UI		
beta-BHC					1 U		
Dieldrin					2 UJ		
Endosulfan I					1 U		
Endosulfan II					2 U		
Endosulfan Sulfate					2 U		
Endrin					2 U		
Endrin Aldehyde					2 U		
Endrin Ketone					2 U		
gamma-BHC (Lindane)					1 U		
gamma-Chlordane					1 U		
Heptachlor					1 U		
Heptachlor Epoxide					1 U		
Methoxychlor					1 U		
Toxaphene					10 U		
Aroclor 1016		20 UJ	20 UJ	20 U	20 UJ	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR218 SD-DR218-0000 0 to 10 cm	DR219 SD-DR219-0000 0 to 10 cm	DR220 SD-DR220-0000 0 to 10 cm	DR221 SD-DR221-0000 0 to 10 cm	DR222 SD-DR222-0000 0 to 10 cm	DR223 SD-DR223-0000-CC 0 to 10 cm
Aroclor 1254		46	86	42	36	74	69
Aroclor 1260		41 J	100	35	28 J	58	84
Total PCB		87 T	186 T	77 T	64 T	132 T	153 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		3400 T	8380 T	2790 T	4080 T	13900 T	7690 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 UJ	1 U	1 U	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 U	1 U	1 U	1 UJ	1 U	1 UJ
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 UJ	1 U	1 U	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5-Heptachlorobiphenyl		2 J	4	2 UI	2 J	2 J	3 J
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 J	1 J	1 U	1 UJ	1 J	1 UJ
2,2',3,4',5,5',6-Heptachlorobiphenyl		3	5	1	2 J	2 J	3 J
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		8 J	11	4	5 J	8 UIJ	7 J
2,2',3,4,4',5,5'-Heptachlorobiphenyl		4	7	2	3 J	4 J	5 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		2 J	2 J	1 UJ	1 J	2 J	1 J
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		7 J	9	3	4 J	5 J	6 J
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		5 J	6 J	3	2 UIJ	2 J	4 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		4 J	3 UIJ	1 J	2 J	3 J	3 J
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 UJ	1 U	1 U	1 UJ	1 UJ	1 UJ
2,3',4,4',5-Pentachlorobipheny (PCB118)		5	5	2	3 J	4	3 J
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		7	6	3	5 UIJ	6 UI	4 J
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 UJ	1 U	1 U	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 U	1 U	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 J	1 U	1 U	1 UJ	1 UJ	1 UJ
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		2 J	2	1 U	2 UIJ	2 J	1 J

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Station ID:	DR218	DR219	DR220	DR221	DR222	DR223
Sample ID:	SD-DR218-0000	SD-DR219-0000	SD-DR220-0000	SD-DR221-0000	SD-DR222-0000	SD-DR223-0000-CC
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	1 UJ	1 U	1 U	1 UJ	1 UJ	1 UJ
2,4,4'-Trichlorobiphenyl (PCB28)	1 J	1 J	1 UJ	1 UJ	1 UJ	1 J
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	1 U	1 U	1 U	1 UJ	1 U	1 UJ
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	1 UJ	1 U	1 U	1 UJ	1 U	1 UJ
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	1 UJ	1 UJ	1 U	1 UJ	1 U	1 UJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)	1 UJ	1 U	1 U	1 UJ	1 UJ	1 UJ
Decachlorobiphenyl (PCB209)	1 U	1 U	1 U	1 U	1 U	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

	Station ID:	DR224	DR225	DR226	DR227	DR228	DR229
	Sample ID:	SD-DR224-0000	SD-DR225-0000	SD-DR226-0000	SD-DR227-0000	SD-DR228-0000	SD-DR229-0000
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD		2 U					
4,4'-DDE		1					
4,4'-DDT		5 UI					
Aldrin		1 U					
alpha-BHC		1 U					
alpha-Chlordane		1 U					
beta-BHC		1 U					
Dieldrin		3 UI					
Endosulfan I		1 U					
Endosulfan II		2 U					
Endosulfan Sulfate		2 U					
Endrin		2 U					
Endrin Aldehyde		2 U					
Endrin Ketone		2 U					
gamma-BHC (Lindane)		1 U					
gamma-Chlordane		1 U					
Heptachlor		1 U					
Heptachlor Epoxide		1 U					
Methoxychlor		2					
Toxaphene		140 UI					
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 U	20 UJ	20 U
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR224	DR225	DR226	DR227	DR228	DR229
	Sample ID:	SD-DR224-0000	SD-DR225-0000	SD-DR226-0000	SD-DR227-0000	SD-DR228-0000	SD-DR229-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Aroclor 1254		29	75	56	20 U	64	22
Aroclor 1260		28	70	57	25	97 J	20 U
Total PCB		57 T	145 T	113 T	25 T	161 T	22 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		4870 T	8380 T	6380 T	1250 T	6490 T	1080 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ
2,2',3,3',4,4',5-Heptachlorobiphenyl		1 J	3 J	3 J	1 UJ	1 U	1 UJ
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 UJ	1 J	1 J	1 UJ	1 U	1 UJ
2,2',3,4',5,5',6-Heptachlorobiphenyl		2 J	3 J	3 J	1 J	1	1 UJ
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		4 J	9 J	8	2 J	3	2 J
2,2',3,4,4',5,5'-Heptachlorobiphenyl		2 J	4 J	5 J	2 J	2	1 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1 UJ	2 J	1 J	1 UJ	1 U	2 J
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		3 J	7 J	6 J	2 J	2	2 J
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		2 J	5 J	5 J	1 UJ	2	2 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		1 J	3 J	2 J	1 UJ	1	2 J
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ
2,3',4,4',5-Pentachlorobipheny (PCB118)		2 J	4 J	3 J	1 UJ	2	1 J
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		2 J	6 J	5 J	1 UJ	2	1 UJ
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1 UJ	2 J	1 J	1 UJ	1 U	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR224	DR225	DR226	DR227	DR228	DR229
	Sample ID:	SD-DR224-0000	SD-DR225-0000	SD-DR226-0000	SD-DR227-0000	SD-DR228-0000	SD-DR229-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ
2,4,4'-Trichlorobiphenyl (PCB28)		1 UJ	2 J	1 J	1 UJ	1 U	1 UJ
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 UJ	1 UJ	1 UJ	1 U	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 UJ	1 UJ	1 U	1 UJ	1 U	1 UJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 UJ	1 UJ	1 UJ	1 U	1 U	1 U
Decachlorobiphenyl (PCB209)		1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR230 SD-DR230-0000 0 to 10 cm	DR231 SD-DR231-0000 0 to 10 cm	DR232 SD-DR232-0000 0 to 10 cm	DR233 SD-DR233-0000 0 to 10 cm	DR234 SD-DR234-0000 0 to 10 cm	DR235 SD-DR235-0000 0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD							
4,4'-DDE							
4,4'-DDT							
Aldrin							
alpha-BHC							
alpha-Chlordane							
beta-BHC							
Dieldrin							
Endosulfan I							
Endosulfan II							
Endosulfan Sulfate							
Endrin							
Endrin Aldehyde							
Endrin Ketone							
gamma-BHC (Lindane)							
gamma-Chlordane							
Heptachlor							
Heptachlor Epoxide							
Methoxychlor							
Toxaphene							
Aroclor 1016		20 U	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR230 SD-DR230-0000 0 to 10 cm	DR231 SD-DR231-0000 0 to 10 cm	DR232 SD-DR232-0000 0 to 10 cm	DR233 SD-DR233-0000 0 to 10 cm	DR234 SD-DR234-0000 0 to 10 cm	DR235 SD-DR235-0000 0 to 10 cm
Aroclor 1254		50	60	46	72	29	41
Aroclor 1260		36	42 J	35	77 J	25 J	34
Total PCB		86 T	102 T	81 T	149 T	54 T	75 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		3580 T	4700 T	5910 T	6800 T	3050 T	3910 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 U	1 UJ	1 U	1 U	1 U	1 UJ
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5-Heptachlorobiphenyl		2 UI	2 J	1 J	3 J	1 J	3 J
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 U	1 J	1 UJ	1 J	1 UJ	1 UJ
2,2',3,4',5,5',6-Heptachlorobiphenyl		2	3 J	1 J	4	2	2 J
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		5	8 J	5 UIJ	9 J	3 J	6
2,2',3,4,4',5,5'-Heptachlorobiphenyl		2	4 J	2 J	6	2	3 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1 J	1 J	1 J	1 J	1 UJ	1 J
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		4	6 J	3 J	8 J	3 J	4 J
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		3	3 J	1 J	4 J	1 UJ	3 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		2 J	3 J	2 J	3 J	1 J	2 J
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3',4,4',5-Pentachlorobipheny (PCB118)		3	4 J	3	4	2	3 J
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		4	7 UIJ	4 UI	6	3	4 J
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 UJ	1 UJ	1 U	1 U	1 UJ
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1	2 J	1 UJ	1 J	1 UJ	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR230	DR231	DR232	DR233	DR234	DR235
	Sample ID:	SD-DR230-0000	SD-DR231-0000	SD-DR232-0000	SD-DR233-0000	SD-DR234-0000	SD-DR235-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,4,4'-Trichlorobiphenyl (PCB28)		1 UJ	1 J	1 UJ	1 J	1 UJ	1 UJ
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 U	1 UJ	1 U	1 U	1 U	1 UJ
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 U	1 UJ	1 U	1 UJ	1 UJ	1 U
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Decachlorobiphenyl (PCB209)		1 U	1 U	1 U	1 U	1 U	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

	Station ID:	DR236	DR237	DR238	DR239	DR240	DR241
	Sample ID:	SD-DR236-0000	SD-DR237-0000	SD-DR238-0000	SD-DR239-0000	SD-DR240-0000	SD-DR241-0000
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD				2 U			
4,4'-DDE				1 U			
4,4'-DDT				2 UJ			
Aldrin				1 UJ			
alpha-BHC				1 U			
alpha-Chlordane				1 U			
beta-BHC				1 U			
Dieldrin				2 UJ			
Endosulfan I				1 U			
Endosulfan II				2 U			
Endosulfan Sulfate				2 U			
Endrin				2 UJ			
Endrin Aldehyde				2 U			
Endrin Ketone				2 U			
gamma-BHC (Lindane)				1 UJ			
gamma-Chlordane				1 U			
Heptachlor				1 UJ			
Heptachlor Epoxide				1 U			
Methoxychlor				1 U			
Toxaphene				25 UI			
Aroclor 1016		20 UJ	20 U	20 UJ	20 UJ	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR236	DR237	DR238	DR239	DR240	DR241
	Sample ID:	SD-DR236-0000	SD-DR237-0000	SD-DR238-0000	SD-DR239-0000	SD-DR240-0000	SD-DR241-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Aroclor 1254		85	67	20 U	22	56	44
Aroclor 1260		44	31	20 U	20 U	39 J	33 J
Total PCB		129 T	98 T	40 UT	22 T	95 T	77 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		15200 T	6710 T	2250 UT	1300 T	2640 T	2160 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 UJ	1 U	1 UJ	1 UJ	1 U	1 U
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 UJ	1 U	1 UJ	1 UJ	1 U	1 U
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 UJ	1 U	1 UJ	1 UJ	1 U	1 U
2,2',3,3',4,4',5-Heptachlorobiphenyl		1 UIJ	2	1 UJ	5 UIJ	2	1
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		2 J	2	1 UJ	1 UJ	1 U	1 U
2,2',3,4',5,5',6-Heptachlorobiphenyl		2 J	1	1 UJ	1 UJ	3	2
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		10	7	3	2	6	5 UI
2,2',3,4,4',5,5'-Heptachlorobiphenyl		3 J	2	1 J	1 UJ	3	2
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		2 J	2 J	1 UJ	1 UJ	1 J	1 UJ
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		6 J	4	2 J	1 J	5	4
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		7 J	5	5 UIJ	2 J	2 J	2 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		4 J	4 J	1 UJ	1 UJ	2 J	2 UIJ
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 UJ	1 U	1 UJ	1 UJ	1 U	1 U
2,3',4,4',5-Pentachlorobipheny (PCB118)		6 J	4	1 J	1 UJ	3	2
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		7 J	6	2 J	1 J	4	3
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 UJ	1 U	1 UJ	1 UJ	1 U	1 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 UJ	1 U	1 UJ	1 UJ	1 U	1 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 UJ	1 U	1 UJ	1 UJ	1 U	1 U
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		2 J	2	1 UJ	1 UJ	1	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR236	DR237	DR238	DR239	DR240	DR241
	Sample ID:	SD-DR236-0000	SD-DR237-0000	SD-DR238-0000	SD-DR239-0000	SD-DR240-0000	SD-DR241-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 UJ	1	1 UJ	1 UJ	1 U	1 U
2,4,4'-Trichlorobiphenyl (PCB28)		1 J	1 UJ	1 UJ	1 UJ	1 J	1 UJ
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 UJ	1 U	1 UJ	1 UJ	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 UJ	1 U	1 UJ	1 UJ	1 U	1 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 U	1 U	1 U	1 U	1 UJ	1 UJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 UJ	1 U	1 UJ	1 UJ	1 U	1 U
Decachlorobiphenyl (PCB209)		1 UJ	1 U	1 UJ	1 UJ	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR242	DR243	DR244	DR245	DR246	DR247
	Sample ID:	SD-DR242-0000-CC	SD-DR243-0000	SD-DR244-0000	SD-DR245-0000	SD-DR246-0000	SD-DR247-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD		20 UI					
4,4'-DDE		10 UI					
4,4'-DDT		20 UI					
Aldrin		10 UI					
alpha-BHC		10 UI					
alpha-Chlordane		10 UI					
beta-BHC		10 UI					
Dieldrin		20 UI					
Endosulfan I		10 UI					
Endosulfan II		20 UI					
Endosulfan Sulfate		20 UI					
Endrin		20 UI					
Endrin Aldehyde		14					
Endrin Ketone		20 UI					
gamma-BHC (Lindane)		10 UI					
gamma-Chlordane		10 UI					
Heptachlor		10 UI					
Heptachlor Epoxide		10 UI					
Methoxychlor		10					
Toxaphene		500 UI					
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 UJ	20 U	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR242 / SD-DR242-0000-CC / 0 to 10 cm	DR243 / SD-DR243-0000 / 0 to 10 cm	DR244 / SD-DR244-0000 / 0 to 10 cm	DR245 / SD-DR245-0000 / 0 to 10 cm	DR246 / SD-DR246-0000 / 0 to 10 cm	DR247 / SD-DR247-0000 / 0 to 10 cm
Aroclor 1254		50	66	74	58	20	32
Aroclor 1260		43 J	52 J	59 J	47 J	20 U	31
Total PCB		93 T	118 T	133 T	105 T	20 T	63 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		2710 T	3220 T	3780 T	3060 T	551 T	3170 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 U	1 U	1 U	1 U	1 U	1 U
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	1 U
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	1 U
2,2',3,3',4,4',5-Heptachlorobiphenyl		2	2	2	2	2	1 U
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 U	1	1 U	1 U	1	1 U
2,2',3,4',5,5',6-Heptachlorobiphenyl		2	3	3	3	2	1
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		6	8	8	7	7	5 UI
2,2',3,4,4',5,5'-Heptachlorobiphenyl		3	4	4	4	4	2
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1 J	1 J	2	1 J	2	1 U
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		5	6	6	5	5	2
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		2 J	1 UIJ	3	3 J	4	2 UI
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		2 J	3 UIJ	3 UI	2 J	2 J	1 J
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 UJ	1 U	1 UJ	1 UJ	
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 U	1 U	1 U	1 U	1 U	1 U
2,3',4,4',5-Pentachlorobipheny (PCB118)		3	3	3	3	3	2
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		4	2	6 UI	4	4	2
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 U	1 U	1 U	1 U	1 U	1 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	1 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 U	1 U	1 U	1 U	1 U	1 U
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1	1	1	1	1	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR242	DR243	DR244	DR245	DR246	DR247
	Sample ID:	SD-DR242-0000-CC	SD-DR243-0000	SD-DR244-0000	SD-DR245-0000	SD-DR246-0000	SD-DR247-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 U	1 U	1 U	1 U	1 U	1 U
2,4,4'-Trichlorobiphenyl (PCB28)		1 J	1 J	1	1 J	1 UJ	1 UJ
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 U	1 U	1 U	1 U	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 U	1 U	1 U	1 U	1 U	1 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 UJ	1 UJ	1 U	1 U	2 UI	5 UI
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 U	1 U	1 U	1 U	1 U	1 U
Decachlorobiphenyl (PCB209)		1 U	1 U	1 U	1 U	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

	Station ID:	DR248	DR249	DR250	DR251	DR252	DR253
	Sample ID:	SD-DR248-0000	SD-DR249-0000	SD-DR250-0000	SD-DR251-0000	SD-DR252-0000	SD-DR253-0000
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD			2 U				
4,4'-DDE			1 U				
4,4'-DDT			2 UJ				
Aldrin			1 UJ				
alpha-BHC			1 U				
alpha-Chlordane			1 U				
beta-BHC			1 U				
Dieldrin			2 UJ				
Endosulfan I			1 U				
Endosulfan II			2 U				
Endosulfan Sulfate			2 U				
Endrin			2 UJ				
Endrin Aldehyde			2 U				
Endrin Ketone			2 U				
gamma-BHC (Lindane)			1 UJ				
gamma-Chlordane			1 U				
Heptachlor			1 UJ				
Heptachlor Epoxide			1 U				
Methoxychlor			1 U				
Toxaphene			10 U				
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 UJ	20 U	20 U
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR248 SD-DR248-0000 0 to 10 cm	DR249 SD-DR249-0000 0 to 10 cm	DR250 SD-DR250-0000 0 to 10 cm	DR251 SD-DR251-0000 0 to 10 cm	DR252 SD-DR252-0000 0 to 10 cm	DR253 SD-DR253-0000 0 to 10 cm
Aroclor 1254		39	20 U	20 U	36	20 U	30
Aroclor 1260		33	20 U	20 U	35	20 U	23
Total PCB		72 T	40 UT	40 UT	71 T	40 UT	53 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		3160 T	2700 UT	2120 UT	3780 T	2400 UT	3400 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 U	1 U	1 U	1 U	1 U	1 U
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	1 U
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	1 U
2,2',3,3',4,4',5-Heptachlorobiphenyl		1 U	1 U	1 U	1	1 U	1 U
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 U	1 U	1 U	1 U	1 U	1 U
2,2',3,4',5,5',6-Heptachlorobiphenyl		1	1 U	1 U	2	1 U	1 U
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		4	1.4	1	3	2	3
2,2',3,4,4',5,5'-Heptachlorobiphenyl		2	1 U	1 U	3	1 U	1
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1 U	1 U	1 U	1 U	1 UJ	1 UJ
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		3	1 U	1 U	2	1	2
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		1	1 U	1 U	1	1	2
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		1 J	1 UJ	1 UJ	1 UJ	1 UJ	1 J
2,2',5-Trichlorobiphenyl (PCB18)						1 UJ	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 U	1 U	1 U	1 U	1 U	1 U
2,3',4,4',5-Pentachlorobipheny (PCB118)		2	1 U	1 U	1 U	1 U	2
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		3	1	1 U	1	1	2
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 U	1 U	1 U	1 U	1 U	1 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	1 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 U	1 U	1 U	1 U	1 U	1 U
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1 U	1 U	1 U	1 U	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Station ID:	DR248	DR249	DR250	DR251	DR252	DR253
Sample ID:	SD-DR248-0000	SD-DR249-0000	SD-DR250-0000	SD-DR251-0000	SD-DR252-0000	SD-DR253-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	1 U	1 U	1 U	1 U	1 U	1 U
2,4,4'-Trichlorobiphenyl (PCB28)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	1 U	1 U	1 U	1 U	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	1 U	1 U	1 U	1 U	1 U	1 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	1 U	3 UI	1 U	3	1 U	1 U
3,4,4',5-Tetrachlorobiphenyl (PCB81)	1 U	1 U	1 U	1 U	1 U	1 U
Decachlorobiphenyl (PCB209)	1 U	1 U	1 U	1 U	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

	Station ID:	DR254	DR255	DR256	DR257	DR258	DR259
	Sample ID:	SD-DR254-0000	SD-DR255-0000	SD-DR256-0000	SD-DR257-0000	SD-DR258-0000	SD-DR259-0000
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD				2 U		2 U	
4,4'-DDE				1 U		3 UI	
4,4'-DDT				2 UJ		5 UI	
Aldrin				1 UJ		1 U	
alpha-BHC				1 U		1 U	
alpha-Chlordane				1 U		1 U	
beta-BHC				1 U		1 U	
Dieldrin				2 UJ		2 U	
Endosulfan I				1 U		1 U	
Endosulfan II				2 U		2 U	
Endosulfan Sulfate				2 U		2 U	
Endrin				2 UJ		2 UJ	
Endrin Aldehyde				2 U		2 U	
Endrin Ketone				2 U		2 U	
gamma-BHC (Lindane)				1 UJ		1 U	
gamma-Chlordane				2 UI		1 U	
Heptachlor				1 UJ		1 U	
Heptachlor Epoxide				1		1 U	
Methoxychlor				1 U		7	
Toxaphene				10 U		150 UI	
Aroclor 1016		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR254 SD-DR254-0000 0 to 10 cm	DR255 SD-DR255-0000 0 to 10 cm	DR256 SD-DR256-0000 0 to 10 cm	DR257 SD-DR257-0000 0 to 10 cm	DR258 SD-DR258-0000 0 to 10 cm	DR259 SD-DR259-0000 0 to 10 cm
Aroclor 1254		20 U	45	42	20 U	34	68
Aroclor 1260		20 U	20 U	20 U	20 U	28	55
Total PCB		40 UT	45 T	42 T	40 UT	62 T	123 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		2110 UT	2490 T	2040 T		4000 T	4180 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 U	1 UJ	1 UJ	1 UJ	1 U	1 U
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 U	1 UJ	1 UJ	1 UJ	1 U	1 U
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 U	1 UJ	1 UJ	1 UJ	1 U	1 U
2,2',3,3',4,4',5-Heptachlorobiphenyl		1 U	1 UJ	1 UJ	1 UJ	1 U	3 UI
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 U	1 UJ	1 UJ	1 UJ	1 U	1
2,2',3,4',5,5',6-Heptachlorobiphenyl		1 U	1 UJ	1 UJ	1 UJ	1 U	2
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		1 U	2 J	3 J	1 UJ	4	7
2,2',3,4,4',5,5'-Heptachlorobiphenyl		1 U	1 UJ	1 J	1 UJ	1	3
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1 UJ	1 J	1 J	1 UJ	1 UJ	2 J
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		1 U	2 J	2 J	1 UJ	3	5
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		1 U	2 J	2 J	1 UJ	4	3
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		1 UJ	2 J	2 J	1 UJ	1 UJ	2 J
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 J	1 UJ	1 UJ	1 UJ	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 U	1 UJ	1 UJ	1 UJ	1 U	1 U
2,3',4,4',5-Pentachlorobipheny (PCB118)		1 U	2 J	2 J	1 UJ	2	3
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		1 U	2 J	3 J	1 UJ	2	4
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 U	1 UJ	1 UJ	1 UJ	1 U	1 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 UJ	1 UJ	1 UJ	1 U	1 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 U	1 UJ	1 UJ	1 UJ	1 U	1 U
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1 U	1 UJ	1 UJ	1 UJ	1 U	1

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Station ID:	DR254	DR255	DR256	DR257	DR258	DR259
Sample ID:	SD-DR254-0000	SD-DR255-0000	SD-DR256-0000	SD-DR257-0000	SD-DR258-0000	SD-DR259-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U
2,4,4'-Trichlorobiphenyl (PCB28)	1 UJ	1 J	1 UJ	1 UJ	1 UJ	1 UJ
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U
3,4,4',5-Tetrachlorobiphenyl (PCB81)	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U
Decachlorobiphenyl (PCB209)	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR260	DR261	DR262	DR263	DR264	DR265
	Sample ID:	SD-DR260-0000	SD-DR261-0000	SD-DR262-0000	SD-DR263-0000	SD-DR264-0000	SD-DR265-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD							
4,4'-DDE							
4,4'-DDT							
Aldrin							
alpha-BHC							
alpha-Chlordane							
beta-BHC							
Dieldrin							
Endosulfan I							
Endosulfan II							
Endosulfan Sulfate							
Endrin							
Endrin Aldehyde							
Endrin Ketone							
gamma-BHC (Lindane)							
gamma-Chlordane							
Heptachlor							
Heptachlor Epoxide							
Methoxychlor							
Toxaphene							
Aroclor 1016		20 UJ	20 U	20 UJ	20 UJ	20 UJ	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR260 SD-DR260-0000 0 to 10 cm	DR261 SD-DR261-0000 0 to 10 cm	DR262 SD-DR262-0000 0 to 10 cm	DR263 SD-DR263-0000 0 to 10 cm	DR264 SD-DR264-0000 0 to 10 cm	DR265 SD-DR265-0000 0 to 10 cm
Aroclor 1254		47	43	28	28	25	20 U
Aroclor 1260		33	40	24 J	22 J	26	20 U
Total PCB		80 T	83 T	52 T	50 T	51 T	40 UT
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		2590 T	3350 T	2110 T	1720 T	3450 T	3880 UT
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 U	1 U	1 U	1 U	1 U	1 U
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	1 U
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	1 U
2,2',3,3',4,4',5-Heptachlorobiphenyl		1	2	4	1 U	1 U	1 U
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 UJ	1 U	1	1 U	1 U	1 U
2,2',3,4',5,5',6-Heptachlorobiphenyl		2	2	4	1	1	1 U
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		5	5	12	3	3	2
2,2',3,4,4',5,5'-Heptachlorobiphenyl		3	2	8	2	1	1
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		3 J	1 J	2	1 UJ	1 U	1 U
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		4	4	8	2	2	2
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		4 J	3	5	1 UJ	1	1 U
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		4 J	2 J	3	2 UIJ	1 UJ	1 UJ
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 UJ	1 U	1 UJ		
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 U	1 U	1 U	1 U	1 U	1 U
2,3',4,4',5-Pentachlorobipheny (PCB118)		3	2	4	2	1	1
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		5	3	6	2	1	2 UI
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 U	1 U	1 U	1 U	1 U	1 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	1 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 U	1 U	1 U	1 U	1 U	1 U
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1	1 U	1	1 U	1 U	2

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR260	DR261	DR262	DR263	DR264	DR265
	Sample ID:	SD-DR260-0000	SD-DR261-0000	SD-DR262-0000	SD-DR263-0000	SD-DR264-0000	SD-DR265-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 U	1 U	1 U	1 U	1 U	2
2,4,4'-Trichlorobiphenyl (PCB28)		2 J	1 UJ	1	1 UJ	1 UJ	1 UJ
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 U	1 U	1 U	1 U	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 U	1 U	1 U	1 U	1 U	1 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 UJ	1 U	1 U	1 U	2 UI	1 U
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 U	1 U	1 U	1 U	1 U	1 U
Decachlorobiphenyl (PCB209)		1 U	1 U	1 U	1 U	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR266	DR267	DR268	DR269	DR270	DR271
	Sample ID:	SD-DR266-0000	SD-DR267-0000	SD-DR268-0000	SD-DR269-0000	SD-DR270-0000	SD-DR271-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD		2 U					
4,4'-DDE		1 U					
4,4'-DDT		2 UJ					
Aldrin		1 UJ					
alpha-BHC		1 U					
alpha-Chlordane		1 U					
beta-BHC		1 U					
Dieldrin		2 UJ					
Endosulfan I		1 U					
Endosulfan II		2 U					
Endosulfan Sulfate		2 U					
Endrin		2 UJ					
Endrin Aldehyde		2 U					
Endrin Ketone		2 U					
gamma-BHC (Lindane)		1 UJ					
gamma-Chlordane		1 U					
Heptachlor		1 UJ					
Heptachlor Epoxide		1 U					
Methoxychlor		1 U					
Toxaphene		10 U					
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 UJ	20 U	20 U
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR266 SD-DR266-0000 0 to 10 cm	DR267 SD-DR267-0000 0 to 10 cm	DR268 SD-DR268-0000 0 to 10 cm	DR269 SD-DR269-0000 0 to 10 cm	DR270 SD-DR270-0000 0 to 10 cm	DR271 SD-DR271-0000 0 to 10 cm
Aroclor 1254		24	21	34	20 U	20 U	9400
Aroclor 1260		27	20 U	20 U	20 U	20 U	20 U
Total PCB		51 T	21 T	34 T	40 UT	40 UT	9400 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		3700 T	2470 T	1620 T	4440 UT	3030 UT	360000 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 U	1 U	1 U	1 U	1 U	1 UIJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	2 J
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	2 J
2,2',3,3',4,4',5-Heptachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	61 J
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 U	1 U	1 U	1 U	1 U	126 J
2,2',3,4',5,5',6-Heptachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	20 J
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		3	2	2	2	1 U	461 J
2,2',3,4,4',5,5'-Heptachlorobiphenyl		1	1 U	1 U	1 U	1 U	63 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1 U	1 U	1 U	1 U	1 UJ	95 J
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		2	1	2	1	1 U	290 J
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		2	1 U	1	1 U	1 U	410 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	189 J
2,2',5-Trichlorobiphenyl (PCB18)						1 UJ	1 J
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 U	1 U	1 U	1 U	1 U	30 J
2,3',4,4',5-Pentachlorobipheny (PCB118)		1	1 U	2	1 U	1 U	411 J
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		2	1	2	1	1 U	343 J
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 U	1 U	1 U	1 U	1 U	21 J
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	3 J
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 U	1 U	1 U	1 U	1 U	76 J
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1 U	1 U	1 U	1 U	1 U	229 J

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR266	DR267	DR268	DR269	DR270	DR271
	Sample ID:	SD-DR266-0000	SD-DR267-0000	SD-DR268-0000	SD-DR269-0000	SD-DR270-0000	SD-DR271-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 U	1 U	1 U	1 U	1 U	1 UIJ
2,4,4'-Trichlorobiphenyl (PCB28)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 U	1 U	1 U	1 U	1 U	1 UJ
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 U	1 U	1 U	1 U	1 U	4 UIJ
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 U	1 U	3 UI	1 U	1 U	1 UIJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 U	1 U	1 U	1 U	1 U	1 UJ
Decachlorobiphenyl (PCB209)		1 U	1 U	1 U	1 U	1 U	1 J

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR272 SD-DR272-0000 0 to 10 cm	DR273 SD-DR273-0000 0 to 10 cm	DR274 SD-DR274-0000 0 to 10 cm	DR275 SD-DR275-0000 0 to 10 cm	DR276 SD-DR276-0000 0 to 10 cm	DR277 SD-DR277-0000 0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD							
4,4'-DDE							
4,4'-DDT							
Aldrin							
alpha-BHC							
alpha-Chlordane							
beta-BHC							
Dieldrin							
Endosulfan I							
Endosulfan II							
Endosulfan Sulfate							
Endrin							
Endrin Aldehyde							
Endrin Ketone							
gamma-BHC (Lindane)							
gamma-Chlordane							
Heptachlor							
Heptachlor Epoxide							
Methoxychlor							
Toxaphene							
Aroclor 1016		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR272	DR273	DR274	DR275	DR276	DR277
	Sample ID:	SD-DR272-0000	SD-DR273-0000	SD-DR274-0000	SD-DR275-0000	SD-DR276-0000	SD-DR277-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Aroclor 1254		52	45	20 U	20 U	32	51
Aroclor 1260		20 U	20 U	20 U	20 U	20 U	40
Total PCB		52 T	45 T	40 UT	40 UT	32 T	91 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)			2710 T	2880 UT	3770 UT	2120 T	4890 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 U	1 U	1 UJ	1 UJ	1 UJ	1 U
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 U	1 U	1 UJ	1 UJ	1 UJ	1 U
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 U	1 U	1 UJ	1 UJ	1 UJ	1 U
2,2',3,3',4,4',5-Heptachlorobiphenyl		1 U	1 U	1 UJ	1 UJ	1 UJ	2 UI
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 U	1 U	1 UJ	1 UJ	1 UJ	1 U
2,2',3,4',5,5',6-Heptachlorobiphenyl		1 U	1 U	1 UJ	1 UJ	1 UJ	2
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		4	3	1 J	1 UJ	2 J	5
2,2',3,4,4',5,5'-Heptachlorobiphenyl		1 U	1 U	1 UJ	1 UJ	1 UJ	2
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1 J	1 UJ	1 UJ	1 UJ	1 UJ	1 J
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		2	2	1 UJ	1 UJ	2 J	4
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		4	3	1 J	1 UJ	2 J	3
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		2 J	2 J	1 UJ	1 UJ	1 J	2 J
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 U	1 U	1 UJ	1 UJ	1 UJ	1 U
2,3',4,4',5-Pentachlorobipheny (PCB118)		3	3	1 UJ	1 UJ	1 J	2
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		4	3	1 J	1 UJ	2 J	3
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 U	1 U	1 UJ	1 UJ	1 UJ	1 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 U	1 UJ	1 UJ	1 UJ	1 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 U	1 U	1 UJ	1 UJ	1 UJ	1 U
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1	1	1 UJ	1 UJ	1 UJ	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Station ID:	DR272	DR273	DR274	DR275	DR276	DR277
Sample ID:	SD-DR272-0000	SD-DR273-0000	SD-DR274-0000	SD-DR275-0000	SD-DR276-0000	SD-DR277-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	1 U	1 U	1 UJ	1 UJ	1 UJ	1 U
2,4,4'-Trichlorobiphenyl (PCB28)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	1 U	1 U	1 UJ	1 UJ	1 UJ	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	1 U	1 U	1 UJ	1 UJ	1 UJ	1 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	1 U	1 U	1 UJ	1 UJ	1 UJ	1 U
3,4,4',5-Tetrachlorobiphenyl (PCB81)	1 U	1 U	1 UJ	1 UJ	1 UJ	1 U
Decachlorobiphenyl (PCB209)	1 U	1 U	1 UJ	1 UJ	1 UJ	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR278	DR279	DR280	DR281	DR282	DR283
	Sample ID:	SD-DR278-0000	SD-DR279-0000	SD-DR280-0000	SD-DR281-0000	SD-DR282-0000	SD-DR283-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD							
4,4'-DDE							
4,4'-DDT							
Aldrin							
alpha-BHC							
alpha-Chlordane							
beta-BHC							
Dieldrin							
Endosulfan I							
Endosulfan II							
Endosulfan Sulfate							
Endrin							
Endrin Aldehyde							
Endrin Ketone							
gamma-BHC (Lindane)							
gamma-Chlordane							
Heptachlor							
Heptachlor Epoxide							
Methoxychlor							
Toxaphene							
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 UJ	20 U	20 U
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	28	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Station ID:	DR278	DR279	DR280	DR281	DR282	DR283
Sample ID:	SD-DR278-0000	SD-DR279-0000	SD-DR280-0000	SD-DR281-0000	SD-DR282-0000	SD-DR283-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Aroclor 1254	48	33	39	97	48	34
Aroclor 1260	32	20	33	68	39	34
Total PCB	80 T	53 T	72 T	193 T	87 T	68 T
Pesticides/PCBs - TOCN (ug/kg)						
Total PCB (TOCN)	2450 T	2910 T	2850 T	5300 T	3370 T	2750 T
PCB Congeners (ug/kg)						
2',3,4,4',5-Pentachlorobiphenyl (PCB123)	1 UJ	1 UJ	1 U	1 U	1 U	1 U
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	1 UJ	1 UJ	1 U	1 U	1 U	1 U
2,2',3,3',4,4',5,6-Octachlorobiphenyl	1 UJ	1 UJ	1 U	1 U	1 U	1 U
2,2',3,3',4,4',5-Heptachlorobiphenyl	5 UIJ	5 UIJ	1	2	2 UI	1
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)	1 UJ	1 UJ	1 U	1	1 U	1 U
2,2',3,4',5,5',6-Heptachlorobiphenyl	2 J	1 J	2	2	2	1
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)	5	4	4	8	5	4
2,2',3,4,4',5,5'-Heptachlorobiphenyl	2 UJ	2 J	2	4	2	2
2,2',3,5'-Tetrachlorobiphenyl (PCB44)	1 J	1 UJ	1 U	2	1 UJ	1 UJ
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)	3 J	2 J	3	6	3	3
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)	3 J	2 J	2	3	3	2
2,2',5,5'-Tetrachlorobiphenyl (PCB52)	2 J	1 J	2 UIJ	4 J	2 J	1 J
2,2',5-Trichlorobiphenyl (PCB18)	1 UJ	1 UJ		2 J	1 UJ	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)	1 UJ	1 UJ	1 U	1 U	1 U	1 U
2,3',4,4',5-Pentachlorobipheny (PCB118)	3 J	2 J	2	4	2	2
2,3',4,4'-Tetrachlorobiphenyl (PCB66)	3 J	2 J	3	6	3	2
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)	1 UJ	1 UJ	1 U	1 U	1 U	1 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl	1 UJ	1 UJ	1 U	1 U	1 U	1 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)	1 UJ	1 UJ	1 U	1 U	1 U	1 U
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)	1 UJ	1 UJ	1 U	2	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR278	DR279	DR280	DR281	DR282	DR283
	Sample ID:	SD-DR278-0000	SD-DR279-0000	SD-DR280-0000	SD-DR281-0000	SD-DR282-0000	SD-DR283-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 UJ	1 UJ	1 U	1 U	1 U	1 U
2,4,4'-Trichlorobiphenyl (PCB28)		1 UJ	1 UJ	1 UJ	2 J	1 UJ	1 UJ
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 UJ	1 UJ	1 U	1 U	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 UJ	1 UJ	1 U	2	1 U	1 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 U	1 U	1 U	1 U	1 U	1 U
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 UJ	1 UJ	1 U	1 U	1 U	1 U
Decachlorobiphenyl (PCB209)		1 UJ	1 UJ	1 U	1 U	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):						
	Station ID:	DR284	DR285	DR286	DR287	DR288	DR289
	Sample ID:	SD-DR284-0000	SD-DR285-0000	SD-DR286-0000-CC	SD-DR287-0000	SD-DR288-0000	SD-DR289-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD		2 U					2 U
4,4'-DDE		3 UI					1 U
4,4'-DDT		11					2 UJ
Aldrin		1 U					1 UJ
alpha-BHC		1 U					1 U
alpha-Chlordane		1 U					1 U
beta-BHC		1 U					1 U
Dieldrin		2 U					2 UJ
Endosulfan I		1 U					1 U
Endosulfan II		2 U					2 U
Endosulfan Sulfate		2 U					2 U
Endrin		2 UJ					2 UJ
Endrin Aldehyde		2 U					2 U
Endrin Ketone		2 U					2 U
gamma-BHC (Lindane)		1 U					1 UJ
gamma-Chlordane		1 U					1 U
Heptachlor		1 U					1 UJ
Heptachlor Epoxide		1 U					1 U
Methoxychlor		9					1 U
Toxaphene		200 UI					45 UI
Aroclor 1016		20 U	20 UJ	20 UJ	20 UJ	20 U	20 UJ
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR284 SD-DR284-0000 0 to 10 cm	DR285 SD-DR285-0000 0 to 10 cm	DR286 SD-DR286-0000-CC 0 to 10 cm	DR287 SD-DR287-0000 0 to 10 cm	DR288 SD-DR288-0000 0 to 10 cm	DR289 SD-DR289-0000 0 to 10 cm
Aroclor 1254		34	29	25	25	44	34
Aroclor 1260		27	24 J	29	20 U	39	24
Total PCB		61 T	53 T	54 T	25 T	83 T	58 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		2740 T	1560 T	3800 T	1910 T	2790 T	1600 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 U	1 U	1 U	1 U	1 U	1 UJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	1 UJ
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	1 UJ
2,2',3,3',4,4',5-Heptachlorobiphenyl		2	1	1 U	1 U	2 UI	1 UJ
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 U	1 U	1 U	1 U	1 U	1 UJ
2,2',3,4',5,5',6-Heptachlorobiphenyl		1	1	1	1 U	1	1 UJ
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		4	3	3	3	5	4
2,2',3,4,4',5,5'-Heptachlorobiphenyl		2	3	2	1	2	2 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1 J	1 UJ	1 U	1 U	1 J	1 UJ
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		3	3	2	2	3	3 J
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		2	2 J	2	1 U	3	2 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		2 J	1 J	1 J	1 J	2 J	1 J
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 UJ			1 UJ	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 U	1 U	1 U	1 U	1 U	1 UJ
2,3',4,4',5-Pentachlorobipheny (PCB118)		2	2	1	1	2	2 J
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		2	2	2	2	3	2 J
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 U	1 U	1 U	1 U	1 U	1 UJ
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	1 UJ
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 U	1 U	1 U	1 U	1 U	1 UJ
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1 U	1 U	1 U	1 U	1 U	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Station ID:	DR284	DR285	DR286	DR287	DR288	DR289
Sample ID:	SD-DR284-0000	SD-DR285-0000	SD-DR286-0000-CC	SD-DR287-0000	SD-DR288-0000	SD-DR289-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	1 U	1 U	1 U	1 U	1 U	1 UJ
2,4,4'-Trichlorobiphenyl (PCB28)	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	1 U	1 U	1 U	1 U	1 U	1 UJ
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	1 U	1 U	1 U	1 U	1 U	1 UJ
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	1 U	2 UI	1 U	2 UI	1 U	1 U
3,4,4',5-Tetrachlorobiphenyl (PCB81)	1 U	1 U	1 U	1 U	1 U	1 UJ
Decachlorobiphenyl (PCB209)	1 U	1 U	1 U	1 U	1 U	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR290 SD-DR290-0000 0 to 10 cm	DR291 SD-DR291-0000 0 to 10 cm	DR292 SD-DR292-0000-CC 0 to 10 cm	DR293 SD-DR293-0000 0 to 10 cm	DR294 SD-DR294-0000 0 to 10 cm	DR295 SD-DR295-0000 0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD			2 U				
4,4'-DDE			1 U				
4,4'-DDT			2 UJ				
Aldrin			1 UJ				
alpha-BHC			1 U				
alpha-Chlordane			1 U				
beta-BHC			1 U				
Dieldrin			2 UJ				
Endosulfan I			1 U				
Endosulfan II			2 U				
Endosulfan Sulfate			2 U				
Endrin			2 UJ				
Endrin Aldehyde			2 U				
Endrin Ketone			2 U				
gamma-BHC (Lindane)			1 UJ				
gamma-Chlordane			1 U				
Heptachlor			1 UJ				
Heptachlor Epoxide			1 U				
Methoxychlor			1 U				
Toxaphene			20 UI				
Aroclor 1016		20 UJ	20 UJ	20 UJ	20 UJ	20 U	20 U
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR290 / SD-DR290-0000 / 0 to 10 cm	DR291 / SD-DR291-0000 / 0 to 10 cm	DR292 / SD-DR292-0000-CC / 0 to 10 cm	DR293 / SD-DR293-0000 / 0 to 10 cm	DR294 / SD-DR294-0000 / 0 to 10 cm	DR295 / SD-DR295-0000 / 0 to 10 cm
Aroclor 1254		92	85	184	20 U	20 U	20 U
Aroclor 1260		78	42	70	20 U	20 U	20 U
Total PCB		170 T	127 T	254 T	40 UT	40 UT	40 UT
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)			3350 T		2300 UT		
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 U	1 U	2 UI	1 U	1 UJ	1 UJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1	1 U	1 U	1 U	1 UJ	1 UJ
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 U	1 U	1 U	1 U	1 UJ	1 UJ
2,2',3,3',4,4',5-Heptachlorobiphenyl		2	1	3	1 U	1 UJ	1 UJ
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1	1	3	1 UJ	1 UJ	1 UJ
2,2',3,4',5,5',6-Heptachlorobiphenyl		4	2	3	1 U	1 UJ	1 UJ
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		8	7	16	1	1 UJ	1 UJ
2,2',3,4,4',5,5'-Heptachlorobiphenyl		5	3	5	1 U	1 UJ	1 UJ
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		2	2	4	1 UJ	1 UJ	1 UJ
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		7	5	10	1	1 UJ	1 UJ
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		5	4	9	1 UJ	1 UJ	1 UJ
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		4 J	4 J	9 J	1 J	1 UJ	1 UJ
2,2',5-Trichlorobiphenyl (PCB18)		1 J		3 J	1 UJ	1 UJ	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 U	1 U	1 U	1 U	1 UJ	1 UJ
2,3',4,4',5-Pentachlorobipheny (PCB118)		5	5	12	1	1 UJ	1 UJ
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		6	6	12	1	1 UJ	1 UJ
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 U	1 U	1 U	1 U	1 UJ	1 UJ
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 U	1 U	1 U	1 UJ	1 UJ
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 U	1 U	2	1 U	1 UJ	1 UJ
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		2	2	6	1 U	1 UJ	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Station ID:	DR290	DR291	DR292	DR293	DR294	DR295
Sample ID:	SD-DR290-0000	SD-DR291-0000	SD-DR292-0000-CC	SD-DR293-0000	SD-DR294-0000	SD-DR295-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	1 U	1 U	1 U	1 U	1 UJ	1 UJ
2,4,4'-Trichlorobiphenyl (PCB28)	1 J	1 UJ	2 J	1 UJ	1 UJ	1 UJ
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	1 U	1 U	1 U	1 U	1 UJ	1 UJ
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	2	1 U	1	1 U	1 UJ	1 UJ
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	1 U	3 UI	1 U	3 J	1 UJ	1 UJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)	1 U	1 U	1 U	1 U	1 UJ	1 UJ
Decachlorobiphenyl (PCB209)	1 U	1 U	1 U	1	1 UJ	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR296	DR297	DR298	DR299	DR300	DR301
	Sample ID:	SD-DR296-0000	SD-DR297-0000	SD-DR298-0000	SD-DR299-0000	SD-DR300-0000	SD-DR301-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Pesticides/PCBs (ug/kg)							
4,4'-DDD			2 U	2 U	2 U	2 U	2 U
4,4'-DDE			1 U	1 U	1 U	1 U	1 U
4,4'-DDT			2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
Aldrin			1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
alpha-BHC			1 U	1 U	1 U	1 U	1 U
alpha-Chlordane			1 U	1 U	1 U	1 U	1 U
beta-BHC			1 U	1 U	1 U	1 U	1 U
Dieldrin			2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
Endosulfan I			1 U	1 U	1 U	1 U	1 U
Endosulfan II			2 U	2 U	2 U	2 U	2 U
Endosulfan Sulfate			2 U	2 U	2 U	2 U	2 U
Endrin			2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
Endrin Aldehyde			2 U	2 U	2 U	2 U	2 U
Endrin Ketone			2 U	2 U	2 U	2 U	2 U
gamma-BHC (Lindane)			1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
gamma-Chlordane			1 U	1 U	1 U	1 U	1
Heptachlor			1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Heptachlor Epoxide			1 U	1 U	1 U	1 U	2
Methoxychlor			1 U	1 U	1 U	1 U	1 U
Toxaphene			10 U	10 U	10 U	10 U	10 U
Aroclor 1016		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR296 SD-DR296-0000 0 to 10 cm	DR297 SD-DR297-0000 0 to 10 cm	DR298 SD-DR298-0000 0 to 10 cm	DR299 SD-DR299-0000 0 to 10 cm	DR300 SD-DR300-0000 0 to 10 cm	DR301 SD-DR301-0000 0 to 10 cm
Aroclor 1254		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1260		20 U	20 U	20 U	20 U	20 U	20 U
Total PCB		40 UT	40 UT	40 UT	40 UT	40 UT	40 UT
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		6150 UT					
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4',5-Heptachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,4',5,5',6-Heptachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,4,4',5,5'-Heptachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3',4,4',5-Pentachlorobipheny (PCB118)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR296	DR297	DR298	DR299	DR300	DR301
	Sample ID:	SD-DR296-0000	SD-DR297-0000	SD-DR298-0000	SD-DR299-0000	SD-DR300-0000	SD-DR301-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,4,4'-Trichlorobiphenyl (PCB28)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Decachlorobiphenyl (PCB209)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ

Blank cell indicate no analyses were performed.

APPENDIX E-2

BNAS (SURFACE SEDIMENT)

Duwamish River Sediment Investigation - Statistics for Surface Sediment Results for BNAs

Constituent	Number of Samples Analyzed	Number of Detections	Detection Frequency (%)	Minimum Detected Value	Maximum Detected Value	Sample Number of Maximum Detected Value	Arithmetic Mean	Median Value
Semi-Volatile Organic Compounds (ug/kg)								
1,2,4-Trichlorobenzene	300	0	0.0	n/a	n/a		22.328	20.000
1,2-Dichlorobenzene	**300**	**4**	**1.3**	**1.40**	**523.00**	**SD-DR008-0000**	**20.218**	**20.000**
1,3-Dichlorobenzene	300	0	0.0	n/a	n/a		20.374	20.000
1,4-Dichlorobenzene	**300**	**2**	**0.7**	**0.74**	**30.00**	**SD-DR007-0000**	**20.343**	**20.000**
2,4,5-Trichlorophenol	300	0	0.0	n/a	n/a		206.000	200.000
2,4,6-Trichlorophenol	300	0	0.0	n/a	n/a		206.000	200.000
2,4-Dichlorophenol	300	0	0.0	n/a	n/a		61.800	60.000
2,4-Dimethylphenol	300	0	0.0	n/a	n/a		20.600	20.000
2,4-Dinitrophenol	300	0	0.0	n/a	n/a		206.000	200.000
2,4-Dinitrotoluene	300	0	0.0	n/a	n/a		206.000	200.000
2,6-Dinitrotoluene	300	0	0.0	n/a	n/a		206.000	200.000
2-Chloronaphthalene	300	0	0.0	n/a	n/a		20.600	20.000
2-Chlorophenol	300	0	0.0	n/a	n/a		20.600	20.000
2-Methyl-4,6-dinitrophenol	300	0	0.0	n/a	n/a		206.000	200.000
2-Methylnaphthalene	**300**	**63**	**21.0**	**20.00**	**690.00**	**SD-DR019-0000**	**33.266**	**20.000**
2-Methylphenol	**300**	**1**	**0.3**	**20.00**	**20.00**	**SD-DR187-0000**	**20.600**	**20.000**
2-Nitroaniline	300	0	0.0	n/a	n/a		103.000	100.000
2-Nitrophenol	300	0	0.0	n/a	n/a		103.000	100.000
3,3'-Dichlorobenzidine	300	0	0.0	n/a	n/a		212.000	200.000
3- and 4-Methylphenol Coelution	**300**	**16**	**5.3**	**20.00**	**910.00**	**SD-DR053-0000-CC**	**24.833**	**20.000**
3-Nitroaniline	300	0	0.0	n/a	n/a		206.000	200.000
4-Bromophenyl Phenyl Ether	300	0	0.0	n/a	n/a		42.400	40.000
4-Chloro-3-methylphenol	300	0	0.0	n/a	n/a		41.200	40.000
4-Chloroaniline	300	0	0.0	n/a	n/a		61.800	60.000
4-Chlorophenyl Phenyl Ether	300	0	0.0	n/a	n/a		20.600	20.000
4-Nitroaniline	300	0	0.0	n/a	n/a		103.000	100.000
4-Nitrophenol	300	0	0.0	n/a	n/a		103.000	100.000
Benzoic Acid	**300**	**4**	**1.3**	**200.00**	**500.00**	**SD-DR004-0000**	**207.333**	**200.000**
Benzyl Alcohol	**300**	**4**	**1.3**	**50.00**	**1700.00**	**SD-DR019-0000**	**57.366**	**50.000**
Bis(2-chloroethoxy)methane	**300**	**1**	**0.3**	**40.00**	**40.00**	**SD-DR188-0000**	**41.200**	**40.000**
Bis(2-chloroethyl) Ether	300	0	0.0	n/a	n/a		41.200	40.000
Bis(2-chloroisopropyl) Ether	*300*	*0*	*0.0*	*n/a*	*n/a*		*41.200*	*40.000*
Bis(2-ethylhexyl) Phthalate	**300**	**223**	**74.3**	**20.00**	**11000.00**	**SD-DR008-0000**	**568.300**	**380.000**
Butyl Benzyl Phthalate	**300**	**191**	**63.7**	**20.00**	**940.00**	**SD-DR008-0000**	**46.566**	**30.000**

Bold text indicates constituent was detected one or more times.
n/a - Not Applicable

Duwamish River Sediment Investigation - Statistics for Surface Sediment Results for BNAs

Constituent	Number of Samples Analyzed	Number of Detections	Detection Frequency (%)	Minimum Detected Value	Maximum Detected Value	Sample Number of Maximum Detected Value	Arithmetic Mean	Median Value
Semi-Volatile Organic Compounds (ug/kg)								
Carbazole	300	200	66.7	20.00	1100.00	SD-DR187-0000	61.966	30.000
Di-n-butyl Phthalate	300	78	26.0	20.00	2000.00	SD-DR217-0000	36.133	20.000
Di-n-octyl Phthalate	300	19	6.3	20.00	570.00	SD-DR178-0000-CC	25.066	20.000
Dibenzofuran	300	134	44.7	20.00	1300.00	SD-DR065-0000	50.200	20.000
Diethyl Phthalate	300	1	0.3	40.00	40.00	SD-DR207-0000	21.266	20.000
Dimethyl Phthalate	*300*	*67*	*22.3*	*20.00*	*90.00*	*SD-DR007-0000*	*22.966*	*20.000*
Hexachlorobenzene	300	3	1.0	20.00	690.00	SD-DR198-0000	23.466	20.000
Hexachlorobutadiene	300	0	0.0	n/a	n/a		20.529	20.000
Hexachlorocyclopentadiene	300	1	0.3	100.00	100.00	SD-DR009-0000	103.000	100.000
Hexachloroethane	300	0	0.0	n/a	n/a		22.174	20.000
Isophorone	300	0	0.0	n/a	n/a		20.600	20.000
N-Nitrosodi-n-propylamine	300	0	0.0	n/a	n/a		41.200	40.000
N-Nitrosodiphenylamine	300	0	0.0	n/a	n/a		41.200	40.000
Nitrobenzene	300	0	0.0	n/a	n/a		20.600	20.000
Pentachlorophenol (PCP)	300	4	1.3	100.00	300.00	SD-DR284-0000	107.333	100.000
Phenol	300	153	51.0	20.00	2100.00	SD-DR207-0000	81.633	20.000
Benz(a)anthracene	300	287	95.7	30.00	4800.00	SD-DR187-0000	369.800	220.000
Benzo(a)pyrene	300	287	95.7	20.00	3700.00	SD-DR187-0000	313.333	220.000
Benzo(b)fluoranthene	300	288	96.0	20.00	4700.00	SD-DR178-0000-CC	406.800	290.000
Benzo(g,h,i)perylene	300	284	94.7	20.00	2300.00	SD-DR187-0000	181.966	135.000
Benzo(k)fluoranthene	300	288	96.0	20.00	4000.00	SD-DR187-0000	319.000	240.000
Benzofluoranthene (Total)	300	289	96.3	20.00	8000.00	SD-DR178-0000-CC	724.933	530.000
Chrysene	300	290	96.7	30.00	4600.00	SD-DR044-0000	505.900	340.000
Dibenz(a,h)anthracene	300	215	71.7	20.00	950.00	SD-DR187-0000	54.633	40.000
Fluoranthene	300	292	97.3	20.00	23000.00	SD-DR044-0000	1117.833	595.000
Indeno(1,2,3-cd)pyrene	300	286	95.3	30.00	2900.00	SD-DR187-0000	210.366	160.000
Pyrene	300	290	96.7	30.00	16000.00	SD-DR044-0000	888.533	530.000
Total HPAH	300	293	97.7	20.00	50840.00	SD-DR044-0000	4355.766	2785.000
Acenaphthene	*300*	*139*	*46.3*	*20.00*	*1600.00*	*SD-DR065-0000*	*62.666*	*20.000*
Acenaphthylene	300	31	10.3	20.00	100.00	SD-DR044-0000	22.266	20.000
Anthracene	300	236	78.7	20.00	1900.00	SD-DR065-0000	143.200	70.000
Fluorene	300	188	62.7	20.00	2100.00	SD-DR065-0000	78.266	30.000
Naphthalene	300	70	23.3	4.30	510.00	SD-DR019-0000	29.437	20.000
Phenanthrene	300	290	96.7	30.00	16000.00	SD-DR175-0000	514.433	210.000

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n/a - Not Applicable

Duwamish River Sediment Investigation - Statistics for Surface Sediment Results for BNAs

Constituent	Number of Samples Analyzed	Number of Detections	Detection Frequency (%)	Minimum Detected Value	Maximum Detected Value	Sample Number of Maximum Detected Value	Arithmetic Mean	Median Value
Semi-Volatile Organic Compounds (ug/kg)								
Total LPAH	300	290	96.7	30.00	20030.00	SD-DR175-0000	791.414	330.000
Semi-Volatile Organic Compounds - TOCN (ug/kg)								
1,2,4-Trichlorobenzene	274	0	0.0	n/a	n/a		988.430	883.000
1,2-Dichlorobenzene	274	3	1.1	45.20	103.00	SD-DR116-0000	972.922	883.000
1,4-Dichlorobenzene	274	2	0.7	23.90	862.00	SD-DR007-0000	976.505	883.000
2-Methylnaphthalene	274	56	20.4	647.00	26400.00	SD-DR019-0000	1620.817	980.000
bis(2-Ethylhexyl)phthalate	274	208	75.9	2780.00	148000.00	SD-DR178-0000-CC	22303.248	16750.000
Butylbenzylphthalate	274	182	66.4	673.00	43800.00	SD-DR131-0000-CC	2075.832	1470.000
Di-n-butylphthalate	274	74	27.0	590.00	120000.00	SD-DR217-0000	1780.394	1050.000
Di-n-octylphthalate	274	18	6.6	528.00	18100.00	SD-DR131-0000-CC	1226.175	917.000
Dibenzofuran	274	129	47.1	617.00	53900.00	SD-DR065-0000	2424.850	1200.000
Diethylphthalate	274	1	0.4	1260.00	1260.00	SD-DR207-0000	1097.310	913.000
Dimethylphthalate	274	64	23.4	546.00	6670.00	SD-DR131-0000-CC	1161.120	947.500
Hexachlorobenzene	274	3	1.1	654.00	44800.00	SD-DR198-0000	1205.489	913.000
Hexachlorobutadiene	274	0	0.0	n/a	n/a		985.593	883.000
N-Nitrosodiphenylamine	274	0	0.0	n/a	n/a		2088.065	1830.000
Benzo(a)anthracene	274	272	99.3	1390.00	253000.00	SD-DR187-0000	17813.138	11400.000
Benzo(a)pyrene	274	271	98.9	1390.00	195000.00	SD-DR187-0000	15072.153	10600.000
Benzo(g,h,i)perylene	274	270	98.5	760.00	121000.00	SD-DR187-0000	8668.259	6775.000
Benzofluoranthene (Total)	274	272	99.3	3140.00	384000.00	SD-DR187-0000	34542.445	24500.000
Chrysene	274	272	99.3	2090.00	221000.00	SD-DR044-0000	24175.547	16800.000
Dibenz(a,h)anthracene	274	206	75.2	528.00	50000.00	SD-DR187-0000	2623.489	1915.000
Fluoranthene	274	273	99.6	3480.00	1110000.00	SD-DR044-0000	54159.562	27700.000
Indeno(1,2,3-cd)pyrene	274	271	98.9	1390.00	153000.00	SD-DR187-0000	10068.175	7540.000
Pyrene	274	272	99.3	3140.00	769000.00	SD-DR044-0000	43169.854	25550.000
Total HPAH (TOCN)	274	273	99.6	4620.00	2440000.00	SD-DR044-0000	209860.474	136500.000
Acenaphthene	274	133	48.5	727.00	74700.00	SD-DR065-0000	3054.624	1270.000
Acenaphthylene	274	29	10.6	645.00	5070.00	SD-DR189-0000	1129.215	934.500
Anthracene	274	224	81.8	549.00	87200.00	SD-DR033-0000	6878.883	3535.000
Fluorene	274	179	65.3	528.00	97700.00	SD-DR175-0000	3815.824	1605.000
Naphthalene	274	65	23.7	195.00	19500.00	SD-DR019-0000	1367.028	996.000
Phenanthrene	274	273	99.6	1390.00	920000.00	SD-DR175-0000	25372.007	10100.000
Total LPAH (TOCN)	274	273	99.6	1390.00	1150000.00	SD-DR175-0000	38665.620	15650.000

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n/a - Not Applicable

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR001	DR002	DR003	DR004	DR005	DR006
	Sample ID:	SD-DR001-0000	SD-DR002-0000	SD-DR003-0000	SD-DR004-0000	SD-DR005-0000	SD-DR006-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	5.7 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	2.8 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	2.8 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	2.8 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 U	200 U	200 U	200 UJ	200 UJ
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 U	200 U	200 UJ	200 UJ
2-Methylnaphthalene		20 U	20 U	20 U	20 U	20	30
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	30
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR001	DR002	DR003	DR004	DR005	DR006
Sample ID:	SD-DR001-0000	SD-DR002-0000	SD-DR003-0000	SD-DR004-0000	SD-DR005-0000	SD-DR006-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	500	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	650	880	970	880	1700	2700
Butyl Benzyl Phthalate	50	70	80	60	120	200
Carbazole	40	50	30	30	60	90
Di-n-butyl Phthalate	20 U	20	20 U	20 U	40	40
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	30	20	20 U	20 U	30	30
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	2.8 U	20 U
Hexachlorocyclopentadiene	100 UJ	100 U	100 U	100 U	100 U	100 U
Hexachloroethane	20 U	20 U	20 U	20 U	5.7 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 UJ	100 UJ	100 UJ	100 U	100 U
Phenol	30	20	20 U	30	30	50
Benz(a)anthracene	470	490	370	290	470	500
Benzo(a)pyrene	410	420	410	300	520	560

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR001	DR002	DR003	DR004	DR005	DR006
	Sample ID:	SD-DR001-0000	SD-DR002-0000	SD-DR003-0000	SD-DR004-0000	SD-DR005-0000	SD-DR006-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene		580	490	540	380	720	790
Benzo(g,h,i)perylene		200	270	240	220	260	290
Benzo(k)fluoranthene		450	490	410	290	500	530
Benzofluoranthene (Total)		1030 T	980 T	950 T	670 T	1220 T	1320 T
Chrysene		730	660	560	430	650	680
Dibenz(a,h)anthracene		60	80	60	50	70	70
Fluoranthene		1200	990	460	560	930	930
Indeno(1,2,3-cd)pyrene		220	270	240	210	320	360
Pyrene		1100	760	760	550	950	1200
Total HPAH		5420 T	4920 T	4050 T	3280 T	5390 T	5910 T
Acenaphthene		30	20 U	20	20 U	30	80
Acenaphthylene		20 U	20 U	20 U	20 U	20 U	20 U
Anthracene		120	130	120	90	130	130
Fluorene		40	40	30	40	40	50
Naphthalene		30	20 U	20 U	20 U	30	30
Phenanthrene		370	290	250	220	360	460
Total LPAH		590 T	460 T	420 T	350 T	590 T	750 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		664 U	866 U	943 U	781 U	248 U	735 U
1,2-Dichlorobenzene		664 U	866 U	943 U	781 U	122 U	735 U
1,4-Dichlorobenzene		664 U	866 U	943 U	781 U	122 U	735 U
2-Methylnaphthalene		664 U	866 U	943 U	781 U	870	1100
bis(2-Ethylhexyl)phthalate		21600	38100	45800	34400	73900	99300
Butylbenzylphthalate		1660	3030	3770	2340	5220	7350
Di-n-butylphthalate		664 U	866	943 U	781 U	1740	1470
Di-n-octylphthalate		664 U	866 U	943 U	781 U	870 U	735 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR001	DR002	DR003	DR004	DR005	DR006
	Sample ID:	SD-DR001-0000	SD-DR002-0000	SD-DR003-0000	SD-DR004-0000	SD-DR005-0000	SD-DR006-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran		997	866	943 U	781 U	1300	1100
Diethylphthalate		664 U	866 U	943 U	781 U	870 U	735 U
Dimethylphthalate		664 U	866 U	943 U	781 U	870 U	735
Hexachlorobenzene		664 U	866 U	943 U	781 U	870 U	735 U
Hexachlorobutadiene		664 U	866 U	943 U	781 U	122 U	735 U
N-Nitrosodiphenylamine		1330 U	1730 U	1890 U	1560 U	1740 U	1470 U
Benzo(a)anthracene		15600	21200	17500	11300	20400	18400
Benzo(a)pyrene		13600	18200	19300	11700	22600	20600
Benzo(g,h,i)perylene		6640	11700	11300	8590	11300	10700
Benzofluoranthene (Total)		34200 T	42400 T	44800 T	26200 T	53000 T	48500 T
Chrysene		24300	28600	26400	16800	28300	25000
Dibenz(a,h)anthracene		1990	3460	2830	1950	3040	2570
Fluoranthene		39900	42900	21700	21900	40400	34200
Indeno(1,2,3-cd)pyrene		7310	11700	11300	8200	13900	13200
Pyrene		36500	32900	35800	21500	41300	44100
Total HPAH (TOCN)		180000 T	213000 T	191000 T	128000 T	234000 T	217000 T
Acenaphthene		997	866 U	943	781 U	1300	2940
Acenaphthylene		664 U	866 U	943 U	781 U	870 U	735 U
Anthracene		3990	5630	5660	3520	5650	4780
Fluorene		1330	1730	1420	1560	1740	1840
Naphthalene		997	866 U	943 U	781 U	1300	1100
Phenanthrene		12300	12600	11800	8590	15700	16900
Total LPAH (TOCN)		19600 T	19900 T	19800 T	13700 T	25700 T	27600 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR007	DR008	DR009	DR010	DR011	DR012
Sample ID:	SD-DR007-0000	SD-DR008-0000	SD-DR009-0000	SD-DR010-0000	SD-DR011-0000	SD-DR012-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)						
1,2,4-Trichlorobenzene	20 U	1060 U	20 U	20 U	4.8 U	20 U
1,2-Dichlorobenzene	20 U	523 J	20 U	20 U	1.7 JQ	20 U
1,3-Dichlorobenzene	20 U	533 U	20 U	20 U	2.4 U	20 U
1,4-Dichlorobenzene	30	533 U	20 U	20 U	2.4 U	20 U
2,4,5-Trichlorophenol	200 U	2000 UI	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol	200 U	2000 UI	200 U	200 U	200 U	200 U
2,4-Dichlorophenol	60 U	600 UI	60 U	60 U	60 U	60 U
2,4-Dimethylphenol	20 U	200 UI	20 U	20 U	20 U	20 U
2,4-Dinitrophenol	200 UJ	2000 UI	200 U	200 U	200 U	200 UJ
2,4-Dinitrotoluene	200 U	2000 UI	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene	200 U	2000 UI	200 U	200 U	200 U	200 U
2-Chloronaphthalene	20 U	200 UI	20 U	20 U	20 U	20 U
2-Chlorophenol	20 U	200 UI	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol	200 UJ	2000 UI	200 U	200 U	200 U	200 UJ
2-Methylnaphthalene	30	200 UI	40	20 U	30	20
2-Methylphenol	20 U	200 UI	20 U	20 U	20 U	20 U
2-Nitroaniline	100 U	1000 UI	100 U	100 U	100 U	100 U
2-Nitrophenol	100 U	1000 UI	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine	200 U	2000 UI	2000 UI	200 U	200 U	200 U
3- and 4-Methylphenol Coelution	30	200 UI	90	20 U	20 U	20 U
3-Nitroaniline	200 U	2000 UI	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether	40 U	400 UI	400 UI	40 U	40 U	40 U
4-Chloro-3-methylphenol	40 U	400 UI	40 U	40 U	40 U	40 U
4-Chloroaniline	60 U	600 UI	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether	20 U	200 UI	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR007	DR008	DR009	DR010	DR011	DR012
	Sample ID:	SD-DR007-0000	SD-DR008-0000	SD-DR009-0000	SD-DR010-0000	SD-DR011-0000	SD-DR012-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline		100 U	1000 UI	100 U	100 U	100 U	100 U
4-Nitrophenol		100 U	1000 UI	100 U	100 U	100 U	100 U
Benzoic Acid		200 U	2000 UI	200 U	200 U	200 U	200 U
Benzyl Alcohol		50 U	500 UI	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane		40 U	400 UI	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether		40 U	400 UI	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether		40 U	400 UI	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate		3300	11000	11000	760	1200	1000
Butyl Benzyl Phthalate		390	940	590	50	90	80
Carbazole		150	240	210	50	60	60
Di-n-butyl Phthalate		70	200 UI	290	20 U	30	30
Di-n-octyl Phthalate		20 U	200 UI	200 UI	20 U	20 U	20 U
Dibenzofuran		40	200 UI	20 U	20 U	30	20 U
Diethyl Phthalate		20 U	200 UI	20 U	20 U	20 U	20 U
Dimethyl Phthalate		90	200 UI	20 U	20 U	20	20
Hexachlorobenzene		20 U	200 UI	200 UI	20 U	20 U	20 U
Hexachlorobutadiene		20 U	533 U	20 U	20 U	2.4 U	20 U
Hexachlorocyclopentadiene		100 U	1000 UIJ	100 J	100 U	100 UJ	100 U
Hexachloroethane		20 U	1060 U	20 U	20 U	4.8 U	20 U
Isophorone		20 U	200 UI	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine		40 U	400 UI	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine		40 U	400 UI	40 U	40 U	40 U	40 U
Nitrobenzene		20 U	200 UI	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)		100 U	1000 UI	1000 UI	100 UJ	100 U	100 U
Phenol		30	200 UI	30	190	50	30
Benz(a)anthracene		720	1100	970	250	370	480
Benzo(a)pyrene		760	1100	980	250	370	490

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR007	DR008	DR009	DR010	DR011	DR012
	Sample ID:	SD-DR007-0000	SD-DR008-0000	SD-DR009-0000	SD-DR010-0000	SD-DR011-0000	SD-DR012-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene		910	1300	1100	340	480	610
Benzo(g,h,i)perylene		410	1000	900	160	240	270
Benzo(k)fluoranthene		810	1100	900	300	300	370
Benzofluoranthene (Total)		1720 T	2400 T	2000 T	640 T	780 T	980 T
Chrysene		900	1700	1400	440	540	700
Dibenz(a,h)anthracene		110	230	220	40	50	50
Fluoranthene		1400	3300	2900	970	1100	900
Indeno(1,2,3-cd)pyrene		500	1000	880	180	280	350
Pyrene		1600	2700	2200	880	770	830
Total HPAH		8120 T	14530 T	12450 T	3810 T	4500 T	5050 T
Acenaphthene		60	200 UI	20 U	20 U	30	20
Acenaphthylene		20 U	200 UI	20 U	20	20 U	20
Anthracene		180	220	200 UI	90	120	130
Fluorene		80	200 UI	20 U	30	50	40
Naphthalene		30	533 U	50	20 U	30	20 U
Phenanthrene		890	1400	1400	420 J	340	310
Total LPAH		1240 T	1620 T	1450 T	560 T	570 T	520 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		575 U			1430 U	193 U	866 U
1,2-Dichlorobenzene		575 U			1430 U	68.3 JQ	866 U
1,4-Dichlorobenzene		862			1430 U	96.4 U	866 U
2-Methylnaphthalene		862			1430 U	1200	866
bis(2-Ethylhexyl)phthalate		94800			54300	48200	43300
Butylbenzylphthalate		11200			3570	3610	3460
Di-n-butylphthalate		2010			1430 U	1200	1300
Di-n-octylphthalate		575 U			1430 U	803 U	866 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR007	DR008	DR009	DR010	DR011	DR012
	Sample ID:	SD-DR007-0000	SD-DR008-0000	SD-DR009-0000	SD-DR010-0000	SD-DR011-0000	SD-DR012-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran		1150			1430 U	1200	866 U
Diethylphthalate		575 U			1430 U	803 U	866 U
Dimethylphthalate		2590			1430 U	803	866
Hexachlorobenzene		575 U			1430 U	803 U	866 U
Hexachlorobutadiene		575 U			1430 U	96.4 U	866 U
N-Nitrosodiphenylamine		1150 U			2860 U	1610 U	1730 U
Benzo(a)anthracene		20700			17900	14900	20800
Benzo(a)pyrene		21800			17900	14900	21200
Benzo(g,h,i)perylene		11800			11400	9640	11700
Benzofluoranthene (Total)		49400 T			45700 T	31300 T	42400 T
Chrysene		25900			31400	21700	30300
Dibenz(a,h)anthracene		3160			2860	2010	2160
Fluoranthene		40200			69300	44200	39000
Indeno(1,2,3-cd)pyrene		14400			12900	11200	15200
Pyrene		46000			62900	30900	35900
Total HPAH (TOCN)		233000 T			272000 T	181000 T	219000 T
Acenaphthene		1720			1430 U	1200	866
Acenaphthylene		575 U			1430	803 U	866
Anthracene		5170			6430	4820	5630
Fluorene		2300			2140	2010	1730
Naphthalene		862			1430 U	1200	866 U
Phenanthrene		25600			30000 J	13700	13400
Total LPAH (TOCN)		35600 T			40000 T	22900 T	22500 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR013	DR014	DR015	DR016	DR017	DR018
	Sample ID:	SD-DR013-0000	SD-DR014-0000	SD-DR015-0000	SD-DR016-0000	SD-DR017-0000	SD-DR018-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 UJ	200 UJ	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 UJ	200 UJ	200 U	200 U	200 U	200 U
2-Methylnaphthalene		20 U	30	30	20	90	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20	20	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR013	DR014	DR015	DR016	DR017	DR018
Sample ID:	SD-DR013-0000	SD-DR014-0000	SD-DR015-0000	SD-DR016-0000	SD-DR017-0000	SD-DR018-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	690	570	610	700	820	410
Butyl Benzyl Phthalate	50	50	20 U	20 U	70	40
Carbazole	40	60	80	70	620	40
Di-n-butyl Phthalate	20 U	20	80	280	490	90
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	20	40	60	40	140	20
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	20 U	20 U	20 U	20	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 U	100 U	100 UJ	100 UJ	100 UJ	100 UJ
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 U	100 U	100 U	100 U
Phenol	80	30	170	380	190	30
Benz(a)anthracene	350	400	690	810	1400	340
Benzo(a)pyrene	360	470	570	570	1000	340

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR013	DR014	DR015	DR016	DR017	DR018
Sample ID:	SD-DR013-0000	SD-DR014-0000	SD-DR015-0000	SD-DR016-0000	SD-DR017-0000	SD-DR018-0000
Constituent Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene	440	530	750	720	1500	440
Benzo(g,h,i)perylene	200	270	310	300	520	220
Benzo(k)fluoranthene	330	420	590	580	840	320
Benzofluoranthene (Total)	770 T	950 T	1340 T	1300 T	2340 T	760 T
Chrysene	500	610	1000	1200	1800	500
Dibenz(a,h)anthracene	50	80	90	80	190	50
Fluoranthene	780	1200	2500	2200	3300	730
Indeno(1,2,3-cd)pyrene	250	350	360	340	610	240
Pyrene	650	910	1400	1300	2200	610
Total HPAH	3910 T	5240 T	8260 T	8100 T	13360 T	3790 T
Acenaphthene	30	50	70	40	40	20 U
Acenaphthylene	20 U	20 U	40	30	40	20 U
Anthracene	100	130	220	320	1800	110
Fluorene	40	60	90	70	310	40
Naphthalene	30	40	20	30	90	20 U
Phenanthrene	290	480	800	440	1200	210
Total LPAH	490 T	760 T	1240 T	930 T	3480 T	360 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)						
1,2,4-Trichlorobenzene	926 U	816 U	763 U	717 U	730 U	905 U
1,2-Dichlorobenzene	926 U	816 U	763 U	717 U	730 U	905 U
1,4-Dichlorobenzene	926 U	816 U	763 U	717 U	730 U	905 U
2-Methylnaphthalene	926 U	1220	1150	717	3280	905 U
bis(2-Ethylhexyl)phthalate	31900	23300	23300	25100	29900	18600
Butylbenzylphthalate	2310	2040	763 U	717 U	2550	1810
Di-n-butylphthalate	926 U	816	3050	10000	17900	4070
Di-n-octylphthalate	926 U	816 U	763 U	717 U	730 U	905 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR013	DR014	DR015	DR016	DR017	DR018
Sample ID:	SD-DR013-0000	SD-DR014-0000	SD-DR015-0000	SD-DR016-0000	SD-DR017-0000	SD-DR018-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran	926	1630	2290	1430	5110	905
Diethylphthalate	926 U	816 U	763 U	717 U	730 U	905 U
Dimethylphthalate	926 U	816 U	763 U	717 U	730	905 U
Hexachlorobenzene	926 U	816 U	763 U	717 U	730 U	905 U
Hexachlorobutadiene	926 U	816 U	763 U	717 U	730 U	905 U
N-Nitrosodiphenylamine	1850 U	1630 U	1530 U	1430 U	1460 U	1810 U
Benzo(a)anthracene	16200	16300	26300	29000	51100	15400
Benzo(a)pyrene	16700	19200	21800	20400	36500	15400
Benzo(g,h,i)perylene	9260	11000	11800	10800	19000	9950
Benzofluoranthene (Total)	35600 T	38800 T	51100 T	46600 T	85400 T	34400 T
Chrysene	23100	24900	38200	43000	65700	22600
Dibenz(a,h)anthracene	2310	3270	3440	2870	6930	2260
Fluoranthene	36100	49000	95400	78900	120000	33000
Indeno(1,2,3-cd)pyrene	11600	14300	13700	12200	22300	10900
Pyrene	30100	37100	53400	46600	80300	27600
Total HPAH (TOCN)	181000 T	214000 T	315000 T	290000 T	488000 T	171000 T
Acenaphthene	1390	2040	2670	1430	1460	905 U
Acenaphthylene	926 U	816 U	1530	1080	1460	905 U
Anthracene	4630	5310	8400	11500	65700	4980
Fluorene	1850	2450	3440	2510	11300	1810
Naphthalene	1390	1630	763	1080	3280	905 U
Phenanthrene	13400	19600	30500	15800	43800	9500
Total LPAH (TOCN)	22700 T	31000 T	47300 T	33300 T	127000 T	16300 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR019 SD-DR019-0000 0 to 10 cm	DR020 SD-DR020-0000 0 to 10 cm	DR021 SD-DR021-0000 0 to 10 cm	DR022 SD-DR022-0000-CC 0 to 10 cm	DR023 SD-DR023-0000 0 to 10 cm	DR024 SD-DR024-0000 0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	1.4 JQ	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	0.74 JQ	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene		690	70	30	30	20 U	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		30	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR019	DR020	DR021	DR022	DR023	DR024
Sample ID:	SD-DR019-0000	SD-DR020-0000	SD-DR021-0000	SD-DR022-0000-CC	SD-DR023-0000	SD-DR024-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	1700	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	710	550	710	660 J	630	450
Butyl Benzyl Phthalate	60	20 U	60	60	20 U	40
Carbazole	440	140	60	80	40	30
Di-n-butyl Phthalate	100	60	90	20 U	20	30
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	500	90	50	60	30	20
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20	20 U	20 U	20 U	20	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 U	100 U	100 U	100 U
Phenol	250	60	140	90	80	190
Benz(a)anthracene	1700	1100	650	780	410	350
Benzo(a)pyrene	1400	1300	560	450	370	280

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR019	DR020	DR021	DR022	DR023	DR024
	Sample ID:	SD-DR019-0000	SD-DR020-0000	SD-DR021-0000	SD-DR022-0000-CC	SD-DR023-0000	SD-DR024-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene		1600	1900	720	620	460	360
Benzo(g,h,i)perylene		800	690	330	210	240	180
Benzo(k)fluoranthene		1100	1000	510	450	370	280
Benzofluoranthene (Total)		2700 T	2900 T	1230 T	1070 T	830 T	640 T
Chrysene		2000	1800	970	880	510	460
Dibenz(a,h)anthracene		270	240	90	60	70	50
Fluoranthene		4000	2700	1400	2100	1000	870
Indeno(1,2,3-cd)pyrene		920	770	370	250	260	190
Pyrene		3200	2300	1200	1900	820	640
Total HPAH		16990 T	13800 T	6800 T	7700 T	4510 T	3660 T
Acenaphthene		580	90	50	80	20	20 U
Acenaphthylene		40	50	20	20 U	20 U	20 U
Anthracene		860	370	220	250	130	110
Fluorene		610	110	80	110	40	30
Naphthalene		510	90	40	40	20 U	20 U
Phenanthrene		3000	870	440	580	260	220
Total LPAH		5600 T	1580 T	850 T	1060 T	450 T	360 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		766 U	735 U	645 U	1260 U	797 U	797 U
1,2-Dichlorobenzene		766 U	735 U	45.2 JQ	1260 U	797 U	797 U
1,4-Dichlorobenzene		766 U	735 U	23.9 JQ	1260 U	797 U	797 U
2-Methylnaphthalene		26400	2570	968	1890	797 U	797 U
bis(2-Ethylhexyl)phthalate		27200	20200	22900	41500 J	25100	17900
Butylbenzylphthalate		2300	735 U	1940	3770	797 U	1590
Di-n-butylphthalate		3830	2210	2900	1260 U	797	1200
Di-n-octylphthalate		766 U	735 U	645 U	1260 U	797 U	797 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR019	DR020	DR021	DR022	DR023	DR024
	Sample ID:	SD-DR019-0000	SD-DR020-0000	SD-DR021-0000	SD-DR022-0000-CC	SD-DR023-0000	SD-DR024-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran		19200	3310	1610	3770	1200	797
Diethylphthalate		766 U	735 U	645 U	1260 U	797 U	797 U
Dimethylphthalate		766	735 U	645 U	1260 U	797	797 U
Hexachlorobenzene		766 U	735 U	645 U	1260 U	797 U	797 U
Hexachlorobutadiene		766 U	735 U	645 U	1260 U	797 U	797 U
N-Nitrosodiphenylamine		1530 U	1470 U	1290 U	2520 U	1590 U	1590 U
Benzo(a)anthracene		65100	40400	21000	49100	16300	13900
Benzo(a)pyrene		53600	47800	18100	28300	14700	11200
Benzo(g,h,i)perylene		30700	25400	10600	13200	9560	7170
Benzofluoranthene (Total)		103000 T	107000 T	39700 T	67300 T	33100 T	25500 T
Chrysene		76600	66200	31300	55300	20300	18300
Dibenz(a,h)anthracene		10300	8820	2900	3770	2790	1990
Fluoranthene		153000	99300	45200	132000	39800	34700
Indeno(1,2,3-cd)pyrene		35200	28300	11900	15700	10400	7570
Pyrene		123000	84600	38700	119000	32700	25500
Total HPAH (TOCN)		651000 T	507000 T	219000 T	484000 T	180000 T	146000 T
Acenaphthene		22200	3310	1610	5030	797	797 U
Acenaphthylene		1530	1840	645	1260 U	797 U	797 U
Anthracene		33000	13600	7100	15700	5180	4380
Fluorene		23400	4040	2580	6920	1590	1200
Naphthalene		19500	3310	1290	2520	797 U	797 U
Phenanthrene		115000	32000	14200	36500	10400	8760
Total LPAH (TOCN)		215000 T	58100 T	27400 T	66700 T	17900 T	14300 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR025	DR026	DR027	DR028	DR030	DR031
	Sample ID:	SD-DR025-0000	SD-DR026-0000	SD-DR027-0000	SD-DR028-0000	SD-DR030-0000	SD-DR031-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		4.6 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		2.3 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		2.3 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		2.3 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 U	200 U	200 U	200 UJ	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 U	200 U	200 UJ	200 U
2-Methylnaphthalene		20	20 U	20 U	20	30	20
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		100	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR025	DR026	DR027	DR028	DR030	DR031
	Sample ID:	SD-DR025-0000	SD-DR026-0000	SD-DR027-0000	SD-DR028-0000	SD-DR030-0000	SD-DR031-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol		100 U	100 U	100 U	100 U	100 UJ	100 U
Benzoic Acid		200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol		50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate		490	460	530	390	1500	590
Butyl Benzyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Carbazole		30	30	40	40	40	50
Di-n-butyl Phthalate		30	30	30	40	40	20 U
Di-n-octyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran		40	20	30	40	40	20
Diethyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene		2.3 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene		100 UJ	100 UJ	100 UJ	100 UJ	100 U	100 U
Hexachloroethane		4.6 U	20 U	20 U	20 U	20 U	20 U
Isophorone		20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine		40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine		40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene		20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)		100 U	100 U	100 U	100 U	100 U	100 UJ
Phenol		90	120	270	30	30	50
Benz(a)anthracene		470	370	350	530	240	620
Benzo(a)pyrene		360	320	320	410	280	550

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR025	DR026	DR027	DR028	DR030	DR031
Sample ID:	SD-DR025-0000	SD-DR026-0000	SD-DR027-0000	SD-DR028-0000	SD-DR030-0000	SD-DR031-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene	480	370	360	430	340	580
Benzo(g,h,i)perylene	220	190	190	220	130	330
Benzo(k)fluoranthene	340	300	320	380	430	460
Benzofluoranthene (Total)	820 T	670 T	680 T	810 T	770 T	1040 T
Chrysene	610	480	540	680	410	790
Dibenz(a,h)anthracene	50	50	50	60	20 U	80
Fluoranthene	1200	810	850	1100	680	1200
Indeno(1,2,3-cd)pyrene	230	220	220	230	150	340
Pyrene	910	750	640	1100	1200	1200
Total HPAH	4870 T	3860 T	3840 T	5140 T	3860 T	6150 T
Acenaphthene	40	30	40	70	60	60
Acenaphthylene	20 U	20 U	20 U	20 U	20 U	20 U
Anthracene	200	110	140	180	90	350
Fluorene	50	40	60	70	50	80
Naphthalene	50	20 U	20 U	20 U	20	30
Phenanthrene	370	290	350	640	390	630
Total LPAH	710 T	470 T	590 T	960 T	610 T	1150 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)						
1,2,4-Trichlorobenzene	163 U	617 U	803 U	823 U	719 U	966 U
1,2-Dichlorobenzene	81.3 U	617 U	803 U	823 U	719 U	966 U
1,4-Dichlorobenzene	81.3 U	617 U	803 U	823 U	719 U	966 U
2-Methylnaphthalene	707	617 U	803 U	823	1080	966
bis(2-Ethylhexyl)phthalate	17300	14200	21300	16000	54000	28500
Butylbenzylphthalate	707 U	617 U	803 U	823 U	719 U	966 U
Di-n-butylphthalate	1060	926	1200	1650	1440	966 U
Di-n-octylphthalate	707 U	617 U	803 U	823 U	719 U	966 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR025	DR026	DR027	DR028	DR030	DR031
Sample ID:	SD-DR025-0000	SD-DR026-0000	SD-DR027-0000	SD-DR028-0000	SD-DR030-0000	SD-DR031-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran	1410	617	1200	1650	1440	966
Diethylphthalate	707 U	617 U	803 U	823 U	719 U	966 U
Dimethylphthalate	707 U	617 U	803 U	823 U	719 U	966 U
Hexachlorobenzene	707 U	617 U	803 U	823 U	719 U	966 U
Hexachlorobutadiene	81.3 U	617 U	803 U	823 U	719 U	966 U
N-Nitrosodiphenylamine	1410 U	1230 U	1610 U	1650 U	1440 U	1930 U
Benzo(a)anthracene	16600	11400	14100	21800	8630	30000
Benzo(a)pyrene	12700	9880	12900	16900	10100	26600
Benzo(g,h,i)perylene	7770	5860	7630	9050	4680	15900
Benzofluoranthene (Total)	29000 T	20700 T	27300 T	33300 T	27700 T	50200 T
Chrysene	21600	14800	21700	28000	14700	38200
Dibenz(a,h)anthracene	1770	1540	2010	2470	719 U	3860
Fluoranthene	42400	25000	34100	45300	24500	58000
Indeno(1,2,3-cd)pyrene	8130	6790	8840	9470	5400	16400
Pyrene	32200	23100	25700	45300	43200	58000
Total HPAH (TOCN)	172000 T	119000 T	154000 T	212000 T	139000 T	297000 T
Acenaphthene	1410	926	1610	2880	2160	2900
Acenaphthylene	707 U	617 U	803 U	823 U	719 U	966 U
Anthracene	7070	3400	5620	7410	3240	16900
Fluorene	1770	1230	2410	2880	1800	3860
Naphthalene	1770	617 U	803 U	823 U	719	1450
Phenanthrene	13100	8950	14100	26300	14000	30400
Total LPAH (TOCN)	25100 T	14500 T	23700 T	39500 T	21900 T	55600 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR032	DR033	DR034	DR035	DR036	DR037
	Sample ID:	SD-DR032-0000	SD-DR033-0000	SD-DR034-0000	SD-DR035-0000	SD-DR036-0000	SD-DR037-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 UJ
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene		20 U	130	20 U	20 U	20 U	310
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR032	DR033	DR034	DR035	DR036	DR037
Sample ID:	SD-DR032-0000	SD-DR033-0000	SD-DR034-0000	SD-DR035-0000	SD-DR036-0000	SD-DR037-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 UJ
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	350	610	480	720	280 UJ	400
Butyl Benzyl Phthalate	20 U	30	70	60	70	30
Carbazole	30	370	30	80	20 U	370
Di-n-butyl Phthalate	20 U	20	20 U	30	220	20
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	20 U	250	20 U	30	20 U	410
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	20 U	20 U	20	20 U	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 U	100 U	100 U	100 U	100 U	100 U
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 UJ	100 UJ	100 UJ	100 UJ	100 U	100 U
Phenol	80	250	30	40	20 U	20 U
Benz(a)anthracene	340	1900	390	490	90	850
Benzo(a)pyrene	310	1300	420	560	90	460

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR032	DR033	DR034	DR035	DR036	DR037
Sample ID:	SD-DR032-0000	SD-DR033-0000	SD-DR034-0000	SD-DR035-0000	SD-DR036-0000	SD-DR037-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene	360	1600	510	770	90	580
Benzo(g,h,i)perylene	170	620	220	410	70	220
Benzo(k)fluoranthene	300	1100	380	610	80	440
Benzofluoranthene (Total)	660 T	2700 T	890 T	1380 T	170 T	1020 T
Chrysene	450	2400	580	910	130	990
Dibenz(a,h)anthracene	50	190	60	100	20	60
Fluoranthene	810	6400	600	2200	180	3600
Indeno(1,2,3-cd)pyrene	180	770	270	410	70	270
Pyrene	690	3300	780	1800	280	2200
Total HPAH	3660 T	19580 T	4210 T	8260 T	1100 T	9670 T
Acenaphthene	20	310	30	30	20 U	550
Acenaphthylene	20 U	60	20 U	30	20 U	30
Anthracene	120	1500	120	110	20	1200
Fluorene	30	570	40	50	20 U	880
Naphthalene	20 U	60	20	20	20 U	130
Phenanthrene	200	2600	270	1100	130	3500
Total LPAH	370 T	5100 T	480 T	1340 T	150 T	6290 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)						
1,2,4-Trichlorobenzene	1120 U	1160 U	1090 U	873 U	593 U	990 U
1,2-Dichlorobenzene	1120 U	1160 U	1090 U	873 U	593 U	990 U
1,4-Dichlorobenzene	1120 U	1160 U	1090 U	873 U	593 U	990 U
2-Methylnaphthalene	1120 U	7560	1090 U	873 U	593 U	15300
bis(2-Ethylhexyl)phthalate	19600	35500	26100	31400	8310 UJ	19800
Butylbenzylphthalate	1120 U	1740	3800	2620	2080	1490
Di-n-butylphthalate	1120 U	1160	1090 U	1310	6530	990
Di-n-octylphthalate	1120 U	1160 U	1090 U	873 U	593 U	990 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR032	DR033	DR034	DR035	DR036	DR037
	Sample ID:	SD-DR032-0000	SD-DR033-0000	SD-DR034-0000	SD-DR035-0000	SD-DR036-0000	SD-DR037-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran		1120 U	14500	1090 U	1310	593 U	20300
Diethylphthalate		1120 U	1160 U	1090 U	873 U	593 U	990 U
Dimethylphthalate		1120 U	1160 U	1090 U	873	593 U	990 U
Hexachlorobenzene		1120 U	1160 U	1090 U	873 U	593 U	990 U
Hexachlorobutadiene		1120 U	1160 U	1090 U	873 U	593 U	990 U
N-Nitrosodiphenylamine		2230 U	2330 U	2170 U	1750 U	1190 U	1980 U
Benzo(a)anthracene		19000	110000	21200	21400	2670	42100
Benzo(a)pyrene		17300	75600	22800	24500	2670	22800
Benzo(g,h,i)perylene		9500	36000	12000	17900	2080	10900
Benzofluoranthene (Total)		36900 T	157000 T	48400 T	60300 T	5040 T	50500 T
Chrysene		25100	140000	31500	39700	3860	49000
Dibenz(a,h)anthracene		2790	11000	3260	4370	593	2970
Fluoranthene		45300	372000	32600	96100	5340	178000
Indeno(1,2,3-cd)pyrene		10100	44800	14700	17900	2080	13400
Pyrene		38500	192000	42400	78600	8310	109000
Total HPAH (TOCN)		204000 T	1140000 T	229000 T	361000 T	32600 T	479000 T
Acenaphthene		1120	18000	1630	1310	593 U	27200
Acenaphthylene		1120 U	3490	1090 U	1310	593 U	1490
Anthracene		6700	87200	6520	4800	593	59400
Fluorene		1680	33100	2170	2180	593 U	43600
Naphthalene		1120 U	3490	1090	873	593 U	6440
Phenanthrene		11200	151000	14700	48000	3860	173000
Total LPAH (TOCN)		20700 T	297000 T	26100 T	58500 T	4450 T	311000 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR038	DR039	DR040	DR041	DR042	DR043
Sample ID:	SD-DR038-0000	SD-DR039-0000	SD-DR040-0000	SD-DR041-0000	SD-DR042-0000	SD-DR043-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)						
1,2,4-Trichlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol	200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol	200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol	60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol	20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol	200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene	200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene	200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene	20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol	20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol	200 U	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene	100	20 U	40	20 U	20 U	20 U
2-Methylphenol	20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine	200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution	20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline	200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether	40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol	40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline	60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether	20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR038	DR039	DR040	DR041	DR042	DR043
Sample ID:	SD-DR038-0000	SD-DR039-0000	SD-DR040-0000	SD-DR041-0000	SD-DR042-0000	SD-DR043-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	570	350 UJ	300 UJ	410	310 UJ	190 UJ
Butyl Benzyl Phthalate	70	50	20 U	50	20 U	100
Carbazole	480	30	90	40	30	20 U
Di-n-butyl Phthalate	30	20 U	20 U	20 U	20 U	20 U
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	270	20 U	110	20	20 U	20 U
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 UJ	100 U	100 U	100 UJ	100 U	100 U
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 U	100 U	100 U	100 U
Phenol	60	50	30	90	20 U	20 U
Benz(a)anthracene	2000	330	1300	370	200	110
Benzo(a)pyrene	1100	280	800	360	250	140

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR038	DR039	DR040	DR041	DR042	DR043
Sample ID:	SD-DR038-0000	SD-DR039-0000	SD-DR040-0000	SD-DR041-0000	SD-DR042-0000	SD-DR043-0000
Constituent Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene	1400	380	1300	460	340	190
Benzo(g,h,i)perylene	480	140	370	210	180	90
Benzo(k)fluoranthene	980	290	780	340	300	150
Benzofluoranthene (Total)	2380 T	670 T	2080 T	800 T	640 T	340 T
Chrysene	2200	540	2100	550	360	220
Dibenz(a,h)anthracene	130	50	160	60	50	20 U
Fluoranthene	7800	680	2900	840	570	310
Indeno(1,2,3-cd)pyrene	560	180	480	230	200	100
Pyrene	4600	540	2100	630	580	350
Total HPAH	21250 T	3410 T	12290 T	4050 T	3030 T	1660 T
Acenaphthene	330	20 U	160	20 U	20 U	20 U
Acenaphthylene	40	20 U	30	20 U	20 U	20 U
Anthracene	1600	90	410	130	50	30
Fluorene	580	30	200	40	20 U	20 U
Naphthalene	70	20 U	30	20 U	20 U	20 U
Phenanthrene	3600	240	910	270	220	130
Total LPAH	6220 T	360 T	1740 T	440 T	270 T	160 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)						
1,2,4-Trichlorobenzene	763 U	823 U		823 U		
1,2-Dichlorobenzene	763 U	823 U		823 U		
1,4-Dichlorobenzene	763 U	823 U		823 U		
2-Methylnaphthalene	3820	823 U		823 U		
bis(2-Ethylhexyl)phthalate	21800	14400 UJ		16900		
Butylbenzylphthalate	2670	2060		2060		
Di-n-butylphthalate	1150	823 U		823 U		
Di-n-octylphthalate	763 U	823 U		823 U		

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR038	DR039	DR040	DR041	DR042	DR043
Sample ID:	SD-DR038-0000	SD-DR039-0000	SD-DR040-0000	SD-DR041-0000	SD-DR042-0000	SD-DR043-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran	10300	823 U		823		
Diethylphthalate	763 U	823 U		823 U		
Dimethylphthalate	763 U	823 U		823 U		
Hexachlorobenzene	763 U	823 U		823 U		
Hexachlorobutadiene	763 U	823 U		823 U		
N-Nitrosodiphenylamine	1530 U	1650 U		1650 U		
Benzo(a)anthracene	76300	13600		15200		
Benzo(a)pyrene	42000	11500		14800		
Benzo(g,h,i)perylene	18300	5760		8640		
Benzofluoranthene (Total)	90800 T	27600 T		32900 T		
Chrysene	84000	22200		22600		
Dibenz(a,h)anthracene	4960	2060		2470		
Fluoranthene	298000	28000		34600		
Indeno(1,2,3-cd)pyrene	21400	7410		9470		
Pyrene	176000	22200		25900		
Total HPAH (TOCN)	811000 T	140000 T		167000 T		
Acenaphthene	12600	823 U		823 U		
Acenaphthylene	1530	823 U		823 U		
Anthracene	61100	3700		5350		
Fluorene	22100	1230		1650		
Naphthalene	2670	823 U		823 U		
Phenanthrene	137000	9880		11100		
Total LPAH (TOCN)	237000 T	14800 T		18100 T		

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR044	DR045	DR046	DR047	DR048	DR049
	Sample ID:	SD-DR044-0000	SD-DR045-0000	SD-DR046-0000	SD-DR047-0000	SD-DR048-0000	SD-DR049-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR044	DR045	DR046	DR047	DR048	DR049
Sample ID:	SD-DR044-0000	SD-DR045-0000	SD-DR046-0000	SD-DR047-0000	SD-DR048-0000	SD-DR049-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	310 UJ	170 UJ	200 UJ	230 UJ	310 UJ	420
Butyl Benzyl Phthalate	20 U	20 U	20	20 U	40	40
Carbazole	300	20 U	20 U	120	30	60
Di-n-butyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	20	20 U	20 U	20 U	20 U	60
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	20 U	20 U	50	20 U	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 UJ	100 U	100 UJ	100 U	100 UJ	100 UJ
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 UJ	100 U	100 UJ	100 U	100 U
Phenol	20 U	310	20 U	740	50	150
Benz(a)anthracene	2000	70	160	1300	840	490
Benzo(a)pyrene	890	90	190	730	380	380

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR044	DR045	DR046	DR047	DR048	DR049
	Sample ID:	SD-DR044-0000	SD-DR045-0000	SD-DR046-0000	SD-DR047-0000	SD-DR048-0000	SD-DR049-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene		2000	110	220	850	510	520
Benzo(g,h,i)perylene		380	70	120	270	180	200
Benzo(k)fluoranthene		1300	110	240	740	400	390
Benzofluoranthene (Total)		3300 T	220 T	460 T	1590 T	910 T	910 T
Chrysene		4600	130	310	1500	1100	710
Dibenz(a,h)anthracene		150	20	50	90	70	70
Fluoranthene		23000	170	480	2500	250	1800
Indeno(1,2,3-cd)pyrene		520	80	140	330	210	230
Pyrene		16000	170	520	3500	1200	970
Total HPAH		50840 T	1020 T	2430 T	11810 T	5140 T	5760 T
Acenaphthene		50	20 U	20 U	20	20 U	90
Acenaphthylene		100	20 U	20 U	30	20 U	20 U
Anthracene		420	20 U	40	510	260	230
Fluorene		90	20 U	20 U	40	50	80
Naphthalene		20 U	20 U	20 U	20 U	20 U	20 U
Phenanthrene		3000	60	160	230	290	570
Total LPAH		3660 T	60 T	200 T	830 T	600 T	970 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		962 U	685 U	885 U	1430 U	985 U	758 U
1,2-Dichlorobenzene		962 U	685 U	885 U	1430 U	985 U	758 U
1,4-Dichlorobenzene		962 U	685 U	885 U	1430 U	985 U	758 U
2-Methylnaphthalene		962 U	685 U	885 U	1430 U	985 U	758 U
bis(2-Ethylhexyl)phthalate		14900 UJ	5820 UJ	8850 UJ	16400 UJ	15300 UJ	15900
Butylbenzylphthalate		962 U	685 U	885	1430 U	1970	1520
Di-n-butylphthalate		962 U	685 U	885 U	1430 U	985 U	758 U
Di-n-octylphthalate		962 U	685 U	885 U	1430 U	985 U	758 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR044	DR045	DR046	DR047	DR048	DR049
	Sample ID:	SD-DR044-0000	SD-DR045-0000	SD-DR046-0000	SD-DR047-0000	SD-DR048-0000	SD-DR049-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran		962	685 U	885 U	1430 U	985 U	2270
Diethylphthalate		962 U	685 U	885 U	1430 U	985 U	758 U
Dimethylphthalate		962 U	685 U	885 U	3570	985 U	758 U
Hexachlorobenzene		962 U	685 U	885 U	1430 U	985 U	758 U
Hexachlorobutadiene		962 U	685 U	885 U	1430 U	985 U	758 U
N-Nitrosodiphenylamine		1920 U	1370 U	1770 U	2860 U	1970 U	1520 U
Benzo(a)anthracene		96200	2400	7080	92900	41400	18600
Benzo(a)pyrene		42800	3080	8410	52100	18700	14400
Benzo(g,h,i)perylene		18300	2400	5310	19300	8870	7580
Benzofluoranthene (Total)		159000 T	7530 T	20400 T	114000 T	44800 T	34500 T
Chrysene		221000	4450	13700	107000	54200	26900
Dibenz(a,h)anthracene		7210	685	2210	6430	3450	2650
Fluoranthene		1110000	5820	21200	179000	12300	68200
Indeno(1,2,3-cd)pyrene		25000	2740	6190	23600	10300	8710
Pyrene		769000	5820	23000	250000	59100	36700
Total HPAH (TOCN)		2440000 T	34900 T	108000 T	844000 T	253000 T	218000 T
Acenaphthene		2400	685 U	885 U	1430	985 U	3410
Acenaphthylene		4810	685 U	885 U	2140	985 U	758 U
Anthracene		20200	685 U	1770	36400	12800	8710
Fluorene		4330	685 U	885 U	2860	2460	3030
Naphthalene		962 U	685 U	885 U	1430 U	985 U	758 U
Phenanthrene		144000	2050	7080	16400	14300	21600
Total LPAH (TOCN)		176000 T	2050 T	8850 T	59300 T	29600 T	36700 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR050	DR051	DR052	DR053	DR054	DR055
	Sample ID:	SD-DR050-0000	SD-DR051-0000	SD-DR052-0000	SD-DR053-0000-CC	SD-DR054-0000	SD-DR055-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene		120	20 U	20 U	40	20 U	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	910	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR050	DR051	DR052	DR053	DR054	DR055
	Sample ID:	SD-DR050-0000	SD-DR051-0000	SD-DR052-0000	SD-DR053-0000-CC	SD-DR054-0000	SD-DR055-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid		200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol		50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate		510	440	370 UJ	3800 J	450	790
Butyl Benzyl Phthalate		50	40	40	50	40	50
Carbazole		260	40	30	140 J	30	40
Di-n-butyl Phthalate		20 U	20 U	20 U	30	20 U	20
Di-n-octyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran		260	100	20 U	480 J	20	20 U
Diethyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate		20	20 U	20 U	20	20 U	20 U
Hexachlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene		100 UJ	100 UJ	100 UJ	100 UJ	100 U	100 UJ
Hexachloroethane		20 U	20 U	20 U	20 U	20 U	20 U
Isophorone		20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine		40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine		40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene		20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)		100 U	100 U	100 U	100 U	100 U	100 U
Phenol		30	40	90	570	70	20 U
Benz(a)anthracene		1600	360	340	1800 J	330	410
Benzo(a)pyrene		820	290	270	1100 J	290	370

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR050	DR051	DR052	DR053	DR054	DR055
	Sample ID:	SD-DR050-0000	SD-DR051-0000	SD-DR052-0000	SD-DR053-0000-CC	SD-DR054-0000	SD-DR055-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene		1100	420	370	1600 J	360	510
Benzo(g,h,i)perylene		380	190	170	530 J	190	240
Benzo(k)fluoranthene		750	290	280	910 J	300	370
Benzofluoranthene (Total)		1850 T	710 T	650 T	2510 T	660 T	880 T
Chrysene		2100	500	470	2100 J	490	590
Dibenz(a,h)anthracene		120	50	60	150 J	50	70
Fluoranthene		6700	1200	990	5500	890	750
Indeno(1,2,3-cd)pyrene		420	210	190	620 J	210	240
Pyrene		4200	730	630	3400	690	730
Total HPAH		18190 T	4240 T	3770 T	17710 T	3800 T	4280 T
Acenaphthene		300	280	20	690 J	20	20 U
Acenaphthylene		30	20 U	20 U	50	20 U	20 U
Anthracene		910	150	110	600	110	110
Fluorene		330	90	40	650 J	40	30
Naphthalene		100	20 U	20 U	60	20 U	20 U
Phenanthrene		1400	580	210	2800 J	240	230
Total LPAH		3070 T	1100 T	380 T	4850 T	410 T	370 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene			722 U	781 U	714 U	847 U	
1,2-Dichlorobenzene			722 U	781 U	714 U	847 U	
1,4-Dichlorobenzene			722 U	781 U	714 U	847 U	
2-Methylnaphthalene			722 U	781 U	1430	847 U	
bis(2-Ethylhexyl)phthalate			15900	14500 UJ	136000 J	19100	
Butylbenzylphthalate			1440	1560	1790	1690	
Di-n-butylphthalate			722 U	781 U	1070	847 U	
Di-n-octylphthalate			722 U	781 U	714 U	847 U	

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR050	DR051	DR052	DR053	DR054	DR055
Sample ID:	SD-DR050-0000	SD-DR051-0000	SD-DR052-0000	SD-DR053-0000-CC	SD-DR054-0000	SD-DR055-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran		3610	781 U	17100 J	847	
Diethylphthalate		722 U	781 U	714 U	847 U	
Dimethylphthalate		722 U	781 U	714	847 U	
Hexachlorobenzene		722 U	781 U	714 U	847 U	
Hexachlorobutadiene		722 U	781 U	714 U	847 U	
N-Nitrosodiphenylamine		1440 U	1560 U	1430 U	1690 U	
Benzo(a)anthracene		13000	13300	64300 J	14000	
Benzo(a)pyrene		10500	10500	39300 J	12300	
Benzo(g,h,i)perylene		6860	6640	18900 J	8050	
Benzofluoranthene (Total)		25600 T	25400 T	89600 T	28000 T	
Chrysene		18100	18400	75000 J	20800	
Dibenz(a,h)anthracene		1810	2340	5360 J	2120	
Fluoranthene		43300	38700	196000	37700	
Indeno(1,2,3-cd)pyrene		7580	7420	22100 J	8900	
Pyrene		26400	24600	121000	29200	
Total HPAH (TOCN)		153000 T	147000 T	633000 T	161000 T	
Acenaphthene		10100	781	24600 J	847	
Acenaphthylene		722 U	781 U	1790	847 U	
Anthracene		5420	4300	21400	4660	
Fluorene		3250	1560	23200 J	1690	
Naphthalene		722 U	781 U	2140	847 U	
Phenanthrene		20900	8200	100000 J	10200	
Total LPAH (TOCN)		39700 T	14800 T	173000 T	17400 T	

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR056	DR057	DR058	DR059	DR060	DR061
Sample ID:	SD-DR056-0000	SD-DR057-0000	SD-DR058-0000	SD-DR059-0000	SD-DR060-0000	SD-DR061-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)						
1,2,4-Trichlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol	200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol	200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol	60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol	20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol	200 U	200 U	200 U	200 UJ	200 UJ	200 UJ
2,4-Dinitrotoluene	200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene	200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene	20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol	20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol	200 U	200 U	200 U	200 UJ	200 U	200 UJ
2-Methylnaphthalene	20 U	20 U	20 U	30	20 U	30
2-Methylphenol	20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine	200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution	20 U	20 U	20 U	30	20 U	20 U
3-Nitroaniline	200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether	40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol	40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline	60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether	20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR056	DR057	DR058	DR059	DR060	DR061
	Sample ID:	SD-DR056-0000	SD-DR057-0000	SD-DR058-0000	SD-DR059-0000	SD-DR060-0000	SD-DR061-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid		200 U	200 U	200 U	200 U	200 UJ	200 U
Benzyl Alcohol		50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate		410	570	470	2500	400 JU	880
Butyl Benzyl Phthalate		30	50	30	150	40	70
Carbazole		20 U	50	20 U	80	40	80
Di-n-butyl Phthalate		20 U	20	20 U	50	20 U	40
Di-n-octyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran		20 U	20	20 U	20 U	20 U	40
Diethyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene		100 UJ	100 UJ	100 UJ	100 U	100 U	100 U
Hexachloroethane		20 U	20 U	20 U	20 U	20 U	20 U
Isophorone		20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine		40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine		40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene		20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)		100 U	100 U	100 U	100 U	100 U	100 U
Phenol		30	40	20 U	30	20 U	80
Benz(a)anthracene		190	450	140	490	240	480
Benzo(a)pyrene		190	490	160	480	260	490

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR056	DR057	DR058	DR059	DR060	DR061
Sample ID:	SD-DR056-0000	SD-DR057-0000	SD-DR058-0000	SD-DR059-0000	SD-DR060-0000	SD-DR061-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene	230	580	190	470	300	700
Benzo(g,h,i)perylene	150	340	120	290	180	250
Benzo(k)fluoranthene	210	450	150	660	240	410
Benzofluoranthene (Total)	440 T	1030 T	340 T	1130 T	540 T	1110 T
Chrysene	280	680	220	660	380	710
Dibenz(a,h)anthracene	40	90	30	70	50	70
Fluoranthene	360	780	220	970	500	1200
Indeno(1,2,3-cd)pyrene	140	350	130	270	240	320
Pyrene	320	740	330	1200	410	890
Total HPAH	2110 T	4950 T	1690 T	5560 T	2800 T	5520 T
Acenaphthene	20 U	30	20 U	60	20 U	30
Acenaphthylene	20 U	20 U	20 U	20 U	20 U	20
Anthracene	50	140	40	200	110	240
Fluorene	20 U	40	20 U	60	30	70
Naphthalene	20 U	30	20 U	20	20 U	30
Phenanthrene	120	300	130	790	230	370
Total LPAH	170 T	540 T	170 T	1130 T	370 T	760 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)						
1,2,4-Trichlorobenzene	1060 U	1120 U	2220 U	733 U	1040 U	755 U
1,2-Dichlorobenzene	1060 U	1120 U	2220 U	733 U	1040 U	755 U
1,4-Dichlorobenzene	1060 U	1120 U	2220 U	733 U	1040 U	755 U
2-Methylnaphthalene	1060 U	1120 U	2220 U	1100	1040 U	1130
bis(2-Ethylhexyl)phthalate	21700	31800	52200	91600	20700 JU	33200
Butylbenzylphthalate	1590	2790	3330	5490	2070	2640
Di-n-butylphthalate	1060 U	1120	2220 U	1830	1040 U	1510
Di-n-octylphthalate	1060 U	1120 U	2220 U	733 U	1040 U	755 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR056	DR057	DR058	DR059	DR060	DR061
	Sample ID:	SD-DR056-0000	SD-DR057-0000	SD-DR058-0000	SD-DR059-0000	SD-DR060-0000	SD-DR061-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran		1060 U	1120	2220 U	733 U	1040 U	1510
Diethylphthalate		1060 U	1120 U	2220 U	733 U	1040 U	755 U
Dimethylphthalate		1060 U	1120 U	2220 U	733 U	1040 U	755 U
Hexachlorobenzene		1060 U	1120 U	2220 U	733 U	1040 U	755 U
Hexachlorobutadiene		1060 U	1120 U	2220 U	733 U	1040 U	755 U
N-Nitrosodiphenylamine		2120 U	2230 U	4440 U	1470 U	2070 U	1510 U
Benzo(a)anthracene		10100	25100	15600	17900	12400	18100
Benzo(a)pyrene		10100	27400	17800	17600	13500	18500
Benzo(g,h,i)perylene		7940	19000	13300	10600	9330	9430
Benzofluoranthene (Total)		23300 T	57500 T	37800 T	41400 T	28000 T	41900 T
Chrysene		14800	38000	24400	24200	19700	26800
Dibenz(a,h)anthracene		2120	5030	3330	2560	2590	2640
Fluoranthene		19000	43600	24400	35500	25900	45300
Indeno(1,2,3-cd)pyrene		7410	19600	14400	9890	12400	12100
Pyrene		16900	41300	36700	44000	21200	33600
Total HPAH (TOCN)		112000 T	277000 T	188000 T	204000 T	145000 T	208000 T
Acenaphthene		1060 U	1680	2220 U	2200	1040 U	1130
Acenaphthylene		1060 U	1120 U	2220 U	733 U	1040 U	755
Anthracene		2650	7820	4440	7330	5700	9060
Fluorene		1060 U	2230	2220 U	2200	1550	2640
Naphthalene		1060 U	1680	2220 U	733	1040 U	1130
Phenanthrene		6350	16800	14400	28900	11900	14000
Total LPAH (TOCN)		8990 T	30200 T	18900 T	41400 T	19200 T	28700 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR062	DR063	DR064	DR065	DR066	DR067
Sample ID:	SD-DR062-0000	SD-DR063-0000	SD-DR064-0000	SD-DR065-0000	SD-DR066-0000	SD-DR067-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)						
1,2,4-Trichlorobenzene	20 U	20 U	20 U	20 U	20 U	5.3 U
1,2-Dichlorobenzene	20 U	20 U	20 U	20 U	20 U	2.7 U
1,3-Dichlorobenzene	20 U	20 U	20 U	20 U	20 U	2.7 U
1,4-Dichlorobenzene	20 U	20 U	20 U	20 U	20 U	2.7 U
2,4,5-Trichlorophenol	200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol	200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol	60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol	20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol	200 U	200 U	200 U	200 U	200 UJ	200 UJ
2,4-Dinitrotoluene	200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene	200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene	20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol	20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol	200 U	200 U	200 U	200 U	200 UJ	200 U
2-Methylnaphthalene	20	20 U	20 U	740 U	20 U	40
2-Methylphenol	20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine	200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution	20	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline	200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether	40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol	40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline	60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether	20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR062	DR063	DR064	DR065	DR066	DR067
	Sample ID:	SD-DR062-0000	SD-DR063-0000	SD-DR064-0000	SD-DR065-0000	SD-DR066-0000	SD-DR067-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid		200 U	200 U	200 U	200 U	200 U	200 UJ
Benzyl Alcohol		50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate		570	510	470	410	460 JU	270 UJ
Butyl Benzyl Phthalate		20 U	40	20 U	40	50	30
Carbazole		70	30	40	890	30	80
Di-n-butyl Phthalate		40	40	30	20	20 U	20 U
Di-n-octyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran		40	20	40	1300	30	60
Diethyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene		20 U	20 U	20 U	20 U	20 U	2.7 U
Hexachlorocyclopentadiene		100 UJ	100 UJ	100 UJ	100 UJ	100 U	100 U
Hexachloroethane		20 U	20 U	20 U	20 U	20 U	5.3 U
Isophorone		20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine		40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine		40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene		20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)		100 U	100 U	100 U	100 U	100 U	100 U
Phenol		190	410	80	20	20 U	20 U
Benz(a)anthracene		620	300	320	930	410	280
Benzo(a)pyrene		440	260	300	450	360	190

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR062	DR063	DR064	DR065	DR066	DR067
Sample ID:	SD-DR062-0000	SD-DR063-0000	SD-DR064-0000	SD-DR065-0000	SD-DR066-0000	SD-DR067-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene	570	370	390	530	440	220
Benzo(g,h,i)perylene	230	150	200	190	190	100
Benzo(k)fluoranthene	400	230	260	440	340	190
Benzofluoranthene (Total)	970 T	600 T	650 T	970 T	780 T	410 T
Chrysene	730	450	470	980	570	400
Dibenz(a,h)anthracene	70	50	50	60	60	20 U
Fluoranthene	1700	710	910	4200	810	760
Indeno(1,2,3-cd)pyrene	260	160	210	220	240	120
Pyrene	1300	580	690	2900	600	470
Total HPAH	6320 T	3260 T	3800 T	10900 T	4020 T	2730 T
Acenaphthene	30	20 U	30	1800	20	80
Acenaphthylene	20 U	20 U	20 U	30	20 U	20 U
Anthracene	360	90	120	1900	140	290
Fluorene	70	40	60	2100	40	120
Naphthalene	30	20 U	20 U	50	20 U	2.7 U
Phenanthrene	390	240	380	8900	260	510
Total LPAH	880 T	370 T	590 T	14780 T	460 T	1000 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)						
1,2,4-Trichlorobenzene	917 U	763 U	775 U	830 U	889 U	646 U
1,2-Dichlorobenzene	917 U	763 U	775 U	830 U	889 U	329 U
1,4-Dichlorobenzene	917 U	763 U	775 U	830 U	889 U	329 U
2-Methylnaphthalene	917	763 U	775 U	30700 U	889 U	4880
bis(2-Ethylhexyl)phthalate	26100	19500	18200	17000	20400 JU	32900 UJ
Butylbenzylphthalate	917 U	1530	775 U	1660	2220	3660
Di-n-butylphthalate	1830	1530	1160	830	889 U	2440 U
Di-n-octylphthalate	917 U	763 U	775 U	830 U	889 U	2440 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR062	DR063	DR064	DR065	DR066	DR067
	Sample ID:	SD-DR062-0000	SD-DR063-0000	SD-DR064-0000	SD-DR065-0000	SD-DR066-0000	SD-DR067-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran		1830	763	1550	53900	1330	7320
Diethylphthalate		917 U	763 U	775 U	830 U	889 U	2440 U
Dimethylphthalate		917 U	763 U	775 U	830 U	889 U	2440 U
Hexachlorobenzene		917 U	763 U	775 U	830 U	889 U	2440 U
Hexachlorobutadiene		917 U	763 U	775 U	830 U	889 U	329 U
N-Nitrosodiphenylamine		1830 U	1530 U	1550 U	1660 U	1780 U	4880 U
Benzo(a)anthracene		28400	11500	12400	38600	18200	34100
Benzo(a)pyrene		20200	9920	11600	18700	16000	23200
Benzo(g,h,i)perylene		10600	5730	7750	7880	8440	12200
Benzofluoranthene (Total)		44500 T	22900 T	25200 T	40200 T	34700 T	50000 T
Chrysene		33500	17200	18200	40700	25300	48800
Dibenz(a,h)anthracene		3210	1910	1940	2490	2670	2440 U
Fluoranthene		78000	27100	35300	174000	36000	92700
Indeno(1,2,3-cd)pyrene		11900	6110	8140	9130	10700	14600
Pyrene		59600	22100	26700	120000	26700	57300
Total HPAH (TOCN)		290000 T	124000 T	147000 T	452000 T	179000 T	333000 T
Acenaphthene		1380	763 U	1160	74700	889	9760
Acenaphthylene		917 U	763 U	775 U	1240	889 U	2440 U
Anthracene		16500	3440	4650	78800	6220	35400
Fluorene		3210	1530	2330	87100	1780	14600
Naphthalene		1380	763 U	775 U	2070	889 U	329 U
Phenanthrene		17900	9160	14700	369000	11600	62200
Total LPAH (TOCN)		40400 T	14100 T	22900 T	613000 T	20400 T	122000 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR068	DR069	DR070	DR071	DR072	DR073
Sample ID:	SD-DR068-0000	SD-DR069-0000-CC	SD-DR070-0000	SD-DR071-0000	SD-DR072-0000	SD-DR073-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)						
1,2,4-Trichlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol	200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol	200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol	60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol	20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol	200 UJ	200 U	200 U	200 UJ	200 U	200 U
2,4-Dinitrotoluene	200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene	200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene	20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol	20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol	200 U	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene	20 U	20 U	20 U	20 U	20 U	20 U
2-Methylphenol	20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine	200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution	20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline	200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether	40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol	40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline	60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether	20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR068	DR069	DR070	DR071	DR072	DR073
Sample ID:	SD-DR068-0000	SD-DR069-0000-CC	SD-DR070-0000	SD-DR071-0000	SD-DR072-0000	SD-DR073-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 UJ	200 U	200 U	200 UJ	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	490	400	380 UJ	360	520	370 UJ
Butyl Benzyl Phthalate	40	40	40	30	40	40
Carbazole	40	30	20	20	60	30
Di-n-butyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	30	20	20 U	20 U	20 U	20
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 U	100 UJ	100 UJ	100 U	100 UJ	100 UJ
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 U	100 U	100 U	100 U
Phenol	60	20 U	50	20 U	20 U	20 U
Benz(a)anthracene	380	310	220	190	210	310
Benzo(a)pyrene	380	290	270	210	250	280

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR068	DR069	DR070	DR071	DR072	DR073
Sample ID:	SD-DR068-0000	SD-DR069-0000-CC	SD-DR070-0000	SD-DR071-0000	SD-DR072-0000	SD-DR073-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene	480	340	330	240	290	350
Benzo(g,h,i)perylene	220	160	170	150	160	170
Benzo(k)fluoranthene	320	280	270	200	220	300
Benzofluoranthene (Total)	800 T	620 T	600 T	440 T	510 T	650 T
Chrysene	560	420	330	290	290	480
Dibenz(a,h)anthracene	60	50	40	40	40	50
Fluoranthene	970	700	420	400	430	880
Indeno(1,2,3-cd)pyrene	270	190	190	170	180	200
Pyrene	620	530	440	300	510	590
Total HPAH	4260 T	3270 T	2680 T	2190 T	2580 T	3610 T
Acenaphthene	30	20 U	20 U	20 U	20 U	20
Acenaphthylene	20 U	20 U	20 U	20 U	20 U	20 U
Anthracene	150	100	60	60	60	110
Fluorene	50	30	20 U	20	20	40
Naphthalene	20	20 U	20 U	20 U	40	20 U
Phenanthrene	270	230	170	150	220	250
Total LPAH	520 T	360 T	230 T	230 T	340 T	420 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)						
1,2,4-Trichlorobenzene	847 U	1050 U	1140 U	926 U	913 U	803 U
1,2-Dichlorobenzene	847 U	1050 U	1140 U	926 U	913 U	803 U
1,4-Dichlorobenzene	847 U	1050 U	1140 U	926 U	913 U	803 U
2-Methylnaphthalene	847 U	1050 U	1140 U	926 U	913 U	803 U
bis(2-Ethylhexyl)phthalate	20800	21100	21700 UJ	16700	23700	14900 UJ
Butylbenzylphthalate	1690	2110	2290	1390	1830	1610
Di-n-butylphthalate	847 U	1050 U	1140 U	926 U	913 U	803 U
Di-n-octylphthalate	847 U	1050 U	1140 U	926 U	913 U	803 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR068	DR069	DR070	DR071	DR072	DR073
	Sample ID:	SD-DR068-0000	SD-DR069-0000-CC	SD-DR070-0000	SD-DR071-0000	SD-DR072-0000	SD-DR073-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran		1270	1050	1140 U	926 U	913 U	803
Diethylphthalate		847 U	1050 U	1140 U	926 U	913 U	803 U
Dimethylphthalate		847 U	1050 U	1140 U	926 U	913 U	803 U
Hexachlorobenzene		847 U	1050 U	1140 U	926 U	913 U	803 U
Hexachlorobutadiene		847 U	1050 U	1140 U	926 U	913 U	803 U
N-Nitrosodiphenylamine		1690 U	2110 U	2290 U	1850 U	1830 U	1610 U
Benzo(a)anthracene		16100	16300	12600	8800	9590	12400
Benzo(a)pyrene		16100	15300	15400	9720	11400	11200
Benzo(g,h,i)perylene		9320	8420	9710	6940	7310	6830
Benzofluoranthene (Total)		33900 T	32600 T	34300 T	20400 T	23300 T	26100 T
Chrysene		23700	22100	18900	13400	13200	19300
Dibenz(a,h)anthracene		2540	2630	2290	1850	1830	2010
Fluoranthene		41100	36800	24000	18500	19600	35300
Indeno(1,2,3-cd)pyrene		11400	10000	10900	7870	8220	8030
Pyrene		26300	27900	25100	13900	23300	23700
Total HPAH (TOCN)		181000 T	172000 T	153000 T	101000 T	118000 T	145000 T
Acenaphthene		1270	1050 U	1140 U	926 U	913 U	803
Acenaphthylene		847 U	1050 U	1140 U	926 U	913 U	803 U
Anthracene		6360	5260	3430	2780	2740	4420
Fluorene		2120	1580	1140 U	926	913	1610
Naphthalene		847	1050 U	1140 U	926 U	1830	803 U
Phenanthrene		11400	12100	9710	6940	10000	10000
Total LPAH (TOCN)		22000 T	18900 T	13100 T	10600 T	15500 T	16900 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR074	DR075	DR076	DR077	DR078	DR079
Sample ID:	SD-DR074-0000	SD-DR075-0000	SD-DR076-0000	SD-DR077-0000	SD-DR078-0000	SD-DR079-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)						
1,2,4-Trichlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol	200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol	200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol	60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol	20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol	200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene	200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene	200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene	20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol	20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol	200 U	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene	20 U	20 U	20 U	20 U	20 U	20 U
2-Methylphenol	20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine	200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution	20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline	200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether	40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol	40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline	60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether	20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR074	DR075	DR076	DR077	DR078	DR079
Sample ID:	SD-DR074-0000	SD-DR075-0000	SD-DR076-0000	SD-DR077-0000	SD-DR078-0000	SD-DR079-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	480	530	6100	520	480	1100
Butyl Benzyl Phthalate	40	50	20 U	50	40	60
Carbazole	30	40	20 U	20	20	20
Di-n-butyl Phthalate	30	20 U	20 U	20 U	20 U	20 U
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	20 U	30	20 U	20	20 U	20 U
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	20 U	20 U	20 U	30	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 UJ	100 U	100 UJ	100 UJ	100 UJ	100 UJ
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 U	100 U	100 U	100 U
Phenol	150	70	20 U	70	20 U	20 U
Benz(a)anthracene	280	290	20 U	390	280	340
Benzo(a)pyrene	270	260	20 U	410	300	310

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR074	DR075	DR076	DR077	DR078	DR079
Sample ID:	SD-DR074-0000	SD-DR075-0000	SD-DR076-0000	SD-DR077-0000	SD-DR078-0000	SD-DR079-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene	350	380	20 U	580	400	420
Benzo(g,h,i)perylene	190	200	20 U	170	130	150
Benzo(k)fluoranthene	280	270	20 U	490	350	360
Benzofluoranthene (Total)	630 T	650 T	20 UT	1070 T	750 T	780 T
Chrysene	410	400	30	570	460	480
Dibenz(a,h)anthracene	70	50	20 U	50	40	40
Fluoranthene	630	660	20 U	620	550	630
Indeno(1,2,3-cd)pyrene	210	220	20 U	200	150	160
Pyrene	490	570	20 U	920	610	670
Total HPAH	3180 T	3300 T	30 T	4400 T	3270 T	3560 T
Acenaphthene	20 U	30	20 U	20	20 U	20 U
Acenaphthylene	20 U	20 U	20 U	20 U	20 U	20 U
Anthracene	90	90	20 U	100	90	90
Fluorene	30	40	20 U	30	30	20
Naphthalene	20 U	20	20 U	20 U	20 U	20 U
Phenanthrene	210	300	20 U	230	170	200
Total LPAH	330 T	480 T	20 UT	380 T	290 T	310 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)						
1,2,4-Trichlorobenzene	813 U	866 U		1240 U	966 U	917 U
1,2-Dichlorobenzene	813 U	866 U		1240 U	966 U	917 U
1,4-Dichlorobenzene	813 U	866 U		1240 U	966 U	917 U
2-Methylnaphthalene	813 U	866 U		1240 U	966 U	917 U
bis(2-Ethylhexyl)phthalate	19500	22900		32300	23200	50500
Butylbenzylphthalate	1630	2160		3110	1930	2750
Di-n-butylphthalate	1220	866 U		1240 U	966 U	917 U
Di-n-octylphthalate	813 U	866 U		1240 U	966 U	917 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR074	DR075	DR076	DR077	DR078	DR079
Sample ID:	SD-DR074-0000	SD-DR075-0000	SD-DR076-0000	SD-DR077-0000	SD-DR078-0000	SD-DR079-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran	813 U	1300		1240	966 U	917 U
Diethylphthalate	813 U	866 U		1240 U	966 U	917 U
Dimethylphthalate	813 U	866 U		1240 U	1450	917 U
Hexachlorobenzene	813 U	866 U		1240 U	966 U	917 U
Hexachlorobutadiene	813 U	866 U		1240 U	966 U	917 U
N-Nitrosodiphenylamine	1630 U	1730 U		2480 U	1930 U	1830 U
Benzo(a)anthracene	11400	12600		24200	13500	15600
Benzo(a)pyrene	11000	11300		25500	14500	14200
Benzo(g,h,i)perylene	7720	8660		10600	6280	6880
Benzofluoranthene (Total)	25600 T	28100 T		66500 T	36200 T	35800 T
Chrysene	16700	17300		35400	22200	22000
Dibenz(a,h)anthracene	2850	2160		3110	1930	1830
Fluoranthene	25600	28600		38500	26600	28900
Indeno(1,2,3-cd)pyrene	8540	9520		12400	7250	7340
Pyrene	19900	24700		57100	29500	30700
Total HPAH (TOCN)	129000 T	143000 T		273000 T	158000 T	163000 T
Acenaphthene	813 U	1300		1240	966 U	917 U
Acenaphthylene	813 U	866 U		1240 U	966 U	917 U
Anthracene	3660	3900		6210	4350	4130
Fluorene	1220	1730		1860	1450	917
Naphthalene	813 U	866		1240 U	966 U	917 U
Phenanthrene	8540	13000		14300	8210	9170
Total LPAH (TOCN)	13400 T	20800 T		23600 T	14000 T	14200 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR080	DR081	DR082	DR083	DR084	DR085
Sample ID:	SD-DR080-0000	SD-DR081-0000	SD-DR082-0000	SD-DR083-0000	SD-DR084-0000	SD-DR085-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)						
1,2,4-Trichlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol	200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol	200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol	60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol	20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol	200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene	200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene	200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene	20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol	20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol	200 U	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene	20 U	20 U	20	20	20 U	20 U
2-Methylphenol	20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine	200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution	20 U	90	20 U	20 U	20 U	20 U
3-Nitroaniline	200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether	40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol	40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline	60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether	20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR080	DR081	DR082	DR083	DR084	DR085
	Sample ID:	SD-DR080-0000	SD-DR081-0000	SD-DR082-0000	SD-DR083-0000	SD-DR084-0000	SD-DR085-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid		200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol		50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate		400	1500	1200	1100	600	340
Butyl Benzyl Phthalate		40	20 U	90	90	40	50
Carbazole		20	20	50	50	30	30
Di-n-butyl Phthalate		20 U	20	30	20	20 U	20 U
Di-n-octyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran		20 U	20	20	30	20 U	20 U
Diethyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate		20 U	20 U	20	20 U	20 U	20 U
Hexachlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene		100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
Hexachloroethane		20 U	20 U	20 U	20 U	20 U	20 U
Isophorone		20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine		40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine		40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene		20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)		100 U	100 U	100 U	100 U	100 U	100 U
Phenol		30	20 U	20 U	20 U	20 U	20 U
Benz(a)anthracene		210	110	360	390	220	200
Benzo(a)pyrene		220	160	480	490	270	280

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR080 SD-DR080-0000 0 to 10 cm	DR081 SD-DR081-0000 0 to 10 cm	DR082 SD-DR082-0000 0 to 10 cm	DR083 SD-DR083-0000 0 to 10 cm	DR084 SD-DR084-0000 0 to 10 cm	DR085 SD-DR085-0000 0 to 10 cm
Benzo(b)fluoranthene		290	170	620	540	290	280
Benzo(g,h,i)perylene		100	110	330	310	180	170
Benzo(k)fluoranthene		240	130	420	440	240	240
Benzofluoranthene (Total)		530 T	300 T	1040 T	980 T	530 T	520 T
Chrysene		330	150	500	540	290	230
Dibenz(a,h)anthracene		20	30	80	80	50	50
Fluoranthene		600	200	620	710	400	370
Indeno(1,2,3-cd)pyrene		120	110	340	310	190	180
Pyrene		510	520	1000	1200	580	610
Total HPAH		2640 T	1690 T	4750 T	5010 T	2710 T	2610 T
Acenaphthene		20 U	20	30	40	20	20
Acenaphthylene		20 U	20 U	20 U	20 U	20 U	20 U
Anthracene		60	40	90	100	60	50
Fluorene		20	30	40	40	20	20
Naphthalene		20 U	20	20	30	20 U	20 U
Phenanthrene		180	140	330	380	200	200
Total LPAH		260 T	250 T	510 T	590 T	300 T	290 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		1100 U	1120 U	1020 U	873 U	1630 U	1550 U
1,2-Dichlorobenzene		1100 U	1120 U	1020 U	873 U	1630 U	1550 U
1,4-Dichlorobenzene		1100 U	1120 U	1020 U	873 U	1630 U	1550 U
2-Methylnaphthalene		1100 U	1120 U	1020	873	1630 U	1550 U
bis(2-Ethylhexyl)phthalate		22000	84300	60900	48000	48800	26400
Butylbenzylphthalate		2200	1120 U	4570	3930	3250	3880
Di-n-butylphthalate		1100 U	1120	1520	873	1630 U	1550 U
Di-n-octylphthalate		1100 U	1120 U	1020 U	873 U	1630 U	1550 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR080	DR081	DR082	DR083	DR084	DR085
Sample ID:	SD-DR080-0000	SD-DR081-0000	SD-DR082-0000	SD-DR083-0000	SD-DR084-0000	SD-DR085-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran	1100 U	1120	1020	1310	1630 U	1550 U
Diethylphthalate	1100 U	1120 U	1020 U	873 U	1630 U	1550 U
Dimethylphthalate	1100 U	1120 U	1020	873 U	1630 U	1550 U
Hexachlorobenzene	1100 U	1120 U	1020 U	873 U	1630 U	1550 U
Hexachlorobutadiene	1100 U	1120 U	1020 U	873 U	1630 U	1550 U
N-Nitrosodiphenylamine	2200 U	2250 U	2030 U	1750 U	3250 U	3100 U
Benzo(a)anthracene	11500	6180	18300	17000	17900	15500
Benzo(a)pyrene	12100	8990	24400	21400	22000	21700
Benzo(g,h,i)perylene	5490	6180	16800	13500	14600	13200
Benzofluoranthene (Total)	29100 T	16900 T	52800 T	42800 T	43100 T	40300 T
Chrysene	18100	8430	25400	23600	23600	17800
Dibenz(a,h)anthracene	1100	1690	4060	3490	4070	3880
Fluoranthene	33000	11200	31500	31000	32500	28700
Indeno(1,2,3-cd)pyrene	6590	6180	17300	13500	15400	14000
Pyrene	28000	29200	50800	52400	47200	47300
Total HPAH (TOCN)	145000 T	94900 T	241000 T	219000 T	220000 T	202000 T
Acenaphthene	1100 U	1120	1520	1750	1630	1550
Acenaphthylene	1100 U	1120 U	1020 U	873 U	1630 U	1550 U
Anthracene	3300	2250	4570	4370	4880	3880
Fluorene	1100	1690	2030	1750	1630	1550
Naphthalene	1100 U	1120	1020	1310	1630 U	1550 U
Phenanthrene	9890	7870	16800	16600	16300	15500
Total LPAH (TOCN)	14300 T	14000 T	25900 T	25800 T	24400 T	22500 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR086	DR087	DR088	DR089	DR090	DR091
	Sample ID:	SD-DR086-0000	SD-DR087-0000	SD-DR088-0000	SD-DR089-0000	SD-DR090-0000	SD-DR091-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene		20 U	410	20 U	20 U	20 U	20
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR086	DR087	DR088	DR089	DR090	DR091
	Sample ID:	SD-DR086-0000	SD-DR087-0000	SD-DR088-0000	SD-DR089-0000	SD-DR090-0000	SD-DR091-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid		200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol		50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate		240	570	410	930	320	110
Butyl Benzyl Phthalate		20	40	40	50	30	20 U
Carbazole		30	120	20 U	40	30	30
Di-n-butyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Di-n-octyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran		90	190	20 U	20 U	20 U	60
Diethyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene		100 UJ	100 UJ	100 UJ	100 U	100 U	100 UJ
Hexachloroethane		20 U	20 U	20 U	20 U	20 U	20 U
Isophorone		20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine		40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine		40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene		20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)		100 U	100 U	100 U	100 U	100 U	100 UJ
Phenol		20 U	20 U	20 U	20 U	20 U	40
Benz(a)anthracene		380	760	120	280	190	300
Benzo(a)pyrene		210	840	160	380	180	190

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR086	DR087	DR088	DR089	DR090	DR091
	Sample ID:	SD-DR086-0000	SD-DR087-0000	SD-DR088-0000	SD-DR089-0000	SD-DR090-0000	SD-DR091-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene		250	840	180	400	200	260
Benzo(g,h,i)perylene		110	520	120	230	110	110
Benzo(k)fluoranthene		210	700	140	300	190	210
Benzofluoranthene (Total)		460 T	1540 T	320 T	700 T	390 T	470 T
Chrysene		400	800	160	400	280	380
Dibenz(a,h)anthracene		30	210	30	60	30	40
Fluoranthene		1300	1800	230	690	440	1100
Indeno(1,2,3-cd)pyrene		120	620	120	250	110	120
Pyrene		880	1300	430	910	360	820
Total HPAH		3890 T	8390 T	1690 T	3900 T	2090 T	3530 T
Acenaphthene		90	530	20 U	30	20 U	120
Acenaphthylene		20 U	20 U	20 U	20 U	20 U	20 U
Anthracene		160	270	40	70	70	130
Fluorene		260	180	20	30	30	90
Naphthalene		20 U	30	20 U	20 U	20 U	20
Phenanthrene		1500	1200	140	300	150	560
Total LPAH		2010 T	2210 T	200 T	430 T	250 T	920 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		1020 U	1200 U	1190 U	1040 U	939 U	2330 U
1,2-Dichlorobenzene		1020 U	1200 U	1190 U	1040 U	939 U	2330 U
1,4-Dichlorobenzene		1020 U	1200 U	1190 U	1040 U	939 U	2330 U
2-Methylnaphthalene		1020 U	24600	1190 U	1040 U	939 U	2330
bis(2-Ethylhexyl)phthalate		12200	34100	24400	48400	15000	12800
Butylbenzylphthalate		1020	2400	2380	2600	1410	2330 U
Di-n-butylphthalate		1020 U	1200 U	1190 U	1040 U	939 U	2330 U
Di-n-octylphthalate		1020 U	1200 U	1190 U	1040 U	939 U	2330 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR086	DR087	DR088	DR089	DR090	DR091
Sample ID:	SD-DR086-0000	SD-DR087-0000	SD-DR088-0000	SD-DR089-0000	SD-DR090-0000	SD-DR091-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran	4570	11400	1190 U	1040 U	939 U	6980
Diethylphthalate	1020 U	1200 U	1190 U	1040 U	939 U	2330 U
Dimethylphthalate	1020 U	1200 U	1190 U	1040 U	939 U	2330 U
Hexachlorobenzene	1020 U	1200 U	1190 U	1040 U	939 U	2330 U
Hexachlorobutadiene	1020 U	1200 U	1190 U	1040 U	939 U	2330 U
N-Nitrosodiphenylamine	2030 U	2400 U	2380 U	2080 U	1880 U	4650 U
Benzo(a)anthracene	19300	45500	7140	14600	8920	34900
Benzo(a)pyrene	10700	50300	9520	19800	8450	22100
Benzo(g,h,i)perylene	5580	31100	7140	12000	5160	12800
Benzofluoranthene (Total)	23400 T	92200 T	19000 T	36500 T	18300 T	54700 T
Chrysene	20300	47900	9520	20800	13100	44200
Dibenz(a,h)anthracene	1520	12600	1790	3130	1410	4650
Fluoranthene	66000	108000	13700	35900	20700	128000
Indeno(1,2,3-cd)pyrene	6090	37100	7140	13000	5160	14000
Pyrene	44700	77800	25600	47400	16900	95300
Total HPAH (TOCN)	197000 T	502000 T	101000 T	203000 T	98100 T	410000 T
Acenaphthene	4570	31700	1190 U	1560	939 U	14000
Acenaphthylene	1020 U	1200 U	1190 U	1040 U	939 U	2330 U
Anthracene	8120	16200	2380	3650	3290	15100
Fluorene	13200	10800	1190	1560	1410	10500
Naphthalene	1020 U	1800	1190 U	1040 U	939 U	2330
Phenanthrene	76100	71900	8330	15600	7040	65100
Total LPAH (TOCN)	102000 T	132000 T	11900 T	22400 T	11700 T	107000 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR092	DR093	DR094	DR095	DR096	DR097
	Sample ID:	SD-DR092-0000	SD-DR093-0000	SD-DR094-0000	SD-DR095-0000	SD-DR096-0000	SD-DR097-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		4.8 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		2.4 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		2.4 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		2.4 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 UJ	200 UJ	200 UJ	200 U	200 UJ
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 UJ	200 UJ	200 U	200 UJ
2-Methylnaphthalene		20 U	50	20 U	20 U	20 U	80
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR092	DR093	DR094	DR095	DR096	DR097
Sample ID:	SD-DR092-0000	SD-DR093-0000	SD-DR094-0000	SD-DR095-0000	SD-DR096-0000	SD-DR097-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	110	520	360 UJ	340 UJ	330	1200
Butyl Benzyl Phthalate	20 U	40	20 U	30	30	40
Carbazole	20 U	40	20 U	20	20	430
Di-n-butyl Phthalate	20 U	30	20 U	20 U	20 U	20
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	40	60	20	20 U	20	100
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	30	20 U	20 U	20 U	20
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	4.8 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 UJ	100 U	100 UJ	100 UJ	100 UJ	100 UJ
Hexachloroethane	2.4 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 U	100 U	100 U	100 U
Phenol	520	50	70	160	250	30
Benz(a)anthracene	130	340	160	200	300	1100
Benzo(a)pyrene	110	330	180	220	240	670

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR092	DR093	DR094	DR095	DR096	DR097
	Sample ID:	SD-DR092-0000	SD-DR093-0000	SD-DR094-0000	SD-DR095-0000	SD-DR096-0000	SD-DR097-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene		130	400	240	300	350	1000
Benzo(g,h,i)perylene		60	190	80	120	160	260
Benzo(k)fluoranthene		130	330	200	240	230	730
Benzofluoranthene (Total)		260 T	730 T	440 T	540 T	580 T	1730 T
Chrysene		180	490	280	300	400	1700
Dibenz(a,h)anthracene		20 U	50	20	40	60	70
Fluoranthene		400	820	430	590	640	2700
Indeno(1,2,3-cd)pyrene		60	200	100	150	170	350
Pyrene		360	770	410	430	530	1900
Total HPAH		1560 T	3920 T	2100 T	2590 T	3080 T	10480 T
Acenaphthene		50	80	30	20 U	20 U	40
Acenaphthylene		20 U	20 U	20 U	20 U	20 U	20 U
Anthracene		50	110	50	60	70	1500
Fluorene		50	90	40	20	30	360
Naphthalene		2.4 U	50	20 U	20 U	20 U	30
Phenanthrene		230	430	150	130	150	1400
Total LPAH		380 T	760 T	270 T	210 T	250 T	3330 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		686 U	784 U	1960 U	922 U	1030 U	669 U
1,2-Dichlorobenzene		343 U	784 U	1960 U	922 U	1030 U	669 U
1,4-Dichlorobenzene		343 U	784 U	1960 U	922 U	1030 U	669 U
2-Methylnaphthalene		2860 U	1960	1960 U	922 U	1030 U	2680
bis(2-Ethylhexyl)phthalate		15700	20400	35300 UJ	15700 UJ	16900	40100
Butylbenzylphthalate		2860 U	1570	1960 U	1380	1540	1340
Di-n-butylphthalate		2860 U	1180	1960 U	922 U	1030 U	669
Di-n-octylphthalate		2860 U	784 U	1960 U	922 U	1030 U	669 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR092	DR093	DR094	DR095	DR096	DR097
	Sample ID:	SD-DR092-0000	SD-DR093-0000	SD-DR094-0000	SD-DR095-0000	SD-DR096-0000	SD-DR097-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran		5710	2350	1960	922 U	1030	3340
Diethylphthalate		2860 U	784 U	1960 U	922 U	1030 U	669 U
Dimethylphthalate		2860 U	1180	1960 U	922 U	1030 U	669
Hexachlorobenzene		2860 U	784 U	1960 U	922 U	1030 U	669 U
Hexachlorobutadiene		686 U	784 U	1960 U	922 U	1030 U	669 U
N-Nitrosodiphenylamine		5710 U	1570 U	3920 U	1840 U	2050 U	1340 U
Benzo(a)anthracene		18600	13300	15700	9220	15400	36800
Benzo(a)pyrene		15700	12900	17600	10100	12300	22400
Benzo(g,h,i)perylene		8570	7450	7840	5530	8210	8700
Benzofluoranthene (Total)		37100 T	28600 T	43100 T	24900 T	29700 T	57900 T
Chrysene		25700	19200	27500	13800	20500	56900
Dibenz(a,h)anthracene		2860 U	1960	1960	1840	3080	2340
Fluoranthene		57100	32200	42200	27200	32800	90300
Indeno(1,2,3-cd)pyrene		8570	7840	9800	6910	8720	11700
Pyrene		51400	30200	40200	19800	27200	63500
Total HPAH (TOCN)		223000 T	154000 T	206000 T	119000 T	158000 T	351000 T
Acenaphthene		7140	3140	2940	922 U	1030 U	1340
Acenaphthylene		2860 U	784 U	1960 U	922 U	1030 U	669 U
Anthracene		7140	4310	4900	2760	3590	50200
Fluorene		7140	3530	3920	922	1540	12000
Naphthalene		343 U	1960	1960 U	922 U	1030 U	1000
Phenanthrene		32900	16900	14700	5990	7690	46800
Total LPAH (TOCN)		54300 T	29800 T	26500 T	9680 T	12800 T	111000 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR098	DR099	DR100	DR101	DR102	DR103
	Sample ID:	SD-DR098-0000	SD-DR099-0000	SD-DR100-0000	SD-DR101-0000	SD-DR102-0000	SD-DR103-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	5.5 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	2.8 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	2.8 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	2.8 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 UJ	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 UJ	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 UJ	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 UJ	20 U	20 U
2,4-Dinitrophenol		200 UJ	200 UJ	200 UJ	200 UJ	200 UJ	200 UJ
2,4-Dinitrotoluene		200 U	200 U	200 U	200 UJ	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 UJ	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 UJ	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 UJ	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 UJ	200 UJ	200 UJ	200 UJ	200 UJ	200 U
2-Methylnaphthalene		20 U	20 U	20 U	30 J	20 U	20 U
2-Methylphenol		20 U	20 U	20 U	20 UJ	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 UJ	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 UJ	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 UJ	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 UJ	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 UJ	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 UJ	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 UJ	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 UJ	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 UJ	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR098	DR099	DR100	DR101	DR102	DR103
Sample ID:	SD-DR098-0000	SD-DR099-0000	SD-DR100-0000	SD-DR101-0000	SD-DR102-0000	SD-DR103-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 UJ	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 UJ	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 UJ	200 U	200 UJ
Benzyl Alcohol	50 U	50 U	50 U	50 UJ	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 UJ	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 UJ	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 UJ	40 U	40 U
Bis(2-ethylhexyl) Phthalate	420	330 UJ	160 UJ	120 UJ	400	550
Butyl Benzyl Phthalate	30	20 U	20 U	20 UJ	30	50
Carbazole	20 U	20 U	40	50 J	30	40
Di-n-butyl Phthalate	20 U	20 U	20 U	20 J	20 U	20
Di-n-octyl Phthalate	20 U	20 U	20 U	20 UJ	20 U	20 U
Dibenzofuran	20 U	20 U	20 U	30 J	20	20
Diethyl Phthalate	20 U	20 U	20 U	20 UJ	20 U	20 U
Dimethyl Phthalate	20 U	20 U	20 U	20 UJ	20 U	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 UJ	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	2.8 U	20 U	20 U
Hexachlorocyclopentadiene	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 U
Hexachloroethane	20 U	20 U	20 U	5.5 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 UJ	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 UJ	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 UJ	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 UJ	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 U	100 UJ	100 U	100 U
Phenol	20 U	20 U	30	20 UJ	20 U	130
Benz(a)anthracene	160	140	200	340 J	350	280
Benzo(a)pyrene	160	110	170	330 J	320	300

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR098	DR099	DR100	DR101	DR102	DR103
	Sample ID:	SD-DR098-0000	SD-DR099-0000	SD-DR100-0000	SD-DR101-0000	SD-DR102-0000	SD-DR103-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene		240	160	230	280 J	460	370
Benzo(g,h,i)perylene		80	60	100	180 J	190	190
Benzo(k)fluoranthene		170	100	200	270 J	330	290
Benzofluoranthene (Total)		410 T	260 T	430 T	550 T	790 T	660 T
Chrysene		230	180	360	430 J	470	420
Dibenz(a,h)anthracene		20 U	20 U	30	40 J	50	50
Fluoranthene		410	280	360	690 J	890	700
Indeno(1,2,3-cd)pyrene		100	60	130	170 J	240	240
Pyrene		360	230	310	770 J	660	540
Total HPAH		1910 T	1320 T	2090 T	3500 T	3960 T	3380 T
Acenaphthene		20 U	20 U	20 U	140 J	30	20 U
Acenaphthylene		20 U	20 U	20 U	20 UJ	20 U	20 U
Anthracene		40	70	120	220 J	70	90
Fluorene		20 U	30	30	100 J	30	30
Naphthalene		20 U	20 U	20 U	20 J	20 U	20 U
Phenanthrene		110	110	110	750 J	210	210
Total LPAH		150 T	210 T	260 T	1230 T	340 T	330 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		1090 U	1200 U	3280 U	318 U	930 U	704 U
1,2-Dichlorobenzene		1090 U	1200 U	3280 U	162 U	930 U	704 U
1,4-Dichlorobenzene		1090 U	1200 U	3280 U	162 U	930 U	704 U
2-Methylnaphthalene		1090 U	1200 U	3280 U	1730 J	930 U	704 U
bis(2-Ethylhexyl)phthalate		22800	19900 UJ	26200 UJ	6940 UJ	18600	19400
Butylbenzylphthalate		1630	1200 U	3280 U	1160 UJ	1400	1760
Di-n-butylphthalate		1090 U	1200 U	3280 U	1160 J	930 U	704
Di-n-octylphthalate		1090 U	1200 U	3280 U	1160 UJ	930 U	704 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR098	DR099	DR100	DR101	DR102	DR103
Sample ID:	SD-DR098-0000	SD-DR099-0000	SD-DR100-0000	SD-DR101-0000	SD-DR102-0000	SD-DR103-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran	1090 U	1200 U	3280 U	1730 J	930	704
Diethylphthalate	1090 U	1200 U	3280 U	1160 UJ	930 U	704 U
Dimethylphthalate	1090 U	1200 U	3280 U	1160 UJ	930 U	704 U
Hexachlorobenzene	1090 U	1200 U	3280 U	1160 UJ	930 U	704 U
Hexachlorobutadiene	1090 U	1200 U	3280 U	162 U	930 U	704 U
N-Nitrosodiphenylamine	2170 U	2410 U	6560 U	2310 UJ	1860 U	1410 U
Benzo(a)anthracene	8700	8430	32800	19700 J	16300	9860
Benzo(a)pyrene	8700	6630	27900	19100 J	14900	10600
Benzo(g,h,i)perylene	4350	3610	16400	10400 J	8840	6690
Benzofluoranthene (Total)	22300 T	15700 T	70500 T	31800 T	36700 T	23200 T
Chrysene	12500	10800	59000	24900 J	21900	14800
Dibenz(a,h)anthracene	1090 U	1200 U	4920	2310 J	2330	1760
Fluoranthene	22300	16900	59000	39900 J	41400	24600
Indeno(1,2,3-cd)pyrene	5430	3610	21300	9830 J	11200	8450
Pyrene	19600	13900	50800	44500 J	30700	19000
Total HPAH (TOCN)	104000 T	79500 T	343000 T	202000 T	184000 T	119000 T
Acenaphthene	1090 U	1200 U	3280 U	8090 J	1400	704 U
Acenaphthylene	1090 U	1200 U	3280 U	1160 UJ	930 U	704 U
Anthracene	2170	4220	19700	12700 J	3260	3170
Fluorene	1090 U	1810	4920	5780 J	1400	1060
Naphthalene	1090 U	1200 U	3280 U	1160 J	930 U	704 U
Phenanthrene	5980	6630	18000	43400 J	9770	7390
Total LPAH (TOCN)	8150 T	12700 T	42600 T	71100 T	15800 T	11600 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR104	DR105	DR106	DR107	DR108	DR109
	Sample ID:	SD-DR104-0000	SD-DR105-0000	SD-DR106-0000	SD-DR107-0000	SD-DR108-0000	SD-DR109-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 UJ	200 UJ	200 UJ	200 UJ	200 UJ	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 UJ	200 UJ	200 UJ	200 UJ	200 U
2-Methylnaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR104	DR105	DR106	DR107	DR108	DR109
Sample ID:	SD-DR104-0000	SD-DR105-0000	SD-DR106-0000	SD-DR107-0000	SD-DR108-0000	SD-DR109-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 UJ	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	80	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	620	370	460	420	400	410
Butyl Benzyl Phthalate	40	30	30	30	40	30
Carbazole	40	20	50	50	30	30
Di-n-butyl Phthalate	20 U	20 U	20 U	20 U	30	20 U
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	30	20 U	20	30	20 U	20
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20	20 U	20 U	20	20 U	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 U	100 U	100 UJ	100 UJ	100 UJ	100 UJ
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 U	100 U	100 U	100 U
Phenol	20 U	20	20 U	230	140	400
Benz(a)anthracene	350	190	350	450	380	340
Benzo(a)pyrene	340	240	340	440	410	340

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR104	DR105	DR106	DR107	DR108	DR109
Sample ID:	SD-DR104-0000	SD-DR105-0000	SD-DR106-0000	SD-DR107-0000	SD-DR108-0000	SD-DR109-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene	470	270	410	590	550	460
Benzo(g,h,i)perylene	220	160	180	220	220	230
Benzo(k)fluoranthene	310	220	350	380	360	330
Benzofluoranthene (Total)	780 T	490 T	760 T	970 T	910 T	790 T
Chrysene	530	290	520	590	460	460
Dibenz(a,h)anthracene	70	40	70	70	70	70
Fluoranthene	870	400	860	1300	940	650
Indeno(1,2,3-cd)pyrene	260	200	240	300	280	250
Pyrene	680	370	580	880	670	610
Total HPAH	4100 T	2380 T	3900 T	5220 T	4340 T	3740 T
Acenaphthene	30	20 U	20	20	20 U	20
Acenaphthylene	20 U	20 U	20 U	20 U	20 U	20 U
Anthracene	120	40	190	180	100	80
Fluorene	50	20 U	50	50	30	30
Naphthalene	20 U	20 U	20 U	20 U	20 U	20 U
Phenanthrene	260	140	250	280	210	190
Total LPAH	460 T	180 T	510 T	530 T	340 T	320 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)						
1,2,4-Trichlorobenzene	709 U	966 U	823 U	800 U	858 U	851 U
1,2-Dichlorobenzene	709 U	966 U	823 U	800 U	858 U	851 U
1,4-Dichlorobenzene	709 U	966 U	823 U	800 U	858 U	851 U
2-Methylnaphthalene	709 U	966 U	823 U	800 U	858 U	851 U
bis(2-Ethylhexyl)phthalate	22000	17900	18900	16800	17200	17400
Butylbenzylphthalate	1420	1450	1230	1200	1720	1280
Di-n-butylphthalate	709 U	966 U	823 U	800 U	1290	851 U
Di-n-octylphthalate	709 U	966 U	823 U	800 U	858 U	851 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR104	DR105	DR106	DR107	DR108	DR109
Sample ID:	SD-DR104-0000	SD-DR105-0000	SD-DR106-0000	SD-DR107-0000	SD-DR108-0000	SD-DR109-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran	1060	966 U	823	1200	858 U	851
Diethylphthalate	709 U	966 U	823 U	800 U	858 U	851 U
Dimethylphthalate	709	966 U	823 U	800	858 U	851 U
Hexachlorobenzene	709 U	966 U	823 U	800 U	858 U	851 U
Hexachlorobutadiene	709 U	966 U	823 U	800 U	858 U	851 U
N-Nitrosodiphenylamine	1420 U	1930 U	1650 U	1600 U	1720 U	1700 U
Benzo(a)anthracene	12400	9180	14400	18000	16300	14500
Benzo(a)pyrene	12100	11600	14000	17600	17600	14500
Benzo(g,h,i)perylene	7800	7730	7410	8800	9440	9790
Benzofluoranthene (Total)	27700 T	23700 T	31300 T	38800 T	39100 T	33600 T
Chrysene	18800	14000	21400	23600	19700	19600
Dibenz(a,h)anthracene	2480	1930	2880	2800	3000	2980
Fluoranthene	30900	19300	35400	52000	40300	27700
Indeno(1,2,3-cd)pyrene	9220	9660	9880	12000	12000	10600
Pyrene	24100	17900	23900	35200	28800	26000
Total HPAH (TOCN)	145000 T	115000 T	160000 T	209000 T	186000 T	159000 T
Acenaphthene	1060	966 U	823	800	858 U	851
Acenaphthylene	709 U	966 U	823 U	800 U	858 U	851 U
Anthracene	4260	1930	7820	7200	4290	3400
Fluorene	1770	966 U	2060	2000	1290	1280
Naphthalene	709 U	966 U	823 U	800 U	858 U	851 U
Phenanthrene	9220	6760	10300	11200	9010	8090
Total LPAH (TOCN)	16300 T	8700 T	21000 T	21200 T	14600 T	13600 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR110	DR111	DR112	DR113	DR114	DR115
	Sample ID:	SD-DR110-0000	SD-DR111-0000-CC	SD-DR112-0000	SD-DR113-0000-CC	SD-DR114-0000	SD-DR115-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 UJ	200 UJ	200 UJ	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 UJ	200 UJ	200 UJ	200 U	200 U	200 U
2-Methylnaphthalene		20 U	20 U	20	20 U	20	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR110	DR111	DR112	DR113	DR114	DR115
Sample ID:	SD-DR110-0000	SD-DR111-0000-CC	SD-DR112-0000	SD-DR113-0000-CC	SD-DR114-0000	SD-DR115-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	520	410	440	910	330	240 UJ
Butyl Benzyl Phthalate	30	30	30	60	20	30
Carbazole	40	20	100	20 U	100	30
Di-n-butyl Phthalate	20 U	20 U	20 U	30	20	20 U
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	50	20	40	20 U	40	20
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20	20 U	20 U	20 U	20 U	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 U
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 U	100 U	100 U	100 UJ
Phenol	120	30	20	40	20	20 U
Benz(a)anthracene	460	480 J	1100	50	350	380
Benzo(a)pyrene	450	460 J	790	100	280	360

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR110	DR111	DR112	DR113	DR114	DR115
Sample ID:	SD-DR110-0000	SD-DR111-0000-CC	SD-DR112-0000	SD-DR113-0000-CC	SD-DR114-0000	SD-DR115-0000
Constituent Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene	600	620 J	1300	120	330	410
Benzo(g,h,i)perylene	210	220 J	350	50	140	170
Benzo(k)fluoranthene	390	450 J	800	100	320	380
Benzofluoranthene (Total)	990 T	1070 T	2100 T	220 T	650 T	790 T
Chrysene	570	450	1500	90	430	610
Dibenz(a,h)anthracene	50	50	110	20 U	50	50
Fluoranthene	1300	880 J	5300	100	800	1000
Indeno(1,2,3-cd)pyrene	290	300 J	470	70	190	210
Pyrene	960	890 J	2800	420	680	760
Total HPAH	5280 T	4800 T	14520 T	1100 T	3570 T	4330 T
Acenaphthene	80	30	50	20 U	20	30
Acenaphthylene	20 U	20 U	30	20 U	20 U	20 U
Anthracene	140	80	320	30	400	100
Fluorene	90	40	90	20 U	90	30
Naphthalene	20 U	4.3	20	20 U	20 U	20 U
Phenanthrene	500	250	800	60	300	240
Total LPAH	810 T	404.3 T	1310 T	90 T	810 T	400 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)						
1,2,4-Trichlorobenzene	749 U	909 U	758 U	735 U	797 U	1540 U
1,2-Dichlorobenzene	749 U	909 U	758 U	735 U	797 U	1540 U
1,4-Dichlorobenzene	749 U	909 U	758 U	735 U	797 U	1540 U
2-Methylnaphthalene	749 U	909 U	758	735 U	797	1540 U
bis(2-Ethylhexyl)phthalate	19500	18600	16700	33500	13100	18500 UJ
Butylbenzylphthalate	1120	1360	1140	2210	797	2310
Di-n-butylphthalate	749 U	909 U	758 U	1100	797	1540 U
Di-n-octylphthalate	749 U	909 U	758 U	735 U	797 U	1540 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR110	DR111	DR112	DR113	DR114	DR115
	Sample ID:	SD-DR110-0000	SD-DR111-0000-CC	SD-DR112-0000	SD-DR113-0000-CC	SD-DR114-0000	SD-DR115-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran		1870	909	1520	735 U	1590	1540
Diethylphthalate		749 U	909 U	758 U	735 U	797 U	1540 U
Dimethylphthalate		749	909 U	758 U	735 U	797 U	1540 U
Hexachlorobenzene		749 U	909 U	758 U	735 U	797 U	1540 U
Hexachlorobutadiene		749 U	909 U	758 U	735 U	797 U	1540 U
N-Nitrosodiphenylamine		1500 U	1820 U	1520 U	1470 U	1590 U	3080 U
Benzo(a)anthracene		17200	21800 J	41700	1840	13900	29200
Benzo(a)pyrene		16900	20900 J	29900	3680	11200	27700
Benzo(g,h,i)perylene		7870	10000 J	13300	1840	5580	13100
Benzofluoranthene (Total)		37100 T	48600 T	79500 T	8090 T	25900 T	60800 T
Chrysene		21300	20500	56800	3310	17100	46900
Dibenz(a,h)anthracene		1870	2270	4170	735 U	1990	3850
Fluoranthene		48700	40000 J	201000	3680	31900	76900
Indeno(1,2,3-cd)pyrene		10900	13600 J	17800	2570	7570	16200
Pyrene		36000	40500 J	106000	15400	27100	58500
Total HPAH (TOCN)		198000 T	218000 T	550000 T	40400 T	142000 T	333000 T
Acenaphthene		3000	1360	1890	735 U	797	2310
Acenaphthylene		749 U	909 U	1140	735 U	797 U	1540 U
Anthracene		5240	3640	12100	1100	15900	7690
Fluorene		3370	1820	3410	735 U	3590	2310
Naphthalene		749 U	195	758	735 U	797 U	1540 U
Phenanthrene		18700	11400	30300	2210	12000	18500
Total LPAH (TOCN)		30300 T	18400 T	49600 T	3310 T	32300 T	30800 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR116	DR117	DR118	DR119	DR120	DR121
	Sample ID:	SD-DR116-0000	SD-DR117-0000	SD-DR118-0000	SD-DR119-0000	SD-DR120-0000	SD-DR121-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		2.6 JQ	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene		20 U	20 U	20 U	20 U	90	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR116	DR117	DR118	DR119	DR120	DR121
Sample ID:	SD-DR116-0000	SD-DR117-0000	SD-DR118-0000	SD-DR119-0000	SD-DR120-0000	SD-DR121-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	390	310	350	520	440	340
Butyl Benzyl Phthalate	30	20 U	30	40	20 U	30
Carbazole	30	80	30	30	320	20
Di-n-butyl Phthalate	20 U	20 U	20 U	20 U	30	20 U
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	30	70	50	20	320	20
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	50	20 U	20 U	20	20 U	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 U	100 U	100 U	100 U	100 UJ	100 UJ
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 U	100 U	100 U	100 U
Phenol	20 U	20 U	20 U	20 U	80	30
Benz(a)anthracene	330	400	350	220	2400	250
Benzo(a)pyrene	270	250	260	220	620	230

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR116	DR117	DR118	DR119	DR120	DR121
	Sample ID:	SD-DR116-0000	SD-DR117-0000	SD-DR118-0000	SD-DR119-0000	SD-DR120-0000	SD-DR121-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene		350	290	320	270	2000	320
Benzo(g,h,i)perylene		140	120	130	140	380	160
Benzo(k)fluoranthene		300	270	280	240	890	220
Benzofluoranthene (Total)		650 T	560 T	600 T	510 T	2890 T	540 T
Chrysene		470	460	470	320	3300	360
Dibenz(a,h)anthracene		40	30	40	30	160	40
Fluoranthene		740	1400	960	540	14000	600
Indeno(1,2,3-cd)pyrene		170	140	160	170	470	170
Pyrene		700	1100	810	500	4900	460
Total HPAH		3510 T	4460 T	3780 T	2650 T	29120 T	2810 T
Acenaphthene		20	100	60	20	170	20
Acenaphthylene		20 U	20 U	20 U	20 U	50	20 U
Anthracene		100	290	110	60	480	70
Fluorene		40	110	70	30	190	30
Naphthalene		20 U	20 U	20 U	20 U	100	20 U
Phenanthrene		240	640	370	220	3900	170
Total LPAH		400 T	1140 T	610 T	330 T	4890 T	290 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		791 U	769 U	714 U	743 U	719 U	837 U
1,2-Dichlorobenzene		103 JQ	769 U	714 U	743 U	719 U	837 U
1,4-Dichlorobenzene		791 U	769 U	714 U	743 U	719 U	837 U
2-Methylnaphthalene		791 U	769 U	714 U	743 U	3240	837 U
bis(2-Ethylhexyl)phthalate		15400	11900	12500	19300	15800	14200
Butylbenzylphthalate		1190	769 U	1070	1490	719 U	1260
Di-n-butylphthalate		791 U	769 U	714 U	743 U	1080	837 U
Di-n-octylphthalate		791 U	769 U	714 U	743 U	719 U	837 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR116	DR117	DR118	DR119	DR120	DR121
	Sample ID:	SD-DR116-0000	SD-DR117-0000	SD-DR118-0000	SD-DR119-0000	SD-DR120-0000	SD-DR121-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran		1190	2690	1790	743	11500	837
Diethylphthalate		791 U	769 U	714 U	743 U	719 U	837 U
Dimethylphthalate		1980	769 U	714 U	743	719 U	837 U
Hexachlorobenzene		791 U	769 U	714 U	743 U	719 U	837 U
Hexachlorobutadiene		791 U	769 U	714 U	743 U	719 U	837 U
N-Nitrosodiphenylamine		1580 U	1540 U	1430 U	1490 U	1440 U	1670 U
Benzo(a)anthracene		13000	15400	12500	8180	86300	10500
Benzo(a)pyrene		10700	9620	9290	8180	22300	9620
Benzo(g,h,i)perylene		5530	4620	4640	5200	13700	6690
Benzofluoranthene (Total)		25700 T	21500 T	21400 T	19000 T	104000 T	22600 T
Chrysene		18600	17700	16800	11900	119000	15100
Dibenz(a,h)anthracene		1580	1150	1430	1120	5760	1670
Fluoranthene		29200	53800	34300	20100	504000	25100
Indeno(1,2,3-cd)pyrene		6720	5380	5710	6320	16900	7110
Pyrene		27700	42300	28900	18600	176000	19200
Total HPAH (TOCN)		139000 T	172000 T	135000 T	98500 T	1050000 T	118000 T
Acenaphthene		791	3850	2140	743	6120	837
Acenaphthylene		791 U	769 U	714 U	743 U	1800	837 U
Anthracene		3950	11200	3930	2230	17300	2930
Fluorene		1580	4230	2500	1120	6830	1260
Naphthalene		791 U	769 U	714 U	743 U	3600	837 U
Phenanthrene		9490	24600	13200	8180	140000	7110
Total LPAH (TOCN)		15800 T	43800 T	21800 T	12300 T	176000 T	12100 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR122	DR123	DR124	DR125	DR126	DR127
	Sample ID:	SD-DR122-0000	SD-DR123-0000	SD-DR124-0000	SD-DR125-0000	SD-DR126-0000	SD-DR127-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene		20 U	20	20 U	20 U	20	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR122	DR123	DR124	DR125	DR126	DR127
Sample ID:	SD-DR122-0000	SD-DR123-0000	SD-DR124-0000	SD-DR125-0000	SD-DR126-0000	SD-DR127-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	560	560	940	280	590	550
Butyl Benzyl Phthalate	70	60	100	30	460	40
Carbazole	40	60	80	40	50	40
Di-n-butyl Phthalate	20 U	30	20	20 U	20	20
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	20	30	20	50	60	30
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20	20 U	20 U	20 U	20	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 U	100 U	100 U	100 UJ	100 UJ	100 UJ
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 UJ	100 UJ	100 U	100 U	100 U	100 U
Phenol	320	100	20 U	40	20	20 U
Benz(a)anthracene	350	460	480	550	490	410
Benzo(a)pyrene	360	530	770	380	420	330

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR122	DR123	DR124	DR125	DR126	DR127
	Sample ID:	SD-DR122-0000	SD-DR123-0000	SD-DR124-0000	SD-DR125-0000	SD-DR126-0000	SD-DR127-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene		460	560	1000	510	600	480
Benzo(g,h,i)perylene		260	350	600	210	260	210
Benzo(k)fluoranthene		390	480	740	380	370	300
Benzofluoranthene (Total)		850 T	1040 T	1740 T	890 T	970 T	780 T
Chrysene		550	730	790	910	720	610
Dibenz(a,h)anthracene		70	100	140	60	70	60
Fluoranthene		750	820	1100	1500	1300	1000
Indeno(1,2,3-cd)pyrene		290	400	680	230	290	240
Pyrene		700	940	1000	930	880	730
Total HPAH		4180 T	5370 T	7300 T	5660 T	5400 T	4370 T
Acenaphthene		20	40	30	60	80	30
Acenaphthylene		20 U	30	20 U	20 U	20 U	20 U
Anthracene		90	120	120	180	180	130
Fluorene		40	50	40	110	80	60
Naphthalene		20 U	30	20 U	20 U	20	20 U
Phenanthrene		240	420	430	590	460	310
Total LPAH		390 T	690 T	620 T	940 T	820 T	530 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		917 U	826 U	719 U	702 U	647 U	719 U
1,2-Dichlorobenzene		917 U	826 U	719 U	702 U	647 U	719 U
1,4-Dichlorobenzene		917 U	826 U	719 U	702 U	647 U	719 U
2-Methylnaphthalene		917 U	826	719 U	702 U	647	719 U
bis(2-Ethylhexyl)phthalate		25700	23100	33800	9820	19100	19800
Butylbenzylphthalate		3210	2480	3600	1050	14900	1440
Di-n-butylphthalate		917 U	1240	719	702 U	647	719
Di-n-octylphthalate		917 U	826 U	719 U	702 U	647 U	719 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR122	DR123	DR124	DR125	DR126	DR127
	Sample ID:	SD-DR122-0000	SD-DR123-0000	SD-DR124-0000	SD-DR125-0000	SD-DR126-0000	SD-DR127-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran		917	1240	719	1750	1940	1080
Diethylphthalate		917 U	826 U	719 U	702 U	647 U	719 U
Dimethylphthalate		917	826 U	719 U	702 U	647	719 U
Hexachlorobenzene		917 U	826 U	719 U	702 U	647 U	719 U
Hexachlorobutadiene		917 U	826 U	719 U	702 U	647 U	719 U
N-Nitrosodiphenylamine		1830 U	1650 U	1440 U	1400 U	1290 U	1440 U
Benzo(a)anthracene		16100	19000	17300	19300	15900	14700
Benzo(a)pyrene		16500	21900	27700	13300	13600	11900
Benzo(g,h,i)perylene		11900	14500	21600	7370	8410	7550
Benzofluoranthene (Total)		39000 T	43000 T	62600 T	31200 T	31400 T	28100 T
Chrysene		25200	30200	28400	31900	23300	21900
Dibenz(a,h)anthracene		3210	4130	5040	2110	2270	2160
Fluoranthene		34400	33900	39600	52600	42100	36000
Indeno(1,2,3-cd)pyrene		13300	16500	24500	8070	9390	8630
Pyrene		32100	38800	36000	32600	28500	26300
Total HPAH (TOCN)		192000 T	222000 T	263000 T	199000 T	175000 T	157000 T
Acenaphthene		917	1650	1080	2110	2590	1080
Acenaphthylene		917 U	1240	719 U	702 U	647 U	719 U
Anthracene		4130	4960	4320	6320	5830	4680
Fluorene		1830	2070	1440	3860	2590	2160
Naphthalene		917 U	1240	719 U	702 U	647	719 U
Phenanthrene		11000	17400	15500	20700	14900	11200
Total LPAH (TOCN)		17900 T	28500 T	22300 T	33000 T	26500 T	19100 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR128	DR129	DR130	DR131	DR132	DR133
	Sample ID:	SD-DR128-0000	SD-DR129-0000	SD-DR130-0000	SD-DR131-0000-CC	SD-DR132-0000	SD-DR133-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene		20 U	30	20	20	20 U	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR128	DR129	DR130	DR131	DR132	DR133
Sample ID:	SD-DR128-0000	SD-DR129-0000	SD-DR130-0000	SD-DR131-0000-CC	SD-DR132-0000	SD-DR133-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	660	550	510	1500	520 UJ	180
Butyl Benzyl Phthalate	50	60	50	460 J	50	20 U
Carbazole	30	40	40	70	150	20 U
Di-n-butyl Phthalate	20 U	20	20 U	50	30	20 U
Di-n-octyl Phthalate	20 U	20	20 U	190	20 U	20 U
Dibenzofuran	40	50	50	70	140	20 U
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	20	20	70	20	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 U	100 UJ	100 U	100 UJ	100 UJ	100 UJ
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 U	100 U	100 U	100 U
Phenol	80	20	20 U	20 U	70	130
Benz(a)anthracene	300	290	260	380	600	120
Benzo(a)pyrene	290	290	220	340	410	90

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR128	DR129	DR130	DR131	DR132	DR133
	Sample ID:	SD-DR128-0000	SD-DR129-0000	SD-DR130-0000	SD-DR131-0000-CC	SD-DR132-0000	SD-DR133-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene		410	350	320	350	540	110
Benzo(g,h,i)perylene		200	150	150	190	240	60
Benzo(k)fluoranthene		310	330	240	300	430	100
Benzofluoranthene (Total)		720 T	680 T	560 T	650 T	970 T	210 T
Chrysene		500	470	440	460	830	170
Dibenz(a,h)anthracene		50	20 U	40	70	60	20 U
Fluoranthene		710	740	990	920	2600	370
Indeno(1,2,3-cd)pyrene		210	160	160	210	270	70
Pyrene		630	740	800	800	1900	300
Total HPAH		3610 T	3520 T	3620 T	4020 T	7880 T	1390 T
Acenaphthene		40	50	70	100	160	20 U
Acenaphthylene		20 U	20 U	20 U	20 U	20 U	20 U
Anthracene		90	120	90	110	440	40
Fluorene		60	70	70	90	310	20 U
Naphthalene		20 U	30	20 U	20	20 U	20 U
Phenanthrene		280	310	500	640	2400	90
Total LPAH		470 T	580 T	730 T	960 T	3310 T	130 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		669 U	749 U	697 U	1900 U	690 U	2630 U
1,2-Dichlorobenzene		669 U	749 U	697 U	1900 U	690 U	2630 U
1,4-Dichlorobenzene		669 U	749 U	697 U	1900 U	690 U	2630 U
2-Methylnaphthalene		669 U	1120	697	1900	690 U	2630 U
bis(2-Ethylhexyl)phthalate		22100	20600	17800	143000	17900 UJ	23700
Butylbenzylphthalate		1670	2250	1740	43800 J	1720	2630 U
Di-n-butylphthalate		669 U	749	697 U	4760	1030	2630 U
Di-n-octylphthalate		669 U	749	697 U	18100	690 U	2630 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR128	DR129	DR130	DR131	DR132	DR133
Sample ID:	SD-DR128-0000	SD-DR129-0000	SD-DR130-0000	SD-DR131-0000-CC	SD-DR132-0000	SD-DR133-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran	1340	1870	1740	6670	4830	2630 U
Diethylphthalate	669 U	749 U	697 U	1900 U	690 U	2630 U
Dimethylphthalate	669 U	749	697	6670	690	2630 U
Hexachlorobenzene	669 U	749 U	697 U	1900 U	690 U	2630 U
Hexachlorobutadiene	669 U	749 U	697 U	1900 U	690 U	2630 U
N-Nitrosodiphenylamine	1340 U	1500 U	1390 U	3810 U	1380 U	5260 U
Benzo(a)anthracene	10000	10900	9060	36200	20700	15800
Benzo(a)pyrene	9700	10900	7670	32400	14100	11800
Benzo(g,h,i)perylene	6690	5620	5230	18100	8280	7890
Benzofluoranthene (Total)	24100 T	25500 T	19500 T	61900 T	33400 T	27600 T
Chrysene	16700	17600	15300	43800	28600	22400
Dibenz(a,h)anthracene	1670	749 U	1390	6670	2070	2630 U
Fluoranthene	23700	27700	34500	87600	89700	48700
Indeno(1,2,3-cd)pyrene	7020	5990	5570	20000	9310	9210
Pyrene	21100	27700	27900	76200	65500	39500
Total HPAH (TOCN)	121000 T	132000 T	126000 T	383000 T	272000 T	183000 T
Acenaphthene	1340	1870	2440	9520	5520	2630 U
Acenaphthylene	669 U	749 U	697 U	1900 U	690 U	2630 U
Anthracene	3010	4490	3140	10500	15200	5260
Fluorene	2010	2620	2440	8570	10700	2630 U
Naphthalene	669 U	1120	697 U	1900	690 U	2630 U
Phenanthrene	9360	11600	17400	61000	82800	11800
Total LPAH (TOCN)	15700 T	21700 T	25400 T	91400 T	114000 T	17100 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR134	DR135	DR136	DR137	DR138	DR139
	Sample ID:	SD-DR134-0000	SD-DR135-0000	SD-DR136-0000	SD-DR137-0000	SD-DR138-0000	SD-DR139-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene		20 U	20 U	40	20 U	20 U	70
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	30
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR134	DR135	DR136	DR137	DR138	DR139
Sample ID:	SD-DR134-0000	SD-DR135-0000	SD-DR136-0000	SD-DR137-0000	SD-DR138-0000	SD-DR139-0000
Constituent Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	510 UJ	110 UJ	310 UJ	230 UJ	30	2500
Butyl Benzyl Phthalate	20 U	20 U	50	30	20 U	110
Carbazole	30	20 U	340	20	20 U	210
Di-n-butyl Phthalate	20 U	20 U	20 U	20 U	20 U	70
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	30	20	140	20 U	20 U	60
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	20 U	20 U	20 U	20 U	40
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 U
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 U	100 U	100 U	100 J
Phenol	30	40	20	20 U	20 U	40
Benz(a)anthracene	230	70	1600	220	20 U	330
Benzo(a)pyrene	210	40	1300	200	20 U	310

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR134	DR135	DR136	DR137	DR138	DR139
	Sample ID:	SD-DR134-0000	SD-DR135-0000	SD-DR136-0000	SD-DR137-0000	SD-DR138-0000	SD-DR139-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene		270	80	1700	250	20	510
Benzo(g,h,i)perylene		150	30	840	110	20 U	220
Benzo(k)fluoranthene		220	30	1100	190	20 U	290
Benzofluoranthene (Total)		490 T	110 T	2800 T	440 T	20 T	800 T
Chrysene		330	90	1800	350	30	480
Dibenz(a,h)anthracene		40	20 U	190	30	20 U	80
Fluoranthene		690	230	4000	430	30	820
Indeno(1,2,3-cd)pyrene		160	30	940	120	20 U	220
Pyrene		530	170	3200	560	30	870
Total HPAH		2830 T	770 T	16670 T	2460 T	110 T	4130 T
Acenaphthene		60	40	150	20 U	20 U	180
Acenaphthylene		20 U	20 U	20 U	20 U	20 U	20 U
Anthracene		70	30	360	80	20 U	460
Fluorene		80	40	150	30	20 U	140
Naphthalene		20	20 U	40	20 U	20 U	60
Phenanthrene		190	150	1600	190	20 U	360
Total LPAH		420 T	260 T	2300 T	300 T	20 UT	1200 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		794 U	980 U	784 U	909 U		676 U
1,2-Dichlorobenzene		794 U	980 U	784 U	909 U		676 U
1,4-Dichlorobenzene		794 U	980 U	784 U	909 U		676 U
2-Methylnaphthalene		794 U	980 U	1570	909 U		2360
bis(2-Ethylhexyl)phthalate		20200 UJ	5390 UJ	12200 UJ	10500 UJ		84500
Butylbenzylphthalate		794 U	980 U	1960	1360		3720
Di-n-butylphthalate		794 U	980 U	784 U	909 U		2360
Di-n-octylphthalate		794 U	980 U	784 U	909 U		676 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR134 / SD-DR134-0000 / 0 to 10 cm	DR135 / SD-DR135-0000 / 0 to 10 cm	DR136 / SD-DR136-0000 / 0 to 10 cm	DR137 / SD-DR137-0000 / 0 to 10 cm	DR138 / SD-DR138-0000 / 0 to 10 cm	DR139 / SD-DR139-0000 / 0 to 10 cm
Dibenzofuran		1190	980	5490	909 U		2030
Diethylphthalate		794 U	980 U	784 U	909 U		676 U
Dimethylphthalate		794 U	980 U	784 U	909 U		1350
Hexachlorobenzene		794 U	980 U	784 U	909 U		676 U
Hexachlorobutadiene		794 U	980 U	784 U	909 U		676 U
N-Nitrosodiphenylamine		1590 U	1960 U	1570 U	1820 U		1350 U
Benzo(a)anthracene		9130	3430	62700	10000		11100
Benzo(a)pyrene		8330	1960	51000	9090		10500
Benzo(g,h,i)perylene		5950	1470	32900	5000		7430
Benzofluoranthene (Total)		19400 T	5390 T	110000 T	20000 T		27000 T
Chrysene		13100	4410	70600	15900		16200
Dibenz(a,h)anthracene		1590	980 U	7450	1360		2700
Fluoranthene		27400	11300	157000	19500		27700
Indeno(1,2,3-cd)pyrene		6350	1470	36900	5450		7430
Pyrene		21000	8330	125000	25500		29400
Total HPAH (TOCN)		112000 T	37700 T	654000 T	112000 T		140000 T
Acenaphthene		2380	1960	5880	909 U		6080
Acenaphthylene		794 U	980 U	784 U	909 U		676 U
Anthracene		2780	1470	14100	3640		15500
Fluorene		3170	1960	5880	1360		4730
Naphthalene		794	980 U	1570	909 U		2030
Phenanthrene		7540	7350	62700	8640		12200
Total LPAH (TOCN)		16700 T	12700 T	90200 T	13600 T		40500 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR140	DR141	DR142	DR143	DR144	DR145
	Sample ID:	SD-DR140-0000	SD-DR141-0000-CC	SD-DR142-0000	SD-DR143-0000	SD-DR144-0000	SD-DR145-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 UJ	200 UJ	200 U	200 U	200 UJ
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 UJ	200 UJ	200 U	200 U	200 U
2-Methylnaphthalene		20 U	120	70	20 U	30	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR140	DR141	DR142	DR143	DR144	DR145
Sample ID:	SD-DR140-0000	SD-DR141-0000-CC	SD-DR142-0000	SD-DR143-0000	SD-DR144-0000	SD-DR145-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	20 U	260 UJ	50 UJ	60	610	390
Butyl Benzyl Phthalate	20 U	40	20 U	20 U	20 U	20 U
Carbazole	20 U	280 J	190	60	50	20
Di-n-butyl Phthalate	20 U	20 U	20 U	20 U	20	20 U
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	20 U	320 J	200	20	70	30
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 U
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 U	100 U	100 U	100 U
Phenol	20 U	20 U	30	40	20 U	20 U
Benz(a)anthracene	20 U	1300 J	610	300	310	180
Benzo(a)pyrene	20 U	940 J	590	310	300	180

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR140 / SD-DR140-0000 / 0 to 10 cm	DR141 / SD-DR141-0000-CC / 0 to 10 cm	DR142 / SD-DR142-0000 / 0 to 10 cm	DR143 / SD-DR143-0000 / 0 to 10 cm	DR144 / SD-DR144-0000 / 0 to 10 cm	DR145 / SD-DR145-0000 / 0 to 10 cm
Benzo(b)fluoranthene		20 U	960 J	480	260	320	220
Benzo(g,h,i)perylene		20 U	390 J	280	200	170	110
Benzo(k)fluoranthene		20 U	780 J	530	330	290	200
Benzofluoranthene (Total)		20 UT	1740 T	1010 T	590 T	610 T	420 T
Chrysene		20 U	1300 J	620	400	410	260
Dibenz(a,h)anthracene		20 U	140	90	60	50	30
Fluoranthene		20 U	3600 J	2200	660	800	440
Indeno(1,2,3-cd)pyrene		20 U	580 J	410	230	160	120
Pyrene		20 U	2200 J	1300	580	970	450
Total HPAH		20 UT	12190 T	7110 T	3330 T	3780 T	2190 T
Acenaphthene		20 U	420 J	260	40	110	30
Acenaphthylene		20 U	20 U	20 U	20 U	20 U	20 U
Anthracene		20 U	830 J	340	120	90	60
Fluorene		20 U	570 J	370	50	100	40
Naphthalene		20 U	100	80	20 U	70	20
Phenanthrene		20 U	2900 J	2100	480	400	190
Total LPAH		20 UT	4820 T	3150 T	690 T	770 T	340 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene			881 U		2440 U	1090 U	813 U
1,2-Dichlorobenzene			881 U		2440 U	1090 U	813 U
1,4-Dichlorobenzene			881 U		2440 U	1090 U	813 U
2-Methylnaphthalene			5290		2440 U	1630	813 U
bis(2-Ethylhexyl)phthalate			11500 UJ		7320	33200	15900
Butylbenzylphthalate			1760		2440 U	1090 U	813 U
Di-n-butylphthalate			881 U		2440 U	1090	813 U
Di-n-octylphthalate			881 U		2440 U	1090 U	813 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR140	DR141	DR142	DR143	DR144	DR145
	Sample ID:	SD-DR140-0000	SD-DR141-0000-CC	SD-DR142-0000	SD-DR143-0000	SD-DR144-0000	SD-DR145-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran			14100 J		2440	3800	1220
Diethylphthalate			881 U		2440 U	1090 U	813 U
Dimethylphthalate			881 U		2440 U	1090 U	813 U
Hexachlorobenzene			881 U		2440 U	1090 U	813 U
Hexachlorobutadiene			881 U		2440 U	1090 U	813 U
N-Nitrosodiphenylamine			1760 U		4880 U	2170 U	1630 U
Benzo(a)anthracene			57300 J		36600	16800	7320
Benzo(a)pyrene			41400 J		37800	16300	7320
Benzo(g,h,i)perylene			17200 J		24400	9240	4470
Benzofluoranthene (Total)			76700 T		72000 T	33200 T	17100 T
Chrysene			57300 J		48800	22300	10600
Dibenz(a,h)anthracene			6170		7320	2720	1220
Fluoranthene			159000 J		80500	43500	17900
Indeno(1,2,3-cd)pyrene			25600 J		28000	8700	4880
Pyrene			96900 J		70700	52700	18300
Total HPAH (TOCN)			537000 T		406000 T	205000 T	89000 T
Acenaphthene			18500 J		4880	5980	1220
Acenaphthylene			881 U		2440 U	1090 U	813 U
Anthracene			36600 J		14600	4890	2440
Fluorene			25100 J		6100	5430	1630
Naphthalene			4410		2440 U	3800	813
Phenanthrene			128000 J		58500	21700	7720
Total LPAH (TOCN)			212000 T		84100 T	41800 T	13800 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR146	DR147	DR148	DR149	DR150	DR151
	Sample ID:	SD-DR146-0000	SD-DR147-0000	SD-DR148-0000	SD-DR149-0000	SD-DR150-0000	SD-DR151-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 UJ	200 U	200 UJ	200 U	200 UJ	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 UJ	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene		20 U	20 U	20	20 U	20 U	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR146	DR147	DR148	DR149	DR150	DR151
	Sample ID:	SD-DR146-0000	SD-DR147-0000	SD-DR148-0000	SD-DR149-0000	SD-DR150-0000	SD-DR151-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid		200 U	200 U	200 UJ	200 U	200 UJ	200 U
Benzyl Alcohol		50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate		530	770	100	290 U	390	540
Butyl Benzyl Phthalate		40	60	20 U	20 U	20	40
Carbazole		30	40	20 U	40	20 U	40
Di-n-butyl Phthalate		20 U	20 U	20	20 U	20 U	20 U
Di-n-octyl Phthalate		20 U	40	20 U	20 U	20 U	20 U
Dibenzofuran		20	20	20 U	70	20 U	30
Diethyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate		20 U	30	20 U	20 U	20 U	20
Hexachlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene		100 U	100 UJ	100 U	100 UJ	100 U	100 U
Hexachloroethane		20 U	20 U	20 U	20 U	20 U	20 U
Isophorone		20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine		40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine		40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene		20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)		100 U	100 U	100 U	100 U	100 U	100 U
Phenol		20	180	20	20 U	50	20 U
Benz(a)anthracene		250	410	60	600	180	320
Benzo(a)pyrene		250	300	60	390	160	300

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR146	DR147	DR148	DR149	DR150	DR151
Sample ID:	SD-DR146-0000	SD-DR147-0000	SD-DR148-0000	SD-DR149-0000	SD-DR150-0000	SD-DR151-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene	350	450	70	480	200	350
Benzo(g,h,i)perylene	150	210	40	180	110	180
Benzo(k)fluoranthene	240	320	60	430	170	320
Benzofluoranthene (Total)	590 T	770 T	130 T	910 T	370 T	670 T
Chrysene	360	530	90	740	250	440
Dibenz(a,h)anthracene	40	60	20 U	50	30	40
Fluoranthene	660	1000	140	2200	490	740
Indeno(1,2,3-cd)pyrene	190	220	50	240	130	210
Pyrene	460	770	130	1500	380	720
Total HPAH	2950 T	4270 T	700 T	6810 T	2100 T	3620 T
Acenaphthene	20 U	20	20	90	20 U	30
Acenaphthylene	20 U	20 U	20 U	20 U	20 U	20 U
Anthracene	80	100	30	220	50	120
Fluorene	30	40	30	110	20 U	40
Naphthalene	20 U	20 U	20 U	20 U	20 U	20 U
Phenanthrene	170	300	80	820	140	310
Total LPAH	280 T	460 T	160 T	1240 T	190 T	500 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)						
1,2,4-Trichlorobenzene	760 U	738 U		995 U	917 U	746 U
1,2-Dichlorobenzene	760 U	738 U		995 U	917 U	746 U
1,4-Dichlorobenzene	760 U	738 U		995 U	917 U	746 U
2-Methylnaphthalene	760 U	738 U		995 U	917 U	746 U
bis(2-Ethylhexyl)phthalate	20200	28400		14400 U	17900	20100
Butylbenzylphthalate	1520	2210		995 U	917	1490
Di-n-butylphthalate	760 U	738 U		995 U	917 U	746 U
Di-n-octylphthalate	760 U	1480		995 U	917 U	746 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR146	DR147	DR148	DR149	DR150	DR151
Sample ID:	SD-DR146-0000	SD-DR147-0000	SD-DR148-0000	SD-DR149-0000	SD-DR150-0000	SD-DR151-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran	760	738		3480	917 U	1120
Diethylphthalate	760 U	738 U		995 U	917 U	746 U
Dimethylphthalate	760 U	1110		995 U	917 U	746
Hexachlorobenzene	760 U	738 U		995 U	917 U	746 U
Hexachlorobutadiene	760 U	738 U		995 U	917 U	746 U
N-Nitrosodiphenylamine	1520 U	1480 U		1990 U	1830 U	1490 U
Benzo(a)anthracene	9510	15100		29900	8260	11900
Benzo(a)pyrene	9510	11100		19400	7340	11200
Benzo(g,h,i)perylene	5700	7750		8960	5050	6720
Benzofluoranthene (Total)	22400 T	28400 T		45300 T	17000 T	25000 T
Chrysene	13700	19600		36800	11500	16400
Dibenz(a,h)anthracene	1520	2210		2490	1380	1490
Fluoranthene	25100	36900		109000	22500	27600
Indeno(1,2,3-cd)pyrene	7220	8120		11900	5960	7840
Pyrene	17500	28400		74600	17400	26900
Total HPAH (TOCN)	112000 T	158000 T		339000 T	96300 T	135000 T
Acenaphthene	760 U	738		4480	917 U	1120
Acenaphthylene	760 U	738 U		995 U	917 U	746 U
Anthracene	3040	3690		10900	2290	4480
Fluorene	1140	1480		5470	917 U	1490
Naphthalene	760 U	738 U		995 U	917 U	746 U
Phenanthrene	6460	11100		40800	6420	11600
Total LPAH (TOCN)	10600 T	17000 T		61700 T	8720 T	18700 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR152 SD-DR152-0000 0 to 10 cm	DR153 SD-DR153-0000 0 to 10 cm	DR154 SD-DR154-0000 0 to 10 cm	DR155 SD-DR155-0000 0 to 10 cm	DR156 SD-DR156-0000 0 to 10 cm	DR157 SD-DR157-0000 0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		6.4 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		3.2 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		3.2 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		3.2 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene		20 U	20 U	20 U	20 U	20 U	100
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	30
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR152	DR153	DR154	DR155	DR156	DR157
Sample ID:	SD-DR152-0000	SD-DR153-0000	SD-DR154-0000	SD-DR155-0000	SD-DR156-0000	SD-DR157-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	450	510	390 UJ	2500	430 UJ	2300
Butyl Benzyl Phthalate	40	50	20 U	40	20 U	90
Carbazole	30	50	20 U	60	20	70
Di-n-butyl Phthalate	20 U	20 U	20 U	20 U	20 U	300
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	20 U	40	20 U	40	20 U	30
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	20 U	20 U	20	20 U	30
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	6.4 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
Hexachloroethane	3.2 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 U	100 U	100 U	300
Phenol	20 U	20 U	40	60	20 U	50
Benz(a)anthracene	220	320	170	350	190	440
Benzo(a)pyrene	220	290	150	270	180	320

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR152 SD-DR152-0000 0 to 10 cm	DR153 SD-DR153-0000 0 to 10 cm	DR154 SD-DR154-0000 0 to 10 cm	DR155 SD-DR155-0000 0 to 10 cm	DR156 SD-DR156-0000 0 to 10 cm	DR157 SD-DR157-0000 0 to 10 cm
Benzo(b)fluoranthene		290	390	210	380	230	480
Benzo(g,h,i)perylene		140	210	110	170	120	180
Benzo(k)fluoranthene		260	310	170	260	160	360
Benzofluoranthene (Total)		550 T	700 T	380 T	640 T	390 T	840 T
Chrysene		350	500	230	520	260	680
Dibenz(a,h)anthracene		30	60	30	50	30	20 U
Fluoranthene		530	850	430	1000	510	680
Indeno(1,2,3-cd)pyrene		140	220	110	160	120	180
Pyrene		540	580	360	730	390	1400
Total HPAH		2720 T	3730 T	1970 T	3890 T	2190 T	4720 T
Acenaphthene		20 U	40	20 U	40	20	50
Acenaphthylene		20 U	20 U	20 U	20 U	20 U	20 U
Anthracene		70	120	40	180	50	160
Fluorene		30	60	20 U	50	30	50
Naphthalene		3.2 U	20 U	20 U	20 U	20 U	50
Phenanthrene		180	270	120	320	140	320
Total LPAH		280 T	490 T	160 T	590 T	240 T	630 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		270 U	913 U	858 U	741 U	727 U	
1,2-Dichlorobenzene		135 U	913 U	858 U	741 U	727 U	
1,4-Dichlorobenzene		135 U	913 U	858 U	741 U	727 U	
2-Methylnaphthalene		844 U	913 U	858 U	741 U	727 U	
bis(2-Ethylhexyl)phthalate		19000	23300	16700 UJ	92600	15600 UJ	
Butylbenzylphthalate		1690	2280	858 U	1480	727 U	
Di-n-butylphthalate		844 U	913 U	858 U	741 U	727 U	
Di-n-octylphthalate		844 U	913 U	858 U	741 U	727 U	

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR152	DR153	DR154	DR155	DR156	DR157
Sample ID:	SD-DR152-0000	SD-DR153-0000	SD-DR154-0000	SD-DR155-0000	SD-DR156-0000	SD-DR157-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran	844 U	1830	858 U	1480	727 U	
Diethylphthalate	844 U	913 U	858 U	741 U	727 U	
Dimethylphthalate	844 U	913 U	858 U	741	727 U	
Hexachlorobenzene	844 U	913 U	858 U	741 U	727 U	
Hexachlorobutadiene	270 U	913 U	858 U	741 U	727 U	
N-Nitrosodiphenylamine	1690 U	1830 U	1720 U	1480 U	1450 U	
Benzo(a)anthracene	9280	14600	7300	13000	6910	
Benzo(a)pyrene	9280	13200	6440	10000	6550	
Benzo(g,h,i)perylene	5910	9590	4720	6300	4360	
Benzofluoranthene (Total)	23200 T	32000 T	16300 T	23700 T	14200 T	
Chrysene	14800	22800	9870	19300	9450	
Dibenz(a,h)anthracene	1270	2740	1290	1850	1090	
Fluoranthene	*22400*	*38800*	*18500*	*37000*	*18500*	
Indeno(1,2,3-cd)pyrene	5910	10000	4720	5930	4360	
Pyrene	22800	26500	15500	27000	14200	
Total HPAH (TOCN)	115000 T	170000 T	84500 T	144000 T	79600 T	
Acenaphthene	844 U	1830	858 U	1480	727	
Acenaphthylene	844 U	913 U	858 U	741 U	727 U	
Anthracene	2950	5480	1720	6670	1820	
Fluorene	1270	2740	858 U	1850	1090	
Naphthalene	135 U	913 U	858 U	741 U	727 U	
Phenanthrene	7590	12300	5150	11900	5090	
Total LPAH (TOCN)	11800 T	22400 T	6870 T	21900 T	8730 T	

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR158	DR159	DR160	DR161	DR162	DR163
	Sample ID:	SD-DR158-0000	SD-DR159-0000	SD-DR160-0000	SD-DR161-0000	SD-DR162-0000	SD-DR163-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	6.4 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	3.2 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	3.2 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	3.2 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 UJ	200 U	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 UJ	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene		20 U	20 U	50	20 U	20 U	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR158	DR159	DR160	DR161	DR162	DR163
Sample ID:	SD-DR158-0000	SD-DR159-0000	SD-DR160-0000	SD-DR161-0000	SD-DR162-0000	SD-DR163-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	230 UJ	440 UJ	1900	90	250	300
Butyl Benzyl Phthalate	20 U	40	60	20 U	30	20 U
Carbazole	30	50	200	20 U	20 U	20 U
Di-n-butyl Phthalate	20 U	40	50	20 U	20 U	20 U
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	20	40	110	20 U	20 U	20 U
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	20 U	60	20 U	20 U	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	6.4 U
Hexachlorocyclopentadiene	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	3.2 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 U	100 UJ	100 U	100 U
Phenol	20 U	30	20 U	20 U	20 U	20 U
Benz(a)anthracene	260	310	550	40	150	120
Benzo(a)pyrene	260	250	350	40	150	120

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR158 / SD-DR158-0000 / 0 to 10 cm	DR159 / SD-DR159-0000 / 0 to 10 cm	DR160 / SD-DR160-0000 / 0 to 10 cm	DR161 / SD-DR161-0000 / 0 to 10 cm	DR162 / SD-DR162-0000 / 0 to 10 cm	DR163 / SD-DR163-0000 / 0 to 10 cm
Benzo(b)fluoranthene		300	330	400	50	170	130
Benzo(g,h,i)perylene		130	160	240	40	90	70
Benzo(k)fluoranthene		240	240	390	40	180	140
Benzofluoranthene (Total)		540 T	570 T	790 T	90 T	350 T	270 T
Chrysene		290	390	650	60	220	170
Dibenz(a,h)anthracene		40	40	60	20 U	20	20 U
Fluoranthene		640	960	1600	100	350	320
Indeno(1,2,3-cd)pyrene		180	180	260	40	90	70
Pyrene		470	750	1000	90	380	290
Total HPAH		2810 T	3610 T	5500 T	500 T	1800 T	1430 T
Acenaphthene		30	40	120	20 U	20 U	20 U
Acenaphthylene		20 U	20 U	20 U	20 U	20 U	20 U
Anthracene		70	100	260	20 U	50	30
Fluorene		30	50	170	20 U	30	20 U
Naphthalene		20 U	20 U	100	20 U	20 U	3.2 U
Phenanthrene		260	390	1200	40	150	90
Total LPAH		390 T	580 T	1850 T	40 T	230 T	120 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		1590 U	725 U	830 U	697 U	1050 U	278 U
1,2-Dichlorobenzene		1590 U	725 U	830 U	697 U	1050 U	139 U
1,4-Dichlorobenzene		1590 U	725 U	830 U	697 U	1050 U	139 U
2-Methylnaphthalene		1590 U	725 U	2070	697 U	1050 U	870 U
bis(2-Ethylhexyl)phthalate		18300 UJ	15900 UJ	78800	3140	13200	13000
Butylbenzylphthalate		1590 U	1450	2490	697 U	1580	870 U
Di-n-butylphthalate		1590 U	1450	2070	697 U	1050 U	870 U
Di-n-octylphthalate		1590 U	725 U	830 U	697 U	1050 U	870 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR158	DR159	DR160	DR161	DR162	DR163
	Sample ID:	SD-DR158-0000	SD-DR159-0000	SD-DR160-0000	SD-DR161-0000	SD-DR162-0000	SD-DR163-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran		1590	1450	4560	697 U	1050 U	870 U
Diethylphthalate		1590 U	725 U	830 U	697 U	1050 U	870 U
Dimethylphthalate		1590 U	725 U	2490	697 U	1050 U	870 U
Hexachlorobenzene		1590 U	725 U	830 U	697 U	1050 U	870 U
Hexachlorobutadiene		1590 U	725 U	830 U	697 U	1050 U	278 U
N-Nitrosodiphenylamine		3170 U	1450 U	1660 U	1390 U	2110 U	1740 U
Benzo(a)anthracene		20600	11200	22800	1390	7890	5220
Benzo(a)pyrene		20600	9060	14500	1390	7890	5220
Benzo(g,h,i)perylene		10300	5800	9960	1390	4740	3040
Benzofluoranthene (Total)		42900 T	20700 T	32800 T	3140 T	18400 T	11700 T
Chrysene		23000	14100	27000	2090	11600	7390
Dibenz(a,h)anthracene		3170	1450	2490	697 U	1050	870 U
Fluoranthene		50800	34800	66400	3480	18400	13900
Indeno(1,2,3-cd)pyrene		14300	6520	10800	1390	4740	3040
Pyrene		37300	27200	41500	3140	20000	12600
Total HPAH (TOCN)		223000 T	131000 T	228000 T	17400 T	94700 T	62200 T
Acenaphthene		2380	1450	4980	697 U	1050 U	870 U
Acenaphthylene		1590 U	725 U	830 U	697 U	1050 U	870 U
Anthracene		5560	3620	10800	697 U	2630	1300
Fluorene		2380	1810	7050	697 U	1580	870 U
Naphthalene		1590 U	725 U	4150	697 U	1050 U	139 U
Phenanthrene		20600	14100	49800	1390	7890	3910
Total LPAH (TOCN)		31000 T	21000 T	76800 T	1390 T	12100 T	5220 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR164 / SD-DR164-0000 / 0 to 10 cm	DR165 / SD-DR165-0000 / 0 to 10 cm	DR166 / SD-DR166-0000 / 0 to 10 cm	DR167 / SD-DR167-0000 / 0 to 10 cm	DR168 / SD-DR168-0000 / 0 to 10 cm	DR169 / SD-DR169-0000 / 0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 UJ	200 U	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 UJ	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR164	DR165	DR166	DR167	DR168	DR169
Sample ID:	SD-DR164-0000	SD-DR165-0000	SD-DR166-0000	SD-DR167-0000	SD-DR168-0000	SD-DR169-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	280 U	190 UJ	240 UJ	170 UJ	280 UJ	160 UJ
Butyl Benzyl Phthalate	20 U	20 U	20	20 U	20 U	20 U
Carbazole	20 U	20 U	20 U	20 U	30	20 U
Di-n-butyl Phthalate	20 U	20 U	20 U	20 U	20	20 U
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	20 U	20 U	20 U	20 U	20 U	20 U
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 U	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 U	100 U	100 U	100 U
Phenol	20 U	30	20 U	20 U	40	20
Benz(a)anthracene	120	80	80	80	210	100
Benzo(a)pyrene	120	90	80	90	180	90

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR164 / SD-DR164-0000 / 0 to 10 cm	DR165 / SD-DR165-0000 / 0 to 10 cm	DR166 / SD-DR166-0000 / 0 to 10 cm	DR167 / SD-DR167-0000 / 0 to 10 cm	DR168 / SD-DR168-0000 / 0 to 10 cm	DR169 / SD-DR169-0000 / 0 to 10 cm
Benzo(b)fluoranthene		160	100	90	110	230	120
Benzo(g,h,i)perylene		90	60	60	60	120	60
Benzo(k)fluoranthene		120	80	80	90	210	90
Benzofluoranthene (Total)		280 T	180 T	170 T	200 T	440 T	210 T
Chrysene		170	110	100	140	340	140
Dibenz(a,h)anthracene		20 U	20 U	20 U	20 U	30	20 U
Fluoranthene		340	220	230	110	510	260
Indeno(1,2,3-cd)pyrene		110	70	60	60	130	60
Pyrene		230	190	190	130	410	230
Total HPAH		1460 T	1000 T	970 T	870 T	2370 T	1150 T
Acenaphthene		20 U	20 U	20 U	20 U	20 U	20 U
Acenaphthylene		20 U	20 U	20 U	20 U	20 U	20 U
Anthracene		40	20	20 U	20	60	30
Fluorene		20	20 U	20 U	20 U	30	20 U
Naphthalene		20 U	20 U	20 U	20 U	20 U	20 U
Phenanthrene		100	90	60	70	180	90
Total LPAH		160 T	110 T	60 T	90 T	270 T	120 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		775 U	847 U	1360 U	1310 U	645 U	995 U
1,2-Dichlorobenzene		775 U	847 U	1360 U	1310 U	645 U	995 U
1,4-Dichlorobenzene		775 U	847 U	1360 U	1310 U	645 U	995 U
2-Methylnaphthalene		775 U	847 U	1360 U	1310 U	645 U	995 U
bis(2-Ethylhexyl)phthalate		10900 U	8050 UJ	16300 UJ	11100 UJ	9030 UJ	7960 UJ
Butylbenzylphthalate		775 U	847 U	1360	1310 U	645 U	995 U
Di-n-butylphthalate		775 U	847 U	1360 U	1310 U	645	995 U
Di-n-octylphthalate		775 U	847 U	1360 U	1310 U	645 U	995 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR164	DR165	DR166	DR167	DR168	DR169
	Sample ID:	SD-DR164-0000	SD-DR165-0000	SD-DR166-0000	SD-DR167-0000	SD-DR168-0000	SD-DR169-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran		775 U	847 U	1360 U	1310 U	645 U	995 U
Diethylphthalate		775 U	847 U	1360 U	1310 U	645 U	995 U
Dimethylphthalate		775 U	847 U	1360 U	1310 U	645 U	995 U
Hexachlorobenzene		775 U	847 U	1360 U	1310 U	645 U	995 U
Hexachlorobutadiene		775 U	847 U	1360 U	1310 U	645 U	995 U
N-Nitrosodiphenylamine		1550 U	1690 U	2720 U	2610 U	1290 U	1990 U
Benzo(a)anthracene		4650	3390	5440	5230	6770	4980
Benzo(a)pyrene		4650	3810	5440	5880	5810	4480
Benzo(g,h,i)perylene		3490	2540	4080	3920	3870	2990
Benzofluoranthene (Total)		10900 T	7630 T	11600 T	13100 T	14200 T	10400 T
Chrysene		6590	4660	6800	9150	11000	6970
Dibenz(a,h)anthracene		775 U	847 U	1360 U	1310 U	968	995 U
Fluoranthene		13200	9320	15600	7190	16500	12900
Indeno(1,2,3-cd)pyrene		4260	2970	4080	3920	4190	2990
Pyrene		8910	8050	12900	8500	13200	11400
Total HPAH (TOCN)		56600 T	42400 T	66000 T	56900 T	76500 T	57200 T
Acenaphthene		775 U	847 U	1360 U	1310 U	645 U	995 U
Acenaphthylene		775 U	847 U	1360 U	1310 U	645 U	995 U
Anthracene		1550	847	1360 U	1310	1940	1490
Fluorene		775	847 U	1360 U	1310 U	968	995 U
Naphthalene		775 U	847 U	1360 U	1310 U	645 U	995 U
Phenanthrene		3880	3810	4080	4580	5810	4480
Total LPAH (TOCN)		6200 T	4660 T	4080 T	5880 T	8710 T	5970 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR170	DR171	DR172	DR173	DR174	DR175
	Sample ID:	SD-DR170-0000	SD-DR171-0000	SD-DR172-0000	SD-DR173-0000	SD-DR174-0000	SD-DR175-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 UJ	200 U	200 U	200 UJ	200 UJ
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 UJ	200 U	200 U	200 UJ	200 UJ
2-Methylnaphthalene		20 U	20 U	20 U	20 U	30	80
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR170	DR171	DR172	DR173	DR174	DR175
	Sample ID:	SD-DR170-0000	SD-DR171-0000	SD-DR172-0000	SD-DR173-0000	SD-DR174-0000	SD-DR175-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid		200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol		50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate		180 UJ	390	20	100	300	270
Butyl Benzyl Phthalate		20 U	30	20 U	20 U	30	20 U
Carbazole		20 U	70	20 U	20 U	120	370
Di-n-butyl Phthalate		20 U	20 U	20 U	20 U	70	20 U
Di-n-octyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran		20 U	40	20 U	20 U	60	750
Diethyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene		100 UJ	100 U	100 U	100 U	100 UJ	100 UJ
Hexachloroethane		20 U	20 U	20 U	20 U	20 U	20 U
Isophorone		20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine		40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine		40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene		20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)		100 U	100 U	100 U	100 U	100 U	100 U
Phenol		20 U	20 U	20 U	110	20 U	20 U
Benz(a)anthracene		90	260	50	160	1500	3000
Benzo(a)pyrene		80	220	50	170	1100	1200

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR170	DR171	DR172	DR173	DR174	DR175
Sample ID:	SD-DR170-0000	SD-DR171-0000	SD-DR172-0000	SD-DR173-0000	SD-DR174-0000	SD-DR175-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene	110	310	70	190	1500	2000
Benzo(g,h,i)perylene	60	130	30	90	340	450
Benzo(k)fluoranthene	90	200	50	170	1000	1300
Benzofluoranthene (Total)	200 T	510 T	120 T	360 T	2500 T	3300 T
Chrysene	120	330	90	250	1800	3400
Dibenz(a,h)anthracene	20 U	40	20 U	30	130	150
Fluoranthene	230	1100	130	390	2800	18000
Indeno(1,2,3-cd)pyrene	60	170	30	100	480	660
Pyrene	210	640	80	310	2600	11000
Total HPAH	1050 T	3400 T	580 T	1860 T	13250 T	41160 T
Acenaphthene	20 U	20 U	20 U	20 U	100	740
Acenaphthylene	20 U	20 U	20 U	20 U	40	60
Anthracene	20 U	180	20 U	40	330	1500
Fluorene	20 U	70	20 U	20	120	1700
Naphthalene	20 U	20 U	20 U	20 U	60	30
Phenanthrene	70	470	30	160	700	16000
Total LPAH	70 T	720 T	30 T	220 T	1350 T	20030 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)						
1,2,4-Trichlorobenzene	980 U	810 U		2300 U	1260 U	1150 U
1,2-Dichlorobenzene	980 U	810 U		2300 U	1260 U	1150 U
1,4-Dichlorobenzene	980 U	810 U		2300 U	1260 U	1150 U
2-Methylnaphthalene	980 U	810 U		2300 U	1890	4600
bis(2-Ethylhexyl)phthalate	8820 UJ	15800		11500	18900	15500
Butylbenzylphthalate	980 U	1210		2300 U	1890	1150 U
Di-n-butylphthalate	980 U	810 U		2300 U	4400	1150 U
Di-n-octylphthalate	980 U	810 U		2300 U	1260 U	1150 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR170	DR171	DR172	DR173	DR174	DR175
	Sample ID:	SD-DR170-0000	SD-DR171-0000	SD-DR172-0000	SD-DR173-0000	SD-DR174-0000	SD-DR175-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran		980 U	1620		2300 U	3770	43100
Diethylphthalate		980 U	810 U		2300 U	1260 U	1150 U
Dimethylphthalate		980 U	810 U		2300 U	1260 U	1150 U
Hexachlorobenzene		980 U	810 U		2300 U	1260 U	1150 U
Hexachlorobutadiene		980 U	810 U		2300 U	1260 U	1150 U
N-Nitrosodiphenylamine		1960 U	1620 U		4600 U	2520 U	2300 U
Benzo(a)anthracene		4410	10500		18400	94300	172000
Benzo(a)pyrene		3920	8910		19500	69200	69000
Benzo(g,h,i)perylene		2940	5260		10300	21400	25900
Benzofluoranthene (Total)		9800 T	20600 T		41400 T	157000 T	190000 T
Chrysene		5880	13400		28700	113000	195000
Dibenz(a,h)anthracene		980 U	1620		3450	8180	8620
Fluoranthene		11300	44500		44800	176000	1030000
Indeno(1,2,3-cd)pyrene		2940	6880		11500	30200	37900
Pyrene		10300	25900		35600	164000	632000
Total HPAH (TOCN)		51500 T	138000 T		214000 T	833000 T	2370000 T
Acenaphthene		980 U	810 U		2300 U	6290	42500
Acenaphthylene		980 U	810 U		2300 U	2520	3450
Anthracene		980 U	7290		4600	20800	86200
Fluorene		980 U	2830		2300	7550	97700
Naphthalene		980 U	810 U		2300 U	3770	1720
Phenanthrene		3430	19000		18400	44000	920000
Total LPAH (TOCN)		3430 T	29100 T		25300 T	84900 T	1150000 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR176	DR177	DR178	DR179	DR180	DR181
	Sample ID:	SD-DR176-0000	SD-DR177-0000	SD-DR178-0000-CC	SD-DR179-0000	SD-DR180-0000	SD-DR181-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene		260	20	90	30	20 U	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR176	DR177	DR178	DR179	DR180	DR181
Sample ID:	SD-DR176-0000	SD-DR177-0000	SD-DR178-0000-CC	SD-DR179-0000	SD-DR180-0000	SD-DR181-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	450	700	5100	2800	500	790
Butyl Benzyl Phthalate	30	50	270	120	30	40
Carbazole	100	50	410	180	20	40
Di-n-butyl Phthalate	20	20	100	70	20 U	20 U
Di-n-octyl Phthalate	20	20 U	570 J	260	20 U	70
Dibenzofuran	680	50	120	50	40	30
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	20 U	70	20	20 U	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 UJ	100 U	100 U	100 U	100 U	100 U
Phenol	20 U	20 U	40	20 U	120	20 U
Benz(a)anthracene	880	420	2600	1200	230	280
Benzo(a)pyrene	490	420	3500 J	1700	190	340

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR176	DR177	DR178	DR179	DR180	DR181
	Sample ID:	SD-DR176-0000	SD-DR177-0000	SD-DR178-0000-CC	SD-DR179-0000	SD-DR180-0000	SD-DR181-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene		600	610	4700 J	2400	350	410
Benzo(g,h,i)perylene		260	120	2100 J	830	20	260
Benzo(k)fluoranthene		510	530	3300 J	1700	270	320
Benzofluoranthene (Total)		1110 T	1140 T	8000 T	4100 T	620 T	730 T
Chrysene		1100	600	3500	1700	320	410
Dibenz(a,h)anthracene		80	40	680 J	250	30	70
Fluoranthene		3900	1100	3600	2300	620	690
Indeno(1,2,3-cd)pyrene		290	220	2300 J	1100	120	270
Pyrene		2500	1100	7500	3700	620	810
Total HPAH		10610 T	5160 T	33780 T	16880 T	2770 T	3860 T
Acenaphthene		1200	50	250	70	50	30
Acenaphthylene		20	20 U	20 U	20 U	20 U	20 U
Anthracene		500	130	540	210	70	80
Fluorene		1000	70	190	70	50	40
Naphthalene		440	20 U	60	30	30	30
Phenanthrene		3900	480	2400	1100	210	270
Total LPAH		7060 T	730 T	3440 T	1480 T	410 T	450 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		763 U	697 U	581 U	707 U	760 U	855 U
1,2-Dichlorobenzene		763 U	697 U	581 U	707 U	760 U	855 U
1,4-Dichlorobenzene		763 U	697 U	581 U	707 U	760 U	855 U
2-Methylnaphthalene		9920	697	2620	1060	760 U	855 U
bis(2-Ethylhexyl)phthalate		17200	24400	148000	98900	19000	33800
Butylbenzylphthalate		1150	1740	7850	4240	1140	1710
Di-n-butylphthalate		763	697	2910	2470	760 U	855 U
Di-n-octylphthalate		763	697 U	16600 J	9190	760 U	2990

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR176 SD-DR176-0000 0 to 10 cm	DR177 SD-DR177-0000 0 to 10 cm	DR178 SD-DR178-0000-CC 0 to 10 cm	DR179 SD-DR179-0000 0 to 10 cm	DR180 SD-DR180-0000 0 to 10 cm	DR181 SD-DR181-0000 0 to 10 cm
Dibenzofuran		26000	1740	3490	1770	1520	1280
Diethylphthalate		763 U	697 U	581 U	707 U	760 U	855 U
Dimethylphthalate		763 U	697 U	2030	707	760 U	855 U
Hexachlorobenzene		763 U	697 U	581 U	707 U	760 U	855 U
Hexachlorobutadiene		763 U	697 U	581 U	707 U	760 U	855 U
N-Nitrosodiphenylamine		1530 U	1390 U	1160 U	1410 U	1520 U	1710 U
Benzo(a)anthracene		33600	14600	75600	42400	8750	12000
Benzo(a)pyrene		18700	14600	102000 J	60100	7220	14500
Benzo(g,h,i)perylene		9920	4180	61000 J	29300	760	11100
Benzofluoranthene (Total)		42400 T	39700 T	233000 T	145000 T	23600 T	31200 T
Chrysene		42000	20900	102000	60100	12200	17500
Dibenz(a,h)anthracene		3050	1390	19800 J	8830	1140	2990
Fluoranthene		149000	38300	105000	81300	23600	29500
Indeno(1,2,3-cd)pyrene		11100	7670	66900 J	38900	4560	11500
Pyrene		95400	38300	218000	131000	23600	34600
Total HPAH (TOCN)		405000 T	180000 T	982000 T	596000 T	105000 T	165000 T
Acenaphthene		45800	1740	7270	2470	1900	1280
Acenaphthylene		763	697 U	581 U	707 U	760 U	855 U
Anthracene		19100	4530	15700	7420	2660	3420
Fluorene		38200	2440	5520	2470	1900	1710
Naphthalene		16800	697 U	1740	1060	1140	1280
Phenanthrene		149000	16700	69800	38900	7980	11500
Total LPAH (TOCN)		269000 T	25400 T	100000 T	52300 T	15600 T	19200 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR182	DR183	DR184	DR185	DR186	DR187
	Sample ID:	SD-DR182-0000	SD-DR183-0000	SD-DR184-0000	SD-DR185-0000	SD-DR186-0000	SD-DR187-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	5.6 U	4.6 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	2.8 U	2.3 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	2.8 U	2.3 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	2.8 U	2.3 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene		20 U	20 U	20 U	20 U	100	90
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR182	DR183	DR184	DR185	DR186	DR187
Sample ID:	SD-DR182-0000	SD-DR183-0000	SD-DR184-0000	SD-DR185-0000	SD-DR186-0000	SD-DR187-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 UJ	100 UJ	100 UJ
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	340	50	430	310	210	1500
Butyl Benzyl Phthalate	20	20 U	30	30	30	50
Carbazole	20 U	20 U	40	60	120	1100
Di-n-butyl Phthalate	20 U	20 U	20 U	20 U	50	90
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	110
Dibenzofuran	20 U	20 U	20 U	20 U	130	280
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	20 U	20 U	20 U	20 U	50
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	5.6 U	4.6 U
Hexachlorocyclopentadiene	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
Hexachloroethane	20 U	20 U	20 U	20 U	2.8 U	2.3 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 U	100 U	100 U	100 U
Phenol	20 U	20 U	20 U	340	20 U	20
Benz(a)anthracene	180	50	200	450	930	4800
Benzo(a)pyrene	50	20 U	230	360	830	3700

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR182 SD-DR182-0000 0 to 10 cm	DR183 SD-DR183-0000 0 to 10 cm	DR184 SD-DR184-0000 0 to 10 cm	DR185 SD-DR185-0000 0 to 10 cm	DR186 SD-DR186-0000 0 to 10 cm	DR187 SD-DR187-0000 0 to 10 cm
Benzo(b)fluoranthene		240	70	240	470	840	3300
Benzo(g,h,i)perylene		20 U	20 U	160	250	440	2300
Benzo(k)fluoranthene		200	60	250	440	700	4000
Benzofluoranthene (Total)		440 T	130 T	490 T	910 T	1540 T	7300 T
Chrysene		230	50	290	780	1100	4100
Dibenz(a,h)anthracene		30	20 U	30	60	120	950
Fluoranthene		400	100	640	1400	2300	8800
Indeno(1,2,3-cd)pyrene		50	20 U	190	260	510	2900
Pyrene		230	70	450	1200	2200	10000
Total HPAH		1610 T	400 T	2680 T	5670 T	9970 T	44850 T
Acenaphthene		20 U	20 U	20 U	20 U	140	440
Acenaphthylene		20 U	20 U	20 U	20 U	20	20
Anthracene		70	20 U	40	80	330	800
Fluorene		20	20 U	20	20	300	530
Naphthalene		20 U	20 U	20 U	20 U	120	200
Phenanthrene		150	70	240	300	1700	6300
Total LPAH		240 T	70 T	300 T	400 T	2610 T	8290 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene			1110 U	905 U	1020 U	279 U	242 U
1,2-Dichlorobenzene			1110 U	905 U	1020 U	139 U	121 U
1,4-Dichlorobenzene			1110 U	905 U	1020 U	139 U	121 U
2-Methylnaphthalene			1110 U	905 U	1020 U	4980	4740
bis(2-Ethylhexyl)phthalate			2780	19500	15800	10400	78900
Butylbenzylphthalate			1110 U	1360	1530	1490	2630
Di-n-butylphthalate			1110 U	905 U	1020 U	2490	4740
Di-n-octylphthalate			1110 U	905 U	1020 U	995 U	5790

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR182	DR183	DR184	DR185	DR186	DR187
	Sample ID:	SD-DR182-0000	SD-DR183-0000	SD-DR184-0000	SD-DR185-0000	SD-DR186-0000	SD-DR187-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran			1110 U	905 U	1020 U	6470	14700
Diethylphthalate			1110 U	905 U	1020 U	995 U	1050 U
Dimethylphthalate			1110 U	905 U	1020 U	995 U	2630
Hexachlorobenzene			1110 U	905 U	1020 U	995 U	1050 U
Hexachlorobutadiene			1110 U	905 U	1020 U	279 U	242 U
N-Nitrosodiphenylamine			2220 U	1810 U	2040 U	1990 U	2110 U
Benzo(a)anthracene			2780	9050	23000	46300	253000
Benzo(a)pyrene			1110 U	10400	18400	41300	195000
Benzo(g,h,i)perylene			1110 U	7240	12800	21900	121000
Benzofluoranthene (Total)			7220 T	22200 T	46400 T	76600 T	384000 T
Chrysene			2780	13100	39800	54700	216000
Dibenz(a,h)anthracene			1110 U	1360	3060	5970	50000
Fluoranthene			5560	29000	71400	114000	463000
Indeno(1,2,3-cd)pyrene			1110 U	8600	13300	25400	153000
Pyrene			3890	20400	61200	109000	526000
Total HPAH (TOCN)			22200 T	121000 T	289000 T	496000 T	2360000 T
Acenaphthene			1110 U	905 U	1020 U	6970	23200
Acenaphthylene			1110 U	905 U	1020 U	995	1050
Anthracene			1110 U	1810	4080	16400	42100
Fluorene			1110 U	905	1020	14900	27900
Naphthalene			1110 U	905 U	1020 U	5970	10500
Phenanthrene			3890	10900	15300	84600	332000
Total LPAH (TOCN)			3890 T	13600 T	20400 T	130000 T	436000 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR188	DR189	DR190	DR191	DR192	DR193
	Sample ID:	SD-DR188-0000	SD-DR189-0000	SD-DR190-0000	SD-DR191-0000	SD-DR192-0000	SD-DR193-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 UJ	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 UJ	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 UJ	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 UJ	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 UJ	200 U	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 UJ	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 UJ	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Methylphenol		20 UJ	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 UJ	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 UJ	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 UJ	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR188	DR189	DR190	DR191	DR192	DR193
Sample ID:	SD-DR188-0000	SD-DR189-0000	SD-DR190-0000	SD-DR191-0000	SD-DR192-0000	SD-DR193-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 UJ	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	260	440	240 UJ	460	110	130
Butyl Benzyl Phthalate	60	30	20 U	20 U	20 U	20
Carbazole	20	160	30	40	20 U	20 U
Di-n-butyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	20 U	60	30	60	20	20 U
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	40	30	20 U	20 U	20 U	20 U
Hexachlorobenzene	20 U	30	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 UJ	100 U	100 UJ	100 UJ	100 UJ	100 UJ
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 UJ	100 UJ	100 U	100 U	100 U	100 U
Phenol	20 UJ	120	20 U	30	20	20
Benz(a)anthracene	120	860	1100	920	260	140
Benzo(a)pyrene	140	610	670	440	160	130

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR188	DR189	DR190	DR191	DR192	DR193
Sample ID:	SD-DR188-0000	SD-DR189-0000	SD-DR190-0000	SD-DR191-0000	SD-DR192-0000	SD-DR193-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene	150	1100	870	570	200	140
Benzo(g,h,i)perylene	100	320	220	170	70	80
Benzo(k)fluoranthene	170	840	600	460	170	130
Benzofluoranthene (Total)	320 T	1940 T	1470 T	1030 T	370 T	270 T
Chrysene	180	1600	1300	870	290	190
Dibenz(a,h)anthracene	30	100	80	50	20 U	20
Fluoranthene	340	6900	2100	2800	720	260
Indeno(1,2,3-cd)pyrene	110	410	290	220	80	90
Pyrene	290	3500	2100	1900	700	280
Total HPAH	1630 T	16240 T	9330 T	8400 T	2650 T	1460 T
Acenaphthene	20 U	70	50	80	30	20 U
Acenaphthylene	20 U	70	20	30	20 U	20 U
Anthracene	20	510	190	160	50	50
Fluorene	20 U	170	80	80	30	20 U
Naphthalene	20 U	20 U	20 U	20 U	20 U	20 U
Phenanthrene	140	2500	570	760	180	130
Total LPAH	160 T	3320 T	910 T	1110 T	290 T	180 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)						
1,2,4-Trichlorobenzene	1140 U	1450 U	1050 U	913 U	760 U	1650 U
1,2-Dichlorobenzene	1140 U	1450 U	1050 U	913 U	760 U	1650 U
1,4-Dichlorobenzene	1140 U	1450 U	1050 U	913 U	760 U	1650 U
2-Methylnaphthalene	1140 U	1450 U	1050 U	913 U	760 U	1650 U
bis(2-Ethylhexyl)phthalate	14900	31900	12600 UJ	21000	4180	10700
Butylbenzylphthalate	3430	2170	1050 U	913 U	760 U	1650
Di-n-butylphthalate	1140 U	1450 U	1050 U	913 U	760 U	1650 U
Di-n-octylphthalate	1140 U	1450 U	1050 U	913 U	760 U	1650 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR188	DR189	DR190	DR191	DR192	DR193
Sample ID:	SD-DR188-0000	SD-DR189-0000	SD-DR190-0000	SD-DR191-0000	SD-DR192-0000	SD-DR193-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran	1140 U	4350	1580	2740	760	1650 U
Diethylphthalate	1140 U	1450 U	1050 U	913 U	760 U	1650 U
Dimethylphthalate	2290	2170	1050 U	913 U	760 U	1650 U
Hexachlorobenzene	1140 U	2170	1050 U	913 U	760 U	1650 U
Hexachlorobutadiene	1140 U	1450 U	1050 U	913 U	760 U	1650 U
N-Nitrosodiphenylamine	2290 U	2900 U	2110 U	1830 U	1520 U	3310 U
Benzo(a)anthracene	6860	62300	57900	42000	9890	11600
Benzo(a)pyrene	8000	44200	35300	20100	6080	10700
Benzo(g,h,i)perylene	5710	23200	11600	7760	2660	6610
Benzofluoranthene (Total)	18300 T	141000 T	77400 T	47000 T	14100 T	22300 T
Chrysene	10300	116000	68400	39700	11000	15700
Dibenz(a,h)anthracene	1710	7250	4210	2280	760 U	1650
Fluoranthene	19400	500000	111000	128000	27400	21500
Indeno(1,2,3-cd)pyrene	6290	29700	15300	10000	3040	7440
Pyrene	16600	254000	111000	86800	26600	23100
Total HPAH (TOCN)	93100 T	1180000 T	491000 T	384000 T	101000 T	121000 T
Acenaphthene	1140 U	5070	2630	3650	1140	1650 U
Acenaphthylene	1140 U	5070	1050	1370	760 U	1650 U
Anthracene	1140	37000	10000	7310	1900	4130
Fluorene	1140 U	12300	4210	3650	1140	1650 U
Naphthalene	1140 U	1450 U	1050 U	913 U	760 U	1650 U
Phenanthrene	8000	181000	30000	34700	6840	10700
Total LPAH (TOCN)	9140 T	241000 T	47900 T	50700 T	11000 T	14900 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR194	DR195	DR196	DR197	DR198	DR199
	Sample ID:	SD-DR194-0000	SD-DR195-0000	SD-DR196-0000	SD-DR197-0000	SD-DR198-0000	SD-DR199-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 UJ	200 UJ	200 UJ	200 UJ	200 UJ	200 UJ
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 UJ	200 UJ	200 UJ	200 UJ	200 UJ	200 UJ
2-Methylnaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR194	DR195	DR196	DR197	DR198	DR199
Sample ID:	SD-DR194-0000	SD-DR195-0000	SD-DR196-0000	SD-DR197-0000	SD-DR198-0000	SD-DR199-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	610	130 UJ	150 UJ	110 UJ	150 UJ	130 UJ
Butyl Benzyl Phthalate	30	20 U	20	20 U	20	20 U
Carbazole	40	20 U	20 U	20 U	20 U	20 U
Di-n-butyl Phthalate	20	20 U	20 U	20 U	20 U	20 U
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	40	20 U	20 U	20 U	20 U	20 U
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	40	20 U	20 U	20 U	20 U	20 U
Hexachlorobenzene	20	20 U	20 U	20 U	690	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 U	100 U	100 U	100 U
Phenol	30	20 U	20	20	70	20 U
Benz(a)anthracene	280	90	90	50	70	80
Benzo(a)pyrene	240	110	120	60	100	100

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR194	DR195	DR196	DR197	DR198	DR199
	Sample ID:	SD-DR194-0000	SD-DR195-0000	SD-DR196-0000	SD-DR197-0000	SD-DR198-0000	SD-DR199-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene		330	120	130	80	120	110
Benzo(g,h,i)perylene		120	80	90	60	70	70
Benzo(k)fluoranthene		250	100	110	70	100	90
Benzofluoranthene (Total)		580 T	220 T	240 T	150 T	220 T	200 T
Chrysene		340	140	150	90	130	130
Dibenz(a,h)anthracene		30	20	20	20 U	20	20 U
Fluoranthene		840	210	220	130	190	230
Indeno(1,2,3-cd)pyrene		150	100	100	70	90	90
Pyrene		540	170	220	120	160	200
Total HPAH		3120 T	1140 T	1250 T	730 T	1050 T	1100 T
Acenaphthene		40	20 U	20 U	20 U	20 U	20 U
Acenaphthylene		20 U	20 U	20 U	20 U	20 U	20 U
Anthracene		80	20 U	20	20 U	20 U	20
Fluorene		60	20 U	20 U	20 U	20 U	20 U
Naphthalene		20 U	20 U	20 U	20 U	20 U	20 U
Phenanthrene		280	90	110	50	70	90
Total LPAH		460 T	90 T	130 T	50 T	70 T	110 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		654 U	1460 U	1710 U	1540 U	1300 U	1380 U
1,2-Dichlorobenzene		654 U	1460 U	1710 U	1540 U	1300 U	1380 U
1,4-Dichlorobenzene		654 U	1460 U	1710 U	1540 U	1300 U	1380 U
2-Methylnaphthalene		654 U	1460 U	1710 U	1540 U	1300 U	1380 U
bis(2-Ethylhexyl)phthalate		19900	9490 UJ	12800 UJ	8460 UJ	9740 UJ	8970 UJ
Butylbenzylphthalate		980	1460 U	1710	1540 U	1300	1380 U
Di-n-butylphthalate		654	1460 U	1710 U	1540 U	1300 U	1380 U
Di-n-octylphthalate		654 U	1460 U	1710 U	1540 U	1300 U	1380 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR194 SD-DR194-0000 0 to 10 cm	DR195 SD-DR195-0000 0 to 10 cm	DR196 SD-DR196-0000 0 to 10 cm	DR197 SD-DR197-0000 0 to 10 cm	DR198 SD-DR198-0000 0 to 10 cm	DR199 SD-DR199-0000 0 to 10 cm
Dibenzofuran		1310	1460 U	1710 U	1540 U	1300 U	1380 U
Diethylphthalate		654 U	1460 U	1710 U	1540 U	1300 U	1380 U
Dimethylphthalate		1310	1460 U	1710 U	1540 U	1300 U	1380 U
Hexachlorobenzene		654	1460 U	1710 U	1540 U	44800	1380 U
Hexachlorobutadiene		654 U	1460 U	1710 U	1540 U	1300 U	1380 U
N-Nitrosodiphenylamine		1310 U	2920 U	3420 U	3080 U	2600 U	2760 U
Benzo(a)anthracene		9150	6570	7690	3850	4550	5520
Benzo(a)pyrene		7840	8030	10300	4620	6490	6900
Benzo(g,h,i)perylene		3920	5840	7690	4620	4550	4830
Benzofluoranthene (Total)		19000 T	16100 T	20500 T	11500 T	14300 T	13800 T
Chrysene		11100	10200	12800	6920	8440	8970
Dibenz(a,h)anthracene		980	1460	1710	1540 U	1300	1380 U
Fluoranthene		27500	15300	18800	10000	12300	15900
Indeno(1,2,3-cd)pyrene		4900	7300	8550	5380	5840	6210
Pyrene		17600	12400	18800	9230	10400	13800
Total HPAH (TOCN)		102000 T	83200 T	107000 T	56200 T	68200 T	75900 T
Acenaphthene		1310	1460 U	1710 U	1540 U	1300 U	1380 U
Acenaphthylene		654 U	1460 U	1710 U	1540 U	1300 U	1380 U
Anthracene		2610	1460 U	1710	1540 U	1300 U	1380
Fluorene		1960	1460 U	1710 U	1540 U	1300 U	1380 U
Naphthalene		654 U	1460 U	1710 U	1540 U	1300 U	1380 U
Phenanthrene		9150	6570	9400	3850	4550	6210
Total LPAH (TOCN)		15000 T	6570 T	11100 T	3850 T	4550 T	7590 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR200	DR201	DR202	DR203	DR204	DR205
	Sample ID:	SD-DR200-0000	SD-DR201-0000	SD-DR202-0000	SD-DR203-0000	SD-DR204-0000	SD-DR205-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	5.1 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	2.6 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	2.6 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	2.6 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 UJ	200 U	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 UJ	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR200	DR201	DR202	DR203	DR204	DR205
Sample ID:	SD-DR200-0000	SD-DR201-0000	SD-DR202-0000	SD-DR203-0000	SD-DR204-0000	SD-DR205-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	150 UJ	150	80	130	180	150
Butyl Benzyl Phthalate	20	20 U	20 U	20 U	20	20 U
Carbazole	20 U	20 U	20 U	20 U	20 U	20 U
Di-n-butyl Phthalate	20 U	20 U	20 U	20 U	40	20 U
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	20 U	20 U	20 U	20 U	20 U	20 U
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20	20 U	20 U	30	20 U	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	5.1 U	20 U	20 U
Hexachlorocyclopentadiene	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
Hexachloroethane	20 U	20 U	20 U	2.6 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 UJ	100 U	100 U	100 U
Phenol	20 U	60	1400	710	20 U	250
Benz(a)anthracene	80	50	90	60	100	50
Benzo(a)pyrene	100	60	90	60	120	50

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR200	DR201	DR202	DR203	DR204	DR205
	Sample ID:	SD-DR200-0000	SD-DR201-0000	SD-DR202-0000	SD-DR203-0000	SD-DR204-0000	SD-DR205-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene		130	80	80	80	130	60
Benzo(g,h,i)perylene		70	50	60	50	120	40
Benzo(k)fluoranthene		100	70	100	80	120	70
Benzofluoranthene (Total)		230 T	150 T	180 T	160 T	250 T	130 T
Chrysene		120	100	110	110	160	100
Dibenz(a,h)anthracene		20 U	20 U	20 U	20 U	50	20 U
Fluoranthene		240	140	230	150	230	130
Indeno(1,2,3-cd)pyrene		90	50	60	50	120	50
Pyrene		190	130	190	140	190	110
Total HPAH		1120 T	730 T	1010 T	780 T	1340 T	660 T
Acenaphthene		20 U	20 U	20 U	20 U	20 U	20 U
Acenaphthylene		20 U	20 U	20 U	20 U	20 U	20 U
Anthracene		20 U	30	20 U	20 U	20 U	20 U
Fluorene		20 U	20 U	20 U	20 U	20 U	20 U
Naphthalene		20 U	20 U	20 U	2.6 U	20 U	20 U
Phenanthrene		90	60	70	60	80	60
Total LPAH		90 T	90 T	70 T	60 T	80 T	60 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		1160 U	1180 U	1270 U	481 U	1830 U	901 U
1,2-Dichlorobenzene		1160 U	1180 U	1270 U	245 U	1830 U	901 U
1,4-Dichlorobenzene		1160 U	1180 U	1270 U	245 U	1830 U	901 U
2-Methylnaphthalene		1160 U	1180 U	1270 U	1890 U	1830 U	901 U
bis(2-Ethylhexyl)phthalate		8670 UJ	8820	5100	12300	16500	6760
Butylbenzylphthalate		1160	1180 U	1270 U	1890 U	1830	901 U
Di-n-butylphthalate		1160 U	1180 U	1270 U	1890 U	3670	901 U
Di-n-octylphthalate		1160 U	1180 U	1270 U	1890 U	1830 U	901 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR200 / SD-DR200-0000 / 0 to 10 cm	DR201 / SD-DR201-0000 / 0 to 10 cm	DR202 / SD-DR202-0000 / 0 to 10 cm	DR203 / SD-DR203-0000 / 0 to 10 cm	DR204 / SD-DR204-0000 / 0 to 10 cm	DR205 / SD-DR205-0000 / 0 to 10 cm
Dibenzofuran		1160 U	1180 U	1270 U	1890 U	1830 U	901 U
Diethylphthalate		1160 U	1180 U	1270 U	1890 U	1830 U	901 U
Dimethylphthalate		1160	1180 U	1270 U	2830	1830 U	901 U
Hexachlorobenzene		1160 U	1180 U	1270 U	1890 U	1830 U	901 U
Hexachlorobutadiene		1160 U	1180 U	1270 U	481 U	1830 U	901 U
N-Nitrosodiphenylamine		2310 U	2350 U	2550 U	3770 U	3670 U	1800 U
Benzo(a)anthracene		4620	2940	5730	5660	9170	2250
Benzo(a)pyrene		5780	3530	5730	5660	11000	2250
Benzo(g,h,i)perylene		4050	2940	3820	4720	11000	1800
Benzofluoranthene (Total)		13300 T	8820 T	11500 T	15100 T	22900 T	5860 T
Chrysene		6940	5880	7010	10400	14700	4500
Dibenz(a,h)anthracene		1160 U	1180 U	1270 U	1890 U	4590	901 U
Fluoranthene		13900	8240	14600	14200	21100	5860
Indeno(1,2,3-cd)pyrene		5200	2940	3820	4720	11000	2250
Pyrene		11000	7650	12100	13200	17400	4950
Total HPAH (TOCN)		64700 T	42900 T	64300 T	73600 T	123000 T	29700 T
Acenaphthene		1160 U	1180 U	1270 U	1890 U	1830 U	901 U
Acenaphthylene		1160 U	1180 U	1270 U	1890 U	1830 U	901 U
Anthracene		1160 U	1760	1270 U	1890 U	1830 U	901 U
Fluorene		1160 U	1180 U	1270 U	1890 U	1830 U	901 U
Naphthalene		1160 U	1180 U	1270 U	245 U	1830 U	901 U
Phenanthrene		5200	3530	4460	5660	7340	2700
Total LPAH (TOCN)		5200 T	5290 T	4460 T	5660 T	7340 T	2700 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR206	DR207	DR208	DR209	DR210	DR211
	Sample ID:	SD-DR206-0000	SD-DR207-0000	SD-DR208-0000	SD-DR209-0000	SD-DR210-0000	SD-DR211-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		6.1 U	20 U	20 UJ	20 U	20 U	20 U
1,2-Dichlorobenzene		3.1 U	20 U	20 UJ	20 U	20 U	20 U
1,3-Dichlorobenzene		3.1 U	20 U	20 UJ	20 U	20 U	20 U
1,4-Dichlorobenzene		3.1 U	20 U	20 UJ	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 UJ	200 U	200 UJ	200 UJ
2,4,6-Trichlorophenol		200 U	200 U	200 UJ	200 U	200 UJ	200 UJ
2,4-Dichlorophenol		60 U	60 U	60 UJ	60 U	60 UJ	60 UJ
2,4-Dimethylphenol		20 U	20 U	20 UJ	20 U	20 UJ	20 UJ
2,4-Dinitrophenol		200 U	200 U	200 UJ	200 U	200 UJ	200 UJ
2,4-Dinitrotoluene		200 U	200 U	200 UJ	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 UJ	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 UJ	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 UJ	20 U	20 UJ	20 UJ
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 UJ	200 U	200 UJ	200 UJ
2-Methylnaphthalene		20 U	20 U	20 UJ	20 U	20 U	20 U
2-Methylphenol		20 U	20 U	20 UJ	20 U	20 UJ	20 UJ
2-Nitroaniline		100 U	100 U	100 UJ	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 UJ	100 U	100 UJ	100 UJ
3,3'-Dichlorobenzidine		200 U	200 U	200 UJ	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 UJ	20 U	20 UJ	20 UJ
3-Nitroaniline		200 U	200 U	200 UJ	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 UJ	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 UJ	40 U	40 UJ	40 UJ
4-Chloroaniline		60 U	60 U	60 UJ	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 UJ	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR206	DR207	DR208	DR209	DR210	DR211
Sample ID:	SD-DR206-0000	SD-DR207-0000	SD-DR208-0000	SD-DR209-0000	SD-DR210-0000	SD-DR211-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 UJ	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 UJ	100 UJ	100 UJ	100 UJ
Benzoic Acid	200 U	200 U	200 UJ	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 UJ	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 UJ	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 UJ	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 UJ	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	280	120	50 J	160	200	160
Butyl Benzyl Phthalate	40	20 U	20 UJ	20 U	40	20 U
Carbazole	20 U	70	20 UJ	20 U	20 U	20 U
Di-n-butyl Phthalate	20 U	20 U	20 UJ	20 U	20 U	20 U
Di-n-octyl Phthalate	20 U	20 U	20 UJ	20 U	20 U	20 U
Dibenzofuran	20 U	50	20 UJ	20 U	20 U	20 U
Diethyl Phthalate	20 U	40	200 UJ	20 U	20 U	20 U
Dimethyl Phthalate	20	40	20 UJ	20 U	30	20 U
Hexachlorobenzene	20 U	20 U	20 UJ	20 U	20 U	20 U
Hexachlorobutadiene	6.1 U	20 U	20 UJ	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
Hexachloroethane	3.1 U	20 U	20 UJ	20 U	20 U	20 U
Isophorone	20 U	20 U	20 UJ	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 UJ	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 UJ	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 UJ	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 UJ	100 U	100 UJ	100 U	100 UJ	100 UJ
Phenol	320	2100	150 J	430	20 UJ	20 UJ
Benz(a)anthracene	80	920	50 J	30	100	50
Benzo(a)pyrene	80	1000	60 J	40	130	60

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR206	DR207	DR208	DR209	DR210	DR211
Sample ID:	SD-DR206-0000	SD-DR207-0000	SD-DR208-0000	SD-DR209-0000	SD-DR210-0000	SD-DR211-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene	130	1700	50 J	40	150	70
Benzo(g,h,i)perylene	80	430	40 J	30	90	50
Benzo(k)fluoranthene	90	1200	60 J	50	150	70
Benzofluoranthene (Total)	220 T	2900 T	110 T	90 T	300 T	140 T
Chrysene	120	1800	80 J	60	180	80
Dibenz(a,h)anthracene	20	150	20 UJ	20 U	20	20 U
Fluoranthene	280	4500	110 J	100	300	130
Indeno(1,2,3-cd)pyrene	80	510	40 J	40	90	50
Pyrene	220	4200	130 J	90	250	120
Total HPAH	1180 T	16410 T	620 T	480 T	1460 T	680 T
Acenaphthene	20 U	120	20 UJ	20 U	20 U	20 U
Acenaphthylene	20 U	20 U	20 UJ	20 U	20 U	20 U
Anthracene	20 U	140	20 UJ	20 U	20	20 U
Fluorene	20 U	150	20 UJ	20 U	20 U	20 U
Naphthalene	3.1 U	20 U	20 UJ	20 U	20 U	20 U
Phenanthrene	80	2100	70 J	50	130	50
Total LPAH	80 T	2510 T	70 T	50 T	150 T	50 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)						
1,2,4-Trichlorobenzene	205 U	631 U	1550 UJ	1940 U	1380 U	1280 U
1,2-Dichlorobenzene	104 U	631 U	1550 UJ	1940 U	1380 U	1280 U
1,4-Dichlorobenzene	104 U	631 U	1550 UJ	1940 U	1380 U	1280 U
2-Methylnaphthalene	673 U	631 U	1550 UJ	1940 U	1380 U	1280 U
bis(2-Ethylhexyl)phthalate	9430	3790	3880 J	15500	13800	10300
Butylbenzylphthalate	1350	631 U	1550 UJ	1940 U	2760	1280 U
Di-n-butylphthalate	673 U	631 U	1550 UJ	1940 U	1380 U	1280 U
Di-n-octylphthalate	673 U	631 U	1550 UJ	1940 U	1380 U	1280 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR206	DR207	DR208	DR209	DR210	DR211
	Sample ID:	SD-DR206-0000	SD-DR207-0000	SD-DR208-0000	SD-DR209-0000	SD-DR210-0000	SD-DR211-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran		673 U	1580	1550 UJ	1940 U	1380 U	1280 U
Diethylphthalate		673 U	1260	15500 UJ	1940 U	1380 U	1280 U
Dimethylphthalate		673	1260	1550 UJ	1940 U	2070	1280 U
Hexachlorobenzene		673 U	631 U	1550 UJ	1940 U	1380 U	1280 U
Hexachlorobutadiene		205 U	631 U	1550 UJ	1940 U	1380 U	1280 U
N-Nitrosodiphenylamine		1350 U	1260 U	3100 UJ	3880 U	2760 U	2560 U
Benzo(a)anthracene		2690	29000	3880 J	2910	6900	3210
Benzo(a)pyrene		2690	31500	4650 J	3880	8970	3850
Benzo(g,h,i)perylene		2690	13600	3100 J	2910	6210	3210
Benzofluoranthene (Total)		7410 T	91500 T	8530 T	8740 T	20700 T	8970 T
Chrysene		4040	56800	6200 J	5830	12400	5130
Dibenz(a,h)anthracene		673	4730	1550 UJ	1940 U	1380	1280 U
Fluoranthene		9430	142000	8530 J	9710	20700	8330
Indeno(1,2,3-cd)pyrene		2690	16100	3100 J	3880	6210	3210
Pyrene		7410	132000	10100 J	8740	17200	7690
Total HPAH (TOCN)		39700 T	518000 T	48100 T	46600 T	101000 T	43600 T
Acenaphthene		673 U	3790	1550 UJ	1940 U	1380 U	1280 U
Acenaphthylene		673 U	631 U	1550 UJ	1940 U	1380 U	1280 U
Anthracene		673 U	4420	1550 UJ	1940 U	1380	1280 U
Fluorene		673 U	4730	1550 UJ	1940 U	1380 U	1280 U
Naphthalene		104 U	631 U	1550 UJ	1940 U	1380 U	1280 U
Phenanthrene		2690	66200	5430 J	4850	8970	3210
Total LPAH (TOCN)		2690 T	79200 T	5430 T	4850 T	10300 T	3210 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR212	DR213	DR214	DR215	DR216	DR217
Sample ID:	SD-DR212-0000	SD-DR213-0000	SD-DR214-0000	SD-DR215-0000	SD-DR216-0000	SD-DR217-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)						
1,2,4-Trichlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol	200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol	200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol	60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol	20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol	200 UJ	200 UJ	200 U	200 U	200 UJ	200 U
2,4-Dinitrotoluene	200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene	200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene	20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol	20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol	200 UJ	200 UJ	200 U	200 U	200 UJ	200 U
2-Methylnaphthalene	20 U	20 U	20 U	20 U	20 U	20 U
2-Methylphenol	20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine	200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution	20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline	200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether	40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol	40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline	60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether	20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR212	DR213	DR214	DR215	DR216	DR217
Sample ID:	SD-DR212-0000	SD-DR213-0000	SD-DR214-0000	SD-DR215-0000	SD-DR216-0000	SD-DR217-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	40 UJ	170 UJ	300	460	660	1000
Butyl Benzyl Phthalate	20 U	20 U	20 U	40	90	200
Carbazole	20 U	30	20 U	30	30	30
Di-n-butyl Phthalate	20 U	20 U	20 U	20	30	2000
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	20 U	20 U	20 U	20 U	20	20 U
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	20 U	20 U	20 U	20	20
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 U	100 U	100 U	100 U
Phenol	20 U	20 U	20 U	50	20 U	20 U
Benz(a)anthracene	130	350	150	180	220	470
Benzo(a)pyrene	90	320	120	180	220	440

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR212 SD-DR212-0000 0 to 10 cm	DR213 SD-DR213-0000 0 to 10 cm	DR214 SD-DR214-0000 0 to 10 cm	DR215 SD-DR215-0000 0 to 10 cm	DR216 SD-DR216-0000 0 to 10 cm	DR217 SD-DR217-0000 0 to 10 cm
Benzo(b)fluoranthene		100	340	150	240	300	730
Benzo(g,h,i)perylene		40	160	80	120	130	190
Benzo(k)fluoranthene		90	310	150	190	230	450
Benzofluoranthene (Total)		190 T	650 T	300 T	430 T	530 T	1180 T
Chrysene		190	420	210	270	330	600
Dibenz(a,h)anthracene		20 U	50	20 U	40	30	90
Fluoranthene		190	700	400	510	710	470
Indeno(1,2,3-cd)pyrene		60	210	100	170	150	280
Pyrene		150	590	310	390	530	980
Total HPAH		1040 T	3450 T	1670 T	2290 T	2850 T	4700 T
Acenaphthene		20 U	20 U	20 U	20 U	20	30
Acenaphthylene		20 U	20 U	20 U	20 U	20 U	20 U
Anthracene		50	80	40	50	60	80
Fluorene		20 U	20	20 U	20	30	20
Naphthalene		20 U	20 U	20 U	20 U	20 U	20 U
Phenanthrene		70	200	140	180	240	200
Total LPAH		120 T	300 T	180 T	250 T	350 T	330 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		1330 U	1600 U	1310 U	926 U	939 U	1200 U
1,2-Dichlorobenzene		1330 U	1600 U	1310 U	926 U	939 U	1200 U
1,4-Dichlorobenzene		1330 U	1600 U	1310 U	926 U	939 U	1200 U
2-Methylnaphthalene		1330 U	1600 U	1310 U	926 U	939 U	1200 U
bis(2-Ethylhexyl)phthalate		2670 UJ	13600 UJ	19600	21300	31000	59900
Butylbenzylphthalate		1330 U	1600 U	1310 U	1850	4230	12000
Di-n-butylphthalate		1330 U	1600 U	1310 U	926	1410	120000
Di-n-octylphthalate		1330 U	1600 U	1310 U	926 U	939 U	1200 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR212	DR213	DR214	DR215	DR216	DR217
Sample ID:	SD-DR212-0000	SD-DR213-0000	SD-DR214-0000	SD-DR215-0000	SD-DR216-0000	SD-DR217-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran	1330 U	1600 U	1310 U	926 U	939	1200 U
Diethylphthalate	1330 U	1600 U	1310 U	926 U	939 U	1200 U
Dimethylphthalate	1330 U	1600 U	1310 U	926 U	939	1200
Hexachlorobenzene	1330 U	1600 U	1310 U	926 U	939 U	1200 U
Hexachlorobutadiene	1330 U	1600 U	1310 U	926 U	939 U	1200 U
N-Nitrosodiphenylamine	2670 U	3200 U	2610 U	1850 U	1880 U	2400 U
Benzo(a)anthracene	8670	28000	9800	8330	10300	28100
Benzo(a)pyrene	6000	25600	7840	8330	10300	26300
Benzo(g,h,i)perylene	2670	12800	5230	5560	6100	11400
Benzofluoranthene (Total)	12700 T	52000 T	19600 T	19900 T	24900 T	70700 T
Chrysene	12700	33600	13700	12500	15500	35900
Dibenz(a,h)anthracene	1330 U	4000	1310 U	1850	1410	5390
Fluoranthene	12700	56000	26100	23600	33300	28100
Indeno(1,2,3-cd)pyrene	4000	16800	6540	7870	7040	16800
Pyrene	10000	47200	20300	18100	24900	58700
Total HPAH (TOCN)	69300 T	276000 T	109000 T	106000 T	134000 T	281000 T
Acenaphthene	1330 U	1600 U	1310 U	926 U	939	1800
Acenaphthylene	1330 U	1600 U	1310 U	926 U	939 U	1200 U
Anthracene	3330	6400	2610	2310	2820	4790
Fluorene	1330 U	1600	1310 U	926	1410	1200
Naphthalene	1330 U	1600 U	1310 U	926 U	939 U	1200 U
Phenanthrene	4670	16000	9150	8330	11300	12000
Total LPAH (TOCN)	8000 T	24000 T	11800 T	11600 T	16400 T	19800 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR218 SD-DR218-0000 0 to 10 cm	DR219 SD-DR219-0000 0 to 10 cm	DR220 SD-DR220-0000 0 to 10 cm	DR221 SD-DR221-0000 0 to 10 cm	DR222 SD-DR222-0000 0 to 10 cm	DR223 SD-DR223-0000-CC 0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 UJ	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 UJ	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 UJ	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 UJ	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 U	200 UJ	200 U	200 U	200 UJ
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 UJ	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 UJ	200 U	200 U	200 UJ
2-Methylnaphthalene		20 U	20	20 U	20 U	20 U	20 U
2-Methylphenol		20 U	20 U	20 UJ	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 UJ	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 UJ	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 UJ	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR218	DR219	DR220	DR221	DR222	DR223
Sample ID:	SD-DR218-0000	SD-DR219-0000	SD-DR220-0000	SD-DR221-0000	SD-DR222-0000	SD-DR223-0000-CC
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 UJ	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	430	710	400	230 UJ	130	350
Butyl Benzyl Phthalate	30	60	30	20 U	20 U	30
Carbazole	20	100	20	20	20 U	20
Di-n-butyl Phthalate	20 U	20 U	20 U	20	20 U	30
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	20 U	30	20 U	80	20 U	20 U
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	40	20 U	20 U	20 U	20
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 UJ	100 U	100 UJ	100 UJ	100 UJ	100 UJ
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 UJ	100 UJ	100 U	100 U	100 U
Phenol	50	120	20 UJ	90	20	290
Benz(a)anthracene	140	380	110	1000	80	160
Benzo(a)pyrene	140	460	130	460	70	150

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR218	DR219	DR220	DR221	DR222	DR223
Sample ID:	SD-DR218-0000	SD-DR219-0000	SD-DR220-0000	SD-DR221-0000	SD-DR222-0000	SD-DR223-0000-CC
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene	170	490	170	510	80	200
Benzo(g,h,i)perylene	100	320	100	150	40	110
Benzo(k)fluoranthene	170	450	160	490	70	150
Benzofluoranthene (Total)	340 T	940 T	330 T	1000 T	150 T	350 T
Chrysene	210	560	180	840	100	230
Dibenz(a,h)anthracene	30	80	20	50	20 U	30
Fluoranthene	460	1100	340	4200	220	420
Indeno(1,2,3-cd)pyrene	110	370	100	190	50	130
Pyrene	340	930	270	2700	240	330
Total HPAH	1870 T	5140 T	1580 T	10590 T	950 T	1910 T
Acenaphthene	20 U	50	20 U	110	20 U	20 U
Acenaphthylene	20 U	20 U	20 U	20	20 U	20 U
Anthracene	30	100	20	140	20 U	40
Fluorene	20 U	50	20 U	90	20 U	20
Naphthalene	20 U	20 U	20 U	20	20 U	20 U
Phenanthrene	140	560	110	790	90	140
Total LPAH	170 T	760 T	130 T	1170 T	90 T	200 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)						
1,2,4-Trichlorobenzene	781 U	901 U	725 U	1270 U	2110 U	1010 U
1,2-Dichlorobenzene	781 U	901 U	725 U	1270 U	2110 U	1010 U
1,4-Dichlorobenzene	781 U	901 U	725 U	1270 U	2110 U	1010 U
2-Methylnaphthalene	781 U	901	725 U	1270 U	2110 U	1010 U
bis(2-Ethylhexyl)phthalate	16800	32000	14500	14600 UJ	13700	17600
Butylbenzylphthalate	1170	2700	1090	1270 U	2110 U	1510
Di-n-butylphthalate	781 U	901 U	725 U	1270	2110 U	1510
Di-n-octylphthalate	781 U	901 U	725 U	1270 U	2110 U	1010 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR218	DR219	DR220	DR221	DR222	DR223
	Sample ID:	SD-DR218-0000	SD-DR219-0000	SD-DR220-0000	SD-DR221-0000	SD-DR222-0000	SD-DR223-0000-CC
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran		781 U	1350	725 U	5100	2110 U	1010 U
Diethylphthalate		781 U	901 U	725 U	1270 U	2110 U	1010 U
Dimethylphthalate		781 U	1800	725 U	1270 U	2110 U	1010
Hexachlorobenzene		781 U	901 U	725 U	1270 U	2110 U	1010 U
Hexachlorobutadiene		781 U	901 U	725 U	1270 U	2110 U	1010 U
N-Nitrosodiphenylamine		1560 U	1800 U	1450 U	2550 U	4210 U	2010 U
Benzo(a)anthracene		5470	17100	3990	63700	8420	8040
Benzo(a)pyrene		5470	20700	4710	29300	7370	7540
Benzo(g,h,i)perylene		3910	14400	3620	9550	4210	5530
Benzofluoranthene (Total)		13300 T	42300 T	12000 T	63700 T	15800 T	17600 T
Chrysene		8200	25200	6520	53500	10500	11600
Dibenz(a,h)anthracene		1170	3600	725	3180	2110 U	1510
Fluoranthene		18000	49500	12300	268000	23200	21100
Indeno(1,2,3-cd)pyrene		4300	16700	3620	12100	5260	6530
Pyrene		13300	41900	9780	172000	25300	16600
Total HPAH (TOCN)		73000 T	232000 T	57200 T	675000 T	100000 T	96000 T
Acenaphthene		781 U	2250	725 U	7010	2110 U	1010 U
Acenaphthylene		781 U	901 U	725 U	1270	2110 U	1010 U
Anthracene		1170	4500	725	8920	2110 U	2010
Fluorene		781 U	2250	725 U	5730	2110 U	1010
Naphthalene		781 U	901 U	725 U	1270	2110 U	1010 U
Phenanthrene		5470	25200	3990	50300	9470	7040
Total LPAH (TOCN)		6640 T	34200 T	4710 T	74500 T	9470 T	10100 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR224	DR225	DR226	DR227	DR228	DR229
	Sample ID:	SD-DR224-0000	SD-DR225-0000	SD-DR226-0000	SD-DR227-0000	SD-DR228-0000	SD-DR229-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 UJ	200 UJ	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 UJ	200 UJ	200 U	200 U	200 U	200 U
2-Methylnaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	40
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR224	DR225	DR226	DR227	DR228	DR229
Sample ID:	SD-DR224-0000	SD-DR225-0000	SD-DR226-0000	SD-DR227-0000	SD-DR228-0000	SD-DR229-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	260	270	180	140	410	200
Butyl Benzyl Phthalate	20 U	30	20 U	20	30	20
Carbazole	20 U	20	20 U	20 U	20	20 U
Di-n-butyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	20 U	20 U	20 U	20 U	30	20 U
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	20	20 U	20 U	20	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 U	100 U	100 U	100 UJ
Phenol	20 U	20 U	20 U	410	20 U	1500
Benz(a)anthracene	60	140	90	60	160	70
Benzo(a)pyrene	70	170	90	50	140	80

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR224	DR225	DR226	DR227	DR228	DR229
	Sample ID:	SD-DR224-0000	SD-DR225-0000	SD-DR226-0000	SD-DR227-0000	SD-DR228-0000	SD-DR229-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene		80	220	110	80	180	90
Benzo(g,h,i)perylene		60	120	60	50	110	80
Benzo(k)fluoranthene		70	170	120	80	160	90
Benzofluoranthene (Total)		150 T	390 T	230 T	160 T	340 T	180 T
Chrysene		90	220	140	90	230	110
Dibenz(a,h)anthracene		20 U	30	20 U	20 U	20	20
Fluoranthene		150	350	230	150	520	180
Indeno(1,2,3-cd)pyrene		60	130	60	50	110	70
Pyrene		130	350	250	170	450	170
Total HPAH		770 T	1900 T	1150 T	780 T	2080 T	960 T
Acenaphthene		20 U	20 U	20 U	20 U	30	20 U
Acenaphthylene		20 U	20 U	20 U	20 U	20 U	20 U
Anthracene		20 U	30	20 U	20 U	40	20 U
Fluorene		20 U	20 U	20 U	20 U	40	20 U
Naphthalene		20 U	20 U	20 U	20 U	20 U	20 U
Phenanthrene		50	130	90	50	240	70
Total LPAH		50 T	160 T	90 T	50 T	350 T	70 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		1710 U	1160 U	1130 U	1000 U	806 U	980 U
1,2-Dichlorobenzene		1710 U	1160 U	1130 U	1000 U	806 U	980 U
1,4-Dichlorobenzene		1710 U	1160 U	1130 U	1000 U	806 U	980 U
2-Methylnaphthalene		1710 U	1160 U	1130 U	1000 U	806 U	980 U
bis(2-Ethylhexyl)phthalate		22200	15600	10200	7000	16500	9800
Butylbenzylphthalate		1710 U	1730	1130 U	1000	1210	980
Di-n-butylphthalate		1710 U	1160 U	1130 U	1000 U	806 U	980 U
Di-n-octylphthalate		1710 U	1160 U	1130 U	1000 U	806 U	980 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR224	DR225	DR226	DR227	DR228	DR229
Sample ID:	SD-DR224-0000	SD-DR225-0000	SD-DR226-0000	SD-DR227-0000	SD-DR228-0000	SD-DR229-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran	1710 U	1160 U	1130 U	1000 U	1210	980 U
Diethylphthalate	1710 U	1160 U	1130 U	1000 U	806 U	980 U
Dimethylphthalate	1710 U	1160	1130 U	1000 U	806	980 U
Hexachlorobenzene	1710 U	1160 U	1130 U	1000 U	806 U	980 U
Hexachlorobutadiene	1710 U	1160 U	1130 U	1000 U	806 U	980 U
N-Nitrosodiphenylamine	3420 U	2310 U	2260 U	2000 U	1610 U	1960 U
Benzo(a)anthracene	5130	8090	5080	3000	6450	3430
Benzo(a)pyrene	5980	9830	5080	2500	5650	3920
Benzo(g,h,i)perylene	5130	6940	3390	2500	4440	3920
Benzofluoranthene (Total)	12800 T	22500 T	13000 T	8000 T	13700 T	8820 T
Chrysene	7690	12700	7910	4500	9270	5390
Dibenz(a,h)anthracene	1710 U	1730	1130 U	1000 U	806	980
Fluoranthene	12800	20200	13000	7500	21000	8820
Indeno(1,2,3-cd)pyrene	5130	7510	3390	2500	4440	3430
Pyrene	11100	20200	14100	8500	18100	8330
Total HPAH (TOCN)	65800 T	110000 T	65000 T	39000 T	83900 T	47100 T
Acenaphthene	1710 U	1160 U	1130 U	1000 U	1210	980 U
Acenaphthylene	1710 U	1160 U	1130 U	1000 U	806 U	980 U
Anthracene	1710 U	1730	1130 U	1000 U	1610	980 U
Fluorene	1710 U	1160 U	1130 U	1000 U	1610	980 U
Naphthalene	1710 U	1160 U	1130 U	1000 U	806 U	980 U
Phenanthrene	4270	7510	5080	2500	9680	3430
Total LPAH (TOCN)	4270 T	9250 T	5080 T	2500 T	14100 T	3430 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR230	DR231	DR232	DR233	DR234	DR235
	Sample ID:	SD-DR230-0000	SD-DR231-0000	SD-DR232-0000	SD-DR233-0000	SD-DR234-0000	SD-DR235-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 UJ	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 UJ	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 UJ	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 UJ	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 UJ	200 U	200 U	200 UJ	200 UJ	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 UJ	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 UJ	200 U	200 U	200 UJ	200 UJ	200 U
2-Methylnaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Methylphenol		20 UJ	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 UJ	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 UJ	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 UJ	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR230	DR231	DR232	DR233	DR234	DR235
	Sample ID:	SD-DR230-0000	SD-DR231-0000	SD-DR232-0000	SD-DR233-0000	SD-DR234-0000	SD-DR235-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol		100 UJ	100 U	100 U	100 U	100 U	100 U
Benzoic Acid		200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol		50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate		360	300 UJ	180	280 U	240 U	240
Butyl Benzyl Phthalate		30	30	20 U	30	20 U	30
Carbazole		20 U	20	20 U	20 U	20 U	20 U
Di-n-butyl Phthalate		20 U	50	20 U	20 U	20 U	20 U
Di-n-octyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran		20 U	20 U	70	20 U	20 U	20 U
Diethyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene		100 UJ	100 UJ	100 UJ	100 U	100 U	100 UJ
Hexachloroethane		20 U	20 U	20 U	20 U	20 U	20 U
Isophorone		20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine		40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine		40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene		20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)		100 UJ	100 U	100 U	100 U	100 U	100 U
Phenol		20 UJ	170	20 U	30	70	20 U
Benz(a)anthracene		100	160	220	130	90	80
Benzo(a)pyrene		120	150	140	150	110	90

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR230	DR231	DR232	DR233	DR234	DR235
Sample ID:	SD-DR230-0000	SD-DR231-0000	SD-DR232-0000	SD-DR233-0000	SD-DR234-0000	SD-DR235-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene	150	170	160	190	130	110
Benzo(g,h,i)perylene	80	110	70	110	80	70
Benzo(k)fluoranthene	130	170	150	150	110	110
Benzofluoranthene (Total)	280 T	340 T	310 T	340 T	240 T	220 T
Chrysene	160	230	240	200	130	130
Dibenz(a,h)anthracene	20 U	30	20 U	30	20	20 U
Fluoranthene	290	500	650	370	240	200
Indeno(1,2,3-cd)pyrene	90	110	80	130	100	70
Pyrene	240	370	550	290	220	220
Total HPAH	1360 T	2000 T	2260 T	1750 T	1230 T	1080 T
Acenaphthene	20 U	20 U	110	20 U	20 U	20 U
Acenaphthylene	20 U	20 U	20 U	20 U	20 U	20 U
Anthracene	20	50	60	30	20	20 U
Fluorene	20 U	20	110	20 U	20 U	20 U
Naphthalene	20 U	20 U	20 U	20 U	20 U	20 U
Phenanthrene	100	130	640	120	90	80
Total LPAH	120 T	200 T	920 T	150 T	110 T	80 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)						
1,2,4-Trichlorobenzene	833 U	922 U	1460 U	913 U	1130 U	1040 U
1,2-Dichlorobenzene	833 U	922 U	1460 U	913 U	1130 U	1040 U
1,4-Dichlorobenzene	833 U	922 U	1460 U	913 U	1130 U	1040 U
2-Methylnaphthalene	833 U	922 U	1460 U	913 U	1130 U	1040 U
bis(2-Ethylhexyl)phthalate	15000	13800 UJ	13100	12800 U	13600 U	12500
Butylbenzylphthalate	1250	1380	1460 U	1370	1130 U	1560
Di-n-butylphthalate	833 U	2300	1460 U	913 U	1130 U	1040 U
Di-n-octylphthalate	833 U	922 U	1460 U	913 U	1130 U	1040 U

Blank cell indicate no analyses were performed

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR230	DR231	DR232	DR233	DR234	DR235
Sample ID:	SD-DR230-0000	SD-DR231-0000	SD-DR232-0000	SD-DR233-0000	SD-DR234-0000	SD-DR235-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran	833 U	922 U	5110	913 U	1130 U	1040 U
Diethylphthalate	833 U	922 U	1460 U	913 U	1130 U	1040 U
Dimethylphthalate	833 U	922 U	1460 U	913 U	1130 U	1040 U
Hexachlorobenzene	833 U	922 U	1460 U	913 U	1130 U	1040 U
Hexachlorobutadiene	833 U	922 U	1460 U	913 U	1130 U	1040 U
N-Nitrosodiphenylamine	1670 U	1840 U	2920 U	1830 U	2260 U	2080 U
Benzo(a)anthracene	4170	7370	16100	5940	5080	4170
Benzo(a)pyrene	5000	6910	10200	6850	6210	4690
Benzo(g,h,i)perylene	3330	5070	5110	5020	4520	3650
Benzofluoranthene (Total)	11700 T	15700 T	22600 T	15500 T	13600 T	11500 T
Chrysene	6670	10600	17500	9130	7340	6770
Dibenz(a,h)anthracene	833 U	1380	1460 U	1370	1130	1040 U
Fluoranthene	12100	23000	47400	16900	13600	10400
Indeno(1,2,3-cd)pyrene	3750	5070	5840	5940	5650	3650
Pyrene	10000	17100	40100	13200	12400	11500
Total HPAH (TOCN)	56700 T	92200 T	165000 T	79900 T	69500 T	56300 T
Acenaphthene	833 U	922 U	8030	913 U	1130 U	1040 U
Acenaphthylene	833 U	922 U	1460 U	913 U	1130 U	1040 U
Anthracene	833	2300	4380	1370	1130	1040 U
Fluorene	833 U	922	8030	913 U	1130 U	1040 U
Naphthalene	833 U	922 U	1460 U	913 U	1130 U	1040 U
Phenanthrene	4170	5990	46700	5480	5080	4170
Total LPAH (TOCN)	5000 T	9220 T	67200 T	6850 T	6210 T	4170 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR236	DR237	DR238	DR239	DR240	DR241
	Sample ID:	SD-DR236-0000	SD-DR237-0000	SD-DR238-0000	SD-DR239-0000	SD-DR240-0000	SD-DR241-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	6.0 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	3.0 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	3.0 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	3.0 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 UJ	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 UJ	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 UJ	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 UJ	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 UJ	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 UJ	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 UJ	200 U	200 U	200 U	200 U
2-Methylnaphthalene		20 U	20 U	20 U	20	20 U	20 U
2-Methylphenol		20 U	20 UJ	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 UJ	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 UJ	20 U	100	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 UJ	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR236	DR237	DR238	DR239	DR240	DR241
Sample ID:	SD-DR236-0000	SD-DR237-0000	SD-DR238-0000	SD-DR239-0000	SD-DR240-0000	SD-DR241-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 UJ	100 UJ	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	130	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	100	100	130	100	470	430
Butyl Benzyl Phthalate	70	20 U	20 U	20 U	40	50
Carbazole	20 U	20 U	20 U	80	30	70
Di-n-butyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	20 U	20 U	20 U	80	20 U	20 U
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20	20 U	20 U	20 U	20	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	6.0 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
Hexachloroethane	20 U	20 U	3.0 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 UJ	100 U	100 U	100 U	100 U
Phenol	20 U	20 UJ	20 U	290	60	20 U
Benz(a)anthracene	80	50	90	180	140	250
Benzo(a)pyrene	90	60	110	150	190	340

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR236	DR237	DR238	DR239	DR240	DR241
Sample ID:	SD-DR236-0000	SD-DR237-0000	SD-DR238-0000	SD-DR239-0000	SD-DR240-0000	SD-DR241-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene	90	70	140	270	270	430
Benzo(g,h,i)perylene	70	40	70	70	110	50
Benzo(k)fluoranthene	100	80	140	230	260	380
Benzofluoranthene (Total)	190 T	150 T	280 T	500 T	530 T	810 T
Chrysene	140	90	180	480	250	410
Dibenz(a,h)anthracene	20 U	20 U	20	20	30	40
Fluoranthene	190	160	270	1500	440	810
Indeno(1,2,3-cd)pyrene	70	40	70	80	110	220
Pyrene	220	140	260	1100	460	860
Total HPAH	1050 T	730 T	1350 T	4080 T	2260 T	3790 T
Acenaphthene	20 U	20 U	20 U	60	20 U	20 U
Acenaphthylene	20 U	20 U	20 U	20 U	20 U	20 U
Anthracene	20 U	20 U	20 U	60	30	40
Fluorene	20 U	20 U	20 U	90	20 U	20
Naphthalene	20 U	20 U	3.0 U	20	20 U	20 U
Phenanthrene	100	70	100	1200	170	330
Total LPAH	100 T	70 T	100 T	1430 T	200 T	390 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)						
1,2,4-Trichlorobenzene	2350 U	1370 U	337 U	1180 U	556 U	562 U
1,2-Dichlorobenzene	2350 U	1370 U	169 U	1180 U	556 U	562 U
1,4-Dichlorobenzene	2350 U	1370 U	169 U	1180 U	556 U	562 U
2-Methylnaphthalene	2350 U	1370 U	1120 U	1180	556 U	562 U
bis(2-Ethylhexyl)phthalate	11800	6850	7300	5920	13100	12100
Butylbenzylphthalate	8240	1370 U	1120 U	1180 U	1110	1400
Di-n-butylphthalate	2350 U	1370 U	1120 U	1180 U	556 U	562 U
Di-n-octylphthalate	2350 U	1370 U	1120 U	1180 U	556 U	562 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR236	DR237	DR238	DR239	DR240	DR241
Sample ID:	SD-DR236-0000	SD-DR237-0000	SD-DR238-0000	SD-DR239-0000	SD-DR240-0000	SD-DR241-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran	2350 U	1370 U	1120 U	4730	556 U	562 U
Diethylphthalate	2350 U	1370 U	1120 U	1180 U	556 U	562 U
Dimethylphthalate	2350	1370 U	1120 U	1180 U	556	562 U
Hexachlorobenzene	2350 U	1370 U	1120 U	1180 U	556 U	562 U
Hexachlorobutadiene	2350 U	1370 U	337 U	1180 U	556 U	562 U
N-Nitrosodiphenylamine	4710 U	2740 U	2250 U	2370 U	1110 U	1120 U
Benzo(a)anthracene	9410	3420	5060	10700	3890	7020
Benzo(a)pyrene	10600	4110	6180	8880	5280	9550
Benzo(g,h,i)perylene	8240	2740	3930	4140	3060	1400
Benzofluoranthene (Total)	22400 T	10300 T	15700 T	29600 T	14700 T	22800 T
Chrysene	16500	6160	10100	28400	6940	11500
Dibenz(a,h)anthracene	2350 U	1370 U	1120	1180	833	1120
Fluoranthene	22400	11000	15200	88800	12200	22800
Indeno(1,2,3-cd)pyrene	8240	2740	3930	4730	3060	6180
Pyrene	25900	9590	14600	65100	12800	24200
Total HPAH (TOCN)	124000 T	50000 T	75800 T	241000 T	62800 T	106000 T
Acenaphthene	2350 U	1370 U	1120 U	3550	556 U	562 U
Acenaphthylene	2350 U	1370 U	1120 U	1180 U	556 U	562 U
Anthracene	2350 U	1370 U	1120 U	3550	833	1120
Fluorene	2350 U	1370 U	1120 U	5330	556 U	562
Naphthalene	2350 U	1370 U	169 U	1180	556 U	562 U
Phenanthrene	11800	4790	5620	71000	4720	9270
Total LPAH (TOCN)	11800 T	4790 T	5620 T	84600 T	5560 T	11000 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR242	DR243	DR244	DR245	DR246	DR247
	Sample ID:	SD-DR242-0000-CC	SD-DR243-0000	SD-DR244-0000	SD-DR245-0000	SD-DR246-0000	SD-DR247-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR242	DR243	DR244	DR245	DR246	DR247
	Sample ID:	SD-DR242-0000-CC	SD-DR243-0000	SD-DR244-0000	SD-DR245-0000	SD-DR246-0000	SD-DR247-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid		200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol		50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate		620	380	360	360	400	260 UJ
Butyl Benzyl Phthalate		50	40	40	40	40	30
Carbazole		150	50	40	30	20	20 U
Di-n-butyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Di-n-octyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran		50	20 U	20 U	20 U	20 U	20 U
Diethyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate		30	20	30	20	20	20 U
Hexachlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene		100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
Hexachloroethane		20 U	20 U	20 U	20 U	20 U	20 U
Isophorone		20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine		40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine		40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene		20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)		100 U	100 U	100 U	100 U	100 UJ	100 U
Phenol		100	30	330	20 U	20 U	20 U
Benz(a)anthracene		620	280	160	160	120	70
Benzo(a)pyrene		170	270	200	170	150	80

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR242	DR243	DR244	DR245	DR246	DR247
Sample ID:	SD-DR242-0000-CC	SD-DR243-0000	SD-DR244-0000	SD-DR245-0000	SD-DR246-0000	SD-DR247-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene	930 J	420	240	250	190	110
Benzo(g,h,i)perylene	20 U	130	180	110	160	60
Benzo(k)fluoranthene	740 J	360	210	200	150	90
Benzofluoranthene (Total)	1670 T	780 T	450 T	450 T	340 T	200 T
Chrysene	920 J	440	260	240	200	110
Dibenz(a,h)anthracene	100	40	40	30	30	20 U
Fluoranthene	2000	770	450	450	370	210
Indeno(1,2,3-cd)pyrene	180	150	190	120	150	60
Pyrene	1100 J	730	420	370	260	180
Total HPAH	6760 T	3590 T	2350 T	2100 T	1780 T	970 T
Acenaphthene	40	20 U	20 U	20 U	20 U	20 U
Acenaphthylene	20 U	20 U	20 U	20 U	20 U	20 U
Anthracene	110	60	30	30	20	20 U
Fluorene	70	30	20	20 U	20 U	20 U
Naphthalene	20 U	20 U	20 U	20 U	20 U	20 U
Phenanthrene	980	290	190	170	130	90
Total LPAH	1200 T	380 T	240 T	200 T	150 T	90 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)						
1,2,4-Trichlorobenzene	583 U	546 U	568 U	583 U	551 U	1010 U
1,2-Dichlorobenzene	583 U	546 U	568 U	583 U	551 U	1010 U
1,4-Dichlorobenzene	583 U	546 U	568 U	583 U	551 U	1010 U
2-Methylnaphthalene	583 U	546 U	568 U	583 U	551 U	1010 U
bis(2-Ethylhexyl)phthalate	18100	10400	10200	10500	11000	13100 UJ
Butylbenzylphthalate	1460	1090	1140	1170	1100	1510
Di-n-butylphthalate	583 U	546 U	568 U	583 U	551 U	1010 U
Di-n-octylphthalate	583 U	546 U	568 U	583 U	551 U	1010 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR242 SD-DR242-0000-CC 0 to 10 cm	DR243 SD-DR243-0000 0 to 10 cm	DR244 SD-DR244-0000 0 to 10 cm	DR245 SD-DR245-0000 0 to 10 cm	DR246 SD-DR246-0000 0 to 10 cm	DR247 SD-DR247-0000 0 to 10 cm
Dibenzofuran		1460	546 U	568 U	583 U	551 U	1010 U
Diethylphthalate		583 U	546 U	568 U	583 U	551 U	1010 U
Dimethylphthalate		875	546	852	583	551	1010 U
Hexachlorobenzene		583 U	546 U	568 U	583 U	551 U	1010 U
Hexachlorobutadiene		583 U	546 U	568 U	583 U	551 U	1010 U
N-Nitrosodiphenylamine		1170 U	1090 U	1140 U	1170 U	1100 U	2010 U
Benzo(a)anthracene		18100	7650	4550	4660	3310	3520
Benzo(a)pyrene		4960	7380	5680	4960	4130	4020
Benzo(g,h,i)perylene		583 U	3550	5110	3210	4410	3020
Benzofluoranthene (Total)		48700 T	21300 T	12800 T	13100 T	9370 T	10100 T
Chrysene		26800 J	12000	7390	7000	5510	5530
Dibenz(a,h)anthracene		2920	1090	1140	875	826	1010 U
Fluoranthene		58300	21000	12800	13100	10200	10600
Indeno(1,2,3-cd)pyrene		5250	4100	5400	3500	4130	3020
Pyrene		32100 J	19900	11900	10800	7160	9050
Total HPAH (TOCN)		197000 T	98100 T	66800 T	61200 T	49000 T	48700 T
Acenaphthene		1170	546 U	568 U	583 U	551 U	1010 U
Acenaphthylene		583 U	546 U	568 U	583 U	551 U	1010 U
Anthracene		3210	1640	852	875	551	1010 U
Fluorene		2040	820	568	583 U	551 U	1010 U
Naphthalene		583 U	546 U	568 U	583 U	551 U	1010 U
Phenanthrene		28600	7920	5400	4960	3580	4520
Total LPAH (TOCN)		35000 T	10400 T	6820 T	5830 T	4130 T	4520 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR248	DR249	DR250	DR251	DR252	DR253
	Sample ID:	SD-DR248-0000	SD-DR249-0000	SD-DR250-0000	SD-DR251-0000	SD-DR252-0000	SD-DR253-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	4.9 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	2.4 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	2.4 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	2.4 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 UJ	200 UJ
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 UJ	200 UJ
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 UJ	60 UJ
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 UJ	20 UJ
2,4-Dinitrophenol		200 U	200 U	200 U	200 U	200 UJ	200 UJ
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 UJ	20 UJ
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 U	200 U	200 UJ	200 UJ
2-Methylnaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 UJ	20 UJ
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 UJ	100 UJ
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 UJ	20 UJ
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 UJ	40 UJ
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR248	DR249	DR250	DR251	DR252	DR253
Sample ID:	SD-DR248-0000	SD-DR249-0000	SD-DR250-0000	SD-DR251-0000	SD-DR252-0000	SD-DR253-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 UJ	100 UJ
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	330 UJ	140 UJ	110 UJ	210 UJ	260	280
Butyl Benzyl Phthalate	30	20 U	20 U	20 U	20 U	20
Carbazole	20	20 U	20 U	20 U	20 U	40
Di-n-butyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Di-n-octyl Phthalate	20	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	20 U	20 U	20 U	20 U	20 U	20 U
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	4.9 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
Hexachloroethane	20 U	2.4 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 U	100 U	100 UJ	100 UJ
Phenol	20 U	30	20 U	20 U	20 UJ	20 UJ
Benz(a)anthracene	100	40	40	60	60	180
Benzo(a)pyrene	120	40	40	70	80	200

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR248	DR249	DR250	DR251	DR252	DR253
Sample ID:	SD-DR248-0000	SD-DR249-0000	SD-DR250-0000	SD-DR251-0000	SD-DR252-0000	SD-DR253-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene	150	50	50	90	90	210
Benzo(g,h,i)perylene	90	40	50	60	60	150
Benzo(k)fluoranthene	140	60	50	80	90	220
Benzofluoranthene (Total)	290 T	110 T	100 T	170 T	180 T	430 T
Chrysene	160	70	60	100	110	310
Dibenz(a,h)anthracene	20	20 U	20 U	20 U	20 U	30
Fluoranthene	280	120	100	170	200	620
Indeno(1,2,3-cd)pyrene	100	40	40	60	60	160
Pyrene	260	110	90	150	160	530
Total HPAH	1420 T	570 T	520 T	840 T	910 T	2610 T
Acenaphthene	20 U	20 U	20 U	20 U	20 U	20
Acenaphthylene	20 U	20 U	20 U	20 U	20 U	20 U
Anthracene	20 U	20 U	20 U	20 U	20 U	60
Fluorene	20 U	20 U	20 U	20 U	20 U	20
Naphthalene	20 U	2.4 U	20 U	20 U	20 U	20 U
Phenanthrene	120	60	50	70	80	290
Total LPAH	120 T	60 T	50 T	70 T	80 T	390 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)						
1,2,4-Trichlorobenzene	877 U	331 U	1060 U	1060 U	1200 U	1280 U
1,2-Dichlorobenzene	877 U	162 U	1060 U	1060 U	1200 U	1280 U
1,4-Dichlorobenzene	877 U	162 U	1060 U	1060 U	1200 U	1280 U
2-Methylnaphthalene	877 U	1350 U	1060 U	1060 U	1200 U	1280 U
bis(2-Ethylhexyl)phthalate	14500 UJ	9460 UJ	5820 UJ	11200 UJ	15600	17900
Butylbenzylphthalate	1320	1350 U	1060 U	1060 U	1200 U	1280
Di-n-butylphthalate	877 U	1350 U	1060 U	1060 U	1200 U	1280 U
Di-n-octylphthalate	877	1350 U	1060 U	1060 U	1200 U	1280 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR248	DR249	DR250	DR251	DR252	DR253
Sample ID:	SD-DR248-0000	SD-DR249-0000	SD-DR250-0000	SD-DR251-0000	SD-DR252-0000	SD-DR253-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran	877 U	1350 U	1060 U	1060 U	1200 U	1280 U
Diethylphthalate	877 U	1350 U	1060 U	1060 U	1200 U	1280 U
Dimethylphthalate	877 U	1350 U	1060 U	1060 U	1200 U	1280 U
Hexachlorobenzene	877 U	1350 U	1060 U	1060 U	1200 U	1280 U
Hexachlorobutadiene	877 U	331 U	1060 U	1060 U	1200 U	1280 U
N-Nitrosodiphenylamine	1750 U	2700 U	2120 U	2130 U	2400 U	2560 U
Benzo(a)anthracene	4390	2700	2120	3190	3590	11500
Benzo(a)pyrene	5260	2700	2120	3720	4790	12800
Benzo(g,h,i)perylene	3950	2700	2650	3190	3590	9620
Benzofluoranthene (Total)	12700 T	7430 T	5290 T	9040 T	10800 T	27600 T
Chrysene	7020	4730	3170	5320	6590	19900
Dibenz(a,h)anthracene	877	1350 U	1060 U	1060 U	1200 U	1920
Fluoranthene	12300	8110	5290	9040	12000	39700
Indeno(1,2,3-cd)pyrene	4390	2700	2120	3190	3590	10300
Pyrene	11400	7430	4760	7980	9580	34000
Total HPAH (TOCN)	62300 T	38500 T	27500 T	44700 T	54500 T	167000 T
Acenaphthene	877 U	1350 U	1060 U	1060 U	1200 U	1280
Acenaphthylene	877 U	1350 U	1060 U	1060 U	1200 U	1280 U
Anthracene	877 U	1350 U	1060 U	1060 U	1200 U	3850
Fluorene	877 U	1350 U	1060 U	1060 U	1200 U	1280
Naphthalene	877 U	162 U	1060 U	1060 U	1200 U	1280 U
Phenanthrene	5260	4050	2650	3720	4790	18600
Total LPAH (TOCN)	5260 T	4050 T	2650 T	3720 T	4790 T	25000 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR254	DR255	DR256	DR257	DR258	DR259
	Sample ID:	SD-DR254-0000	SD-DR255-0000	SD-DR256-0000	SD-DR257-0000	SD-DR258-0000	SD-DR259-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	5.5 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	2.7 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	2.7 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	2.7 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 UJ	200 U	200 U	200 U	200 UJ	200 U
2,4,6-Trichlorophenol		200 UJ	200 U	200 U	200 U	200 UJ	200 UJ
2,4-Dichlorophenol		60 UJ	60 U	60 U	60 U	60 UJ	60 UJ
2,4-Dimethylphenol		20 UJ	20 U	20 U	20 U	20 UJ	20 UJ
2,4-Dinitrophenol		200 UJ	200 U	200 U	200 U	200 UJ	200 UJ
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 UJ	20 U	20 U	20 U	20 UJ	20 UJ
2-Methyl-4,6-dinitrophenol		200 UJ	200 U	200 U	200 U	200 UJ	200 UJ
2-Methylnaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Methylphenol		20 UJ	20 U	20 U	20 U	20 UJ	20 UJ
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 UJ	100 U	100 U	100 U	100 UJ	100 UJ
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 UJ	20 U	20 U	20 U	20 UJ	20 UJ
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 UJ	40 U	40 U	40 U	40 UJ	40 UJ
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR254	DR255	DR256	DR257	DR258	DR259
Sample ID:	SD-DR254-0000	SD-DR255-0000	SD-DR256-0000	SD-DR257-0000	SD-DR258-0000	SD-DR259-0000
Constituent Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 UJ	100 U	100 U	100 U	100 UJ	100 UJ
Benzoic Acid	200 U	200 U	200 U	300	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	20 U	390	570	20 U	390	610
Butyl Benzyl Phthalate	20 U	30	20 U	20 U	100	40
Carbazole	20 U	30	40	20 U	20 U	20
Di-n-butyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Di-n-octyl Phthalate	20 U	20 U	30	20 U	20 U	40
Dibenzofuran	20 U	20 U	20 U	20 U	20 U	20 U
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	20 U	20 U	20 U	30	40
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	5.5 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 UJ	100 U	100 U	100 U	100 UJ	100 UJ
Hexachloroethane	20 U	20 U	2.7 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 UJ	100 U	100 U	100 U	100 UJ	100 UJ
Phenol	60 J	20 U	20 U	30	140 J	20 UJ
Benz(a)anthracene	20 U	130	170	20 U	90	120
Benzo(a)pyrene	20 U	180	210	20 U	120	130

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR254	DR255	DR256	DR257	DR258	DR259
Sample ID:	SD-DR254-0000	SD-DR255-0000	SD-DR256-0000	SD-DR257-0000	SD-DR258-0000	SD-DR259-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene	20 U	190	220	20 U	130	180
Benzo(g,h,i)perylene	20 U	140	170	20 U	80	80
Benzo(k)fluoranthene	20 U	180	240	20 U	110	170
Benzofluoranthene (Total)	20 UT	370 T	460 T	20 UT	240 T	350 T
Chrysene	20 U	200	270	20 U	160	180
Dibenz(a,h)anthracene	20 U	30	40	20 U	20 U	20 U
Fluoranthene	20 U	450	570	20	300	360
Indeno(1,2,3-cd)pyrene	20 U	160	180	20 U	90	80
Pyrene	20 U	340	440	20 U	260	320
Total HPAH	20 UT	2000 T	2510 T	20 T	1340 T	1620 T
Acenaphthene	20 U	20 U	20 U	20 U	20 U	20 U
Acenaphthylene	20 U	20 U	20 U	20 U	20 U	20 U
Anthracene	20 U	30	40	20 U	20	20
Fluorene	20 U	20 U	20 U	20 U	20 U	20 U
Naphthalene	20 U	20 U	2.7 U	20 U	20 U	20 U
Phenanthrene	20 U	180	240	20 U	210	130
Total LPAH	20 UT	210 T	280 T	20 UT	230 T	150 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)						
1,2,4-Trichlorobenzene	1050 U	1100 U	267 U		1290 U	680 U
1,2-Dichlorobenzene	1050 U	1100 U	131 U		1290 U	680 U
1,4-Dichlorobenzene	1050 U	1100 U	131 U		1290 U	680 U
2-Methylnaphthalene	1050 U	1100 U	971 U		1290 U	680 U
bis(2-Ethylhexyl)phthalate	1050 U	21500	27700		25200	20700
Butylbenzylphthalate	1050 U	1660	971 U		6450	1360
Di-n-butylphthalate	1050 U	1100 U	971 U		1290 U	680 U
Di-n-octylphthalate	1050 U	1100 U	1460		1290 U	1360

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR254	DR255	DR256	DR257	DR258	DR259
Sample ID:	SD-DR254-0000	SD-DR255-0000	SD-DR256-0000	SD-DR257-0000	SD-DR258-0000	SD-DR259-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran	1050 U	1100 U	971 U		1290 U	680 U
Diethylphthalate	1050 U	1100 U	971 U		1290 U	680 U
Dimethylphthalate	1050 U	1100 U	971 U		1940	1360
Hexachlorobenzene	1050 U	1100 U	971 U		1290 U	680 U
Hexachlorobutadiene	1050 U	1100 U	267 U		1290 U	680 U
N-Nitrosodiphenylamine	2110 U	2210 U	1940 U		2580 U	1360 U
Benzo(a)anthracene	1050 U	7180	8250		5810	4080
Benzo(a)pyrene	1050 U	9940	10200		7740	4420
Benzo(g,h,i)perylene	1050 U	7730	8250		5160	2720
Benzofluoranthene (Total)	1050 UT	20400 T	22300 T		15500 T	11900 T
Chrysene	1050 U	11000	13100		10300	6120
Dibenz(a,h)anthracene	1050 U	1660	1940		1290 U	680 U
Fluoranthene	1050 U	24900	27700		19400	12200
Indeno(1,2,3-cd)pyrene	1050 U	8840	8740		5810	2720
Pyrene	1050 U	18800	21400		16800	10900
Total HPAH (TOCN)	1050 UT	110000 T	122000 T		86500 T	55100 T
Acenaphthene	1050 U	1100 U	971 U		1290 U	680 U
Acenaphthylene	1050 U	1100 U	971 U		1290 U	680 U
Anthracene	1050 U	1660	1940		1290	680
Fluorene	1050 U	1100 U	971 U		1290 U	680 U
Naphthalene	1050 U	1100 U	131 U		1290 U	680 U
Phenanthrene	1050 U	9940	11700		13500	4420
Total LPAH (TOCN)	1050 UT	11600 T	13600 T		14800 T	5100 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR260 SD-DR260-0000 0 to 10 cm	DR261 SD-DR261-0000 0 to 10 cm	DR262 SD-DR262-0000 0 to 10 cm	DR263 SD-DR263-0000 0 to 10 cm	DR264 SD-DR264-0000 0 to 10 cm	DR265 SD-DR265-0000 0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 UJ	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 UJ	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 UJ	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 UJ	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 UJ	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 UJ	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 UJ	200 U	200 U	200 U	200 U
2-Methylnaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Methylphenol		20 U	20 UJ	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 UJ	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 UJ	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 UJ	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR260	DR261	DR262	DR263	DR264	DR265
Sample ID:	SD-DR260-0000	SD-DR261-0000	SD-DR262-0000	SD-DR263-0000	SD-DR264-0000	SD-DR265-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 UJ	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	330	320	260	280	150 UJ	80 UJ
Butyl Benzyl Phthalate	40	20	20	30	20 U	20 U
Carbazole	20 U	20 U	20 U	20 U	20 U	20 U
Di-n-butyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	20 U	20 U	20 U	20 U	20 U	20 U
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	60	30	20 U	40	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 J	100 U	100 U	100 U	100 U
Phenol	20 U	20 UJ	20 U	20 U	20 U	90
Benz(a)anthracene	80	100	110	80	70	70
Benzo(a)pyrene	80	120	110	90	70	60

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR260	DR261	DR262	DR263	DR264	DR265
	Sample ID:	SD-DR260-0000	SD-DR261-0000	SD-DR262-0000	SD-DR263-0000	SD-DR264-0000	SD-DR265-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene		100	150	140	130	70	60
Benzo(g,h,i)perylene		70	70	100	80	50	50
Benzo(k)fluoranthene		90	140	110	120	70	90
Benzofluoranthene (Total)		190 T	290 T	250 T	250 T	140 T	150 T
Chrysene		130	150	150	160	100	100
Dibenz(a,h)anthracene		20 U	20 U	20 U	20 U	20 U	20 U
Fluoranthene		260	310	250	390	210	290
Indeno(1,2,3-cd)pyrene		70	80	110	80	50	40
Pyrene		190	290	260	300	180	260
Total HPAH		1070 T	1410 T	1340 T	1430 T	870 T	1020 T
Acenaphthene		20 U	20 U	20 U	20 U	20 U	40
Acenaphthylene		20 U	20 U	20 U	20 U	20 U	20 U
Anthracene		20 U	20 U	20 U	20 U	20 U	30
Fluorene		20 U	20 U	20 U	20 U	20 U	20
Naphthalene		20 U	20 U	20 U	20 U	20 U	20 U
Phenanthrene		80	100	100	160	70	110
Total LPAH		80 T	100 T	100 T	160 T	70 T	200 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		647 U	806 U	813 U	690 U	1350 U	1940 U
1,2-Dichlorobenzene		647 U	806 U	813 U	690 U	1350 U	1940 U
1,4-Dichlorobenzene		647 U	806 U	813 U	690 U	1350 U	1940 U
2-Methylnaphthalene		647 U	806 U	813 U	690 U	1350 U	1940 U
bis(2-Ethylhexyl)phthalate		10700	12900	10600	9660	10100 UJ	7770 UJ
Butylbenzylphthalate		1290	806	813	1030	1350 U	1940 U
Di-n-butylphthalate		647 U	806 U	813 U	690 U	1350 U	1940 U
Di-n-octylphthalate		647 U	806 U	813 U	690 U	1350 U	1940 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR260 / SD-DR260-0000 / 0 to 10 cm	DR261 / SD-DR261-0000 / 0 to 10 cm	DR262 / SD-DR262-0000 / 0 to 10 cm	DR263 / SD-DR263-0000 / 0 to 10 cm	DR264 / SD-DR264-0000 / 0 to 10 cm	DR265 / SD-DR265-0000 / 0 to 10 cm
Dibenzofuran		647 U	806 U	813 U	690 U	1350 U	1940 U
Diethylphthalate		647 U	806 U	813 U	690 U	1350 U	1940 U
Dimethylphthalate		647 U	2420	1220	690 U	2700	1940 U
Hexachlorobenzene		647 U	806 U	813 U	690 U	1350 U	1940 U
Hexachlorobutadiene		647 U	806 U	813 U	690 U	1350 U	1940 U
N-Nitrosodiphenylamine		1290 U	1610 U	1630 U	1380 U	2700 U	3880 U
Benzo(a)anthracene		2590	4030	4470	2760	4730	6800
Benzo(a)pyrene		2590	4840	4470	3100	4730	5830
Benzo(g,h,i)perylene		2270	2820	4070	2760	3380	4850
Benzofluoranthene (Total)		6150 T	11700 T	10200 T	8620 T	9460 T	14600 T
Chrysene		4210	6050	6100	5520	6760	9710
Dibenz(a,h)anthracene		647 U	806 U	813 U	690 U	1350 U	1940 U
Fluoranthene		8410	12500	10200	13400	14200	28200
Indeno(1,2,3-cd)pyrene		2270	3230	4470	2760	3380	3880
Pyrene		6150	11700	10600	10300	12200	25200
Total HPAH (TOCN)		34600 T	56900 T	54500 T	49300 T	58800 T	99000 T
Acenaphthene		647 U	806 U	813 U	690 U	1350 U	3880
Acenaphthylene		647 U	806 U	813 U	690 U	1350 U	1940 U
Anthracene		647 U	806 U	813 U	690 U	1350 U	2910
Fluorene		647 U	806 U	813 U	690 U	1350 U	1940
Naphthalene		647 U	806 U	813 U	690 U	1350 U	1940 U
Phenanthrene		2590	4030	4070	5520	4730	10700
Total LPAH (TOCN)		2590 T	4030 T	4070 T	5520 T	4730 T	19400 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR266	DR267	DR268	DR269	DR270	DR271
	Sample ID:	SD-DR266-0000	SD-DR267-0000	SD-DR268-0000	SD-DR269-0000	SD-DR270-0000	SD-DR271-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		7.6 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		3.8 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		3.8 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		3.8 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 UJ	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 UJ	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 UJ	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 UJ	20 U
2,4-Dinitrophenol		200 U	200 U	200 U	200 U	200 UJ	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 UJ	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 U	200 U	200 UJ	200 U
2-Methylnaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 UJ	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 UJ	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 UJ	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 UJ	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR266	DR267	DR268	DR269	DR270	DR271
Sample ID:	SD-DR266-0000	SD-DR267-0000	SD-DR268-0000	SD-DR269-0000	SD-DR270-0000	SD-DR271-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 UJ	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	160 UJ	120 UJ	150 UJ	120 UJ	120	260
Butyl Benzyl Phthalate	20 U	20 U	20 U	20 U	20 U	300
Carbazole	20 U	20 U	30	20 U	20 U	20 U
Di-n-butyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	20 U	20 U	20 U	20 U	20 U	20 U
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	7.6 UJL	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 U
Hexachloroethane	3.8 UJL	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 U	100 U	100 UJ	100 U
Phenol	20 U	20 U	20 U	30	120 J	20 U
Benz(a)anthracene	50	50	200	60	50	220
Benzo(a)pyrene	70	60	120	70	50	300

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR266	DR267	DR268	DR269	DR270	DR271
	Sample ID:	SD-DR266-0000	SD-DR267-0000	SD-DR268-0000	SD-DR269-0000	SD-DR270-0000	SD-DR271-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene		70	70	180	90	60	330
Benzo(g,h,i)perylene		50	40	70	50	40	210
Benzo(k)fluoranthene		90	70	210	80	70	300
Benzofluoranthene (Total)		160 T	140 T	390 T	170 T	130 T	630 T
Chrysene		90	90	400	110	80	290
Dibenz(a,h)anthracene		20 U	20 U	20	20 U	20 U	50
Fluoranthene		170	150	1700	150	140	420
Indeno(1,2,3-cd)pyrene		50	40	80	50	40	240
Pyrene		150	120	1600	160	120	360
Total HPAH		790 T	690 T	4580 T	820 T	650 T	2720 T
Acenaphthene		20 U	20 U	20 U	20 U	20 U	20 U
Acenaphthylene		20 U	20 U	20 U	20 U	20 U	20 U
Anthracene		20 U	20 U	50	20 U	20 U	20 U
Fluorene		20 U	20 U	20	20 U	20 U	20 U
Naphthalene		3.8 U	20 U	20 U	20 U	20 U	20 U
Phenanthrene		70	70	460	60	60	90
Total LPAH		70 T	70 T	530 T	60 T	60 T	90 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		551 U	2350 U	952 U	2220 U	1520 U	766 U
1,2-Dichlorobenzene		275 U	2350 U	952 U	2220 U	1520 U	766 U
1,4-Dichlorobenzene		275 U	2350 U	952 U	2220 U	1520 U	766 U
2-Methylnaphthalene		1450 U	2350 U	952 U	2220 U	1520 U	766 U
bis(2-Ethylhexyl)phthalate		11600 UJ	14100 UJ	7140 UJ	13300 UJ	9090	9960
Butylbenzylphthalate		1450 U	2350 U	952 U	2220 U	1520 U	11500
Di-n-butylphthalate		1450 U	2350 U	952 U	2220 U	1520 U	766 U
Di-n-octylphthalate		1450 U	2350 U	952 U	2220 U	1520 U	766 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR266	DR267	DR268	DR269	DR270	DR271
	Sample ID:	SD-DR266-0000	SD-DR267-0000	SD-DR268-0000	SD-DR269-0000	SD-DR270-0000	SD-DR271-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran		1450 U	2350 U	952 U	2220 U	1520 U	766 U
Diethylphthalate		1450 U	2350 U	952 U	2220 U	1520 U	766 U
Dimethylphthalate		1450 U	2350 U	952 U	2220 U	1520 U	766 U
Hexachlorobenzene		1450 U	2350 U	952 U	2220 U	1520 U	766 U
Hexachlorobutadiene		551 UJL	2350 U	952 U	2220 U	1520 U	766 U
N-Nitrosodiphenylamine		2900 U	4710 U	1900 U	4440 U	3030 U	1530 U
Benzo(a)anthracene		3620	5880	9520	6670	3790	8430
Benzo(a)pyrene		5070	7060	5710	7780	3790	11500
Benzo(g,h,i)perylene		3620	4710	3330	5560	3030	8050
Benzofluoranthene (Total)		11600 T	16500 T	18600 T	18900 T	9850 T	24100 T
Chrysene		6520	10600	19000	12200	6060	11100
Dibenz(a,h)anthracene		1450 U	2350 U	952	2220 U	1520 U	1920
Fluoranthene		12300	17600	81000	16700	10600	16100
Indeno(1,2,3-cd)pyrene		3620	4710	3810	5560	3030	9200
Pyrene		10900	14100	76200	17800	9090	13800
Total HPAH (TOCN)		57200 T	81200 T	218000 T	91100 T	49200 T	104000 T
Acenaphthene		1450 U	2350 U	952 U	2220 U	1520 U	766 U
Acenaphthylene		1450 U	2350 U	952 U	2220 U	1520 U	766 U
Anthracene		1450 U	2350 U	2380	2220 U	1520 U	766 U
Fluorene		1450 U	2350 U	952	2220 U	1520 U	766 U
Naphthalene		275 U	2350 U	952 U	2220 U	1520 U	766 U
Phenanthrene		5070	8240	21900	6670	4550	3450
Total LPAH (TOCN)		5070 T	8240 T	25200 T	6670 T	4550 T	3450 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

	Station ID:	DR272	DR273	DR274	DR275	DR276	DR277
	Sample ID:	SD-DR272-0000	SD-DR273-0000	SD-DR274-0000	SD-DR275-0000	SD-DR276-0000	SD-DR277-0000
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 UJ	200 UJ	200 U	200 U	200 U	200 UJ
2,4,6-Trichlorophenol		200 UJ	200 UJ	200 U	200 U	200 U	200 UJ
2,4-Dichlorophenol		60 UJ	60 UJ	60 U	60 U	60 U	60 UJ
2,4-Dimethylphenol		20 UJ	20 UJ	20 U	20 U	20 U	20 UJ
2,4-Dinitrophenol		200 UJ	200 UJ	200 U	200 U	200 U	200 UJ
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 UJ	20 UJ	20 U	20 U	20 U	20 UJ
2-Methyl-4,6-dinitrophenol		200 UJ	200 UJ	200 U	200 U	200 U	200 UJ
2-Methylnaphthalene		20 U	20 U	20 U	20 U	100	20 U
2-Methylphenol		20 UJ	20 UJ	20 U	20 U	20 U	20 UJ
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 UJ	100 UJ	100 U	100 U	100 U	100 UJ
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 UJ	20 UJ	20 U	20 U	20 U	20 UJ
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 UJ	40 UJ	40 U	40 U	40 U	40 UJ
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR272	DR273	DR274	DR275	DR276	DR277
Sample ID:	SD-DR272-0000	SD-DR273-0000	SD-DR274-0000	SD-DR275-0000	SD-DR276-0000	SD-DR277-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 UJ	100 UJ	100 U	100 U	100 U	100 UJ
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	80	120	150	110	340	280
Butyl Benzyl Phthalate	20 U	20 U	20 U	20 U	20	20 U
Carbazole	20	40	120	30	70	20
Di-n-butyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20	20 U
Dibenzofuran	20 U	20 U	20 U	20 U	170	20 U
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	20 U	20 U	20 U	20 U	30
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 UJ	100 UJ	100 U	100 U	100 U	100 UJ
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 UJ	100 UJ	100 U	100 U	100 U	100 UJ
Phenol	20 UJ	60 J	20 U	20 U	20 U	20 UJ
Benz(a)anthracene	80	130	370	100	410	110
Benzo(a)pyrene	110	160	440	130	340	130

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR272	DR273	DR274	DR275	DR276	DR277
	Sample ID:	SD-DR272-0000	SD-DR273-0000	SD-DR274-0000	SD-DR275-0000	SD-DR276-0000	SD-DR277-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene		110	170	400	110	360	160
Benzo(g,h,i)perylene		70	110	280	100	210	90
Benzo(k)fluoranthene		120	180	420	130	340	140
Benzofluoranthene (Total)		230 T	350 T	820 T	240 T	700 T	300 T
Chrysene		130	190	490	140	520	170
Dibenz(a,h)anthracene		20 U	30	70	20 U	60	20
Fluoranthene		280	390	1100	330	1500	310
Indeno(1,2,3-cd)pyrene		80	120	320	110	230	100
Pyrene		210	300	850	220	980	250
Total HPAH		1190 T	1780 T	4740 T	1370 T	4950 T	1480 T
Acenaphthene		20 U	20 U	20 U	20 U	260	20 U
Acenaphthylene		20 U	20 U	20 U	20 U	20 U	20 U
Anthracene		20 U	20	90	20	140	20
Fluorene		20 U	20 U	30	20 U	280	20 U
Naphthalene		20 U	20 U	20 U	20 U	70	20 U
Phenanthrene		120	180	550	170	1300	120
Total LPAH		120 T	200 T	670 T	190 T	2050 T	140 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene			1200 U	1440 U	1890 U	1320 U	1080 U
1,2-Dichlorobenzene			1200 U	1440 U	1890 U	1320 U	1080 U
1,4-Dichlorobenzene			1200 U	1440 U	1890 U	1320 U	1080 U
2-Methylnaphthalene			1200 U	1440 U	1890 U	6620	1080 U
bis(2-Ethylhexyl)phthalate			7230	10800	10400	22500	15100
Butylbenzylphthalate			1200 U	1440 U	1890 U	1320	1080 U
Di-n-butylphthalate			1200 U	1440 U	1890 U	1320 U	1080 U
Di-n-octylphthalate			1200 U	1440 U	1890 U	1320	1080 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR272 / SD-DR272-0000 / 0 to 10 cm	DR273 / SD-DR273-0000 / 0 to 10 cm	DR274 / SD-DR274-0000 / 0 to 10 cm	DR275 / SD-DR275-0000 / 0 to 10 cm	DR276 / SD-DR276-0000 / 0 to 10 cm	DR277 / SD-DR277-0000 / 0 to 10 cm
Dibenzofuran			1200 U	1440 U	1890 U	11300	1080 U
Diethylphthalate			1200 U	1440 U	1890 U	1320 U	1080 U
Dimethylphthalate			1200 U	1440 U	1890 U	1320 U	1610
Hexachlorobenzene			1200 U	1440 U	1890 U	1320 U	1080 U
Hexachlorobutadiene			1200 U	1440 U	1890 U	1320 U	1080 U
N-Nitrosodiphenylamine			2410 U	2880 U	3770 U	2650 U	2150 U
Benzo(a)anthracene			7830	26600	9430	27200	5910
Benzo(a)pyrene			9640	31700	12300	22500	6990
Benzo(g,h,i)perylene			6630	20100	9430	13900	4840
Benzofluoranthene (Total)			21100 T	59000 T	22600 T	46400 T	16100 T
Chrysene			11400	35300	13200	34400	9140
Dibenz(a,h)anthracene			1810	5040	1890 U	3970	1080
Fluoranthene			*23500*	*79100*	*31100*	*99300*	*16700*
Indeno(1,2,3-cd)pyrene			7230	23000	10400	15200	5380
Pyrene			18100	61200	20800	64900	13400
Total HPAH (TOCN)			107000 T	341000 T	129000 T	328000 T	79600 T
Acenaphthene			1200 U	1440 U	1890 U	17200	1080 U
Acenaphthylene			1200 U	1440 U	1890 U	1320 U	1080 U
Anthracene			1200	6470	1890	9270	1080
Fluorene			1200 U	2160	1890 U	18500	1080 U
Naphthalene			1200 U	1440 U	1890 U	4640	1080 U
Phenanthrene			10800	39600	16000	86100	6450
Total LPAH (TOCN)			12000 T	48200 T	17900 T	136000 T	7530 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR278	DR279	DR280	DR281	DR282	DR283
	Sample ID:	SD-DR278-0000	SD-DR279-0000	SD-DR280-0000	SD-DR281-0000	SD-DR282-0000	SD-DR283-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 UJ	200 UJ
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 UJ	200 UJ
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 UJ	60 UJ
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 UJ	20 UJ
2,4-Dinitrophenol		200 U	200 U	200 U	200 U	200 UJ	200 UJ
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 UJ	20 UJ
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 U	200 U	200 UJ	200 UJ
2-Methylnaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 UJ	20 UJ
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 UJ	100 UJ
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 UJ	20 UJ
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 UJ	40 UJ
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR278	DR279	DR280	DR281	DR282	DR283
Sample ID:	SD-DR278-0000	SD-DR279-0000	SD-DR280-0000	SD-DR281-0000	SD-DR282-0000	SD-DR283-0000
Constituent Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 UJ	100 UJ
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	350	160	410	530	410	520
Butyl Benzyl Phthalate	30	20	50	50	30	50
Carbazole	20 U	20 U	20	30	20 U	30
Di-n-butyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Di-n-octyl Phthalate	20	20 U	20	20	20 U	30
Dibenzofuran	20 U	20 U	20 U	20 U	20 U	20 U
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	20 U	20 U	20	20 U	60
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 U	100 U	100 UJ	100 UJ
Phenol	20 U	20 U	20 U	20 U	20 UJ	20 UJ
Benz(a)anthracene	130	60	100	140	100	130
Benzo(a)pyrene	130	70	130	130	110	150

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR278 SD-DR278-0000 0 to 10 cm	DR279 SD-DR279-0000 0 to 10 cm	DR280 SD-DR280-0000 0 to 10 cm	DR281 SD-DR281-0000 0 to 10 cm	DR282 SD-DR282-0000 0 to 10 cm	DR283 SD-DR283-0000 0 to 10 cm
Benzo(b)fluoranthene		170	80	160	180	150	190
Benzo(g,h,i)perylene		100	60	100	90	90	80
Benzo(k)fluoranthene		150	90	150	190	120	190
Benzofluoranthene (Total)		320 T	170 T	310 T	370 T	270 T	380 T
Chrysene		190	90	170	230	170	210
Dibenz(a,h)anthracene		20	20 U	20	20	20 U	20 U
Fluoranthene		340	180	310	440	300	460
Indeno(1,2,3-cd)pyrene		90	60	100	90	80	90
Pyrene		360	180	280	410	230	390
Total HPAH		1680 T	870 T	1520 T	1920 T	1350 T	1890 T
Acenaphthene		20 U	20 U	20 U	20 U	20 U	20 U
Acenaphthylene		20 U	20 U	20 U	20 U	20 U	20 U
Anthracene		20	20 U	20 U	20	20 U	30
Fluorene		20 U	20 U	20 U	20 U	20 U	20 U
Naphthalene		20 U	20 U	20 U	20 U	20 U	20 U
Phenanthrene		140	80	120	160	100	140
Total LPAH		160 T	80 T	120 T	180 T	100 T	170 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		612 U	1100 U	791 U	549 U	775 U	810 U
1,2-Dichlorobenzene		612 U	1100 U	791 U	549 U	775 U	810 U
1,4-Dichlorobenzene		612 U	1100 U	791 U	549 U	775 U	810 U
2-Methylnaphthalene		612 U	1100 U	791 U	549 U	775 U	810 U
bis(2-Ethylhexyl)phthalate		10700	8790	16200	14600	15900	21100
Butylbenzylphthalate		917	1100	1980	1370	1160	2020
Di-n-butylphthalate		612 U	1100 U	791 U	549 U	775 U	810 U
Di-n-octylphthalate		612	1100 U	791	549	775 U	1210

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR278	DR279	DR280	DR281	DR282	DR283
Sample ID:	SD-DR278-0000	SD-DR279-0000	SD-DR280-0000	SD-DR281-0000	SD-DR282-0000	SD-DR283-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran	612 U	1100 U	791 U	549 U	775 U	810 U
Diethylphthalate	612 U	1100 U	791 U	549 U	775 U	810 U
Dimethylphthalate	612 U	1100 U	791 U	549	775 U	2430
Hexachlorobenzene	612 U	1100 U	791 U	549 U	775 U	810 U
Hexachlorobutadiene	612 U	1100 U	791 U	549 U	775 U	810 U
N-Nitrosodiphenylamine	1220 U	2200 U	1580 U	1100 U	1550 U	1620 U
Benzo(a)anthracene	3980	3300	3950	3850	3880	5260
Benzo(a)pyrene	3980	3850	5140	3570	4260	6070
Benzo(g,h,i)perylene	3060	3300	3950	2470	3490	3240
Benzofluoranthene (Total)	9790 T	9340 T	12300 T	10200 T	10500 T	15400 T
Chrysene	5810	4950	6720	6320	6590	8500
Dibenz(a,h)anthracene	612	1100 U	791	549	775 U	810 U
Fluoranthene	10400	9890	12300	12100	11600	18600
Indeno(1,2,3-cd)pyrene	2750	3300	3950	2470	3100	3640
Pyrene	11000	9890	11100	11300	8910	15800
Total HPAH (TOCN)	51400 T	47800 T	60100 T	52700 T	52300 T	76500 T
Acenaphthene	612 U	1100 U	791 U	549 U	775 U	810 U
Acenaphthylene	612 U	1100 U	791 U	549 U	775 U	810 U
Anthracene	612	1100 U	791 U	549	775 U	1210
Fluorene	612 U	1100 U	791 U	549 U	775 U	810 U
Naphthalene	612 U	1100 U	791 U	549 U	775 U	810 U
Phenanthrene	4280	4400	4740	4400	3880	5670
Total LPAH (TOCN)	4890 T	4400 T	4740 T	4950 T	3880 T	6880 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR284 / SD-DR284-0000 / 0 to 10 cm	DR285 / SD-DR285-0000 / 0 to 10 cm	DR286 / SD-DR286-0000-CC / 0 to 10 cm	DR287 / SD-DR287-0000 / 0 to 10 cm	DR288 / SD-DR288-0000 / 0 to 10 cm	DR289 / SD-DR289-0000 / 0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	6.6 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	3.3 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	3.3 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	3.3 U
2,4,5-Trichlorophenol		200 UJ	200 U	200 U	200 U	200 UJ	200 U
2,4,6-Trichlorophenol		200 UJ	200 U	200 U	200 U	200 UJ	200 U
2,4-Dichlorophenol		60 UJ	60 U	60 U	60 U	60 UJ	60 U
2,4-Dimethylphenol		20 UJ	20 U	20 U	20 U	20 UJ	20 U
2,4-Dinitrophenol		200 UJ	200 U	200 U	200 U	200 UJ	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 UJ	20 U	20 U	20 U	20 UJ	20 U
2-Methyl-4,6-dinitrophenol		200 UJ	200 U	200 U	200 U	200 UJ	200 U
2-Methylnaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Methylphenol		20 UJ	20 U	20 U	20 U	20 UJ	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 UJ	100 U	100 U	100 U	100 UJ	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 UJ	20 U	20 U	20 U	20 UJ	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 UJ	40 U	40 U	40 U	40 UJ	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR284	DR285	DR286	DR287	DR288	DR289
	Sample ID:	SD-DR284-0000	SD-DR285-0000	SD-DR286-0000-CC	SD-DR287-0000	SD-DR288-0000	SD-DR289-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol		100 UJ	100 U	100 U	100 U	100 UJ	100 U
Benzoic Acid		200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol		50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate		340	450	150 UJ	190 UJ	130	450
Butyl Benzyl Phthalate		20	30	20 U	20 U	20	40
Carbazole		20	20 U	20 U	20 U	20 U	20
Di-n-butyl Phthalate		20 U	20	20 U	20 U	20 U	20 U
Di-n-octyl Phthalate		20 U	20 U	20 U	20 U	20 U	20
Dibenzofuran		20 U	20 U	20 U	20 U	20 U	20 U
Diethyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate		30	80	20 U	20 U	20 U	20 U
Hexachlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene		20 U	20 U	20 U	20 U	20 U	6.6 U
Hexachlorocyclopentadiene		100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
Hexachloroethane		20 U	20 U	20 U	20 U	20 U	3.3 U
Isophorone		20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine		40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine		40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene		20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)		300 J	100 U	100 U	100 U	100 UJ	100 U
Phenol		20 UJ	20 U	40	30	20 UJ	20 U
Benz(a)anthracene		100	130	50	60	60	90
Benzo(a)pyrene		120	120	70	70	80	120

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR284	DR285	DR286	DR287	DR288	DR289
	Sample ID:	SD-DR284-0000	SD-DR285-0000	SD-DR286-0000-CC	SD-DR287-0000	SD-DR288-0000	SD-DR289-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene		150	160	80	90	100	150
Benzo(g,h,i)perylene		80	80	60	60	50	90
Benzo(k)fluoranthene		140	160	100	100	110	150
Benzofluoranthene (Total)		290 T	320 T	180 T	190 T	210 T	300 T
Chrysene		170	190	90	100	110	170
Dibenz(a,h)anthracene		20 U	20 U	20 U	20 U	20 U	20
Fluoranthene		380	410	160 J	180	220	330
Indeno(1,2,3-cd)pyrene		90	90	60	60	60	90
Pyrene		300	330	150	170	190	260
Total HPAH		1530 T	1670 T	820 T	890 T	980 T	1470 T
Acenaphthene		20 U	20 U	20 U	20 U	20 U	20 U
Acenaphthylene		20 U	20 U	20 U	20 U	20 U	20 U
Anthracene		20	20	20 U	20 U	20 U	20
Fluorene		20 U	20	20 U	20 U	20 U	20 U
Naphthalene		20 U	20 U	20 U	20 U	20 U	3.3 U
Phenanthrene		190	150	70	80	90	120
Total LPAH		210 T	190 T	70 T	80 T	90 T	140 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		897 U	590 U	1410 U	1530 U	673 U	182 U
1,2-Dichlorobenzene		897 U	590 U	1410 U	1530 U	673 U	90.9 U
1,4-Dichlorobenzene		897 U	590 U	1410 U	1530 U	673 U	90.9 U
2-Methylnaphthalene		897 U	590 U	1410 U	1530 U	673 U	551 U
bis(2-Ethylhexyl)phthalate		15200	13300	10600 UJ	14500 UJ	4380	12400
Butylbenzylphthalate		897	885	1410 U	1530 U	673	1100
Di-n-butylphthalate		897 U	590	1410 U	1530 U	673 U	551 U
Di-n-octylphthalate		897 U	590 U	1410 U	1530 U	673 U	551

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR284	DR285	DR286	DR287	DR288	DR289
Sample ID:	SD-DR284-0000	SD-DR285-0000	SD-DR286-0000-CC	SD-DR287-0000	SD-DR288-0000	SD-DR289-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dibenzofuran	897 U	590 U	1410 U	1530 U	673 U	551 U
Diethylphthalate	897 U	590 U	1410 U	1530 U	673 U	551 U
Dimethylphthalate	1350	2360	1410 U	1530 U	673 U	551 U
Hexachlorobenzene	897 U	590 U	1410 U	1530 U	673 U	551 U
Hexachlorobutadiene	897 U	590 U	1410 U	1530 U	673 U	182 U
N-Nitrosodiphenylamine	1790 U	1180 U	2820 U	3050 U	1350 U	1100 U
Benzo(a)anthracene	4480	3830	3520	4580	2020	2480
Benzo(a)pyrene	5380	3540	4930	5340	2690	3310
Benzo(g,h,i)perylene	3590	2360	4230	4580	1680	2480
Benzofluoranthene (Total)	13000 T	9440 T	12700 T	14500 T	7070 T	8260 T
Chrysene	7620	5600	6340	7630	3700	4680
Dibenz(a,h)anthracene	897 U	590 U	1410 U	1530 U	673 U	551
Fluoranthene	17000	12100	11300 J	13700	7410	9090
Indeno(1,2,3-cd)pyrene	4040	2650	4230	4580	2020	2480
Pyrene	13500	9730	10600	13000	6400	7160
Total HPAH (TOCN)	68600 T	49300 T	57700 T	67900 T	33000 T	40500 T
Acenaphthene	897 U	590 U	1410 U	1530 U	673 U	551 U
Acenaphthylene	897 U	590 U	1410 U	1530 U	673 U	551 U
Anthracene	897	590	1410 U	1530 U	673 U	551
Fluorene	897 U	590	1410 U	1530 U	673 U	551 U
Naphthalene	897 U	590 U	1410 U	1530 U	673 U	90.9 U
Phenanthrene	8520	4420	4930	6110	3030	3310
Total LPAH (TOCN)	9420 T	5600 T	4930 T	6110 T	3030 T	3860 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR290	DR291	DR292	DR293	DR294	DR295
	Sample ID:	SD-DR290-0000	SD-DR291-0000	SD-DR292-0000-CC	SD-DR293-0000	SD-DR294-0000	SD-DR295-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	7.6 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	3.8 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	3.8 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	3.8 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene		20 U	20 U	20	20 U	20 U	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR290	DR291	DR292	DR293	DR294	DR295
	Sample ID:	SD-DR290-0000	SD-DR291-0000	SD-DR292-0000-CC	SD-DR293-0000	SD-DR294-0000	SD-DR295-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid		200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol		50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate		500	490	530	330 UJ	50	20
Butyl Benzyl Phthalate		30	40	40	20	20 U	20 U
Carbazole		20	30	40	40	20 U	20 U
Di-n-butyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Di-n-octyl Phthalate		20	20	20 U	20 U	20 U	20 U
Dibenzofuran		20 U	20 U	30	20 U	20 U	20 U
Diethyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate		20 U	20 U	20	20 U	20 U	20 U
Hexachlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene		20 U	7.6 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene		100 UJ	100 UJ	100 UJ	100 U	100 U	100 U
Hexachloroethane		20 U	3.8 U	20 U	20 U	20 U	20 U
Isophorone		20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine		40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine		40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene		20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)		100 U	100 U	100 U	100 UJ	100 U	100 U
Phenol		30	20 U	30	20 U	20 U	20 U
Benz(a)anthracene		130	140	200	140	20 U	20 U
Benzo(a)pyrene		140	140	210	180	20	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR290 / SD-DR290-0000 / 0 to 10 cm	DR291 / SD-DR291-0000 / 0 to 10 cm	DR292 / SD-DR292-0000-CC / 0 to 10 cm	DR293 / SD-DR293-0000 / 0 to 10 cm	DR294 / SD-DR294-0000 / 0 to 10 cm	DR295 / SD-DR295-0000 / 0 to 10 cm
Benzo(b)fluoranthene		220	210	280	190	20 U	20 U
Benzo(g,h,i)perylene		100	90	130	120	20 U	20 U
Benzo(k)fluoranthene		180	190	250	180	20	20 U
Benzofluoranthene (Total)		400 T	400 T	530 T	370 T	20 T	20 UT
Chrysene		220	220	290	210	30	20 U
Dibenz(a,h)anthracene		20 U	20	20	30	20 U	20 U
Fluoranthene		410	380	480	430	60	30
Indeno(1,2,3-cd)pyrene		100	100	120	140	20 U	20 U
Pyrene		420	410	580	350	40	30
Total HPAH		1920 T	1900 T	2560 T	1970 T	170 T	60 T
Acenaphthene		20 U	20 U	40	20 U	20 U	20 U
Acenaphthylene		20 U	20 U	20 U	20 U	20 U	20 U
Anthracene		30	30	40	30	20 U	20 U
Fluorene		30	20	40	20 U	20 U	20 U
Naphthalene		20 U	3.8 U	20 U	20 U	20 U	20 U
Phenanthrene		190	180	290	210	30	30
Total LPAH		250 T	230 T	410 T	240 T	30 T	30 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene			201 U		1150 U		
1,2-Dichlorobenzene			100 U		1150 U		
1,4-Dichlorobenzene			100 U		1150 U		
2-Methylnaphthalene			528 U		1150 U		
bis(2-Ethylhexyl)phthalate			12900		19000 UJ		
Butylbenzylphthalate			1060		1150		
Di-n-butylphthalate			528 U		1150 U		
Di-n-octylphthalate			528		1150 U		

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR290 / SD-DR290-0000 / 0 to 10 cm	DR291 / SD-DR291-0000 / 0 to 10 cm	DR292 / SD-DR292-0000-CC / 0 to 10 cm	DR293 / SD-DR293-0000 / 0 to 10 cm	DR294 / SD-DR294-0000 / 0 to 10 cm	DR295 / SD-DR295-0000 / 0 to 10 cm
Dibenzofuran			528 U		1150 U		
Diethylphthalate			528 U		1150 U		
Dimethylphthalate			528 U		1150 U		
Hexachlorobenzene			528 U		1150 U		
Hexachlorobutadiene			201 U		1150 U		
N-Nitrosodiphenylamine			1060 U		2300 U		
Benzo(a)anthracene			3690		8050		
Benzo(a)pyrene			3690		10300		
Benzo(g,h,i)perylene			2370		6900		
Benzofluoranthene (Total)			10600 T		21300 T		
Chrysene			5800		12100		
Dibenz(a,h)anthracene			528		1720		
Fluoranthene			10000		24700		
Indeno(1,2,3-cd)pyrene			2640		8050		
Pyrene			10800		20100		
Total HPAH (TOCN)			50100 T		113000 T		
Acenaphthene			528 U		1150 U		
Acenaphthylene			528 U		1150 U		
Anthracene			792		1720		
Fluorene			528		1150 U		
Naphthalene			100 U		1150 U		
Phenanthrene			4750		12100		
Total LPAH (TOCN)			6070 T		13800 T		

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID:	DR296	DR297	DR298	DR299	DR300	DR301
	Sample ID:	SD-DR296-0000	SD-DR297-0000	SD-DR298-0000	SD-DR299-0000	SD-DR300-0000	SD-DR301-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	3.0 U	3.1 U	3.1 U	3.2 U	3.1 U
1,2-Dichlorobenzene		20 U	1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
1,3-Dichlorobenzene		20 U	1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
1,4-Dichlorobenzene		20 U	1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR296	DR297	DR298	DR299	DR300	DR301
Sample ID:	SD-DR296-0000	SD-DR297-0000	SD-DR298-0000	SD-DR299-0000	SD-DR300-0000	SD-DR301-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Butyl Benzyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Carbazole	20 U	20 U	20 U	20 U	20 U	20 U
Di-*n*-butyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	20 U	20 U	20 U	20 U	20 U	20 U
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	3.0 U	3.1 U	3.1 U	3.2 U	3.1 U
Hexachlorocyclopentadiene	100 U	100 U	100 U	100 U	100 U	100 UJ
Hexachloroethane	20 U	1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 U	100 U	100 U	100 U
Phenol	20 U	20 U	20 U	20 U	20 U	20 U
Benz(a)anthracene	20 U	20 U	20 U	20 U	20 U	20 U
Benzo(a)pyrene	20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Station ID:	DR296	DR297	DR298	DR299	DR300	DR301
Sample ID:	SD-DR296-0000	SD-DR297-0000	SD-DR298-0000	SD-DR299-0000	SD-DR300-0000	SD-DR301-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Benzo(b)fluoranthene	20 U	20 U	20 U	20 U	20 U	20 U
Benzo(g,h,i)perylene	20 U	20 U	20 U	20 U	20 U	20 U
Benzo(k)fluoranthene	20 U	20 U	20 U	20 U	20 U	20 U
Benzofluoranthene (Total)	20 UT	20 UT	20 UT	20 UT	20 UT	20 UT
Chrysene	20 U	20 U	20 U	20 U	20 U	20 U
Dibenz(a,h)anthracene	20 U	20 U	20 U	20 U	20 U	20 U
Fluoranthene	30	20 U	20 U	20 U	20 U	20 U
Indeno(1,2,3-cd)pyrene	20 U	20 U	20 U	20 U	20 U	20 U
Pyrene	20 U	20 U	20 U	20 U	20 U	20 U
Total HPAH	30 T	20 UT	20 UT	20 UT	20 UT	20 UT
Acenaphthene	20 U	20 U	20 U	20 U	20 U	20 U
Acenaphthylene	20 U	20 U	20 U	20 U	20 U	20 U
Anthracene	20 U	20 U	20 U	20 U	20 U	20 U
Fluorene	20 U	20 U	20 U	20 U	20 U	20 U
Naphthalene	20 U	1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
Phenanthrene	30	20 U	20 U	20 U	20 U	20 U
Total LPAH	30 T	20 UT	20 UT	20 UT	20 UT	20 UT
Semi-Volatile Organic Compounds - TOCN (ug/kg)						
1,2,4-Trichlorobenzene	3080 U					
1,2-Dichlorobenzene	3080 U					
1,4-Dichlorobenzene	3080 U					
2-Methylnaphthalene	3080 U					
bis(2-Ethylhexyl)phthalate	3080 U					
Butylbenzylphthalate	3080 U					
Di-n-butylphthalate	3080 U					
Di-n-octylphthalate	3080 U					

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR296 / SD-DR296-0000 / 0 to 10 cm	DR297 / SD-DR297-0000 / 0 to 10 cm	DR298 / SD-DR298-0000 / 0 to 10 cm	DR299 / SD-DR299-0000 / 0 to 10 cm	DR300 / SD-DR300-0000 / 0 to 10 cm	DR301 / SD-DR301-0000 / 0 to 10 cm
Dibenzofuran		3080 U					
Diethylphthalate		3080 U					
Dimethylphthalate		3080 U					
Hexachlorobenzene		3080 U					
Hexachlorobutadiene		3080 U					
N-Nitrosodiphenylamine		6150 U					
Benzo(a)anthracene		3080 U					
Benzo(a)pyrene		3080 U					
Benzo(g,h,i)perylene		3080 U					
Benzofluoranthene (Total)		3080 UT					
Chrysene		3080 U					
Dibenz(a,h)anthracene		3080 U					
Fluoranthene		4620					
Indeno(1,2,3-cd)pyrene		3080 U					
Pyrene		3080 U					
Total HPAH (TOCN)		4620 T					
Acenaphthene		3080 U					
Acenaphthylene		3080 U					
Anthracene		3080 U					
Fluorene		3080 U					
Naphthalene		3080 U					
Phenanthrene		4620					
Total LPAH (TOCN)		4620 T					

Blank cell indicate no analyses were performed.

APPENDIX E-3

TOTAL INORGANICS (SURFACE SEDIMENT)

Duwamish River Sediment Investigation - Statistics for Surface Sediment Results for Total Inorganics

Constituent	Number of Samples Analyzed	Number of Detections	Detection Frequency (%)	Minimum Detected Value	Maximum Detected Value	Sample Number of Maximum Detected Value	Arithmetic Mean	Median Value
Inorganics (Total) (mg/kg)								
Aluminum	300	300	100.0	2800.00	33500.00	SD-DR056-0000	18565.100	19450.000
Antimony	300	46	15.3	5.00	16.00	SD-DR020-0000	9.473	10.000
Arsenic	300	300	100.0	1.80	99.30	SD-DR020-0000	12.564	11.550
Barium	300	300	100.0	12.00	7380.00	SD-DR027-0000	120.480	74.000
Beryllium	300	300	100.0	0.10	0.68	SD-DR160-0000	0.385	0.410
Cadmium	300	278	92.7	0.07	3.10	SD-DR020-0000	0.442	0.380
Calcium	300	300	100.0	1760.00	48900.00	SD-DR004-0000	6997.700	6160.000
Chromium	300	300	100.0	8.00	180.00	SD-DR186-0000	28.620	28.000
Cobalt	300	300	100.0	3.00	15.00	SD-DR042-0000	9.090	9.000
Copper	300	300	100.0	10.00	204.00	SD-DR123-0000	58.780	53.000
Iron	300	300	100.0	9730.00	45700.00	SD-DR042-0000	27418.433	28300.000
Lead	300	300	100.0	3.52	619.00	SD-DR254-0000	46.772	30.900
Magnesium	300	300	100.0	2150.00	17200.00	SD-DR124-0000	7338.633	7710.000
Manganese	300	300	100.0	122.00	779.00	SD-DR273-0000	320.450	316.500
Mercury	300	288	96.0	0.02	1.60	SD-DR157-0000	0.183	0.165
Nickel	300	300	100.0	7.40	96.40	SD-DR186-0000	20.335	20.400
Potassium	300	300	100.0	380.00	11100.00	SD-DR209-0000	2422.466	2600.000
Selenium	300	280	93.3	0.40	28.00	SD-DR018-0000	7.853	7.000
Silver	300	300	100.0	0.04	2.27	SD-DR030-0000	0.341	0.290
Sodium	300	300	100.0	845.00	22700.00	SD-DR292-0000-CC	10766.283	11300.000
Thallium	300	299	99.7	0.01	0.40	SD-DR081-0000	0.099	0.100
Tin	300	193	64.3	1.00	466.00	SD-DR123-0000	8.017	4.000
Vanadium	300	300	100.0	15.00	92.00	SD-DR056-0000	57.786	59.000
Zinc	300	300	100.0	28.00	1060.00	SD-DR020-0000	121.163	106.000

Bold text indicates constituent was detected one or more times.
n/a - Not Applicable

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID:	DR001	DR002	DR003	DR004	DR005	DR006
	Sample ID:	SD-DR001-0000	SD-DR002-0000	SD-DR003-0000	SD-DR004-0000	SD-DR005-0000	SD-DR006-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		26000	22600	22000	19900	23000	22400
Antimony		13 J	6 J	10 UJ	10 UJ	5 J	10 UJ
Arsenic		77.2	13.4	12.2	11.2	13.9	13.7
Barium		110	91	104	74	97	95
Beryllium		0.47	0.46	0.42	0.41	0.45	0.44
Cadmium		1.5	0.43	0.59	0.36	0.6	0.8
Calcium		45500	15500	13000	48900	11600	9160
Chromium		42	33	33	27	36	38
Cobalt		14	10	10	10	11	11
Copper		153	86	91	72	87	101
Iron		37500 J	31800 J	29600 J	26300 J	31700 J	31700 J
Lead		339	60.9	91.7	47.6	64.9	75.2
Magnesium		12400	8710	8370	7710	8970	9050
Manganese		402	366	318	302	347	346
Mercury		0.22	0.22	0.30	0.18	0.32	0.25
Nickel		27.6	24.9	21.2	22.1	26.9	27.7
Potassium		3400	3080	3080	2790	2900	2800
Selenium		20 J	0.7 J	0.6 J	0.8 J	6	6
Silver		1.14	0.41	0.51	0.30	0.73	0.60
Sodium		14600	12600	12100	11300	11600	11400
Thallium		0.22	0.12	0.13	0.11	0.13	0.12
Tin		14	5	6	4	5.48	6
Vanadium		78	63	62	53	66	66
Zinc		372	155	164	123	167	204

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID:	DR007	DR008	DR009	DR010	DR011	DR012
	Sample ID:	SD-DR007-0000	SD-DR008-0000	SD-DR009-0000	SD-DR010-0000	SD-DR011-0000	SD-DR012-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		18400	19200	18900	10000	21500	20200
Antimony		5 J	7 J	5 J	10 U	6 J	5 J
Arsenic		12.4	14.0	12.7	4.7	13.9	13.1
Barium		83	97	98	27	91	87
Beryllium		0.38	0.41	0.39	0.21 J	0.45	0.44
Cadmium		1.1	1.8	2.0	0.2 J	0.8	0.6
Calcium		7160	7720	7600	6340	8030	10600
Chromium		41	47	46	20	43	32
Cobalt		10	10	11	5	12	10
Copper		93	128	130	38	84	82
Iron		27000 J	28400 J	28900 J	16200	30800 J	29100 J
Lead		100	118	124	38.7 J	73.9	60.0
Magnesium		8170	9130	9200	3760	8690	8070
Manganese		287	276	271	122	355	314
Mercury		0.20	0.29	0.28	0.07	0.28	0.27
Nickel		28.2	31.4	31.7	11.8	23.2	23.8
Potassium		2300	2600	2600	1300	2700	2800
Selenium		5	6	6	1 U	6	6
Silver		0.71	0.86	0.70	0.21	1.10	0.67
Sodium		10100	15400	16200	7050	12000	11600
Thallium		0.10	0.15	0.13	0.09 J	0.11	0.12
Tin		5	8	7	4 UJ	6	6
Vanadium		55	62	60	47	61	59
Zinc		241	359	363	86	173	151

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR013 SD-DR013-0000 0 to 10 cm	DR014 SD-DR014-0000 0 to 10 cm	DR015 SD-DR015-0000 0 to 10 cm	DR016 SD-DR016-0000 0 to 10 cm	DR017 SD-DR017-0000 0 to 10 cm	DR018 SD-DR018-0000 0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		25300	21700	24000	23000	23100	30000
Antimony		10 UJ	10 UJ	6 J	7 J	5 J	10 UJ
Arsenic		10.8	13.5	16.0	17.2	20.0	17.4
Barium		82	77	91	86	93	107
Beryllium		0.49	0.45	0.50	0.48	0.50	0.48
Cadmium		0.4	0.5	0.49	0.56	0.75	1.0
Calcium		7220	8350	8580	15100	8240	9130
Chromium		34	31	34	33	36	44
Cobalt		12	11	12	11	11	14
Copper		74	74	86	90	104	102
Iron		32600 J	30400 J	35700 J	34800 J	35300 J	40900 J
Lead		40.6	43.5	47.5	50.2	60.7	59.9
Magnesium		9530	8650	8840	8690	8860	11000
Manganese		342	339	451	456	452	474
Mercury		0.24	0.21	0.26	0.24	0.37	0.48
Nickel		26.1	23.2	23.2	23.5	23.7	25.8
Potassium		3000	2800	3100	3100	3100	3800
Selenium		6	6	9	9	9	28
Silver		0.45	0.52	0.54	0.51	0.53	0.46
Sodium		12900	13000	13700	14000	14000	15100
Thallium		0.12	0.11	0.12 J	0.11 J	0.12 J	0.15
Tin		4	4	5 J	5 J	5 J	7
Vanadium		69	61	69	66	67	89
Zinc		132	131	159	196	244	254

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID:	DR019	DR020	DR021	DR022	DR023	DR024
	Sample ID:	SD-DR019-0000	SD-DR020-0000	SD-DR021-0000	SD-DR022-0000-CC	SD-DR023-0000	SD-DR024-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		21700	20900	20200	15100	22500	23400
Antimony		10 UJ	16 J	10 UJ	10 UJ	10 UJ	10 UJ
Arsenic		21.1	99.3	15.2	9.7	11.9	12.4
Barium		91	107	88	51	82	92
Beryllium		0.48	0.53	0.46	0.30	0.51	0.49
Cadmium		1.14	3.10	0.52	0.30	0.47	0.41
Calcium		6980	7640	7130	7970	8520	12400
Chromium		34	38	31	24	32	33
Cobalt		11	14	10	9	11	11
Copper		103	180	88	66	75	74
Iron		33100 J	37100 J	30400 J	23500 J	31200 J	33000
Lead		64.9	154	50.1	29.0	43.1	41.6
Magnesium		8490	8360	8020	6830	8310	8570
Manganese		400	387	359	302	345	368
Mercury		0.27	0.47	0.29	0.18	0.22	0.21
Nickel		23.1	23.3	20.4	19.8	23.8	24.8
Potassium		3000	2900	2900	1500	2900	3000
Selenium		9	9.02	8.56	6	9	8
Silver		0.50	0.67	0.45	0.33	0.45	0.49
Sodium		13700	13500	12900	6560	12200	12300
Thallium		0.11 J	0.13 J	0.09 J	0.07 J	0.13 J	0.15
Tin		5 J	10.7 J	5 J	4.26 J	4.84 J	5
Vanadium		61	63	56	46	60	65
Zinc		359	1060	162	106	134	138

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID:	DR025	DR026	DR027	DR028	DR030	DR031
	Sample ID:	SD-DR025-0000	SD-DR026-0000	SD-DR027-0000	SD-DR028-0000	SD-DR030-0000	SD-DR031-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		20200	21700	18600	19800	19900	10600
Antimony		10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Arsenic		12.9	13.0	13.4	9.9	13.6	15.2
Barium		82	89	7380	87	526	51
Beryllium		0.46	0.48	0.45	0.49	0.48	0.22
Cadmium		0.46	0.49	0.44	0.44	2.10	0.23
Calcium		28900	11000	7380	6340	6290	15900
Chromium		31	35	29	29	71	22
Cobalt		9	10	9	10	9	7
Copper		73	77	70	65	93	93
Iron		29800	32400	28400	28400	28600	23400 J
Lead		45.3	45.2	43.8	38.0	124	68.3
Magnesium		7930	8520	7280	7850	7700	5420
Manganese		349	356	317	290	320	242
Mercury		0.26	0.22	0.21	0.20	0.62	0.22
Nickel		23.8	23.8	20.5	22.3	26.8	16.0
Potassium		2700	2700	2500	2800	2700	1490
Selenium		7	7	7	8	8	0.6 J
Silver		0.45	0.51	0.43	0.37	2.27	0.19
Sodium		11800	11600	10500	12200	11100	8930
Thallium		0.13	0.14	0.10	0.11	0.17	0.07
Tin		5	5	5	5	24	5
Vanadium		57	61	54	57	61	34
Zinc		138	142	127	125	215	172

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Station ID:	DR032	DR033	DR034	DR035	DR036	DR037
Sample ID:	SD-DR032-0000	SD-DR033-0000	SD-DR034-0000	SD-DR035-0000	SD-DR036-0000	SD-DR037-0000
Constituent Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Inorganics (Total) (mg/kg)						
Aluminum	15200	14000	19200	20000	9640	26400
Antimony	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Arsenic	9.4	12.4	11.6	16.7	21.9 J	10.6
Barium	65	84	112	154	54	94
Beryllium	0.30	0.35	0.37	0.36	0.22	0.59
Cadmium	0.26	0.33	0.51	0.91	0.37	0.35
Calcium	4960	4710	6290	7440	3560 J	8480
Chromium	24	24	33	42	51 J	35
Cobalt	8	7	9	10	10	12
Copper	63	66	82	182	27	74
Iron	23800 J	22300 J	27300 J	29800 J	18100 J	35600 J
Lead	47.5	70.8	73.6	160	84.7 J	32.0
Magnesium	6340	6020	7140	7950	5650	9540
Manganese	263	234	267	275	323	366
Mercury	0.19	0.20	0.28	0.52	0.09	0.22
Nickel	19.2	20.2	23.4	23.7	35.8	26.9
Potassium	2130	2190	2520	2840	1400	3400
Selenium	0.6 J	0.8 J	0.8 J	0.9 J	0.4 J	7
Silver	0.23	0.28	0.40	0.66	0.11	0.32
Sodium	8510	8890	9680	11800	5940	13800
Thallium	0.08	0.10	0.12	0.12	0.07	0.12
Tin	3	5	6	9	2 UJ	4 J
Vanadium	46	41	56	61	40	71
Zinc	108	137	145	230	86	136

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR038 / SD-DR038-0000 / 0 to 10 cm	DR039 / SD-DR039-0000 / 0 to 10 cm	DR040 / SD-DR040-0000 / 0 to 10 cm	DR041 / SD-DR041-0000 / 0 to 10 cm	DR042 / SD-DR042-0000 / 0 to 10 cm	DR043 / SD-DR043-0000 / 0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		2800	23200	18400	22900	18900	13500
Antimony		10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Arsenic		17.2	15.9 J	16.4 J	13.1 J	18.2 J	11.2 J
Barium		119	130	95	94	89	62
Beryllium		0.45	0.55	0.41	0.45	0.40	0.28
Cadmium		0.64	0.45	0.39	0.33	0.70	0.53
Calcium		11800	8740 J	10800 J	7140 J	29600 J	4880 J
Chromium		52	34 J	46 J	35 J	36 J	26 J
Cobalt		13	11	10	11	15	6
Copper		126	92	101	84	115	55
Iron		45000 J	34800 J	32400 J	34300 J	45700 J	20400 J
Lead		71.2	65.6 J	78.5 J	56.1 J	81.9 J	50.0 J
Magnesium		11200	9630	9100	9740	9290	6230
Manganese		497	400	346	389	261	162
Mercury		0.34	0.26	0.18	0.22	0.17	0.12
Nickel		31.0	27.6	20.1	23.3	21.4	13.9
Potassium		3500	3600	3100	3500	3400	2400
Selenium		27	0.8 J	0.9 J	0.7 J	1	0.7 J
Silver		0.44	0.37	0.29	0.38	0.47	0.38
Sodium		16100	14200	16500	13600	20800	13600
Thallium		0.15	0.14	0.13	0.13	0.18	0.15
Tin		8	7 J	7 J	6 J	9 J	7 J
Vanadium		87	69	60	67	65	46
Zinc		220	168	188	151	168	123

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID:	DR044	DR045	DR046	DR047	DR048	DR049
	Sample ID:	SD-DR044-0000	SD-DR045-0000	SD-DR046-0000	SD-DR047-0000	SD-DR048-0000	SD-DR049-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		13800	13700	13300	14000	20500	17400
Antimony		10 UJ	10 U	10 UJ	6 J	10 UJ	10 UJ
Arsenic		9.8 J	7.6	10.0 J	12.5	11.6 J	12.6 J
Barium		56	45	52	53	74	76
Beryllium		0.28	0.24 J	0.28	0.25 J	0.45	0.43
Cadmium		0.24	0.2	0.22	0.4	0.32	0.53
Calcium		5210 J	6210	5620 J	5150	11300 J	6670 J
Chromium		24 J	24	22 J	34	30 J	27 J
Cobalt		6	6	6	7	10	10
Copper		55	43	56	58	67	78
Iron		20700 J	19400	20700 J	21500	30400 J	27700 J
Lead		37.4 J	44.5 J	32.4 J	64.4 J	38.3 J	14.4 J
Magnesium		5720	5540	6150	7360	8410	8110
Manganese		171	167	156	210	378	322
Mercury		0.12	0.11	0.12	0.12	0.18	0.24
Nickel		14.8	16.5	13.6	26.2	21.9	21.7
Potassium		2300	1700	2400	1900	3100	3000
Selenium		0.7 J	1 U	0.8 J	1 U	0.8 J	1 J
Silver		0.26	0.27	0.24	0.40	0.34	0.32
Sodium		11100	8480	13600	9670	10900	12100
Thallium		0.10	0.11 J	0.09	0.10 J	0.12	0.12
Tin		5 J	7 UJ	5 J	11 J	6 J	6 J
Vanadium		48	48	48	50	62	51
Zinc		96	90	89	146	118	130

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR050 SD-DR050-0000 0 to 10 cm	DR051 SD-DR051-0000 0 to 10 cm	DR052 SD-DR052-0000 0 to 10 cm	DR053 SD-DR053-0000-CC 0 to 10 cm	DR054 SD-DR054-0000 0 to 10 cm	DR055 SD-DR055-0000 0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		29100	21500	19400	29700	24800	22700
Antimony		5 J	10 UJ	10 UJ	6 J	10 UJ	6 J
Arsenic		15.7	11.5 J	12.6 J	35.4 J	23.6	14.6
Barium		116	81	85	117	105	99
Beryllium		0.47	0.45	0.42	0.50	0.49	0.51
Cadmium		0.61	0.34	0.40	0.6	0.37	0.63
Calcium		15300	8330 J	9170 J	16500	8370	9220
Chromium		40	32 J	30 J	42	34	36
Cobalt		12	10	11	13	12	11
Copper		111	76	98	161	140	90
Iron		38500 J	31100 J	30400 J	43500 J	35400 J	34700
Lead		65.9 J	41.6 J	46.5 J	82.6 J	48.9	70.1
Magnesium		9990	9130	8760	10100	9390	9230
Manganese		426	326	359	520	439	372
Mercury		0.32	0.22	0.22	0.25	0.17	0.27
Nickel		25.7 J	21.7	21.1	29.6 J	28.3	25.1
Potassium		3710	3200	3100	3500	3200	3200
Selenium		24 J	0.8 J	1	25 J	0.5 J	5
Silver		0.48	0.31	0.32	0.52	0.28	0.52 J
Sodium		14400	13200	12100	12700	12300	13400
Thallium		0.17 J	0.12	0.13	0.15 J	0.13	0.15
Tin		11	6 J	8 J	15	10	6 UJ
Vanadium		87	62	58	88	70	74
Zinc		171	131	143	211	170	156

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

	Station ID:	DR056	DR057	DR058	DR059	DR060	DR061
	Sample ID:	SD-DR056-0000	SD-DR057-0000	SD-DR058-0000	SD-DR059-0000	SD-DR060-0000	SD-DR061-0000
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		33500	22700	13100	24600	22700	21800
Antimony		10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Arsenic		9.9	10.8	8.4	11.7	10.2	16.5
Barium		106	115	61	88	83	95
Beryllium		0.52	0.38	0.22	0.50	0.46	0.46
Cadmium		0.4	0.45	0.5	0.7	0.4	0.6
Calcium		8910	9910	20400 J	7050	7060	9450
Chromium		43	38	28	35	30	35
Cobalt		14	10	7	13	11	11
Copper		87	94	47	80	60	90
Iron		39900 J	32000 J	20600 J	32800 J	28500 J	32300 J
Lead		48.4	74.3	46.4	48.9	36.7	61.6
Magnesium		11100	8420	5590	9560	8320	9010
Manganese		412	326	211	367	302	369
Mercury		0.23	0.25	0.21	0.24	0.20	0.37
Nickel		27.5	22.5	21.4	26.0	23.4	23.6
Potassium		4100	2900	1500	3000	3000	2800
Selenium		23 J	18 J	11	6	5	7
Silver		0.39	0.46	0.44	0.45	0.38	0.53
Sodium		14700	11300	6160	12400	11000	12700
Thallium		0.15	0.12	0.16	0.11	0.12	0.12
Tin		6	8	6	4	3.51	6
Vanadium		92	74	51	66	59	62
Zinc		144	158	99	180	109	155

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR062 / SD-DR062-0000 / 0 to 10 cm	DR063 / SD-DR063-0000 / 0 to 10 cm	DR064 / SD-DR064-0000 / 0 to 10 cm	DR065 / SD-DR065-0000 / 0 to 10 cm	DR066 / SD-DR066-0000 / 0 to 10 cm	DR067 / SD-DR067-0000 / 0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		19000	22200	20100	22400	22800	9930
Antimony		10 UJ	10 UJ	10 UJ	10 UJ	5 J	10 UJ
Arsenic		10.9	12.6	13.5	10.3	12.0	7.4
Barium		74	87	83	84	85	44
Beryllium		0.43	0.50	0.52	0.54	0.46	0.22
Cadmium		0.42	0.48	0.45	0.37	0.4	0.2
Calcium		6420	8120	6250	6360	6480	3810
Chromium		28	33	30	31	31	16
Cobalt		10	11	10	12	11	6
Copper		71	77	72	61	70	32
Iron		27600 J	32100	30400	30300	30900 J	15400 J
Lead		39.9	42.2	39.8	30.8	38.4	19.8
Magnesium		7690	8570	8180	8450	8910	4100
Manganese		317	344	341	309	327	156
Mercury		0.22	0.25	0.23	0.19	0.23	0.09
Nickel		21.4	23.8	22.8	23.2	24.4	13.2
Potassium		2400	3000	3000	3100	2900	1300
Selenium		8	7	10	8	6	4
Silver		0.41	0.47	0.42	0.38	0.34	0.22
Sodium		10300	13200	13100	13200	12100	5600
Thallium		0.11 J	0.15	0.12	0.10	0.09	0.05
Tin		4 J	5	5	4	4	2
Vanadium		53	63	57	62	62	34
Zinc		123	137	129	113	118	66

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID:	DR068	DR069	DR070	DR071	DR072	DR073
	Sample ID:	SD-DR068-0000	SD-DR069-0000-CC	SD-DR070-0000	SD-DR071-0000	SD-DR072-0000	SD-DR073-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		24400	23300	15800	25900	21600	18800
Antimony		6 J	10 UJ	10 UJ	6 J	10 UJ	10 UJ
Arsenic		12.5	10.3 J	9.7 J	9.7	13.3 J	13.4 J
Barium		96	86	88	82	133	78
Beryllium		0.50	0.50	0.35	0.52	0.48	0.44
Cadmium		0.40	0.29	0.40	0.33	0.47	0.46
Calcium		8860	6970 J	5590 J	8180	6920 J	6400 J
Chromium		36	34 J	28 J	33	33 J	29 J
Cobalt		11	11	9	12	11	10
Copper		84	73	77	76	100	81
Iron		34400 J	32200 J	23400 J	33800 J	28900 J	29600 J
Lead		44.8	43.8 J	61.0 J	32.1	83.8 J	48.8 J
Magnesium		9060	9700	7200	9320	9070	8570
Manganese		369	335	245	336	290	335
Mercury		0.33	0.29	0.24	0.23	0.27	0.19
Nickel		24.7	26.4	18.7	22.7	22.9	22.1
Potassium		3100	3400	2800	3300	3400	3200
Selenium		8	0.6 J	0.6 J	7	0.6 J	0.7 J
Silver		0.40	0.30	0.37	0.32	0.48	0.32
Sodium		12800	13100	10100	13700	12600	12200
Thallium		0.12	0.13	0.11	0.10	0.13	0.12
Tin		4 J	5 J	6 J	4 J	7 J	6 J
Vanadium		68	65	49	70	60	54
Zinc		156	132	138	124	176	136

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR074 SD-DR074-0000 0 to 10 cm	DR075 SD-DR075-0000 0 to 10 cm	DR076 SD-DR076-0000 0 to 10 cm	DR077 SD-DR077-0000 0 to 10 cm	DR078 SD-DR078-0000 0 to 10 cm	DR079 SD-DR079-0000 0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		21400	21400	5810	22100	27100	25000
Antimony		10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Arsenic		9.5 J	10.2 J	10.6	15.7	14.1	15.1
Barium		76	82	13	138	103	95
Beryllium		0.44	0.45	0.12	0.38	0.47	0.46
Cadmium		0.31	0.35	0.13	0.51	0.46	0.55
Calcium		6660 J	6610 J	3760	7120	7490	7440
Chromium		31 J	32 J	10	36	38	35
Cobalt		11	10	4	11	13	12
Copper		70	78	16	89	82	83
Iron		29900 J	30800 J	13400	30700	35800	34000
Lead		38.3 J	42.8 J	25.9	65.2	44.9	47.3
Magnesium		9200	9270	2830	8440	9820	9440
Manganese		304	324	135	323	374	379
Mercury		0.19	0.21	0.02 J	0.32	0.24	0.25
Nickel		22.3	22.1	9.6	23.5	27.4	25.9
Potassium		3300	3320	580	2900	3490	3250
Selenium		1	0.7 J	4	10	11	11
Silver		0.26	0.30	0.22	0.45	0.40	0.44
Sodium		13000	12900	3410	11800	13200	13000
Thallium		0.12	0.13	0.04	0.12	0.12	0.12
Tin		6 J	6 J	46.8	6	5	5
Vanadium		61	63	30	67	78	72
Zinc		123	137	46	151	139	137

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR080 SD-DR080-0000 0 to 10 cm	DR081 SD-DR081-0000 0 to 10 cm	DR082 SD-DR082-0000 0 to 10 cm	DR083 SD-DR083-0000 0 to 10 cm	DR084 SD-DR084-0000 0 to 10 cm	DR085 SD-DR085-0000 0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		25000	14000	23600	28100	22100	24800
Antimony		10 UJ	7 J	10 UJ	10 UJ	7 J	10 UJ
Arsenic		12.6	40.7	16.5	19.7	15.3	16.5
Barium		86	83	172	220	93	104
Beryllium		0.46	0.36	0.40	0.47	0.38	0.42
Cadmium		0.42	2.8	1.0	1.0	0.8	0.7
Calcium		9800	26400	8120	8810	7130	6470
Chromium		34	38	39	40	29	29
Cobalt		12	8	11	12	10	11
Copper		66	60	112	126	90	64
Iron		31400	20400 J	31500 J	36100 J	27900 J	30300 J
Lead		41.3	411	141	152	122	89.8 J
Magnesium		8900	7100	8330	9400	7080	7650
Manganese		323	233	303	345	262	309
Mercury		0.18	0.39	0.34	0.34	0.27	0.20
Nickel		27.1	30.3	24.3	24.7	18.7	16.3 J
Potassium		3150	1900	3100	3700	2800	3200
Selenium		10	16	18	21	17	22 J
Silver		0.36	1.98	1.03	0.93	0.63	0.59
Sodium		11800	8170	10400	13000	8880	9660
Thallium		0.12	0.40	0.17	0.19	0.14	0.14 J
Tin		4	14	10	11	8	7
Vanadium		70	53	73	80	68	70
Zinc		115	357	197	220	155	131

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR086 SD-DR086-0000 0 to 10 cm	DR087 SD-DR087-0000 0 to 10 cm	DR088 SD-DR088-0000 0 to 10 cm	DR089 SD-DR089-0000 0 to 10 cm	DR090 SD-DR090-0000 0 to 10 cm	DR091 SD-DR091-0000 0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		27200	15800	22100	21800	21100	10100
Antimony		10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Arsenic		9.1	16.8 J	15.4	15.6	9.0	7.3
Barium		91	135	128	123	82	45
Beryllium		0.47	0.35	0.40	0.39	0.46	0.19
Cadmium		0.42 UJ	0.97	1.0	0.77	0.25	0.3
Calcium		6860	8240 J	7240	8380	5670	14700 J
Chromium		31	36 J	39	31	27	26 J
Cobalt		12	9	10	10	12	5
Copper		51	87	187	96	53	50 J
Iron		33200 J	24800 J	29000 J	28000 J	28200 J	17900 J
Lead		24.9 J	127 J	77.3 J	127	21.2	46.1 J
Magnesium		8930	7240	7430	7460	8000	4300
Manganese		380	274	309	307	365	192
Mercury		0.14	0.55	0.29	0.24	0.15	0.07
Nickel		22.3 J	20.6	20.0 J	17.2	23.2	13.7
Potassium		3200	2600	2800	2900	2600	1300
Selenium		23 J	0.8 J	19 J	0.7 J	0.6 J	8 J
Silver		0.33	0.75	0.85	0.70	0.20	0.17
Sodium		11900	9670	9360	9720	9840	5650
Thallium		0.13 J	0.13	0.16 J	0.12	0.11	0.08
Tin		4 UJ	11 J	10	6	2	7
Vanadium		79	51	70	58	57	44
Zinc		94	225	169	193	93	81

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID:	DR092	DR093	DR094	DR095	DR096	DR097
	Sample ID:	SD-DR092-0000	SD-DR093-0000	SD-DR094-0000	SD-DR095-0000	SD-DR096-0000	SD-DR097-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		9410	20300	11600	19700	21500	17400
Antimony		10 U	6 J	10 UJ	10 UJ	7 J	6 J
Arsenic		6.0	12.9	8.7	13.1	12.0	14.6
Barium		41	88	1100	116	110	118
Beryllium		0.20	0.48	0.24	0.41	0.39	0.37
Cadmium		0.2	0.44	0.51	0.39	0.4	0.39
Calcium		3600	6180	5100	5710	7080	6180
Chromium		15	31	23	28	35	29
Cobalt		5	9	7	9	10	8
Copper		26	68	39	59	66	63
Iron		15000	29500	17700 J	28600 J	31600 J	29000 J
Lead		15.7	37.0	29.4	33.0	34.2	41.0
Magnesium		3540	8040	5260	7690	8630	8200
Manganese		140	291	179	312	379	291
Mercury		0.07	0.34	0.11	0.15	0.14	0.14
Nickel		13.6	20.7	16.3	20.7	22.8	21.6
Potassium		1100	2800	1500	2600	2500	2400
Selenium		7	8	3	5	24	5
Silver		0.14	0.43	0.45	0.37	0.32	0.41
Sodium		5370	14800	6280	10400	10000	11800
Thallium		0.08	0.12	0.11	0.12	0.11	0.12
Tin		4 UJ	4	6	4	6	6
Vanadium		43	59	44	59	69	57
Zinc		54	124	86	111	134	134

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR098 SD-DR098-0000 0 to 10 cm	DR099 SD-DR099-0000 0 to 10 cm	DR100 SD-DR100-0000 0 to 10 cm	DR101 SD-DR101-0000 0 to 10 cm	DR102 SD-DR102-0000 0 to 10 cm	DR103 SD-DR103-0000 0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		25100	10100	7850	18600	17700	21100
Antimony		10 UJ	10 UJ	5 J	10 UJ	10 UJ	10 UJ
Arsenic		11.9	8.5	4.6	11.1	14.3	12.2
Barium		113	53	42	73	74	86
Beryllium		0.48	0.21	0.16	0.38	0.36	0.46
Cadmium		0.35	0.24	0.22	0.47	0.42	0.42
Calcium		6140	7580	8820	5400	9090	6220
Chromium		32	15	12	25	36	32
Cobalt		11	5	4	8	9	10
Copper		61	31	25	47	69	69
Iron		34300 J	18600 J	13100 J	26000 J	26700 J	30600 J
Lead		30.2	20.7	12.2	26.6	44.5	36.8
Magnesium		9290	4640	3440	7100	7440	8290
Manganese		359	168	125	256	276	306
Mercury		0.17	0.07	0.06	0.18	0.13	0.30
Nickel		26.1	15.1	11.1	21.1	25.9	20.2
Potassium		3000	1300	1100	2600	2200	2700
Selenium		5	2	3	5	4	7
Silver		0.32	0.18	0.33	0.43	0.36	0.39
Sodium		11700	6120	4340	10800	9780	14300
Thallium		0.13	0.05	0.05	0.13	0.10	0.11
Tin		3	3	2 UJ	3	5	4 J
Vanadium		72	33	29	59	56	62
Zinc		113	77	51	85	132	130

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID:	DR104	DR105	DR106	DR107	DR108	DR109
	Sample ID:	SD-DR104-0000	SD-DR105-0000	SD-DR106-0000	SD-DR107-0000	SD-DR108-0000	SD-DR109-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		21700	19500	18600	18600	19800	26400
Antimony		5 J	10 UJ	10 UJ	10 UJ	6 J	10 UJ
Arsenic		12.3	9.1	12.7	23.1	21.4	14.3
Barium		89	80	76	77	78	93
Beryllium		0.47	0.40	0.46	0.46	0.49	0.45
Cadmium		0.46	0.4	0.37	0.38	0.39	0.48
Calcium		6970	5730	5190	5380	2290	7340
Chromium		33	33	27	27	28	38
Cobalt		10	10	9	10	10	13
Copper		71	59	60	82	84	93
Iron		31800 J	25600 J	27500 J	29200 J	31300 J	42900 J
Lead		46.9	365	56.4	52.3	49.3	43.9
Magnesium		8370	7520	7730	7730	8140	9800
Manganese		320	266	291	367	367	404
Mercury		0.25	0.15	0.22	0.22	0.25	0.29
Nickel		21.0	20.3	19.4	20.3	21.6	23.4
Potassium		2800	2500	2600	2500	2700	3200
Selenium		7	5 J	9	9	9	26
Silver		0.41	0.40	0.32	0.46	0.50	0.38
Sodium		14300	11700	12600	11900	12200	14200
Thallium		0.11	0.09 J	0.11	0.12	0.12	0.13
Tin		4 J	5	4 J	5 J	5 J	6
Vanadium		66	60	50	51	54	83
Zinc		138	115	120	148	153	175

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR110 SD-DR110-0000 0 to 10 cm	DR111 SD-DR111-0000-CC 0 to 10 cm	DR112 SD-DR112-0000 0 to 10 cm	DR113 SD-DR113-0000-CC 0 to 10 cm	DR114 SD-DR114-0000 0 to 10 cm	DR115 SD-DR115-0000 0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		19300	18000	19400	24800	19100	18100
Antimony		10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 U
Arsenic		13.9	16.5	11.8	13.4	13.2	8.2
Barium		79	78	82	279	80	77
Beryllium		0.47	0.45	0.46	0.54	0.42	0.33 J
Cadmium		0.42	0.48	0.36	1.8	0.6	0.2
Calcium		5550	5650	5440	6260	6560	5700
Chromium		29	26	27	48	26	29
Cobalt		9	9	10	11	8	8
Copper		65	62	56	70	59	83
Iron		28400 J	25400 J	27500 J	31900 J	25800 J	28500
Lead		40.8	39.3	33.0	67.3	30.7	29.8 J
Magnesium		7690	7100	7720	8980	7480	6510
Manganese		337	265	305	311	284	294
Mercury		0.19	0.20	0.17	0.39	0.16	0.10
Nickel		20.7	20.5	20.0	21.5	19.6	20.9
Potassium		2500	2300	2500	3400	2400	1800
Selenium		9	9	8	7 J	5 J	1 U
Silver		0.41	0.41	0.36	1.33	0.39	0.19
Sodium		11300	11700	12200	12500	10700	7110
Thallium		0.13	0.12	0.12	0.13 J	0.09 J	0.09 J
Tin		5 J	4.09 J	4 J	14	4	5 UJ
Vanadium		54	52	54	74	56	61
Zinc		126	120	111	159	124	111

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Station ID:	DR116	DR117	DR118	DR119	DR120	DR121
Sample ID:	SD-DR116-0000	SD-DR117-0000	SD-DR118-0000	SD-DR119-0000	SD-DR120-0000	SD-DR121-0000
Constituent Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Inorganics (Total) (mg/kg)						
Aluminum	19300	20600	20700	20500	18600	27400
Antimony	10 UJ	10 UJ	5 J	6 J	10 UJ	10 UJ
Arsenic	12.0	11.5	12.5	13.6	18.5	17.5
Barium	72	76	79	77	89	97
Beryllium	0.48	0.50	0.50	0.49	0.42	0.48
Cadmium	0.37	0.33	0.41	0.44	0.54	0.42
Calcium	5550	5850	5950	5960	10200	7950
Chromium	27	28	29	28	28	39
Cobalt	10	10	10	10	10	11
Copper	59	55	59	61	181	105
Iron	28800 J	29100 J	30600 J	30600 J	31600 J	37800 J
Lead	25.1	25.1	28.0	29.7	52.9	46.7
Magnesium	7830	8010	8100	8220	8120	9750
Manganese	276	291	331	311	418	439
Mercury	0.19	0.23	0.31	0.17	0.21	0.27
Nickel	19.4	20.4	20.1	19.5	21.0	24.4
Potassium	2600	2700	2700	2700	2700	3400
Selenium	6	6	6	7	1	17.9 J
Silver	0.30	0.28	0.34	0.36	0.39	0.35
Sodium	13300	13300	14000	15100	12800	13100
Thallium	0.08	0.09	0.09	0.12	0.12	0.10
Tin	3 J	3 J	3 J	3 J	9	19
Vanadium	56	59	61	60	54	83
Zinc	126	107	116	118	235	168

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR122 / SD-DR122-0000 / 0 to 10 cm	DR123 / SD-DR123-0000 / 0 to 10 cm	DR124 / SD-DR124-0000 / 0 to 10 cm	DR125 / SD-DR125-0000 / 0 to 10 cm	DR126 / SD-DR126-0000 / 0 to 10 cm	DR127 / SD-DR127-0000 / 0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		27300	23100	19800	25400	19200	20900
Antimony		8 J	13	8 J	10 UJ	6 J	10 UJ
Arsenic		16.8	52.4	31.8	15.8	13.4	13.1
Barium		91	117	89	95	80	84
Beryllium		0.49 J	0.43 J	0.45	0.45	0.38	0.42
Cadmium		0.3	0.8	0.65	0.55	0.41	0.41
Calcium		7430	9920	15300	14600	6260	6130
Chromium		38	46	39	37	30	31
Cobalt		12	9	10	10	9	10
Copper		100	204	119	94	89	85
Iron		37200	35200	30500	35000 J	29200 J	31200 J
Lead		46.7 J	164 J	83.2	48.8	46.0	47.2
Magnesium		10100	8880	17200	9420	8590	8850
Manganese		387	331	364	408	311	336
Mercury		0.20	0.45	0.05 U	0.23	0.24	0.19
Nickel		27.3	25.5	30.6	23.6	19.2	20.2
Potassium		3300	3000	2500	3300	2900	3000
Selenium		1 U	1 U	1 U	18 J	0.8 J	1
Silver		0.31	0.74	0.35 J	0.47	0.35	0.31
Sodium		13500	12000	12800	13700	16500	15000
Thallium		0.21 J	0.21 J	0.11	0.10	0.12	0.13
Tin		49 J	466 J	137 J	15	14	11
Vanadium		79	72	66	78	55	60
Zinc		164	339	282	155	135	138

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR128 SD-DR128-0000 0 to 10 cm	DR129 SD-DR129-0000 0 to 10 cm	DR130 SD-DR130-0000 0 to 10 cm	DR131 SD-DR131-0000-CC 0 to 10 cm	DR132 SD-DR132-0000 0 to 10 cm	DR133 SD-DR133-0000 0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		20400	26500	19500	10900	21400	9780
Antimony		10 UJ	10 U	10 UJ	10 UJ	10 UJ	10 UJ
Arsenic		13.0	14.0	10.2	8.1	11.3	6.8
Barium		81	91	80	44	80	42
Beryllium		0.42	0.46	0.33	0.25	0.53	0.28
Cadmium		0.44	0.5	0.30	0.46	0.5	0.3 UJ
Calcium		6250	7310	5620	4480	9320	3550
Chromium		30	37	28	31	33	17
Cobalt		10	11	10	7	9	7
Copper		81	75	67	44	61	30
Iron		30700 J	34900	29000 J	20600 J	30500 J	18100
Lead		44.5	46.6	33.9	129	52.3	37.6
Magnesium		8820	9170	8150	6190	8060	4100
Manganese		320	354	310	239	330	176
Mercury		0.22	0.19	0.18	0.09	0.17	0.05
Nickel		19.2	24.7	16.3	31.8	22.8	12.6
Potassium		2900	3190	2700	1200	2800	1200
Selenium		0.8 J	15	0.8 J	3	7	3
Silver		0.34	0.38	0.28	0.14	0.32	0.19 J
Sodium		15700	14000	14300	7710	12200	5450
Thallium		0.13	0.16	0.09	0.06	0.11	0.11
Tin		9	8 UJ	5	4	5	3 UJ
Vanadium		58	77	56	34	61	47
Zinc		134	136	125	150	129	61

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID:	DR134	DR135	DR136	DR137	DR138	DR139
	Sample ID:	SD-DR134-0000	SD-DR135-0000	SD-DR136-0000	SD-DR137-0000	SD-DR138-0000	SD-DR139-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		19200	14900	18700	16200	8720	21200
Antimony		10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	6 J
Arsenic		10.6	10	11.6	5.7	5.2	9.9
Barium		78	50	69	56	23	74
Beryllium		0.53	0.46	0.54	0.31	0.14	0.38 J
Cadmium		0.41	0.56	0.36	0.27	0.2 U	0.9
Calcium		5600	4130	6670	5040	3920	5890
Chromium		30	22	27	24	16	52
Cobalt		9	7	9	7	4	10
Copper		52	35	44	39	20	86
Iron		27500 J	18500 J	25400 J	21600 J	16000 J	31600
Lead		41.1	46.2	32.9	52.5	22.8	179 J
Magnesium		7170	5490	7160	6090	3270	8080
Manganese		350	188	264	209	276	249
Mercury		0.16	0.2	0.17	0.14	0.05	0.82
Nickel		22	15.6	23.4	16.1	9.7	23.6
Potassium		2700	2200	2600	2300	920	2200
Selenium		8	7	6	4	8 J	1 U
Silver		0.32	0.3	0.23	0.19	0.11	1.11
Sodium		10700	9020	10900	8630	5300	9620
Thallium		0.1	0.1	0.1	0.09	0.03	0.11 J
Tin		5	3	3	4	4 UJ	10 J
Vanadium		56	46	53	47	50	71
Zinc		107	74	92	88	57	240

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR140 / SD-DR140-0000 / 0 to 10 cm	DR141 / SD-DR141-0000-CC / 0 to 10 cm	DR142 / SD-DR142-0000 / 0 to 10 cm	DR143 / SD-DR143-0000 / 0 to 10 cm	DR144 / SD-DR144-0000 / 0 to 10 cm	DR145 / SD-DR145-0000 / 0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		5560	15100	5570	10200	18100	20400
Antimony		10 UJ	10 UJ	10 UJ	10 UJ	7 J	7 J
Arsenic		1.8	10.0	5.2	13.3	25.6	11.7
Barium		14	61	21	31	124	82
Beryllium		0.11	0.32	0.11	0.21	0.47	0.51
Cadmium		0.13 UJ	0.29	0.09	0.1 J	0.64	0.39
Calcium		2750	7490 J	3590	4270	11500	5670
Chromium		10	18	10	20	36	30
Cobalt		4	8	3	6	10	10
Copper		10	39	35	40	77	57
Iron		13600 J	21800 J	14500 J	28100 J	26100	28500
Lead		5.64	26.0	7.54	22.4	65.2	29.1
Magnesium		2450	5680	2440	4370	6780	7990
Manganese		161	220	144	272	266	289
Mercury		0.05 U	0.09	0.03 J	0.06	0.22	0.18
Nickel		7.4	14.2	8.7	15.1	21.9	22.2
Potassium		530	2100	690	1100	2600	2800
Selenium		10	4	2	10 J	8	8
Silver		0.14	0.23	0.09	0.09	0.58	0.34
Sodium		3010	9740	2870	5300	10800	13400
Thallium		0.03 UJ	0.09	0.04	0.05	0.11	0.11
Tin		2 UJ	3	2 UJ	5	6	4
Vanadium		40	49	25	49	51	56
Zinc		28	81	42	91	181	106

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR146 SD-DR146-0000 0 to 10 cm	DR147 SD-DR147-0000 0 to 10 cm	DR148 SD-DR148-0000 0 to 10 cm	DR149 SD-DR149-0000 0 to 10 cm	DR150 SD-DR150-0000 0 to 10 cm	DR151 SD-DR151-0000 0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		21800	21400	20400	18800	20500	19000
Antimony		10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Arsenic		12.2	14.2	12.4	10.8	9.4	12.4
Barium		84	93	84	66	80	72
Beryllium		0.48	0.47	0.55	0.40	0.49	0.49
Cadmium		0.5	0.6	0.50	0.4	0.42	0.40
Calcium		6430	6750	9770	6270	5850	5550
Chromium		29	35	30	26	29	27
Cobalt		10	11	11	10	9	9
Copper		67	78	51	53	48	57
Iron		30000 J	33300	30500 J	25800 J	28700 J	28500 J
Lead		32.5	69.9	24.5	23.1	19.3	27.9
Magnesium		9000	8570	7750	7660	7710	7720
Manganese		325	368	377	257	290	285
Mercury		0.17	0.27	0.26	0.13	0.11	0.18
Nickel		22.7	22.8	17.9	20.6	21.6	14.4
Potassium		2900	2800	2600	2400	2500	2600
Selenium		6 J	5	8	5 J	6	6
Silver		0.35	0.48 J	0.49	0.29	0.27	0.31
Sodium		13400	13100	15000	11100	12000	13400
Thallium		0.10 J	0.14	0.12	0.08 J	0.10	0.10
Tin		5	5 UJ	3 J	3	2 J	3 J
Vanadium		63	70	75	56	60	55
Zinc		122	168	93	100	96	110

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID:	DR152	DR153	DR154	DR155	DR156	DR157
	Sample ID:	SD-DR152-0000	SD-DR153-0000	SD-DR154-0000	SD-DR155-0000	SD-DR156-0000	SD-DR157-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		26000	26000	19000	19900	19900	17500
Antimony		10 U	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Arsenic		13.0	13.7	10.9	12.7	12.3	10.1
Barium		88	93	74	79	86	81
Beryllium		0.45	0.49	0.46	0.51	0.54	0.32
Cadmium		0.5	0.62	0.37	0.33	0.38	1.18
Calcium		7880	7950	5190	5760	6850	6100
Chromium		34	39	29	31	28	55
Cobalt		11	11	9	9	10	9
Copper		73	84	57	57	48	83
Iron		33600	36100 J	30000 J	28700 J	26400 J	27300 J
Lead		38.1	50.2	39	54.5	28.7	245
Magnesium		9180	9940	7250	7380	7750	7730
Manganese		354	365	328	340	304	200
Mercury		0.25	0.22	0.17	0.17	0.15	1.6
Nickel		25.5	24.5	20.9	20	22.5	19.3
Potassium		3140	3400	2500	2700	2700	2300
Selenium		16	20 J	5	8	7	14 J
Silver		0.37	0.42	0.31	0.35	0.22	1.07
Sodium		13400	15400	11000	11200	11500	16700
Thallium		0.14	0.12	0.09	0.11	0.11	0.10
Tin		10	9	6	6	3	9
Vanadium		75	82	54	57	54	67
Zinc		121	152	133	114	92	247

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR158 / SD-DR158-0000 / 0 to 10 cm	DR159 / SD-DR159-0000 / 0 to 10 cm	DR160 / SD-DR160-0000 / 0 to 10 cm	DR161 / SD-DR161-0000 / 0 to 10 cm	DR162 / SD-DR162-0000 / 0 to 10 cm	DR163 / SD-DR163-0000 / 0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		12500	18500	19700	27100	21300	26900
Antimony		10 UJ	10 UJ	10 UJ	10 UJ	10 U	10 U
Arsenic		9.9	11.8	9.6	8.6	11.6	11.2
Barium		50	72	73	93	82	98
Beryllium		0.27	0.39	0.68	0.49	0.42	0.49
Cadmium		0.28	0.3	0.32	0.27	0.4	0.4
Calcium		4060	12700	5830	6360	6880	6820
Chromium		18	26	27	35	27	34
Cobalt		6	8	9	13	10	12
Copper		38	51	78	48	55	53
Iron		19800 J	28300 J	26800 J	33300 J	29000	33500
Lead		21.2	33.2	31.0	16.9	32.5	25.5
Magnesium		5160	7480	8120	9210	7660	9210
Manganese		218	299	275	521	332	393
Mercury		0.10	0.16	0.19	0.13	0.13	0.17
Nickel		16.1	19.1	21.2	25.9	22.9	28.0
Potassium		1700	2800	2800	3000	2540	3040
Selenium		4	6	0.7 J	18 J	15	17
Silver		0.21	0.26	0.23	0.24	0.26	0.29
Sodium		6960	13300	12800	10100	11100	12100
Thallium		0.08	0.09	0.10	0.09	0.14	0.15
Tin		3.56	4	6	5	5 UJ	5 UJ
Vanadium		42	51	53	77	65	77
Zinc		80	104	117	86	102	99

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID:	DR164	DR165	DR166	DR167	DR168	DR169
	Sample ID:	SD-DR164-0000	SD-DR165-0000	SD-DR166-0000	SD-DR167-0000	SD-DR168-0000	SD-DR169-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		21900	19700	14100	14200	16900	17800
Antimony		5 J	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Arsenic		10.7	8.3	6.9	11.7	9.8	8
Barium		78	78	64	74	72	70
Beryllium		0.49	0.53	0.44	0.37	0.45	0.43
Cadmium		0.4	0.31	0.39	0.38	0.41	0.17
Calcium		5750	5100	4550	4860	5680	4780
Chromium		28	30	21	21	26	26
Cobalt		11	10	7	7	9	9
Copper		56	42	33	33	45	34
Iron		29000 J	25300 J	19100 J	18500 J	23600 J	22700 J
Lead		24.2	29.5	32.9	37.6	31.2	19.0
Magnesium		9140	7320	5480	4830	6650	6610
Manganese		360	330	215	197	271	243
Mercury		0.14	0.12	0.11	0.12	0.14	0.12
Nickel		25.1	25.7	19.7	15.7	20.2	24.3
Potassium		2800	2400	2000	1900	2400	2400
Selenium		6 J	7	7	5	5	7
Silver		0.38	0.33	0.27	0.22	0.23	0.15
Sodium		13800	10100	7760	6570	11200	9230
Thallium		0.09 J	0.11	0.11	0.09	0.12	0.10
Tin		3	2 UJ	2 UJ	3	3	2 UJ
Vanadium		61	54	40	44	50	49
Zinc		98	80	86	81	93	70

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR170 / SD-DR170-0000 / 0 to 10 cm	DR171 / SD-DR171-0000 / 0 to 10 cm	DR172 / SD-DR172-0000 / 0 to 10 cm	DR173 / SD-DR173-0000 / 0 to 10 cm	DR174 / SD-DR174-0000 / 0 to 10 cm	DR175 / SD-DR175-0000 / 0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		18700	20200	3800	8730	13000	16700
Antimony		10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Arsenic		8	10.7	4	7.4	9.6	12.2
Barium		78	75	12	29	54	57
Beryllium		0.44	0.45	0.10	0.23	0.27	0.34
Cadmium		0.26	0.4	0.07	0.13	0.41	0.33
Calcium		5220	5740	1960	3230	4260	4890
Chromium		25	26	9	15	22	23
Cobalt		9	10	3	5	7	8
Copper		34	51	16	24	40	47
Iron		23600 J	27400 J	9730 J	15300 J	19400 J	22800 J
Lead		24.8	20.4	8.21	15.5	28.6	21.6
Magnesium		6910	8300	2150	3860	5500	6350
Manganese		265	299	179	206	170	239
Mercury		0.15	0.15	0.05 U	0.07	0.15	0.13
Nickel		24.9	20.8	8.9	10.2	20.8	18.4
Potassium		2600	2600	380	1100	1400	2000
Selenium		7	6 J	3	5	4	5
Silver		0.15	0.26	0.23	0.16	0.35	0.23
Sodium		9630	12800	3190	5500	6820	9010
Thallium		0.10	0.08 J	0.04	0.01 J	0.08	0.09
Tin		2 UJ	3	3 J	2 J	3	3
Vanadium		50	59	15	30	40	50
Zinc		76	96	28	60	92	102

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID:	DR176	DR177	DR178	DR179	DR180	DR181
	Sample ID:	SD-DR176-0000	SD-DR177-0000	SD-DR178-0000-CC	SD-DR179-0000	SD-DR180-0000	SD-DR181-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		24100	22200	18400	21400	17700	22600
Antimony		10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Arsenic		12.0	17.1	16.3	14.8	13.5	12.2
Barium		101	100	144	136	81	157
Beryllium		0.43	0.43	0.37	0.41	0.36	0.42
Cadmium		0.45	0.66	2.74	1.84	0.56	0.8
Calcium		7350	6640	11700	9270	5870	7180
Chromium		36	35	50	42	28	35
Cobalt		10	10	10	10	9	10
Copper		65	67	93	82	55	65
Iron		35100 J	33700	34000	32100	27300	32200 J
Lead		44.3	49.3	215	120	38.1	58.2 J
Magnesium		8200	9060	8060	8740	7480	8230
Manganese		356	339	291	286	281	328
Mercury		0.19	0.21	0.46	1.12	0.17	0.24
Nickel		21.6	22.7	25.7	25.3	19.0	23.7 J
Potassium		2700	2940	2460	2810	2480	2800
Selenium		19 J	10	8	9	9	24 J
Silver		0.42	0.53	1.65	1.06	0.47	0.59
Sodium		10600	14600	11800	13100	11700	12500
Thallium		0.13	0.15	0.17	0.17	0.12	0.16 J
Tin		6	5	6	6	4	6
Vanadium		78	91	66	71	59	73
Zinc		142	148	300	242	123	139

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID:	DR182	DR183	DR184	DR185	DR186	DR187
	Sample ID:	SD-DR182-0000	SD-DR183-0000	SD-DR184-0000	SD-DR185-0000	SD-DR186-0000	SD-DR187-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		14800	16900	20900	22300	17900	12200
Antimony		10 UJ	10 UJ	10 UJ	10 U	10 U	10 U
Arsenic		10.9	18.0	10.1	9.5	24.9	48.1
Barium		58	64	69	64	69	42
Beryllium		0.33	0.39	0.45	0.40	0.34	0.25
Cadmium		0.49	1.47	0.3	0.4	1.0	1.4
Calcium		11400	5240	5910	6160	5570	14700
Chromium		22	40	27	31	180	64
Cobalt		7	8	10	10	10	8
Copper		41	45	47	44	157	56
Iron		21400	24500	28100 J	28800	32000	32900
Lead		29.8	35.4	18.5	26.2	152	181
Magnesium		6350	6800	8500	8250	6780	5940
Manganese		210	230	300	293	721	558
Mercury		0.13	0.24	0.13	0.13	0.19	0.09
Nickel		17.4	22.4	21.3	24.5	96.4	31.8
Potassium		2100	2380	2700	2680	1900	1180
Selenium		7	8	6 J	15.9	15	12
Silver		0.34	0.81	0.25	0.21	0.43	1.28
Sodium		9930	9680	13200	12000	8520	6770
Thallium		0.10	0.13	0.07 J	0.12	0.11	0.07
Tin		3 UJ	4	2 UJ	4 UJ	9 UJ	7 UJ
Vanadium		51	60	60	67	66	59
Zinc		92	120	95	94	240	233

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR188 SD-DR188-0000 0 to 10 cm	DR189 SD-DR189-0000 0 to 10 cm	DR190 SD-DR190-0000 0 to 10 cm	DR191 SD-DR191-0000 0 to 10 cm	DR192 SD-DR192-0000 0 to 10 cm	DR193 SD-DR193-0000 0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		18100	14200	18800	20700	17000	11700
Antimony		10 U	5 J	10 UJ	10 UJ	6 J	10 UJ
Arsenic		12.5	11.4	5.9	10.0	7	7
Barium		55	44	57	70	55	39
Beryllium		0.34	0.27 J	0.44	0.46	0.37	0.28
Cadmium		0.29	0.2 J	0.29	0.27	0.27	0.33
Calcium		5380	4440	4910	5890	4900	3760
Chromium		25	23	25	28	23	17
Cobalt		8	7	8	10	9	7
Copper		37	46	53	58	39	40
Iron		23900	26900	21200 J	29300 J	23100 J	17600 J
Lead		20.7	33.9 J	25.8	21.1	16.3	19.4
Magnesium		7130	5900	6530	7860	6280	4770
Manganese		258	210	219	282	223	174
Mercury		0.13	0.11	0.19	0.18	0.09	0.07
Nickel		18.8	17.3	19.4	19.9	17.5	13.5
Potassium		2180	1500	2400	2600	2000	1400
Selenium		10 J	1 U	7	6	6	4
Silver		0.19	0.14	0.21	0.27	0.22	0.22
Sodium		10800	8810	9720	12200	8810	7060
Thallium		0.07	0.06 J	0.09	0.09	0.08	0.07
Tin		4	5 UJ	3	2 J	2 J	3 J
Vanadium		54	54	51	62	53	37
Zinc		81	102	98	101	80	88

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR194 / SD-DR194-0000 / 0 to 10 cm	DR195 / SD-DR195-0000 / 0 to 10 cm	DR196 / SD-DR196-0000 / 0 to 10 cm	DR197 / SD-DR197-0000 / 0 to 10 cm	DR198 / SD-DR198-0000 / 0 to 10 cm	DR199 / SD-DR199-0000 / 0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		21100	13500	11100	12500	11500	14600
Antimony		10 UJ	10 J	10 UJ	10 UJ	10 UJ	10 UJ
Arsenic		14.3	9.3	9.9	8.9	6.7	8.5
Barium		74	119	37	32	33	41
Beryllium		0.43	0.26	0.23	0.25	0.24	0.30
Cadmium		0.41	0.16	0.12	0.12	0.16	0.21
Calcium		6180	4360	3830	4200	3770	4460
Chromium		29	19	15	17	16	20
Cobalt		9	6	5	6	6	6
Copper		57	36	28	30	27	33
Iron		31300 J	20000 J	19900 J	18900 J	17800 J	21300 J
Lead		31.4	31.7	23.3	18.3	21.1	24.4
Magnesium		8240	5050	4500	4830	4600	5540
Manganese		340	247	254	299	215	225
Mercury		0.17	0.09	0.08	0.08	0.07	0.12
Nickel		19.8	13.3	12.1	14.2	16.5	15.3
Potassium		2900	1700	1200	1500	1300	1500
Selenium		6	4	4	4	4	5
Silver		0.30	0.17	0.15	0.14	0.14	0.18
Sodium		14000	8060	7320	6950	5690	7690
Thallium		0.12	0.07	0.06	0.05	0.05	0.07
Tin		4	3	3	4	2 JU	4
Vanadium		63	48	38	44	41	49
Zinc		117	82	58	71	69	77

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID:	DR200	DR201	DR202	DR203	DR204	DR205
	Sample ID:	SD-DR200-0000	SD-DR201-0000	SD-DR202-0000	SD-DR203-0000	SD-DR204-0000	SD-DR205-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		14600	14400	15800	12700	14600	24600
Antimony		10 UJ	10 U	10 UJ	10 U	10 UJ	10 UJ
Arsenic		8.2	10.7	8.1	6.5	7.9	9.6
Barium		43	40	45	33	39	84
Beryllium		0.30	0.29	0.34	0.25	0.27	0.46
Cadmium		0.25	0.2	0.33	0.2	0.20	0.26
Calcium		4550	4610	4880	4440	4930	6610
Chromium		20	20	25	17	23	30
Cobalt		6	7	7	6	6	11
Copper		43	43	36	37	30	40
Iron		21100 J	28600	22500 J	18200	25900 J	31500 J
Lead		27.7	26.7	30.0	22.0	22.6	15.3
Magnesium		5480	5970	5450	4650	5160	8350
Manganese		264	303	251	253	268	349
Mercury		0.13	0.08	0.11	0.06	0.23	0.14
Nickel		16.6	16.9	14.8	13.9	14.2	21.1
Potassium		1600	1720	2000	1500	1700	2800
Selenium		5	12	13 J	10	11 J	16 J
Silver		0.17	0.13	0.24	0.11	0.12	0.16
Sodium		6650	9960	7380	7550	7500	11600
Thallium		0.06	0.07	0.05	0.05	0.03	0.08
Tin		4	4 UJ	12	4 UJ	5	4 UJ
Vanadium		51	52	62	48	61	76
Zinc		79	72	89	63	62	81

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID:	DR206	DR207	DR208	DR209	DR210	DR211
	Sample ID:	SD-DR206-0000	SD-DR207-0000	SD-DR208-0000	SD-DR209-0000	SD-DR210-0000	SD-DR211-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		26600	15300	15500	22400	14500	18600
Antimony		10 UJ	6 J	10 U	10 U	10 U	10 U
Arsenic		7.4	15.9	9.6	9.8	15.0	13.1
Barium		75	52	41	72	47	58
Beryllium		0.49	0.30	0.28	0.39	0.29	0.34
Cadmium		0.4	0.2	0.2	0.2	0.14	0.21
Calcium		6920	7010	4780	3020	4800	5450
Chromium		34	26	22	14	20	24
Cobalt		11	8	7	6	7	9
Copper		46	42	32	26	31	33
Iron		32300 J	26700 J	24000	23900	28000	26700
Lead		16.9	46.4	25.9	12.7	17.8	14.9
Magnesium		9440	6850	5520	5780	6110	7000
Manganese		317	411	327	533	392	361
Mercury		0.10	0.10	0.07	0.04 J	0.46	0.09
Nickel		24.2	17.6	15.9	9.1	15.2	20.2
Potassium		3400	2800	2480	11100	2160	2210
Selenium		17.5 J	11 J	12	13	9 J	9 J
Silver		0.19	0.15	0.16	0.29	0.15	0.16
Sodium		14600	8200	8060	13000	10700	9000
Thallium		0.10	0.04	0.06	0.04 J	0.04	0.06
Tin		4 UJ	6	4 UJ	3 UJ	3	2 UJ
Vanadium		81	61	55	39	48	58
Zinc		93	131	79	66	70	72

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID:	DR212	DR213	DR214	DR215	DR216	DR217
	Sample ID:	SD-DR212-0000	SD-DR213-0000	SD-DR214-0000	SD-DR215-0000	SD-DR216-0000	SD-DR217-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		11200	14200	16800	19100	18400	18100
Antimony		10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Arsenic		8.1	8.0	10.3	10.7	11.0	10.6
Barium		32	45	5180	66	65	50
Beryllium		0.24	0.29	0.34	0.42	0.37	0.36
Cadmium		0.72	0.37	0.3	0.4	0.41	0.9
Calcium		3600	4310	5180	5540	5370	4930
Chromium		25	21	23	25	30	35
Cobalt		6	7	8	9	9	9
Copper		26	34	40	47	45	64
Iron		14800 J	18800 J	23800 J	26600 J	26100 J	21500 J
Lead		32.3	22.2	18.1	20.5	24.4	48.8
Magnesium		4110	5420	6430	7680	7280	6640
Manganese		131	187	254	284	274	214
Mercury		0.10	0.11	0.10 J	0.15	0.13	0.22
Nickel		12.3	15.5	16.8	20.0	19.9	18.6
Potassium		1400	1800	2000	2400	2300	2300
Selenium		3	4	5 J	5 J	5	5 J
Silver		0.24	0.24	0.26	0.28	0.27	0.76
Sodium		6170	7420	8810	11600	11400	9390
Thallium		0.08	0.08	0.06 J	0.07 J	0.09	0.08 J
Tin		2 UJ	2 UJ	3	3	3	4
Vanadium		39	43	53	56	55	55
Zinc		68	79	82	94	96	142

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

	Station ID:	DR218	DR219	DR220	DR221	DR222	DR223
	Sample ID:	SD-DR218-0000	SD-DR219-0000	SD-DR220-0000	SD-DR221-0000	SD-DR222-0000	SD-DR223-0000-CC
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		21700	21300	23000	16000	10300	19400
Antimony		10 UJ	10 U	10 U	10 UJ	10 UJ	10 UJ
Arsenic		12.4	10.8	15.3	6.9	4.3	12.2
Barium		75	72	78	60	35	67
Beryllium		0.45	0.40 J	0.42	0.34	0.25	0.38
Cadmium		0.3	0.3	0.38	0.31	0.16	0.35
Calcium		6040	5840	6300	4660	3410	5650
Chromium		26	28	28	22	15	26
Cobalt		10	10	10	8	6	9
Copper		49	44	47	36	24	46
Iron		29600 J	30500	31600	21600 J	15100 J	27600 J
Lead		18.2	24.6 J	22.3	20.6	11.8	22.0
Magnesium		8580	8130	8450	6240	4380	7480
Manganese		314	316	336	225	144	289
Mercury		0.12	0.14	0.14	0.11	0.05	0.12
Nickel		20.7	22.2	20.8	17.8	12.6	20.2
Potassium		2800	2600	2670	2300	1200	2600
Selenium		6 J	1 U	12 J	5	4	5
Silver		0.26	0.22	0.30	0.16	0.14	0.25
Sodium		13600	12300	13800	9420	5890	11300
Thallium		0.07 J	0.08 J	0.09	0.09	0.05	0.11
Tin		3	4 UJ	3	2 UJ	1 J	3
Vanadium		63	65	71	44	32	59
Zinc		96	96	98	76	53	95

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR224 / SD-DR224-0000 / 0 to 10 cm	DR225 / SD-DR225-0000 / 0 to 10 cm	DR226 / SD-DR226-0000 / 0 to 10 cm	DR227 / SD-DR227-0000 / 0 to 10 cm	DR228 / SD-DR228-0000 / 0 to 10 cm	DR229 / SD-DR229-0000 / 0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		12200	18200	15000	22400	23600	21800
Antimony		10 UJ	10 UJ	10 U	10 UJ	10 UJ	10 UJ
Arsenic		6.1	8.5	7.4	7.9	11.1	7.7
Barium		39	56	43	70	82	71
Beryllium		0.26	0.36	0.27	0.43	0.42	0.42
Cadmium		0.21	0.35	0.3	0.21	0.3 UJ	0.4
Calcium		3890	5120	6180	6040	6970	6180
Chromium		15	24	21	27	31	29
Cobalt		6	8	7	9	10	10
Copper		29	44	34	37	47	39
Iron		15500 J	23200 J	21500	28300 J	32100 J	28400 J
Lead		13.6	25.6	25.4	12.9	24.3 J	16.6
Magnesium		4460	6510	5530	7860	8610	7740
Manganese		181	228	205	308	334	305
Mercury		0.17	0.15	0.32	0.09	0.15	0.13
Nickel		12.7	18.1	16.3	20.3	22.7 J	21.5
Potassium		1500	2300	1780	2600	2900	2600
Selenium		4	5	11	16 J	25 J	14.7 J
Silver		0.20	0.29	0.20	0.13	0.19	0.23
Sodium		7100	9890	7980	11900	13700	11000
Thallium		0.08	0.09	0.09	0.07	0.12 J	0.08
Tin		2 UJ	4	4 UJ	4 UJ	4 UJ	5
Vanadium		40	56	55	69	74	70
Zinc		57	93	78	74	101	85

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR230 SD-DR230-0000 0 to 10 cm	DR231 SD-DR231-0000 0 to 10 cm	DR232 SD-DR232-0000 0 to 10 cm	DR233 SD-DR233-0000 0 to 10 cm	DR234 SD-DR234-0000 0 to 10 cm	DR235 SD-DR235-0000 0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		19900	19900	13300	18900	16600	21000
Antimony		10 U	10 UJ	10 UJ	10 UJ	10 UJ	10 U
Arsenic		14.1	9.8	7	9.9	7.1	10.0
Barium		70	72	50	61	52	69
Beryllium		0.38	0.41	0.32	0.39	0.35	0.40
Cadmium		0.33	0.26	0.22	0.4	0.4	0.3
Calcium		5790	5680	4310	5530	4860	5980
Chromium		24	28	18	24	20	27
Cobalt		9	9	6	9	8	9
Copper		43	45	32	46	36	39
Iron		27600	26700 J	20000 J	25900 J	22000 J	28800
Lead		19.7	26	14.2	18.4	15.6	18.5
Magnesium		7810	7340	5350	7560	6520	7650
Manganese		297	270	219	278	233	299
Mercury		0.21	0.14	0.07	0.26	0.10	0.13
Nickel		18.7	20.2	14.1	18.9	16.3	22.0
Potassium		2540	2800	1700	2400	2100	2460
Selenium		11 J	7	5	5 J	5 J	14
Silver		0.31	0.22	0.20	0.26	0.23	0.16
Sodium		12700	11200	8810	10900	9320	11200
Thallium		0.08	0.1	0.06	0.07 J	0.06 J	0.11
Tin		3	3	2 J	3	2 UJ	4 UJ
Vanadium		58	55	42	55	50	65
Zinc		90	93	70	90	77	85

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR236 SD-DR236-0000 0 to 10 cm	DR237 SD-DR237-0000 0 to 10 cm	DR238 SD-DR238-0000 0 to 10 cm	DR239 SD-DR239-0000 0 to 10 cm	DR240 SD-DR240-0000 0 to 10 cm	DR241 SD-DR241-0000 0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		12100	12200	19500	17200	21900	23300
Antimony		10 U	10 U	10 U	10 U	10 UJ	5 J
Arsenic		8.4	9.0	8.9	8.8	18.2	19.7
Barium		32	38	55	52	72	70
Beryllium		0.22	0.24	0.37	0.34	0.46	0.48
Cadmium		0.3	0.15	0.2	0.2	0.38	0.37
Calcium		4300	4000	5720	5310	6390	6380
Chromium		19	15	25	22	29	31
Cobalt		7	6	9	9	10	10
Copper		28	25	33	31	54	55
Iron		19600	18500	26700	23500	33200	34900
Lead		21.6	10.7	16.1	15.4	24.9	26.9
Magnesium		4510	4770	7000	6470	9470	9510
Manganese		340	215	259	327	468	422
Mercury		0.07	0.07	0.09	0.09	0.14	0.14
Nickel		14.3	11.8	20.3	19.5	20.8	22.4
Potassium		1280	1500	2100	1800	3040	3130
Selenium		10	7 J	14	13	11	11
Silver		0.14	0.14	0.18	0.13	0.36	0.31
Sodium		5900	7740	8500	8630	15900	15900
Thallium		0.06	0.05	0.08	0.08	0.10	0.1
Tin		4 UJ	2 UJ	3 UJ	4 UJ	3 UJ	3 UJ
Vanadium		50	41	60	55	68	74
Zinc		68	52	79	73	111	114

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR242 / SD-DR242-0000-CC / 0 to 10 cm	DR243 / SD-DR243-0000 / 0 to 10 cm	DR244 / SD-DR244-0000 / 0 to 10 cm	DR245 / SD-DR245-0000 / 0 to 10 cm	DR246 / SD-DR246-0000 / 0 to 10 cm	DR247 / SD-DR247-0000 / 0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		24400	22300	27200	21900	26000	20100
Antimony		10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 U
Arsenic		20.0	20.8	17.5	19.2	14.1	11.3
Barium		80	71	81	72	77	69
Beryllium		0.50	0.48	0.48	0.45	0.47	0.39
Cadmium		0.45	0.40	0.4 UJ	0.36	0.38	0.19
Calcium		6630	6310	7320	6520	7120	6020
Chromium		32	30	34	29	32	23
Cobalt		11	10	12	9	10	10
Copper		59	55	56	53	52	36
Iron		36800	34200	39200 J	33200	36000 J	26700
Lead		29.0	27.0	30.1 J	24.7	25.7	13.8 J
Magnesium		9870	9380	9640	9250	9640	7290
Manganese		561	476	578	388	364	301
Mercury		0.17	0.13	0.17	0.13	0.13	0.22
Nickel		23.5	21.8	23.8 J	20.9	20.4	17.3 J
Potassium		3210	3050	3300	2990	3400	2440
Selenium		11	11	26 J	11	20 J	12
Silver		0.37	0.40	0.27	0.27	0.24	0.09
Sodium		15400	15900	15500	15000	17600	11400
Thallium		0.12	0.11	0.13 J	0.10	0.10	0.07
Tin		3 UJ	3 UJ	4 UJ	3 UJ	4 UJ	1 UJ
Vanadium		76	71	84	68	80	55
Zinc		122	113	119	109	113	72

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID:	DR248	DR249	DR250	DR251	DR252	DR253
	Sample ID:	SD-DR248-0000	SD-DR249-0000	SD-DR250-0000	SD-DR251-0000	SD-DR252-0000	SD-DR253-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		20400	18100	21500	19600	14400	19600
Antimony		10 U	5 J	10 U	10 U	10 U	10 U
Arsenic		11.6	7.7	9	6.9	10.8	14.1
Barium		70	67	77	59	39	64
Beryllium		0.38	0.38	0.44	0.40	0.27	0.33
Cadmium		0.21	0.23	0.23	0.28	0.17	0.17
Calcium		6220	5370	6040	5410	4510	5980
Chromium		23	22	27	26	17	23
Cobalt		10	10	11	10	8	9
Copper		36	30	34	33	27	30
Iron		28000	23400	27900	25200	25300	28800
Lead		15.2 J	9.94 J	10.8 J	12.5 J	11.6	16.0
Magnesium		7770	7040	7890	7270	6110	7020
Manganese		485	340	394	328	330	605
Mercury		0.09	0.09	0.12	0.09	0.06	0.07
Nickel		16.7 J	19.0 J	21.6 J	29.8 J	17.3	17.7
Potassium		2370	2090	2280	2040	1560	2000
Selenium		13	11	13	12	9 J	9 J
Silver		0.09	0.09	0.13	0.12	0.13	0.18
Sodium		12700	9110	9130	9000	7780	10200
Thallium		0.06	0.06	0.08	0.09	0.05	0.05
Tin		2 UJ	1 UJ	1 UJ	2 UJ	2 UJ	4
Vanadium		56	53	65	63	51	63
Zinc		80	63	74	75	71	78

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR254 / SD-DR254-0000 / 0 to 10 cm	DR255 / SD-DR255-0000 / 0 to 10 cm	DR256 / SD-DR256-0000 / 0 to 10 cm	DR257 / SD-DR257-0000 / 0 to 10 cm	DR258 / SD-DR258-0000 / 0 to 10 cm	DR259 / SD-DR259-0000 / 0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		8230	16100	16800	7360	15800	21100
Antimony		10 U	10 U	6 J	10 U	10 U	10 U
Arsenic		6.1	9.2	7.3	5.2	11.5	12.7
Barium		31	51	59	59	52	71
Beryllium		0.17	0.34	0.29	0.19	0.30	0.41
Cadmium		0.16	0.3 UJ	0.2 UJ	0.04 UJ	0.19	0.37
Calcium		3250	4740	4980	2660	4760	6070
Chromium		12	22	24	8	23	25
Cobalt		4	8	9	5	8	9
Copper		29	31	31	14	38	45
Iron		22300	24400	26800	17300	24100	28300
Lead		619	15.9	13.4	4.76	22.9	21.1
Magnesium		4780	6400	6420	3140	5780	7990
Manganese		415	389	318	482	415	313
Mercury		0.05	0.11	0.09	0.05 U	0.08	0.20
Nickel		15.3	18.1	15.3	10.0	16.6	18.4
Potassium		750	1800	1700	800	2110	2680
Selenium		6 J	1 U	1 U	1 U	8 J	11 J
Silver		0.25	0.20 J	0.15 J	0.07 J	0.15	0.23
Sodium		3510	8210	5730	1220	7640	14400
Thallium		0.05	0.07	0.05	0.03	0.04	0.10
Tin		347	3 UJ	2 UJ	2 UJ	2 UJ	2 UJ
Vanadium		38	53	57	26	53	60
Zinc		54	73	82	40	89	100

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR260 SD-DR260-0000 0 to 10 cm	DR261 SD-DR261-0000 0 to 10 cm	DR262 SD-DR262-0000 0 to 10 cm	DR263 SD-DR263-0000 0 to 10 cm	DR264 SD-DR264-0000 0 to 10 cm	DR265 SD-DR265-0000 0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		18600	21300	22500	22700	14500	13100
Antimony		10 UJ	10 U	10 UJ	10 UJ	10 U	10 U
Arsenic		9.9	11.6	8.5	13.8	10	11.5
Barium		62	78	82	72	44	42
Beryllium		0.43	0.39	0.41	0.41	0.31	0.27
Cadmium		0.4	0.37	0.4 UJ	0.32	0.17	0.12
Calcium		5020	6300	6200	6480	4880	4490
Chromium		26	28	30	28	19	19
Cobalt		9	11	11	10	8	7
Copper		44	47	43	44	26	22
Iron		27300	29800	29300 J	31000	22300	24300
Lead		21.0	22.9	20.5 J	18.6	11.5 J	12.7 J
Magnesium		7270	8480	8060	8630	6030	5320
Manganese		282	322	336	329	366	432
Mercury		0.17	0.12	0.11	0.12	0.12	0.05
Nickel		18.6	20.3	23.8 J	20.0	15.9 J	14.3 J
Potassium		2400	2700	2600	2970	1740	1440
Selenium		4	11 J	23 J	10	10	9
Silver		0.21 J	0.22	0.17	0.21	0.07	0.09
Sodium		12400	13900	12100	16800	8990	6450
Thallium		0.11	0.13	0.12 J	0.08	0.05	0.04
Tin		3 UJ	2 UJ	3 UJ	2 UJ	2 UJ	1 UJ
Vanadium		60	66	72	69	46	49
Zinc		108	115	92	99	61	61

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID:	DR266	DR267	DR268	DR269	DR270	DR271
	Sample ID:	SD-DR266-0000	SD-DR267-0000	SD-DR268-0000	SD-DR269-0000	SD-DR270-0000	SD-DR271-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		15700	13700	18200	14600	12700	11400
Antimony		10 U	10 U	10 U	10 U	10 U	6 J
Arsenic		12.0	7.2	8.0	8.0	10.6	6.4
Barium		50	46	70	48	46	73
Beryllium		0.31	0.28	0.38	0.30	0.25	0.27
Cadmium		0.16	0.12	0.19	0.12	0.11	0.2 UJ
Calcium		5360	4330	5410	4730	3990	3470
Chromium		21	18	24	19	15	30
Cobalt		9	8	9	9	7	6
Copper		27	22	30	22	22	32
Iron		25900	21600	24800	25700	21800	22300
Lead		11.8 J	8.93 J	10.5 J	11.5 J	9.29	330
Magnesium		6280	5310	6560	5570	4950	4660
Manganese		441	405	277	453	334	185
Mercury		0.14	0.39	0.07	0.05	0.09	0.09
Nickel		16.0 J	14.7 J	18.4 J	16.3 J	13.4	14.7
Potassium		1760	1420	1820	1400	1330	1100
Selenium		10	9	11	9	8 J	4
Silver		0.10	0.08	0.11	0.06	0.11	0.14 J
Sodium		9920	6910	7650	4910	6320	3240
Thallium		0.06	0.06	0.10	0.07	0.04	0.07
Tin		2 UJ	1 UJ	1 UJ	1 UJ	2 UJ	3 UJ
Vanadium		54	47	61	54	41	38
Zinc		67	57	64	67	56	104

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID:	DR272	DR273	DR274	DR275	DR276	DR277
	Sample ID:	SD-DR272-0000	SD-DR273-0000	SD-DR274-0000	SD-DR275-0000	SD-DR276-0000	SD-DR277-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		19300	14300	13900	12900	14400	21300
Antimony		10 U	10 U	10 U	10 U	10 U	10 U
Arsenic		10.4	10.7	6.1	7.4	9.5	11.5
Barium		62	50	42	42	47	64
Beryllium		0.35	0.25	0.28	0.26	0.30	0.40
Cadmium		0.20	0.18	0.2 UJ	0.11 UJ	0.20 UJ	0.38
Calcium		5640	4840	4320	4310	4580	6180
Chromium		26	20	20	18	21	27
Cobalt		9	9	7	6	8	10
Copper		29	24	22	21	29	39
Iron		26600	23400	20700	22500	26500	27600
Lead		16.1	12.9	10.3	9.69	15.23	17.6
Magnesium		6450	5780	5340	5000	5970	7760
Manganese		574	779	254	316	373	280
Mercury		0.07	0.12	0.06	0.04 J	0.06	0.11
Nickel		15.1	15.0	15.2	14.1	16.0	20.8
Potassium		1940	1490	1400	1400	1700	2580
Selenium		9 J	8 J	1 U	1 U	1 U	11 J
Silver		0.19	0.12	0.13 J	0.10 J	0.14 J	0.24
Sodium		8400	8220	6960	6830	9570	11200
Thallium		0.05	0.04	0.06	0.04	0.06	0.08
Tin		2 UJ	2 UJ	2 UJ	2 UJ	4 UJ	3
Vanadium		66	52	50	50	56	66
Zinc		73	67	56	53	76	86

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID:	DR278	DR279	DR280	DR281	DR282	DR283
	Sample ID:	SD-DR278-0000	SD-DR279-0000	SD-DR280-0000	SD-DR281-0000	SD-DR282-0000	SD-DR283-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		25600	21100	20000	21000	21400	21100
Antimony		10 U	10 U	10 U	10 U	10 U	10 U
Arsenic		11.6	11.6	13.1	15.4	14.1	10.8
Barium		79	69	74	68	77	67
Beryllium		0.44	0.38	0.40	0.42	0.41	0.40
Cadmium		0.4	0.2	0.18	0.36	0.30	0.30
Calcium		6840	6040	6030	6370	6160	6280
Chromium		29	26	23	26	25	26
Cobalt		10	9	10	10	10	9
Copper		44	35	37	44	43	42
Iron		32900	28400	28500	32800	29000	28100
Lead		22.6	15.6	15.8 J	22.4 J	18.8	18.8
Magnesium		8650	7510	7820	8360	8100	8340
Manganese		334	279	398	408	314	282
Mercury		0.12	0.15	0.11	0.12	0.12	0.17
Nickel		20.8	20.9	17.1 J	18.2 J	19.2	18.8
Potassium		3000	2400	2420	2620	2800	2630
Selenium		15	12.7	14	14	11 J	11 J
Silver		0.20	0.15	0.12	0.22	0.26	0.18
Sodium		14600	10700	14000	17100	13400	13800
Thallium		0.12	0.10	0.07	0.11	0.08	0.10
Tin		4 UJ	3 UJ	2 UJ	2 UJ	2 UJ	2 UJ
Vanadium		73	64	56	67	63	61
Zinc		98	78	81	101	91	99

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID:	DR284	DR285	DR286	DR287	DR288	DR289
	Sample ID:	SD-DR284-0000	SD-DR285-0000	SD-DR286-0000-CC	SD-DR287-0000	SD-DR288-0000	SD-DR289-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		19700	24000	15300	17800	21100	23000
Antimony		10 U	10 UJ	10 U	10 U	10 U	10 U
Arsenic		9.2	12.3	10.7	8.5	13.8	12.7
Barium		60	76	45	55	73	73
Beryllium		0.39	0.43	0.31	0.33	0.40	0.42
Cadmium		0.35	0.40	0.15 J	0.11	0.34	0.4
Calcium		5720	6840	5140	5700	6160	6380
Chromium		26	28	20	22	24	27
Cobalt		10	11	8	9	10	10
Copper		39	47	27	27	44	44
Iron		26100	31300	24700	25800	28900	32600
Lead		17.6	20.3	12.4 J	11.3 J	20.9	21.5
Magnesium		7850	8740	6200	6500	8080	8270
Manganese		266	334	528	489	330	365
Mercury		0.16	0.11	0.08	0.09	0.17	0.21
Nickel		20.3	20.1	16.5 J	16.7 J	18.0	20.1
Potassium		2550	3010	1780	1900	2790	2700
Selenium		9 J	11	10	9	11 J	13.4
Silver		0.29	0.22	0.07	0.09	0.22	0.19
Sodium		12000	16000	10000	9290	14500	15500
Thallium		0.11	0.10	0.05	0.06	0.09	0.12
Tin		2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	4 UJ
Vanadium		62	70	53	59	60	70
Zinc		93	105	67	69	95	97

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR290 SD-DR290-0000 0 to 10 cm	DR291 SD-DR291-0000 0 to 10 cm	DR292 SD-DR292-0000-CC 0 to 10 cm	DR293 SD-DR293-0000 0 to 10 cm	DR294 SD-DR294-0000 0 to 10 cm	DR295 SD-DR295-0000 0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		21900	18100	20000	16800	8030	8350
Antimony		10 U	10 U	10 U	7 J	10 U	10 U
Arsenic		15.0	13.5	17.8	7.0	4.6	4.9
Barium		74	64	74	58	29	34
Beryllium		0.44	0.40	0.44	0.32 J	0.19	0.21
Cadmium		0.40	0.34	0.43	0.1 J	0.06 UJ	0.07 UJ
Calcium		6660	5860	6640	5030	2860	2780
Chromium		28	23	26	22	9	11
Cobalt		10	9	10	8	6	6
Copper		46	39	52	26	13	13
Iron		35300	30500	36400	24700	18800	19600
Lead		23.6 J	20.4 J	31.6 J	12.5 J	5.19	4.91
Magnesium		8710	7480	9010	6120	3570	3600
Manganese		486	412	543	358	379	411
Mercury		0.13	0.12	0.16	0.21	0.05 U	0.05 U
Nickel		21.8 J	17.2 J	18.4 J	17.6	10.4	11.7
Potassium		2750	2210	2720	1600	840	900
Selenium		14	12	14	1 U	1 U	1 U
Silver		0.18	0.19	0.21	0.10	0.10 J	0.15 J
Sodium		18700	14400	22700	7680	1780	1500
Thallium		0.11	0.09	0.10	0.05 J	0.03	0.03
Tin		3 UJ	2 UJ	3 UJ	3 UJ	2 UJ	2 UJ
Vanadium		71	59	67	56	34	36
Zinc		107	92	120	66	44	47

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR296 / SD-DR296-0000 / 0 to 10 cm	DR297 / SD-DR297-0000 / 0 to 10 cm	DR298 / SD-DR298-0000 / 0 to 10 cm	DR299 / SD-DR299-0000 / 0 to 10 cm	DR300 / SD-DR300-0000 / 0 to 10 cm	DR301 / SD-DR301-0000 / 0 to 10 cm
Inorganics (Total) (mg/kg)							
Aluminum		7690	6910	6010	7310	7180	6160
Antimony		10 U	10 U	10 U	10 U	10 U	10 U
Arsenic		5.3	4.0	5.1	4.2	4.1	4.4
Barium		47	27	22	39	27	33
Beryllium		0.21	0.18	0.18	0.18	0.17	0.17
Cadmium		0.09 UJ	0.04 UJ	0.05 UJ	0.04 UJ	0.2 UJ	0.2 U
Calcium		2500	2290	1760	2310	2130	1860
Chromium		11	10	11	9	10	8
Cobalt		6	6	5	6	6	5
Copper		15	10	11	12	12	11
Iron		18200	17800	16800	18800	19300	16000
Lead		4.80	4.03	4.38	3.80	4.99	3.52
Magnesium		3580	3540	3110	3750	3820	3030
Manganese		515	312	300	380	301	333
Mercury		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Nickel		11.2	10.6	10.1	11.0	10.7	9.3
Potassium		800	600	540	760	550	580
Selenium		1 U	2	2	2	2	3
Silver		0.08 J	0.08 J	0.04 J	0.06 J	0.12 J	0.05 J
Sodium		1280	1340	1010	1210	1320	845
Thallium		0.02	0.04	0.02	0.03	0.04	0.02
Tin		4 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
Vanadium		29	28	22	28	28	23
Zinc		43	40	39	41	44	36

Blank cell indicate no analyses were performed.

APPENDIX E-4

DIOXINS/FURANS (SURFACE SEDIMENT)

Duwamish River Sediment Investigation - Statistics for Surface Sediment Results for Dioxins/Furans

Constituent	Number of Samples Analyzed	Number of Detections	Detection Frequency (%)	Minimum Detected Value	Maximum Detected Value	Sample Number of Maximum Detected Value	Arithmetic Mean	Median Value
Dioxins and Furans (pg/g)								
Total TCDF	30	28	93.3	3.00	150.00	SD-DR123-0000	30.700	25.500
2378-TCDF	30	19	63.3	0.99	6.80	SD-DR123-0000	1.962	1.500
Total PeCDF	30	27	90.0	4.90	230.00	SD-DR123-0000	33.515	21.000
12378-PeCDF	30	1	3.3	54.00	54.00	SD-DR123-0000	3.063	1.150
23478-PeCDF	30	2	6.7	8.80	58.00	SD-DR123-0000	4.057	2.000
Total HxCDF	30	28	93.3	6.20	3900.00	SD-DR123-0000	211.657	33.000
123478-HxCDF	30	14	46.7	4.20	540.00	SD-DR123-0000	24.725	3.900
123678-HxCDF	30	2	6.7	20.00	74.00	SD-DR123-0000	4.635	1.450
234678-HxCDF	30	2	6.7	18.00	32.00	SD-DR123-0000	2.787	1.100
123789-HxCDF	30	1	3.3	16.00	16.00	SD-DR123-0000	1.268	0.450
Total HpCDF	30	28	93.3	18.00	9300.00	SD-DR123-0000	553.768	110.000
1234678-HpCDF	30	27	90.0	8.30	1600.00	SD-DR123-0000	117.627	27.000
1234789-HpCDF	30	11	36.7	3.90	270.00	SD-DR123-0000	14.526	2.600
OCDF	30	29	96.7	22.00	3600.00	SD-DR123-0000	289.391	96.000
Total TCDD	30	23	76.7	0.95	75.00	SD-DR123-0000	7.272	4.050
2378-TCDD	30	3	10.0	2.00	3.80	SD-DR123-0000	0.828	0.670
Total PeCDD	30	2	6.7	49.00	58.00	SD-DR123-0000	6.900	3.350
12378-PeCDD	30	2	6.7	12.00	22.00	SD-DR008-0000	2.649	1.550
Total HxCDD	30	28	93.3	7.50	1200.00	SD-DR123-0000	135.176	65.000
123478-HxCDD	30	2	6.7	27.00	72.00	SD-DR008-0000	5.363	1.900
123678-HxCDD	30	20	66.7	5.60	290.00	SD-DR008-0000	23.938	7.500
123789-HxCDD	30	15	50.0	4.80	120.00	SD-DR008-0000	11.394	4.800
Total HpCDD	30	28	93.3	120.00	11000.00	SD-DR008-0000	1159.763	475.000
1234678-HpCDD	30	28	93.3	48.00	6600.00	SD-DR008-0000	564.103	170.000
OCDD	30	30	100.0	7.80	91000.00	SD-DR123-0000	6484.203	1750.000
Total 2,3,7,8-TCDD(Equiv)	30	30	100.0	0.00	217.74	SD-DR123-0000	16.363	3.939

Bold text indicates constituent was detected one or more times.
n/a - Not Applicable

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Dioxins/Furans

	Station ID:	DR002	DR008	DR021	DR033	DR042	DR046
	Sample ID:	SD-DR002-0000	SD-DR008-0000	SD-DR021-0000	SD-DR033-0000	SD-DR042-0000	SD-DR046-0000
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dioxins and Furans (pg/g)							
Total TCDF		27	95	61	35	51	36
2378-TCDF		1.8	5.0	3.3	1.9	4.3	2.6
Total PeCDF		20	180	40	22	64	25
12378-PeCDF		1.0 U	5.0 U	2.4 U	1.2 U	2.8 U	1.3 U
23478-PeCDF		1.7 U	8.8 J	3.9 U	2.2 U	5.4 U	2.4 U
Total HxCDF		52	1200	110	54	170	57
123478-HxCDF		4.2 J	66	9.3 J	5.3 J	13 J	5.9 J
123678-HxCDF		1.4 U	20	3.1 U	1.6 U	4.3 U	1.6 U
234678-HxCDF		0.89 U	18	2.2 U	1.7 U	2.5 U	2.0 U
123789-HxCDF		0.81 U	1.7 U	0.41 U	1.7 U	2.4 U	2.1 U
Total HpCDF		150	3900	290	130	430	190
1234678-HpCDF		30	1100	59	29	110	39
1234789-HpCDF		3.9 J	70	7.0 J	3.5 U	9.2 J	4.2 U
OCDF		130	2200	260	110	320	170
Total TCDD		5.8	18	12	6.7	16	7.2
2378-TCDD		0.34 U	2.6	0.92 U	0.67 U	0.67 U	0.78 U
Total PeCDD		3.0 U	49	7.0 U	3.8 U	8.5 U	3.6 U
12378-PeCDD		1.9 U	22	2.7 U	1.6 U	4.1 U	3.4 U
Total HxCDD		90	1100	170	62	200	70
123478-HxCDD		2.4 U	72	3.5 U	3.5 U	4.4 U	5.4 U
123678-HxCDD		9.6	290	18	6.8 J	26	8.3 J
123789-HxCDD		6.1	120	11 J	4.8 J	13 J	4.8 U
Total HpCDD		700	11000	1300	430	1300	510
1234678-HpCDD		220 J	6600	400	140	440	190
OCDD		2600	52000	4500	1300	3900	1800

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Dioxins/Furans

	Station ID:	DR002	DR008	DR021	DR033	DR042	DR046
	Sample ID:	SD-DR002-0000	SD-DR008-0000	SD-DR021-0000	SD-DR033-0000	SD-DR042-0000	SD-DR046-0000
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Total 2,3,7,8-TCDD(Equiv)		4.982 T	160.22 T	9.296 T	3.711 T	11.644 T	4.167 T

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Dioxins/Furans

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR047 SD-DR047-0000 0 to 10 cm	DR051 SD-DR051-0000 0 to 10 cm	DR065 SD-DR065-0000 0 to 10 cm	DR092 SD-DR092-0000 0 to 10 cm	DR101 SD-DR101-0000 0 to 10 cm	DR111 SD-DR111-0000-CC 0 to 10 cm
Dioxins and Furans (pg/g)							
Total TCDF		46	38	26	25	24	36
2378-TCDF		2.5	2.3	1.7 U	1.3 J	1.1 U	2.3
Total PeCDF		37	32	20	28	16	31
12378-PeCDF		1.3 U	1.4 U	0.89 U	0.87 U	0.56 U	1.4 U
23478-PeCDF		3.2 U	2.8 U	1.8 U	3.0 U	1.1 U	2.6 U
Total HxCDF		82	95	30	85	15	68
123478-HxCDF		9.3	9.5 J	3.5 U	15	1.8 U	6.1 J
123678-HxCDF		2.0 U	3.3 U	0.91 U	2.6 U	0.56 U	2.0 U
234678-HxCDF		1.4 U	2.0 U	0.81 U	1.1 U	0.50 U	1.4 U
123789-HxCDF		0.30 U	1.4 U	0.28 U	0.14 U	0.45 U	0.28 U
Total HpCDF		180	270	84	200	41	210
1234678-HpCDF		41	62	18	42	9.6	54
1234789-HpCDF		5.2 J	6.6 J	2.3 U	6.1 J	1.2 U	5.1 J
OCDF		140	220	61	120	28	160
Total TCDD		6.7	6.5	4.3	2.1	5.3	5.2
2378-TCDD		1.1 U	0.58 U	0.65 U	0.37 U	0.39 U	0.83 U
Total PeCDD		4.0 U	4.9 U	3.1 U	2.7 U	2.6 U	4.9 U
12378-PeCDD		1.6 U	3.0 U	1.1 U	0.65 U	0.62 U	1.8 U
Total HxCDD		97	160	42	68	18	100
123478-HxCDD		2.8 U	3.5 U	1.7 U	1.4 U	1.1 U	3.4 U
123678-HxCDD		12	16	6.2 J	8.2	3.4 U	16
123789-HxCDD		8.1 J	11	4.3 U	4.8 J	2.2 U	9.1 J
Total HpCDD		610	1300	360	730	180	950
1234678-HpCDD		230	430	130	260	66	410
OCDD		2400	4500	1100	2700	620	3300

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Dioxins/Furans

	Station ID:	DR047	DR051	DR065	DR092	DR101	DR111
	Sample ID:	SD-DR047-0000	SD-DR051-0000	SD-DR065-0000	SD-DR092-0000	SD-DR101-0000	SD-DR111-0000-CC
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Total 2,3,7,8-TCDD(Equiv)		6.206 T	9.338 T	2.2161 T	6.293 T	0.8208 T	8.387 T

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Dioxins/Furans

Constituent	Station ID:	DR115	DR123	DR154	DR168	DR183	DR187
	Sample ID:	SD-DR115-0000	SD-DR123-0000	SD-DR154-0000	SD-DR168-0000	SD-DR183-0000	SD-DR187-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Dioxins and Furans (pg/g)							
Total TCDF		13	150	36	31	63	45
2378-TCDF		0.99 J	6.8	2.3	1.5	2.5	4.3
Total PeCDF		23	230	33	23	66	38
12378-PeCDF		2.3 U	54	1.4 U	1.1 U	1.1 U	1.7 U
23478-PeCDF		2.4 U	58	3.0 U	2.2 U	2.5 U	3.0 U
Total HxCDF		28	3900	92	52	36	60
123478-HxCDF		3.6 U	540	10	6.6 J	4.2 U	9.0
123678-HxCDF		0.93 U	74	3.2 U	2.2 U	2.0 U	3.7 U
234678-HxCDF		0.71 U	32	2.0 U	1.6 U	1.6 U	1.9 U
123789-HxCDF		0.39 U	16	0.57 U	1.6 U	0.18 U	0.41 U
Total HpCDF		110	9300	260	140	110	140
1234678-HpCDF		25	1600	66	34	32	42
1234789-HpCDF		2.8 U	270	6.9 J	3.9 U	2.3 U	7.6 J
OCDF		95	3600 J	230	140	97	93
Total TCDD		1.6	75	4.9	1.5	10	14
2378-TCDD		0.69 U	3.8	0.91 U	0.72 U	0.66 U	2.0
Total PeCDD		4.6 U	58	4.7 U	2.6 U	5.5 U	6.7 U
12378-PeCDD		0.89 U	12	1.8 U	1.7 U	1.3 U	2.3 U
Total HxCDD		97	1200	120	70	45	80
123478-HxCDD		2.2 U	27	3.8 U	2.1 U	1.4 U	3.0 U
123678-HxCDD		8.6	200	17	9.8	5.6 J	12
123789-HxCDD		6.9 J	65	10	5.8 J	3.8 U	7.9
Total HpCDD		900	9500	1000	560	250	510
1234678-HpCDD		260	5200	400	230	100	220
OCDD		2600	91000 J	4000	2700	640	1800

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Dioxins/Furans

	Station ID:	DR115	DR123	DR154	DR168	DR183	DR187
	Sample ID:	SD-DR115-0000	SD-DR123-0000	SD-DR154-0000	SD-DR168-0000	SD-DR183-0000	SD-DR187-0000
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Total 2,3,7,8-TCDD(Equiv)		4.7685 T	217.74 T	9.082 T	5.294 T	2.2037 T	8.2053 T

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Dioxins/Furans

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR203 / SD-DR203-0000 / 0 to 10 cm	DR206 / SD-DR206-0000 / 0 to 10 cm	DR221 / SD-DR221-0000 / 0 to 10 cm	DR224 / SD-DR224-0000 / 0 to 10 cm	DR238 / SD-DR238-0000 / 0 to 10 cm	DR246 / SD-DR246-0000 / 0 to 10 cm
Dioxins and Furans (pg/g)							
Total TCDF		7.6	4.9	15	6.6	4.2	14
2378-TCDF		0.81 U	0.75 U	1.3 J	0.76 U	1.1 J	1.5 J
Total PeCDF		5.3	7.1	14	4.9	6.1	13
12378-PeCDF		0.86 U	1.1 U	0.60 U	0.29 U	0.78 U	0.65 U
23478-PeCDF		0.70 U	1.1 U	1.1 U	0.66 U	0.91 U	1.3 U
Total HxCDF		11	6.2	21	14	12	28
123478-HxCDF		1.2 U	1.1 U	3.0 U	1.4 U	1.8 U	3.3 U
123678-HxCDF		1.2 U	0.97 U	0.96 U	0.48 U	0.76 U	1.5 U
234678-HxCDF		1.2 U	1.1 U	0.78 U	0.45 U	0.80 U	0.95 U
123789-HxCDF		1.3 U	1.2 U	0.12 U	0.45 U	0.89 U	0.32 U
Total HpCDF		28	31	68	52	42	74
1234678-HpCDF		8.3 J	9.9 J	18	13	12	21
1234789-HpCDF		0.79 U	1.1 U	2.0 U	1.6 U	0.78 U	2.4 U
OCDF		22	26	55	39	39	70
Total TCDD		0.76 U	0.97 U	2.2	1.8	0.80 U	3.8
2378-TCDD		0.68 U	0.39 U	0.38 U	0.27 U	0.37 U	0.70 U
Total PeCDD		1.4 U	1.5 U	2.1 U	1.4 U	1.7 U	4.0 U
12378-PeCDD		0.90 U	1.5 U	0.85 U	0.63 U	1.4 U	2.9 U
Total HxCDD		14	7.5	42	15	25	73
123478-HxCDD		0.86 U	0.99 U	1.7 U	0.82 U	1.3 U	3.6 U
123678-HxCDD		2.6 U	2.8 U	5.7 J	2.7 U	4.3 U	8.7 J
123789-HxCDD		2.2 U	2.3 U	4.5 U	2.3 U	3.3 U	15
Total HpCDD		120	140	440	170	280	560
1234678-HpCDD		48	59	130	66	91	220
OCDD		420	680 J	1300	600	850	3200

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Dioxins/Furans

	Station ID:	DR203	DR206	DR221	DR224	DR238	DR246
	Sample ID:	SD-DR203-0000	SD-DR206-0000	SD-DR221-0000	SD-DR224-0000	SD-DR238-0000	SD-DR246-0000
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Total 2,3,7,8-TCDD(Equiv)		0.6072 T	0.7596 T	2.3155 T	0.8539 T	1.2289 T	5.257 T

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Dioxins/Furans

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR256 / SD-DR256-0000 / 0 to 10 cm	DR264 / SD-DR264-0000 / 0 to 10 cm	DR284 / SD-DR284-0000 / 0 to 10 cm	DR291 / SD-DR291-0000 / 0 to 10 cm	DR298 / SD-DR298-0000 / 0 to 10 cm	DR301 / SD-DR301-0000 / 0 to 10 cm
Dioxins and Furans (pg/g)							
Total TCDF		6.2	3.0	8.9	12	0.32 U	0.28 U
2378-TCDF		0.67 U	0.91 U	0.79 U	1.4 U	0.18 U	0.21 U
Total PeCDF		8.3	3.9 U	4.9	8.4	0.85 U	0.71 U
12378-PeCDF		1.6 U	0.28 U	1.3 U	1.3 U	0.70 U	0.71 U
23478-PeCDF		1.6 U	0.44 U	1.3 U	1.2 U	0.70 U	0.71 U
Total HxCDF		23	9.7	14	24	0.45 U	0.36 U
123478-HxCDF		1.6 U	1.2 U	1.2 U	3.0 U	0.38 U	0.29 U
123678-HxCDF		0.81 U	0.51 U	0.76 U	1.2 U	0.30 U	0.22 U
234678-HxCDF		1.1 U	0.44 U	0.83 U	0.99 U	0.38 U	0.29 U
123789-HxCDF		0.47 U	0.15 U	0.94 U	0.28 U	0.45 U	0.36 U
Total HpCDF		52	18	37	73	2.2 U	0.84 U
1234678-HpCDF		15	7.7 U	9.8	20	0.89 U	0.62 U
1234789-HpCDF		1.7 U	0.77 U	1.9 U	1.9 U	2.2 U	0.84 U
OCDF		37	22	27	60	0.74 U	110
Total TCDD		1.1 U	0.95	1.2	1.1 U	0.36 U	0.34 U
2378-TCDD		1.1 U	0.46 U	0.31 U	0.80 U	0.36 U	0.34 U
Total PeCDD		4.2 U	1.4 U	2.0 U	2.5 U	2.6 U	3.0 U
12378-PeCDD		1.7 U	0.53 U	1.0 U	1.3 U	1.0 U	1.3 U
Total HxCDD		20	12	26	29	1.7 U	1.1 U
123478-HxCDD		1.2 U	1.0 U	0.72 U	1.5 U	1.5 U	1.1 U
123678-HxCDD		3.4 U	2.4 U	4.1 U	6.1 J	1.1 U	0.74 U
123789-HxCDD		2.8 U	2.1 U	3.1 U	3.6 U	1.2 U	0.84 U
Total HpCDD		220	120	310	340	1.9 U	0.99 U
1234678-HpCDD		78	53	100	150	1.1 U	0.99 U
OCDD		670	530	1100	1700	7.8 J	8.3 J

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Dioxins/Furans

	Station ID:	DR256	DR264	DR284	DR291	DR298	DR301
	Sample ID:	SD-DR256-0000	SD-DR264-0000	SD-DR284-0000	SD-DR291-0000	SD-DR298-0000	SD-DR301-0000
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Total 2,3,7,8-TCDD(Equiv)		1.0007 T	0.5852 T	1.2107 T	2.486 T	0.00078 T	0.01183 T

Blank cells indicate no analysis were performed.

APPENDIX E-5

ORGANOTINS (SURFACE SEDIMENT)

Duwamish River Sediment Investigation - Statistics for Surface Sediment Results for Organotins

Constituent	Number of Samples Analyzed	Number of Detections	Detection Frequency (%)	Minimum Detected Value	Maximum Detected Value	Sample Number of Maximum Detected Value	Arithmetic Mean	Median Value
Organotins (ug/kg)								
Di-n-butyltin (as Organotin)	92	62	67.4	1.00	210.00	SD-DR008-0000	19.760	10.000
n-Butyltin (as Organotin)	89	58	65.2	1.00	96.00	SD-DR008-0000	21.494	12.000
Tetra-n-butyltin (as Organotin)	92	6	6.5	2.00	7.00	SD-DR053-0000-CC	7.717	5.000
Tri-n-butyltin (as Organotin)	92	85	92.4	1.00	320.00	SD-DR002-0000	69.913	35.500
Organotins (TOCN) (ug/kg)								
Di-n-butyltin (as Organotin)	83	59	71.1	26.40	3680.00	SD-DR203-0000	863.391	657.000
n-Butyltin (as Organotin)	80	55	68.8	53.20	3030.00	SD-DR018-0000	962.475	702.000
Tetra-n-butyltin (as Organotin)	83	5	6.0	128.00	254.00	SD-DR054-0000	415.138	281.000
Tri-n-butyltin (as Organotin)	83	82	98.8	53.20	13900.00	SD-DR002-0000	3309.672	1970.000

Bold text indicates constituent was detected one or more times.
n/a - Not Applicable

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Organotins

Constituent	Station ID:	DR002	DR005	DR008	DR011	DR018	DR021
	Sample ID:	SD-DR002-0000	SD-DR005-0000	SD-DR008-0000	SD-DR011-0000	SD-DR018-0000	SD-DR021-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Organotins (ug/kg)							
Di-n-butyltin (as Organotin)		45	8 J	210 J	49 UJ	5 UJ	44 J
n-Butyltin (as Organotin)		37 J	53 J	96 J	32 J	67 J	57 J
Tetra-n-butyltin (as Organotin)		10 U	5 UJ	20 UJ	20 UJ	5 UJ	20 UIJ
Tri-n-butyltin (as Organotin)		320	190	180	180	100	170
Organotins (TOCN) (ug/kg)							
Di-n-butyltin (as Organotin)		1950	348 J		1970 UJ	226 UJ	1420 J
n-Butyltin (as Organotin)		1600 J	2300 J		1290 J	3030 J	1840 J
Tetra-n-butyltin (as Organotin)		433 U	217 UJ		803 UJ	226 UJ	645 UIJ
Tri-n-butyltin (as Organotin)		13900	8260		7230	4520	5480

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Organotins

Constituent	Station ID:	DR025	DR033	DR038	DR042	DR046	DR047
	Sample ID:	SD-DR025-0000	SD-DR033-0000	SD-DR038-0000	SD-DR042-0000	SD-DR046-0000	SD-DR047-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Organotins (ug/kg)							
Di-n-butyltin (as Organotin)		35 J	19	24 J	57	34	24 J
n-Butyltin (as Organotin)		56 J	30 J	55 J	17 J	11 J	11 J
Tetra-n-butyltin (as Organotin)		20 UIJ	10 U	6 UJ	10 U	10 U	15 UI
Tri-n-butyltin (as Organotin)		130	94	250 J	99	110	92
Organotins (TOCN) (ug/kg)							
Di-n-butyltin (as Organotin)		1240 J	1100	916 J		1500	1710 J
n-Butyltin (as Organotin)		1980 J	1740 J	2100 J		487 J	786 J
Tetra-n-butyltin (as Organotin)		707 UIJ	581 U	229 UJ		442 U	1070 UI
Tri-n-butyltin (as Organotin)		4590	5470	9540 J		4870	6570

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Organotins

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR049 SD-DR049-0000 0 to 10 cm	DR051 SD-DR051-0000 0 to 10 cm	DR053 SD-DR053-0000-CC 0 to 10 cm	DR054 SD-DR054-0000 0 to 10 cm	DR055 SD-DR055-0000 0 to 10 cm	DR056 SD-DR056-0000 0 to 10 cm
Organotins (ug/kg)							
Di-n-butyltin (as Organotin)		36	49	59 J	21 J	52 J	32 J
n-Butyltin (as Organotin)		41 J	26 J	30 J	40 J	29 J	22 J
Tetra-n-butyltin (as Organotin)		5 U	10 U	7 J	6	5 J	5 UJ
Tri-n-butyltin (as Organotin)		170	160	270 J	190	228	144 J
Organotins (TOCN) (ug/kg)							
Di-n-butyltin (as Organotin)		1360	1770	2110 J	890 J		1690 J
n-Butyltin (as Organotin)		1550 J	939 J	1070 J	1690 J		1160 J
Tetra-n-butyltin (as Organotin)		189 U	361 U	250 J	254		265 UJ
Tri-n-butyltin (as Organotin)		6440	5780	9640 J	8050		7620 J

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Organotins

Constituent	Station ID:	DR065	DR067	DR068	DR070	DR072	DR081
	Sample ID:	SD-DR065-0000	SD-DR067-0000	SD-DR068-0000	SD-DR070-0000	SD-DR072-0000	SD-DR081-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Organotins (ug/kg)							
Di-n-butyltin (as Organotin)		20 UIJ	20 UJ	44 J	48	45	5 UJ
n-Butyltin (as Organotin)		22 J			44 J	37 J	55 UJI
Tetra-n-butyltin (as Organotin)		20 UIJ	20 UJ	20 UI	10 U	10 U	5 UJ
Tri-n-butyltin (as Organotin)		78	53	180	200	250	34 J
Organotins (TOCN) (ug/kg)							
Di-n-butyltin (as Organotin)		830 UIJ	2440 UJ	1860 J	2740	2050	281 UJ
n-Butyltin (as Organotin)		913 J			2510 J	1690 J	3090 UJI
Tetra-n-butyltin (as Organotin)		830 UIJ	2440 UJ	847 UI	571 U	457 U	281 UJ
Tri-n-butyltin (as Organotin)		3240	6460	7630	11400	11400	1910 J

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Organotins

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR087 SD-DR087-0000 0 to 10 cm	DR090 SD-DR090-0000 0 to 10 cm	DR092 SD-DR092-0000 0 to 10 cm	DR096 SD-DR096-0000 0 to 10 cm	DR101 SD-DR101-0000 0 to 10 cm	DR109 SD-DR109-0000 0 to 10 cm
Organotins (ug/kg)							
Di-n-butyltin (as Organotin)		55	14	7 J	14 J	11 J	26 J
n-Butyltin (as Organotin)		10 UJ	10 J	5 UJ	11 J	10 UJ	17 J
Tetra-n-butyltin (as Organotin)		10 U	5 U	5 UJ	5 UJ	10 U	5 UJ
Tri-n-butyltin (as Organotin)		180	54	25 J	39 J	42 J	77 J
Organotins (TOCN) (ug/kg)							
Di-n-butyltin (as Organotin)		3290	657	1000 J	718 J	636 J	1110 J
n-Butyltin (as Organotin)		599 UJ	469 J	714 UJ	564 J	578 UJ	723 J
Tetra-n-butyltin (as Organotin)		599 U	235 U	714 UJ	256 UJ	578 U	213 UJ
Tri-n-butyltin (as Organotin)		10800	2540	3570 J	2000 J	2430 J	3280 J

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Organotins

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR110 SD-DR110-0000 0 to 10 cm	DR111 SD-DR111-0000-CC 0 to 10 cm	DR112 SD-DR112-0000 0 to 10 cm	DR115 SD-DR115-0000 0 to 10 cm	DR116 SD-DR116-0000 0 to 10 cm	DR121 SD-DR121-0000 0 to 10 cm
Organotins (ug/kg)							
Di-n-butyltin (as Organotin)		21 J	51 J	12 J	9 J	22 J	29 J
n-Butyltin (as Organotin)		26 J	66 J	17 J	5 UJ		19 J
Tetra-n-butyltin (as Organotin)		10 U	10 U	10 U	15 UIJ	20 UI	5 UJ
Tri-n-butyltin (as Organotin)		131	239 J	71	31 J	48	115 J
Organotins (TOCN) (ug/kg)							
Di-n-butyltin (as Organotin)		787 J	2320 J	455 J	692 J	870 J	1210 J
n-Butyltin (as Organotin)		974 J	3000 J	644 J	385 UJ		795 J
Tetra-n-butyltin (as Organotin)		375 U	455 U	379 U	1150 UIJ	791 UI	209 UJ
Tri-n-butyltin (as Organotin)		4910	10900 J	2690	2380 J	1900	4810 J

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Organotins

Constituent	Station ID:	DR123	DR133	DR136	DR140	DR147	DR151
	Sample ID:	SD-DR123-0000	SD-DR133-0000	SD-DR136-0000	SD-DR140-0000	SD-DR147-0000	SD-DR151-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Organotins (ug/kg)							
Di-n-butyltin (as Organotin)		82 J	6 J	31	1 UJ	20 J	8 J
n-Butyltin (as Organotin)		66 J	5 UJ	22 J	1 UJ	23 J	18 J
Tetra-n-butyltin (as Organotin)		15 UI	15 UI	5 U	1 UJ	15 UI	5 U
Tri-n-butyltin (as Organotin)		216	20	120	1 UJ	81	47
Organotins (TOCN) (ug/kg)							
Di-n-butyltin (as Organotin)		3390 J	789 J	1220		738 J	299 J
n-Butyltin (as Organotin)		2730 J	658 UJ	863 J		849 J	672 J
Tetra-n-butyltin (as Organotin)		620 UI	1970 UI	196 U		554 UI	187 U
Tri-n-butyltin (as Organotin)		8930	2630	4710		2990	1750

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Organotins

Constituent	Station ID:	DR152	DR154	DR163	DR166	DR168	DR171
	Sample ID:	SD-DR152-0000	SD-DR154-0000	SD-DR163-0000	SD-DR166-0000	SD-DR168-0000	SD-DR171-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Organotins (ug/kg)							
Di-n-butyltin (as Organotin)		24 J	25	10 J	5 U	5 U	10 UJ
n-Butyltin (as Organotin)		10 J	17 J	5 UJ	6 J	19 J	10 UJ
Tetra-n-butyltin (as Organotin)		5 J	5 U	5 UJ	5 U	5 U	10 U
Tri-n-butyltin (as Organotin)		68 J	69	26 J	28	49	37
Organotins (TOCN) (ug/kg)							
Di-n-butyltin (as Organotin)		1010 J	1070	435 J	340 U	161 U	405 UJ
n-Butyltin (as Organotin)		422 J	730 J	217 UJ	408 J	613 J	405 UJ
Tetra-n-butyltin (as Organotin)		211 J	215 U	217 UJ	340 U	161 U	405 U
Tri-n-butyltin (as Organotin)		2870 J	2960	1130 J	1900	1580	1500

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Organotins

Constituent	Station ID:	DR174	DR178	DR181	DR183	DR186	DR187
	Sample ID:	SD-DR174-0000	SD-DR178-0000-CC	SD-DR181-0000	SD-DR183-0000	SD-DR186-0000	SD-DR187-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Organotins (ug/kg)							
Di-n-butyltin (as Organotin)		11 J	32 J	20 J	5 UJ	7	20
n-Butyltin (as Organotin)		12 J	45 UIJ	8 J	5 UJ	5 UJ	8 J
Tetra-n-butyltin (as Organotin)		10 U	5 UJ	5 UJ	5 UJ	5 U	5 U
Tri-n-butyltin (as Organotin)		46	40 J	40	6 J	9	27
Organotins (TOCN) (ug/kg)							
Di-n-butyltin (as Organotin)		692 J	930 J	855 J	278 UJ	348	1050
n-Butyltin (as Organotin)		755 J	1310 UIJ	342 J	278 UJ	249 UJ	421 J
Tetra-n-butyltin (as Organotin)		629 U	145 UJ	214 UJ	278 UJ	249 U	263 U
Tri-n-butyltin (as Organotin)		2890	1160 J	1710	333 J	448	1420

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Organotins

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR192 SD-DR192-0000 0 to 10 cm	DR194 SD-DR194-0000 0 to 10 cm	DR199 SD-DR199-0000 0 to 10 cm	DR203 SD-DR203-0000 0 to 10 cm	DR206 SD-DR206-0000 0 to 10 cm	DR208 SD-DR208-0000 0 to 10 cm
Organotins (ug/kg)							
Di-n-butyltin (as Organotin)		8	13 J	10 UJ	39 J	5 UJ	9 J
n-Butyltin (as Organotin)		6 J	10 J	10 J	14 J	35 UIJ	6 J
Tetra-n-butyltin (as Organotin)		5 U	10 U	10 U	5 UJ	5 UJ	5 UJ
Tri-n-butyltin (as Organotin)		24	42	29	86 J	15 J	13 J
Organotins (TOCN) (ug/kg)							
Di-n-butyltin (as Organotin)		304	425 J	690 UJ	3680 J	168 UJ	698 J
n-Butyltin (as Organotin)		228 J	327 J	690 J	1320 J	1180 UIJ	465 J
Tetra-n-butyltin (as Organotin)		190 U	327 U	690 U	472 UJ	168 UJ	388 UJ
Tri-n-butyltin (as Organotin)		913	1370	2000	8110 J	505 J	1010 J

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Organotins

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR210 SD-DR210-0000 0 to 10 cm	DR215 SD-DR215-0000 0 to 10 cm	DR217 SD-DR217-0000 0 to 10 cm	DR221 SD-DR221-0000 0 to 10 cm	DR224 SD-DR224-0000 0 to 10 cm	DR228 SD-DR228-0000 0 to 10 cm
Organotins (ug/kg)							
Di-n-butyltin (as Organotin)		5 UJ	10 UJ	10 UJ	10	10 UJ	5 UJ
n-Butyltin (as Organotin)		5 J	11 J	14 J	9 J	10 UJ	8 J
Tetra-n-butyltin (as Organotin)		5 UJ	10 U	10 U	5 U	10 U	5 UJ
Tri-n-butyltin (as Organotin)		12 J	27	33	31	18	19
Organotins (TOCN) (ug/kg)							
Di-n-butyltin (as Organotin)		345 UJ	463 UJ	599 UJ	637	855 UJ	202 UJ
n-Butyltin (as Organotin)		345 J	509 J	838 J	573 J	855 UJ	323 J
Tetra-n-butyltin (as Organotin)		345 UJ	463 U	599 U	318 U	855 U	202 UJ
Tri-n-butyltin (as Organotin)		828 J	1250	1980	1970	1540	766

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Organotins

Constituent	Station ID:	DR232	DR234	DR238	DR242	DR244	DR246
	Sample ID:	SD-DR232-0000	SD-DR234-0000	SD-DR238-0000	SD-DR242-0000-CC	SD-DR244-0000	SD-DR246-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Organotins (ug/kg)							
Di-n-butyltin (as Organotin)		6	10 UJ	5 UJ	8 J	11 J	7 J
n-Butyltin (as Organotin)		5 J	10 UJ	50 J	30 UIJ	85 UJI	8 J
Tetra-n-butyltin (as Organotin)		5 U	10 U	5 UJ	5 UJ	5 UJ	5 UJ
Tri-n-butyltin (as Organotin)		21	14	8 J	28 J	29 J	21 J
Organotins (TOCN) (ug/kg)							
Di-n-butyltin (as Organotin)		438	565 UJ	281 UJ	233 J	313 J	193 J
n-Butyltin (as Organotin)		365 J	565 UJ	2810 J	875 UIJ	2410 UJI	220 J
Tetra-n-butyltin (as Organotin)		365 U	565 U	281 UJ	146 UJ	142 UJ	138 UJ
Tri-n-butyltin (as Organotin)		1530	791	449 J	816 J	824 J	579 J

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Organotins

Constituent	Station ID:	DR249	DR251	DR253	DR256	DR258	DR260
	Sample ID:	SD-DR249-0000	SD-DR251-0000	SD-DR253-0000	SD-DR256-0000	SD-DR258-0000	SD-DR260-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Organotins (ug/kg)							
Di-n-butyltin (as Organotin)		2 J	1 UJ	3 J	5 UJ	5 UJ	8 J
n-Butyltin (as Organotin)		10 UJ	1 J	2 J	30 UIJ	5 UJ	62 UIJ
Tetra-n-butyltin (as Organotin)		1 UJ	1 UJ	2 J	15 UI	5 UJ	15 UI
Tri-n-butyltin (as Organotin)		1 J	1 J	4 J	5 U	6 J	24
Organotins (TOCN) (ug/kg)							
Di-n-butyltin (as Organotin)		135 J	53.2 UJ	192 J	243 UJ	323 UJ	259 J
n-Butyltin (as Organotin)		676 UJ	53.2 J	128 J	1460 UIJ	323 UJ	2010 UIJ
Tetra-n-butyltin (as Organotin)		67.6 UJ	53.2 UJ	128 J	728 UI	323 UJ	485 UI
Tri-n-butyltin (as Organotin)		67.6 J	53.2 J	256 J	243 U	387 J	777

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Organotins

Constituent	Station ID:	DR262	DR264	DR266	DR270	DR273	DR284
	Sample ID:	SD-DR262-0000	SD-DR264-0000	SD-DR266-0000	SD-DR270-0000	SD-DR273-0000	SD-DR284-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Organotins (ug/kg)							
Di-n-butyltin (as Organotin)		5 UJ	1 J	1 UJ	1 J	2 J	5 UJ
n-Butyltin (as Organotin)		6 J	6 UIJ	3 J	1 J	2 J	16 UIJ
Tetra-n-butyltin (as Organotin)		5 UJ	1 UJ	1 UJ	2 J	1 UJ	5 UJ
Tri-n-butyltin (as Organotin)		9 J	4 J	3 J	2 J	4 J	7 J
Organotins (TOCN) (ug/kg)							
Di-n-butyltin (as Organotin)		203 UJ	67.6 J	72.5 UJ	75.8 J	120 J	224 UJ
n-Butyltin (as Organotin)		244 J	405 UIJ	217 J	75.8 J	120 J	717 UIJ
Tetra-n-butyltin (as Organotin)		203 UJ	67.6 UJ	72.5 UJ	152 J	60.2 UJ	224 UJ
Tri-n-butyltin (as Organotin)		366 J	270 J	217 J	152 J	241 J	314 J

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Organotins

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR288 SD-DR288-0000 0 to 10 cm	DR289 SD-DR289-0000 0 to 10 cm	DR291 SD-DR291-0000 0 to 10 cm	DR297 SD-DR297-0000 0 to 10 cm	DR298 SD-DR298-0000 0 to 10 cm	DR299 SD-DR299-0000 0 to 10 cm
Organotins (ug/kg)							
Di-n-butyltin (as Organotin)		6 J	8 J	1 J	1 U	1 U	1 U
n-Butyltin (as Organotin)		17 UIJ	60 UIJ	12 UJI	1 UJ	1 UJ	1 UJ
Tetra-n-butyltin (as Organotin)		5 UJ	5 UJ	1 UJ	3 U	3 U	3 U
Tri-n-butyltin (as Organotin)		17 J	11 J	5 J	1 U	1 U	1 U
Organotins (TOCN) (ug/kg)							
Di-n-butyltin (as Organotin)		202 J	220 J	26.4 J			
n-Butyltin (as Organotin)		572 UIJ	1650 UIJ	317 UJI			
Tetra-n-butyltin (as Organotin)		168 UJ	138 UJ	26.4 UJ			
Tri-n-butyltin (as Organotin)		572 J	303 J	132 J			

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for Organotins

Constituent	Station ID:	DR300	DR301
	Sample ID:	SD-DR300-0000	SD-DR301-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm
Organotins (ug/kg)			
Di-n-butyltin (as Organotin)		1 U	1 U
n-Butyltin (as Organotin)		1 UJ	1 UJ
Tetra-n-butyltin (as Organotin)		3 U	3 U
Tri-n-butyltin (as Organotin)		1 U	1 U
Organotins (TOCN) (ug/kg)			
Di-n-butyltin (as Organotin)			
n-Butyltin (as Organotin)			
Tetra-n-butyltin (as Organotin)			
Tri-n-butyltin (as Organotin)			

Blank cells indicate no analysis were performed.

APPENDIX E-6

VOCS (SURFACE SEDIMENT)

Duwamish River Sediment Investigation - Statistics for Surface Sediment Results for VOCs

Constituent	Number of Samples Analyzed	Number of Detections	Detection Frequency (%)	Minimum Detected Value	Maximum Detected Value	Sample Number of Maximum Detected Value	Arithmetic Mean	Median Value
Volatile Organic Compounds (ug/kg)								
1,1,1,2-Tetrachloroethane	47	0	0.0	n/a	n/a		13.965	2.700
1,1,1-Trichloroethane	47	0	0.0	n/a	n/a		13.965	2.700
1,1,2,2-Tetrachloroethane	47	0	0.0	n/a	n/a		13.965	2.700
1,1,2-Trichloroethane	47	0	0.0	n/a	n/a		25.736	3.000
1,1-Dichloroethane	47	0	0.0	n/a	n/a		13.965	2.700
1,1-Dichloroethene	47	0	0.0	n/a	n/a		26.238	3.300
1,1-Dichloropropanone	45	0	0.0	n/a	n/a		69.788	6.600
1,1-Dichloropropene	47	0	0.0	n/a	n/a		13.965	2.700
1,2,3-Trichlorobenzene	47	0	0.0	n/a	n/a		27.300	5.000
1,2,3-Trichloropropane	47	0	0.0	n/a	n/a		27.744	3.300
1,2,4-Trimethylbenzene	**47**	**2**	**4.3**	**0.54**	**1.50**	**SD-DR053-0000-CC**	**13.896**	**2.700**
1,2-Dibromo-3-chloropropane	47	0	0.0	n/a	n/a		32.504	9.000
1,2-Dibromoethane	47	0	0.0	n/a	n/a		25.736	3.000
1,2-Dichloroethane	47	0	0.0	n/a	n/a		13.965	2.700
1,2-Dichloropropane	47	0	0.0	n/a	n/a		13.965	2.700
1,3,5-Trimethylbenzene	**47**	**1**	**2.1**	**1.40**	**1.40**	**SD-DR053-0000-CC**	**13.946**	**2.700**
1,3-Dichloropropane	47	0	0.0	n/a	n/a		13.965	2.700
1-Chlorobutane	47	0	0.0	n/a	n/a		13.965	2.700
2,2-Dichloropropane	47	0	0.0	n/a	n/a		13.965	2.700
2-Butanone	**47**	**12**	**25.5**	**5.30**	**34.50**	**SD-DR154-0000**	**29.885**	**6.000**
2-Chlorotoluene	47	0	0.0	n/a	n/a		13.965	2.700
2-Hexanone	47	0	0.0	n/a	n/a		51.685	6.000
2-Nitropropane	47	0	0.0	n/a	n/a		69.725	13.600
4-Chlorotoluene	47	0	0.0	n/a	n/a		13.965	2.700
4-Methyl-2-Pentanone	47	0	0.0	n/a	n/a		27.802	5.400
Acetone	**47**	**3**	**6.4**	**114.00**	**1020.00**	**SD-DR047-0000**	**529.029**	**32.600**
Acrylonitrile	1	0	0.0	n/a	n/a		7.600	7.600
Allyl chloride	47	0	0.0	n/a	n/a		25.736	3.000
Benzene	**47**	**1**	**2.1**	**0.87**	**0.87**	**SD-DR053-0000-CC**	**13.935**	**2.700**
Bromobenzene	47	0	0.0	n/a	n/a		13.965	2.700
Bromochloromethane	47	0	0.0	n/a	n/a		25.736	3.000
Bromodichloromethane	47	0	0.0	n/a	n/a		13.965	2.700
Bromoform	47	0	0.0	n/a	n/a		63.517	6.000
Bromomethane	47	0	0.0	n/a	n/a		129.331	15.100

Bold text indicates constituent was detected one or more times.
n/a - Not Applicable

Duwamish River Sediment Investigation - Statistics for Surface Sediment Results for VOCs

Constituent	Number of Samples Analyzed	Number of Detections	Detection Frequency (%)	Minimum Detected Value	Maximum Detected Value	Sample Number of Maximum Detected Value	Arithmetic Mean	Median Value
Volatile Organic Compounds (ug/kg)								
Carbon Disulfide	**47**	**17**	**36.2**	**0.84**	**4.00**	**SD-DR178-0000-CC**	**26.456**	**4.600**
Carbon Tetrachloride	47	0	0.0	n/a	n/a		13.965	2.700
Chloroacetonitrile	2	0	0.0	n/a	n/a		15.700	15.700
Chlorobenzene	47	0	0.0	n/a	n/a		13.965	2.700
Chloroethane	47	0	0.0	n/a	n/a		242.342	6.600
Chloroform	47	0	0.0	n/a	n/a		13.965	2.700
Chloromethane	47	0	0.0	n/a	n/a		27.744	3.300
cis-1,2-Dichloroethene	47	0	0.0	n/a	n/a		13.965	2.700
cis-1,3-Dichloropropene	47	0	0.0	n/a	n/a		14.778	2.900
Dibromochloromethane	47	0	0.0	n/a	n/a		61.953	3.300
Dibromomethane	47	0	0.0	n/a	n/a		25.736	3.000
Diethyl ether	47	0	0.0	n/a	n/a		26.238	3.300
Ethylbenzene	**47**	**1**	**2.1**	**0.49**	**0.49**	**SD-DR053-0000-CC**	**13.927**	**2.700**
Ethylmethacrylate	47	0	0.0	n/a	n/a		25.736	3.000
Freon 113	47	0	0.0	n/a	n/a		35.272	3.300
Freon 12	9	0	0.0	n/a	n/a		2.133	1.600
Isopropylbenzene	47	0	0.0	n/a	n/a		20.231	9.000
m,p-Xylene	**47**	**1**	**2.1**	**1.40**	**1.40**	**SD-DR053-0000-CC**	**27.734**	**5.400**
Methacrylonitrile	46	0	0.0	n/a	n/a		33.041	10.200
Methyl acrylate	47	0	0.0	n/a	n/a		20.734	9.000
Methyl Iodide	47	0	0.0	n/a	n/a		25.736	3.000
Methyl Methacrylate	47	0	0.0	n/a	n/a		15.529	3.900
Methyl-t-butyl ether	47	0	0.0	n/a	n/a		14.468	2.800
Methylene Chloride	**47**	**1**	**2.1**	**1610.00**	**1610.00**	**SD-DR008-0000**	**45.719**	**12.300**
n-Butylbenzene	47	0	0.0	n/a	n/a		13.965	2.700
n-Propylbenzene	47	0	0.0	n/a	n/a		13.965	2.700
o-Xylene	**47**	**1**	**2.1**	**1.10**	**1.10**	**SD-DR053-0000-CC**	**13.940**	**2.700**
p-Isopropyltoluene	**47**	**3**	**6.4**	**1.60**	**25.00**	**SD-DR111-0000-CC**	**14.368**	**2.700**
Pentachloroethane	47	0	0.0	n/a	n/a		26.238	3.300
sec-Butylbenzene	47	0	0.0	n/a	n/a		13.965	2.700
Styrene	47	0	0.0	n/a	n/a		25.736	3.000
tert-Butylbenzene	47	0	0.0	n/a	n/a		13.965	2.700
Tetrachloroethene	**47**	**2**	**4.3**	**0.21**	**0.52**	**SD-DR297-0000**	**13.917**	**2.700**
Tetrahydrofuran	2	0	0.0	n/a	n/a		7.700	7.700

Bold text indicates constituent was detected one or more times.
n/a - Not Applicable

Duwamish River Sediment Investigation - Statistics for Surface Sediment Results for VOCs

Constituent	Number of Samples Analyzed	Number of Detections	Detection Frequency (%)	Minimum Detected Value	Maximum Detected Value	Sample Number of Maximum Detected Value	Arithmetic Mean	Median Value
Volatile Organic Compounds (ug/kg)								
Toluene	**47**	**5**	**10.6**	**0.34**	**6.40**	**SD-DR021-0000**	**13.930**	**2.700**
trans-1,2-Dichloroethene	47	0	0.0	n/a	n/a		13.965	2.700
trans-1,3-Dichloropropene	47	0	0.0	n/a	n/a		14.593	3.600
trans-1,4-Dichloro-2-butene	45	0	0.0	n/a	n/a		72.160	13.600
Trichloroethene	47	0	0.0	n/a	n/a		13.965	2.700
Trichlorofluormethane	47	0	0.0	n/a	n/a		130.593	3.300
Vinyl Chloride	47	0	0.0	n/a	n/a		63.459	3.300

Bold text indicates constituent was detected one or more times.
n/a - *Not Applicable*

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for VOCs

Constituent	Station ID:	DR002	DR005	DR008	DR011	DR021	DR025
	Sample ID:	SD-DR002-0000	SD-DR005-0000	SD-DR008-0000	SD-DR011-0000	SD-DR021-0000	SD-DR025-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Volatile Organic Compounds (ug/kg)							
1,1,1,2-Tetrachloroethane		2.7 UJL	2.8 U	533 U	2.4 U	3.0 U	2.3 U
1,1,1-Trichloroethane		2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
1,1,2,2-Tetrachloroethane		2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
1,1,2-Trichloroethane		2.7 U	5.7 U	1060 U	4.8 U	6.0 U	4.6 U
1,1-Dichloroethane		2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
1,1-Dichloroethene		5.4 U	5.7 U	1060 U	4.8 U	6.0 U	4.6 U
1,1-Dichloropropanone			14.2 U	2660 U	11.9 U	15.0 U	11.5 U
1,1-Dichloropropene		2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
1,2,3-Trichlorobenzene		2.7 UJL	5.7 U	1060 U	4.8 U	6.0 U	4.6 U
1,2,3-Trichloropropane		13.6 U	5.7 U	1060 U	4.8 U	6.0 U	4.6 U
1,2,4-Trimethylbenzene		2.7 U	2.8 U	533 U	2.4 U	0.54 JQ	2.3 U
1,2-Dibromo-3-chloropropane		5.4 U	5.7 U	1060 U	4.8 U	6.0 U	4.6 U
1,2-Dibromoethane		2.7 U	5.7 U	1060 U	4.8 U	6.0 U	4.6 U
1,2-Dichloroethane		2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
1,2-Dichloropropane		2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
1,3,5-Trimethylbenzene		2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
1,3-Dichloropropane		2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
1-Chlorobutane		2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
2,2-Dichloropropane		2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
2-Butanone		16.7	5.7 U	1060 U	4.8 U	6.0 U	13.5
2-Chlorotoluene		2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
2-Hexanone		5.4 U	11.3 U	2130 U	9.5 U	12.0 U	9.2 U
2-Nitropropane		13.6 U	14.2 U	2660 U	11.9 U	15.0 U	11.5 U
4-Chlorotoluene		2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
4-Methyl-2-Pentanone		5.4 U	5.7 U	1060 U	4.8 U	6.0 U	4.6 U

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for VOCs

Station ID:	DR002	DR005	DR008	DR011	DR021	DR025
Sample ID:	SD-DR002-0000	SD-DR005-0000	SD-DR008-0000	SD-DR011-0000	SD-DR021-0000	SD-DR025-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Acetone	64.8 UJK	113 UJK	21300 UJK	95.3 UJK	120 UJK	47.5 UJK
Acrylonitrile						
Allyl chloride	2.7 UJL	5.7 U	1060 U	4.8 U	6.0 U	4.6 U
Benzene	2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
Bromobenzene	2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
Bromochloromethane	2.7 U	5.7 U	1060 U	4.8 U	6.0 U	4.6 U
Bromodichloromethane	2.7 UJL	2.8 U	533 U	2.4 U	3.0 U	2.3 U
Bromoform	5.4 UJL	14.2 U	2660 U	11.9 U	15.0 U	11.5 U
Bromomethane	13.6 U	28.3 U	5330 U	23.8 U	30.0 U	23.0 U
Carbon Disulfide	2.5 JQ	2.1 JQ	1060 U	1.6 JQ	1.4 JQ	1.3 JQ
Carbon Tetrachloride	2.7 UJL	2.8 U	533 U	2.4 U	3.0 U	2.3 U
Chloroacetonitrile				23.8 U		
Chlorobenzene	2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
Chloroethane	13.6 U	56.7 U	10600 U	47.6 U	60.0 U	45.9 U
Chloroform	2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
Chloromethane	13.6 U	5.7 U	1060 U	4.8 U	6.0 U	4.6 U
cis-1,2-Dichloroethene	2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
cis-1,3-Dichloropropene	2.9 UJL	3.0 U	564 U	2.5 U	3.2 U	2.4 U
Dibromochloromethane	5.4 UJL	14.2 U	2660 U	11.9 U	15.0 U	11.5 U
Dibromomethane	2.7 U	5.7 U	1060 U	4.8 U	6.0 U	4.6 U
Diethyl ether	5.4 U	5.7 U	1060 U	4.8 U	6.0 U	4.6 U
Ethylbenzene	2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
Ethylmethacrylate	2.7 U	5.7 U	1060 U	4.8 U	6.0 U	4.6 U
Freon 113	54.2 U	5.7 U	1060 U	4.8 U	6.0 U	4.6 U
Freon 12						
Isopropylbenzene	2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
m,p-Xylene	5.4 U	5.7 U	1060 U	4.8 U	6.0 U	4.6 U

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for VOCs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR002 / SD-DR002-0000 / 0 to 10 cm	DR005 / SD-DR005-0000 / 0 to 10 cm	DR008 / SD-DR008-0000 / 0 to 10 cm	DR011 / SD-DR011-0000 / 0 to 10 cm	DR021 / SD-DR021-0000 / 0 to 10 cm	DR025 / SD-DR025-0000 / 0 to 10 cm
Methacrylonitrile		5.4 U	5.7 U	1060 U	4.8 U	6.0 U	4.6 U
Methyl acrylate		5.4 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
Methyl Iodide		2.7 UJL	5.7 U	1060 U	4.8 U	6.0 U	4.6 U
Methyl Methacrylate		2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
Methyl-t-butyl ether		5.4 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
Methylene Chloride		13.6 U	5.7 U	1610	4.8 UJK	6.3 U	4.6 U
n-Butylbenzene		2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
n-Propylbenzene		2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
o-Xylene		2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
p-Isopropyltoluene		2.7 U	1.6 JQ	533 U	2.4 U	3.0 U	2.3 U
Pentachloroethane		5.4 UJL	5.7 U	1060 U	4.8 U	6.0 U	4.6 U
sec-Butylbenzene		2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
Styrene		2.7 U	5.7 U	1060 U	4.8 U	6.0 U	4.6 U
tert-Butylbenzene		2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
Tetrachloroethene		2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
Tetrahydrofuran							
Toluene		2.7 U	2.8 U	533 U	2.2 JQ	6.4	2.3 U
trans-1,2-Dichloroethene		2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
trans-1,3-Dichloropropene		2.5 UJL	2.7 U	501 U	2.2 U	2.8 U	2.2 U
trans-1,4-Dichloro-2-butene			14.2 U	2660 U	11.9 U	15.0 U	11.5 U
Trichloroethene		2.7 U	2.8 U	533 U	2.4 U	3.0 U	2.3 U
Trichlorofluormethane		54.2 UJK	28.3 U	5330 U	23.8 U	30.0 U	23.0 U
Vinyl Chloride		13.6 U	14.2 U	2660 U	11.9 U	15.0 U	11.5 U

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for VOCs

Constituent	Station ID:	DR033	DR042	DR047	DR053	DR067	DR081
	Sample ID:	SD-DR033-0000	SD-DR042-0000	SD-DR047-0000	SD-DR053-0000-CC	SD-DR067-0000	SD-DR081-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Volatile Organic Compounds (ug/kg)							
1,1,1,2-Tetrachloroethane		2.4 U	3.7 U	3.0 U	2.3 U	2.7 U	1.8 U
1,1,1-Trichloroethane		2.4 U	3.7 U	3.0 U	2.3 U	2.7 U	1.8 U
1,1,2,2-Tetrachloroethane		2.4 U	3.7 U	3.0 U	2.3 U	2.7 U	1.8 U
1,1,2-Trichloroethane		2.4 U	3.7 U	3.0 U	2.3 U	5.3 U	1.8 U
1,1-Dichloroethane		2.4 U	3.7 U	3.0 U	2.3 U	2.7 U	1.8 U
1,1-Dichloroethene		4.8 U	7.4 U	3.0 U	2.3 U	5.3 U	1.8 U
1,1-Dichloropropanone		24.3 U	36.9 U	6.0 U	4.6 U	13.3 U	3.6 U
1,1-Dichloropropene		2.4 U	3.7 U	3.0 U	2.3 U	2.7 U	1.8 U
1,2,3-Trichlorobenzene		2.4 U	3.7 U	6.0 U	4.6 U	5.3 U	3.6 U
1,2,3-Trichloropropane		12.1 U	18.4 U	3.0 U	2.3 U	5.3 U	1.8 U
1,2,4-Trimethylbenzene		2.4 U	3.7 U	3.0 U	1.5 JQ	2.7 U	1.8 U
1,2-Dibromo-3-chloropropane		4.8 U	7.4 U	15.1 U	11.6 U	5.3 U	9.0 U
1,2-Dibromoethane		2.4 U	3.7 U	3.0 U	2.3 U	5.3 U	1.8 U
1,2-Dichloroethane		2.4 U	3.7 U	3.0 U	2.3 U	2.7 U	1.8 U
1,2-Dichloropropane		2.4 U	3.7 U	3.0 U	2.3 U	2.7 U	1.8 U
1,3,5-Trimethylbenzene		2.4 U	3.7 U	3.0 U	1.4 JQ	2.7 U	1.8 U
1,3-Dichloropropane		2.4 U	3.7 U	3.0 U	2.3 U	2.7 U	1.8 U
1-Chlorobutane		2.4 U	3.7 U	3.0 U	2.3 U	2.7 U	1.8 U
2,2-Dichloropropane		2.4 U	3.7 U	3.0 U	2.3 U	2.7 U	1.8 U
2-Butanone		12.4	7.4 U	6.0 U	10.6	5.3 U	3.6 U
2-Chlorotoluene		2.4 U	3.7 U	3.0 U	2.3 U	2.7 U	1.8 U
2-Hexanone		4.8 U	7.4 U	6.0 U	4.6 U	10.7 U	3.6 U
2-Nitropropane		12.1 U	18.4 U	15.1 U	11.6 U	13.3 U	9.0 U
4-Chlorotoluene		2.4 U	3.7 U	3.0 U	2.3 U	2.7 U	1.8 U
4-Methyl-2-Pentanone		4.8 U	7.4 U	6.0 U	4.6 U	5.3 U	3.6 U

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for VOCs

Constituent	Station ID:	DR033	DR042	DR047	DR053	DR067	DR081
	Sample ID:	SD-DR033-0000	SD-DR042-0000	SD-DR047-0000	SD-DR053-0000-CC	SD-DR067-0000	SD-DR081-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Acetone		30.8 UJK	148 UJK	1020 JL	46 UJK	107 UJK	18.1 UJK
Acrylonitrile							
Allyl chloride		2.4 U	3.7 U	3.0 U	2.3 U	5.3 U	1.8 U
Benzene		2.4 U	3.7 U	3.0 U	0.87 JQ	2.7 U	1.8 U
Bromobenzene		2.4 U	3.7 U	3.0 U	2.3 U	2.7 U	1.8 U
Bromochloromethane		2.4 U	3.7 U	3.0 U	2.3 U	5.3 U	1.8 U
Bromodichloromethane		2.4 U	3.7 U	3.0 U	2.3 U	2.7 U	1.8 U
Bromoform		4.8 U	7.4 U	6.0 U	4.6 U	13.3 U	3.6 U
Bromomethane		12.1 U	18.4 U	15.1 U	11.6 U	26.7 U	9.0 U
Carbon Disulfide		4.8 U	7.4 U	6.0 U	1.5 JQ	5.3 U	1.1 JQ
Carbon Tetrachloride		2.4 U	3.7 U	3.0 U	2.3 U	2.7 U	1.8 U
Chloroacetonitrile							
Chlorobenzene		2.4 U	3.7 U	3.0 U	2.3 U	2.7 U	1.8 U
Chloroethane		12.1 U	18.4 U	6.0 U	4.6 U	53.3 U	3.6 U
Chloroform		2.4 U	3.7 U	3.0 U	2.3 U	2.7 U	1.8 U
Chloromethane		12.1 U	18.4 U	3.0 U	2.3 U	5.3 U	1.8 U
cis-1,2-Dichloroethene		2.4 U	3.7 U	3.0 U	2.3 U	2.7 U	1.8 U
cis-1,3-Dichloropropene		2.6 U	3.9 U	3.2 U	2.5 U	2.8 U	1.9 U
Dibromochloromethane		4.8 U	7.4 U	3.0 U	2.3 U	13.3 U	1.8 U
Dibromomethane		2.4 U	3.7 U	3.0 U	2.3 U	5.3 U	1.8 U
Diethyl ether		4.8 U	7.4 U	3.0 U	2.3 U	5.3 U	1.8 U
Ethylbenzene		2.4 U	3.7 U	3.0 U	0.49 JQ	2.7 U	1.8 U
Ethylmethacrylate		2.4 U	3.7 U	3.0 U	2.3 U	5.3 U	1.8 U
Freon 113		48.6 U	73.8 U	3.0 U	2.3 U	5.3 U	1.8 U
Freon 12				3.0 U			
Isopropylbenzene		2.4 U	3.7 U	15.1 U	11.6 U	2.7 U	9.0 U
m,p-Xylene		4.8 U	7.4 U	6.0 U	1.4 JQ	5.3 U	3.6 U

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for VOCs

Constituent	Station ID:	DR033	DR042	DR047	DR053	DR067	DR081
	Sample ID:	SD-DR033-0000	SD-DR042-0000	SD-DR047-0000	SD-DR053-0000-CC	SD-DR067-0000	SD-DR081-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Methacrylonitrile		4.8 U	7.4 U	15.1 U	11.6 U	5.3 U	9.0 U
Methyl acrylate		4.8 U	7.4 U	15.1 U	11.6 U	2.7 U	9.0 U
Methyl Iodide		2.4 U	3.7 U	3.0 U	2.3 U	5.3 U	1.8 U
Methyl Methacrylate		2.4 U	3.7 U	6.0 U	4.6 U	2.7 U	3.6 U
Methyl-t-butyl ether		4.8 U	7.4 U	3.0 U	2.3 U	2.7 U	1.8 U
Methylene Chloride		12.1 U	18.4 U	15.1 U	11.6 U	5.3 U	9.0 U
n-Butylbenzene		2.4 U	3.7 U	3.0 U	2.3 U	2.7 U	1.8 U
n-Propylbenzene		2.4 U	3.7 U	3.0 U	2.3 U	2.7 U	1.8 U
o-Xylene		2.4 U	3.7 U	3.0 U	1.1 JQ	2.7 U	1.8 U
p-Isopropyltoluene		2.4 U	3.7 U	3.0 U	2.3 U	2.7 U	1.8 U
Pentachloroethane		4.8 U	7.4 U	3.0 U	2.3 U	5.3 U	1.8 U
sec-Butylbenzene		2.4 U	3.7 U	3.0 U	2.3 U	2.7 U	1.8 U
Styrene		2.4 U	3.7 U	3.0 U	2.3 U	5.3 U	1.8 U
tert-Butylbenzene		2.4 U	3.7 U	3.0 U	2.3 U	2.7 U	1.8 U
Tetrachloroethene		2.4 U	3.7 U	3.0 U	2.3 U	2.7 U	1.8 U
Tetrahydrofuran							
Toluene		2.4 U	3.7 U	3.0 U	0.34 JQ	1.5 JQ	1.8 U
trans-1,2-Dichloroethene		2.4 U	3.7 U	3.0 U	2.3 U	2.7 U	1.8 U
trans-1,3-Dichloropropene		2.3 U	3.5 U	5.7 U	4.4 U	2.5 U	3.4 U
trans-1,4-Dichloro-2-butene		12.1 U	18.4 U	15.1 U	11.6 U	13.3 U	9.0 U
Trichloroethene		2.4 U	3.7 U	3.0 U	2.3 U	2.7 U	1.8 U
Trichlorofluormethane		48.6 UJK	73.8 UJK	3.0 U	2.3 U	26.7 U	1.8 U
Vinyl Chloride		12.1 U	18.4 U	3.0 U	2.3 U	13.3 U	1.8 U

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for VOCs

Constituent	Station ID:	DR087	DR092	DR101	DR111	DR116	DR123
	Sample ID:	SD-DR087-0000	SD-DR092-0000	SD-DR101-0000	SD-DR111-0000-CC	SD-DR116-0000	SD-DR123-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Volatile Organic Compounds (ug/kg)							
1,1,1,2-Tetrachloroethane		1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
1,1,1-Trichloroethane		1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
1,1,2,2-Tetrachloroethane		1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
1,1,2-Trichloroethane		1.8 U	2.4 U	5.5 U	5.4 U	5.6 U	2.5 U
1,1-Dichloroethane		1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
1,1-Dichloroethene		3.7 U	2.4 U	5.5 U	5.4 U	5.6 U	2.5 U
1,1-Dichloropropanone		18.5 U	4.8 U	13.8 U	13.4 U	13.9 U	5.0 U
1,1-Dichloropropene		1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
1,2,3-Trichlorobenzene		1.8 U	4.8 U	5.5 U	5.4 U	5.6 U	5.0 U
1,2,3-Trichloropropane		9.2 U	2.4 U	5.5 U	5.4 U	5.6 U	2.5 U
1,2,4-Trimethylbenzene		1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
1,2-Dibromo-3-chloropropane		3.7 U	11.9 U	5.5 U	5.4 U	5.6 U	12.6 U
1,2-Dibromoethane		1.8 U	2.4 U	5.5 U	5.4 U	5.6 U	2.5 U
1,2-Dichloroethane		1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
1,2-Dichloropropane		1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
1,3,5-Trimethylbenzene		1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
1,3-Dichloropropane		1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
1-Chlorobutane		1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
2,2-Dichloropropane		1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
2-Butanone		10.6	4.8 U	7.8	10.1	5.6 U	5.0 U
2-Chlorotoluene		1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
2-Hexanone		3.7 U	4.8 U	11.0 U	10.7 U	11.2 U	5.0 U
2-Nitropropane		9.2 U	11.9 U	13.8 U	13.4 U	13.9 U	12.6 U
4-Chlorotoluene		1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
4-Methyl-2-Pentanone		3.7 U	4.8 U	5.5 U	5.4 U	5.6 U	5.0 U

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for VOCs

Station ID:	DR087	DR092	DR101	DR111	DR116	DR123
Sample ID:	SD-DR087-0000	SD-DR092-0000	SD-DR101-0000	SD-DR111-0000-CC	SD-DR116-0000	SD-DR123-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Acetone	26.4 UJK	23.8 UJK	19.4 UJK	107 UJK	112 UJK	25.1 UJK
Acrylonitrile						
Allyl chloride	1.8 U	2.4 U	5.5 U	5.4 U	5.6 U	2.5 U
Benzene	1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
Bromobenzene	1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
Bromochloromethane	1.8 U	2.4 U	5.5 U	5.4 U	5.6 U	2.5 U
Bromodichloromethane	1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
Bromoform	3.7 U	4.8 U	13.8 U	13.4 U	13.9 U	5.0 U
Bromomethane	9.2 U	11.9 U	27.6 U	26.8 U	27.9 U	12.6 U
Carbon Disulfide	2.9 JQ	0.84 JQ	5.5 U	1.2 JQ	5.6 U	5.0 U
Carbon Tetrachloride	1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
Chloroacetonitrile						
Chlorobenzene	1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
Chloroethane	9.2 U	4.8 U	55.1 U	53.6 U	55.8 U	5.0 U
Chloroform	1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
Chloromethane	9.2 U	2.4 U	5.5 U	5.4 U	5.6 U	2.5 U
cis-1,2-Dichloroethene	1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
cis-1,3-Dichloropropene	2.0 U	2.5 U	2.9 U	2.8 U	3.0 U	2.7 U
Dibromochloromethane	3.7 U	2.4 U	13.8 U	13.4 U	13.9 U	2.5 U
Dibromomethane	1.8 U	2.4 U	5.5 U	5.4 U	5.6 U	2.5 U
Diethyl ether	3.7 U	2.4 U	5.5 U	5.4 U	5.6 U	2.5 U
Ethylbenzene	1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
Ethylmethacrylate	1.8 U	2.4 U	5.5 U	5.4 U	5.6 U	2.5 U
Freon 113	37.0 U	2.4 U	5.5 U	5.4 U	5.6 U	2.5 U
Freon 12						2.5 U
Isopropylbenzene	1.8 U	11.9 U	2.8 U	2.7 U	2.8 U	12.6 U
m,p-Xylene	3.7 U	4.8 U	5.5 U	5.4 U	5.6 U	5.0 U

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for VOCs

Constituent	Station ID:	DR087	DR092	DR101	DR111	DR116	DR123
	Sample ID:	SD-DR087-0000	SD-DR092-0000	SD-DR101-0000	SD-DR111-0000-CC	SD-DR116-0000	SD-DR123-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Methacrylonitrile		3.7 U	11.9 U	5.5 U	5.4 U	5.6 U	12.6 U
Methyl acrylate		3.7 U	11.9 U	2.8 U	2.7 U	2.8 U	12.6 U
Methyl Iodide		1.8 U	2.4 U	5.5 U	5.4 U	5.6 U	2.5 U
Methyl Methacrylate		1.8 U	4.8 U	2.8 U	2.7 U	2.8 U	5.0 U
Methyl-t-butyl ether		3.7 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
Methylene Chloride		9.2 U	11.9 U	5.5 U	5.4 U	5.6 U	12.6 U
n-Butylbenzene		1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
n-Propylbenzene		1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
o-Xylene		1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
p-Isopropyltoluene		1.8 U	2.4 U	2.8 U	25.0	2.8 U	2.5 U
Pentachloroethane		3.7 U	2.4 U	5.5 U	5.4 U	5.6 U	2.5 U
sec-Butylbenzene		1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
Styrene		1.8 U	2.4 U	5.5 U	5.4 U	5.6 U	2.5 U
tert-Butylbenzene		1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
Tetrachloroethene		1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
Tetrahydrofuran							
Toluene		1.8 U	2.4 U	2.8 U	1.00 JQ	2.8 U	2.5 U
trans-1,2-Dichloroethene		1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
trans-1,3-Dichloropropene		1.7 U	4.5 U	2.6 U	2.5 U	2.6 U	4.7 U
trans-1,4-Dichloro-2-butene		9.2 U	11.9 U	13.8 U	13.4 U	13.9 U	12.6 U
Trichloroethene		1.8 U	2.4 U	2.8 U	2.7 U	2.8 U	2.5 U
Trichlorofluormethane		37.0 UJK	2.4 U	27.6 U	26.8 U	27.9 U	2.5 U
Vinyl Chloride		9.2 U	2.4 U	13.8 U	13.4 U	13.9 U	2.5 U

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for VOCs

Constituent	Station ID:	DR139	DR152	DR154	DR163	DR168	DR178
	Sample ID:	SD-DR139-0000	SD-DR152-0000	SD-DR154-0000	SD-DR163-0000	SD-DR168-0000	SD-DR178-0000-CC
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Volatile Organic Compounds (ug/kg)							
1,1,1,2-Tetrachloroethane		3.3 UJK	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
1,1,1-Trichloroethane		3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
1,1,2,2-Tetrachloroethane		3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
1,1,2-Trichloroethane		3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
1,1-Dichloroethane		3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
1,1-Dichloroethene		3.3 U	3.2 U	7.8 U	3.2 U	6.8 U	3.3 U
1,1-Dichloropropanone			6.4 U	38.8 U	6.4 U	33.9 U	6.6 U
1,1-Dichloropropene		3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
1,2,3-Trichlorobenzene		6.5 UJK	6.4 U	3.9 U	6.4 U	3.4 U	6.6 U
1,2,3-Trichloropropane		3.3 U	3.2 U	19.4 U	3.2 U	17.0 U	3.3 U
1,2,4-Trimethylbenzene		3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
1,2-Dibromo-3-chloropropane		16.3 U	16.0 U	7.8 UJK	16.0 U	6.8 UJK	16.6 U
1,2-Dibromoethane		3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
1,2-Dichloroethane		3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
1,2-Dichloropropane		3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
1,3,5-Trimethylbenzene		3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
1,3-Dichloropropane		3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
1-Chlorobutane		3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
2,2-Dichloropropane		3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
2-Butanone		6.5 U	6.4 U	34.5	6.4 U	6.8 U	16.8
2-Chlorotoluene		3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
2-Hexanone		6.5 U	6.4 U	7.8 U	6.4 U	6.8 U	6.6 U
2-Nitropropane		16.3 U	16.0 U	19.4 U	16.0 U	17.0 U	16.6 U
4-Chlorotoluene		3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
4-Methyl-2-Pentanone		6.5 U	6.4 U	7.8 U	6.4 U	6.8 U	6.6 U

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for VOCs

Constituent	Station ID:	DR139	DR152	DR154	DR163	DR168	DR178
	Sample ID:	SD-DR139-0000	SD-DR152-0000	SD-DR154-0000	SD-DR163-0000	SD-DR168-0000	SD-DR178-0000-CC
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Acetone		32.6 UJK	31.9 UJK	124 UJK	32.0 UJK	136 UJK	114 JK
Acrylonitrile							
Allyl chloride		3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
Benzene		3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
Bromobenzene		3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
Bromochloromethane		3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
Bromodichloromethane		3.3 UJK	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
Bromoform		6.5 UJK	6.4 UJH	7.8 U	6.4 U	6.8 U	6.6 U
Bromomethane		16.3 U	16.0 U	19.4 U	16.0 U	17.0 U	16.6 U
Carbon Disulfide		6.5 U	6.4 U	3.2 JQ	1.2 JQ	6.8 U	4.0 JQ
Carbon Tetrachloride		3.3 UJK	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
Chloroacetonitrile							
Chlorobenzene		3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
Chloroethane		6.5 U	6.4 U	19.4 U	6.4 U	17.0 U	6.6 U
Chloroform		3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
Chloromethane		3.3 U	3.2 U	19.4 U	3.2 U	17.0 U	3.3 U
cis-1,2-Dichloroethene		3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
cis-1,3-Dichloropropene		3.5 U	3.4 U	4.1 U	3.4 U	3.6 U	3.5 U
Dibromochloromethane		3.3 UJK	3.2 U	7.8 U	3.2 U	6.8 U	3.3 U
Dibromomethane		3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
Diethyl ether		3.3 U	3.2 U	7.8 U	3.2 U	6.8 U	3.3 U
Ethylbenzene		3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
Ethylmethacrylate		3.3 UJK	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
Freon 113		3.3 U	3.2 U	77.5 U	3.2 U	67.8 U	3.3 U
Freon 12		3.3 U					
Isopropylbenzene		16.3 U	16.0 U	3.9 U	16.0 U	3.4 U	16.6 U
m,p-Xylene		6.5 U	6.4 U	7.8 U	6.4 U	6.8 U	6.6 U

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for VOCs

Station ID:	DR139	DR152	DR154	DR163	DR168	DR178
Sample ID:	SD-DR139-0000	SD-DR152-0000	SD-DR154-0000	SD-DR163-0000	SD-DR168-0000	SD-DR178-0000-CC
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Methacrylonitrile	16.3 U	16.0 U	7.8 U	16.0 U	6.8 U	16.6 U
Methyl acrylate	16.3 U	16.0 U	7.8 U	16.0 U	6.8 U	16.6 U
Methyl Iodide	3.3 UJK	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
Methyl Methacrylate	6.5 U	6.4 U	3.9 U	6.4 U	3.4 U	6.6 U
Methyl-t-butyl ether	3.3 U	3.2 U	7.8 U	3.2 U	6.8 U	3.3 U
Methylene Chloride	16.3 U	16.0 U	19.4 U	16.0 U	17.0 U	16.6 U
n-Butylbenzene	3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
n-Propylbenzene	3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
o-Xylene	3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
p-Isopropyltoluene	3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
Pentachloroethane	3.3 UJK	3.2 U	7.8 U	3.2 U	6.8 U	3.3 U
sec-Butylbenzene	3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
Styrene	3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
tert-Butylbenzene	3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
Tetrachloroethene	3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
Tetrahydrofuran						
Toluene	3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
trans-1,2-Dichloroethene	3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
trans-1,3-Dichloropropene	6.1 UJK	6.0 U	3.6 U	6.0 U	3.2 U	6.2 U
trans-1,4-Dichloro-2-butene		16.0 UJH	19.4 U	16.0 U	17.0 U	16.6 U
Trichloroethene	3.3 U	3.2 U	3.9 U	3.2 U	3.4 U	3.3 U
Trichlorofluormethane	3.3 U	3.2 U	77.5 UJK	3.2 U	67.8 UJK	3.3 U
Vinyl Chloride	3.3 U	3.2 U	19.4 U	3.2 U	17.0 U	3.3 U

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for VOCs

Constituent	Station ID:	DR183	DR186	DR187	DR192	DR203	DR206
	Sample ID:	SD-DR183-0000	SD-DR186-0000	SD-DR187-0000	SD-DR192-0000	SD-DR203-0000	SD-DR206-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Volatile Organic Compounds (ug/kg)							
1,1,1,2-Tetrachloroethane		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
1,1,1-Trichloroethane		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
1,1,2,2-Tetrachloroethane		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
1,1,2-Trichloroethane		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
1,1-Dichloroethane		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
1,1-Dichloroethene		2.3 U	2.8 U	2.3 U	5.4 U	2.6 U	3.1 U
1,1-Dichloropropanone		4.6 U	5.6 U	4.6 U	27.2 U	5.1 U	6.1 U
1,1-Dichloropropene		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
1,2,3-Trichlorobenzene		4.6 U	5.6 U	4.6 U	2.7 U	5.1 U	6.1 U
1,2,3-Trichloropropane		2.3 U	2.8 U	2.3 U	13.6 U	2.6 U	3.1 U
1,2,4-Trimethylbenzene		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
1,2-Dibromo-3-chloropropane		11.4 U	14.1 U	11.5 U	5.4 UJK	12.8 U	15.3 U
1,2-Dibromoethane		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
1,2-Dichloroethane		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
1,2-Dichloropropane		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
1,3,5-Trimethylbenzene		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
1,3-Dichloropropane		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
1-Chlorobutane		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
2,2-Dichloropropane		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
2-Butanone		11.8	5.6 U	4.6 U	5.4 U	5.1 U	6.1 U
2-Chlorotoluene		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
2-Hexanone		4.6 U	5.6 U	4.6 U	5.4 U	5.1 U	6.1 U
2-Nitropropane		11.4 U	14.1 U	11.5 U	13.6 U	12.8 U	15.3 U
4-Chlorotoluene		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
4-Methyl-2-Pentanone		4.6 U	5.6 U	4.6 U	5.4 U	5.1 U	6.1 U

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for VOCs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR183 SD-DR183-0000 0 to 10 cm	DR186 SD-DR186-0000 0 to 10 cm	DR187 SD-DR187-0000 0 to 10 cm	DR192 SD-DR192-0000 0 to 10 cm	DR203 SD-DR203-0000 0 to 10 cm	DR206 SD-DR206-0000 0 to 10 cm
Acetone		29.8 UJK	28.3 UJK	23.0 UJK	109 UJK	162 JK	30.7 UJK
Acrylonitrile							
Allyl chloride		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
Benzene		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
Bromobenzene		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
Bromochloromethane		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
Bromodichloromethane		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
Bromoform		4.6 U	5.6 U	4.6 U	5.4 U	5.1 U	6.1 U
Bromomethane		11.4 U	14.1 U	11.5 U	13.6 U	12.8 U	15.3 U
Carbon Disulfide		1.5 JQ	5.6 U	4.6 U	5.4 U	5.1 U	6.1 U
Carbon Tetrachloride		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
Chloroacetonitrile							
Chlorobenzene		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
Chloroethane		4.6 U	5.6 U	4.6 U	13.6 U	5.1 U	6.1 U
Chloroform		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
Chloromethane		2.3 U	2.8 U	2.3 U	13.6 U	2.6 U	3.1 U
cis-1,2-Dichloroethene		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
cis-1,3-Dichloropropene		2.4 U	3.0 U	2.4 U	2.9 U	2.7 U	3.2 U
Dibromochloromethane		2.3 U	2.8 U	2.3 U	5.4 U	2.6 U	3.1 U
Dibromomethane		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
Diethyl ether		2.3 U	2.8 U	2.3 U	5.4 U	2.6 U	3.1 U
Ethylbenzene		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
Ethylmethacrylate		2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
Freon 113		2.3 U	2.8 U	2.3 U	54.3 U	2.6 U	3.1 U
Freon 12							
Isopropylbenzene		11.4 U	14.1 U	11.5 U	2.7 U	12.8 U	15.3 U
m,p-Xylene		4.6 U	5.6 U	4.6 U	5.4 U	5.1 U	6.1 U

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for VOCs

Station ID:	DR183	DR186	DR187	DR192	DR203	DR206
Sample ID:	SD-DR183-0000	SD-DR186-0000	SD-DR187-0000	SD-DR192-0000	SD-DR203-0000	SD-DR206-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Methacrylonitrile	11.4 U	14.1 U	11.5 U	5.4 U	12.8 U	15.3 U
Methyl acrylate	11.4 U	14.1 U	11.5 U	5.4 U	12.8 U	15.3 U
Methyl Iodide	2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
Methyl Methacrylate	4.6 U	5.6 U	4.6 U	2.7 U	5.1 U	6.1 U
Methyl-t-butyl ether	2.3 U	2.8 U	2.3 U	5.4 U	2.6 U	3.1 U
Methylene Chloride	11.4 U	14.1 U	11.5 U	13.6 U	12.8 U	15.3 U
n-Butylbenzene	2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
n-Propylbenzene	2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
o-Xylene	2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
p-Isopropyltoluene	2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
Pentachloroethane	2.3 U	2.8 U	2.3 U	5.4 U	2.6 U	3.1 U
sec-Butylbenzene	2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
Styrene	2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
tert-Butylbenzene	2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
Tetrachloroethene	2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
Tetrahydrofuran						
Toluene	2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
trans-1,2-Dichloroethene	2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
trans-1,3-Dichloropropene	4.3 U	5.3 U	4.3 U	2.6 U	4.8 U	5.8 U
trans-1,4-Dichloro-2-butene	11.4 U	14.1 U	11.5 U	13.6 U	12.8 U	15.3 U
Trichloroethene	2.3 U	2.8 U	2.3 U	2.7 U	2.6 U	3.1 U
Trichlorofluormethane	2.3 U	2.8 U	2.3 U	54.3 UJK	2.6 U	3.1 U
Vinyl Chloride	2.3 U	2.8 U	2.3 U	13.6 U	2.6 U	3.1 U

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for VOCs

Constituent	Station ID:	DR217	DR221	DR224	DR238	DR242	DR249
	Sample ID:	SD-DR217-0000	SD-DR221-0000	SD-DR224-0000	SD-DR238-0000	SD-DR242-0000-CC	SD-DR249-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Volatile Organic Compounds (ug/kg)							
1,1,1,2-Tetrachloroethane		2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
1,1,1-Trichloroethane		2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
1,1,2,2-Tetrachloroethane		2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
1,1,2-Trichloroethane		5.1 U	2.9 U	4.6 U	3.0 U	3.4 U	2.4 U
1,1-Dichloroethane		2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
1,1-Dichloroethene		5.1 U	5.8 U	4.6 U	3.0 U	3.4 U	2.4 U
1,1-Dichloropropanone		12.8 U	29.2 U	11.4 U	6.0 U	6.8 U	4.9 U
1,1-Dichloropropene		2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
1,2,3-Trichlorobenzene		5.1 U	2.9 U	4.6 U	6.0 U	6.8 U	4.9 U
1,2,3-Trichloropropane		5.1 U	14.6 U	4.6 U	3.0 U	3.4 U	2.4 U
1,2,4-Trimethylbenzene		2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
1,2-Dibromo-3-chloropropane		5.1 U	5.8 UJK	4.6 U	14.9 U	17.0 U	12.3 U
1,2-Dibromoethane		5.1 U	2.9 U	4.6 U	3.0 U	3.4 U	2.4 U
1,2-Dichloroethane		2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
1,2-Dichloropropane		2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
1,3,5-Trimethylbenzene		2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
1,3-Dichloropropane		2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
1-Chlorobutane		2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
2,2-Dichloropropane		2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
2-Butanone		5.1 U	5.8 U	5.3	6.0 U	6.8 U	4.9 U
2-Chlorotoluene		2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
2-Hexanone		10.3 U	5.8 U	9.2 U	6.0 U	6.8 U	4.9 U
2-Nitropropane		12.8 U	14.6 U	11.4 U	14.9 U	17.0 U	12.3 U
4-Chlorotoluene		2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
4-Methyl-2-Pentanone		5.1 U	5.8 U	4.6 U	6.0 U	6.8 U	4.9 U

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for VOCs

Constituent	Station ID:	DR217	DR221	DR224	DR238	DR242	DR249
	Sample ID:	SD-DR217-0000	SD-DR221-0000	SD-DR224-0000	SD-DR238-0000	SD-DR242-0000-CC	SD-DR249-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Acetone		103 UJK	117 UJK	11.2 UJK	29.8 UJK	34.1 UJK	24.6 UJK
Acrylonitrile							
Allyl chloride		5.1 U	2.9 U	4.6 U	3.0 U	3.4 U	2.4 U
Benzene		2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
Bromobenzene		2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
Bromochloromethane		5.1 U	2.9 U	4.6 U	3.0 U	3.4 U	2.4 U
Bromodichloromethane		2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
Bromoform		12.8 U	5.8 U	11.4 U	6.0 U	6.8 U	4.9 U
Bromomethane		25.7 U	14.6 U	22.9 U	14.9 U	17.0 U	12.3 U
Carbon Disulfide		5.1 U	5.8 U	4.6 U	6.0 U	2.4 JQ	4.9 U
Carbon Tetrachloride		2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
Chloroacetonitrile							
Chlorobenzene		2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
Chloroethane		51.4 U	14.6 U	45.8 U	6.0 U	6.8 U	4.9 U
Chloroform		2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
Chloromethane		5.1 U	14.6 U	4.6 U	3.0 U	3.4 U	2.4 U
cis-1,2-Dichloroethene		2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
cis-1,3-Dichloropropene		2.7 U	3.1 U	2.4 U	3.2 U	3.6 U	2.6 U
Dibromochloromethane		12.8 U	5.8 U	11.4 U	3.0 U	3.4 U	2.4 U
Dibromomethane		5.1 U	2.9 U	4.6 U	3.0 U	3.4 U	2.4 U
Diethyl ether		5.1 U	5.8 U	4.6 U	3.0 U	3.4 U	2.4 U
Ethylbenzene		2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
Ethylmethacrylate		5.1 U	2.9 U	4.6 U	3.0 U	3.4 U	2.4 U
Freon 113		5.1 U	58.5 U	4.6 U	3.0 U	3.4 U	2.4 U
Freon 12							
Isopropylbenzene		2.6 U	2.9 U	2.3 U	14.9 U	17.0 U	12.3 U
m,p-Xylene		5.1 U	5.8 U	4.6 U	6.0 U	6.8 U	4.9 U

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for VOCs

Station ID:	DR217	DR221	DR224	DR238	DR242	DR249
Sample ID:	SD-DR217-0000	SD-DR221-0000	SD-DR224-0000	SD-DR238-0000	SD-DR242-0000-CC	SD-DR249-0000
Constituent Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Methacrylonitrile	5.1 U	5.8 U	4.6 U	14.9 U	17.0 U	12.3 U
Methyl acrylate	2.6 U	5.8 U	2.3 U	14.9 U	17.0 U	12.3 U
Methyl Iodide	5.1 U	2.9 U	4.6 U	3.0 U	3.4 U	2.4 U
Methyl Methacrylate	2.6 U	2.9 U	2.3 U	6.0 U	6.8 U	4.9 U
Methyl-t-butyl ether	2.6 U	5.8 U	2.3 U	3.0 U	3.4 U	2.4 U
Methylene Chloride	5.1 U	14.6 U	4.6 U	14.9 U	17.0 U	12.3 U
n-Butylbenzene	2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
n-Propylbenzene	2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
o-Xylene	2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
p-Isopropyltoluene	2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
Pentachloroethane	5.1 U	5.8 U	4.6 U	3.0 U	3.4 U	2.4 U
sec-Butylbenzene	2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
Styrene	5.1 U	2.9 U	4.6 U	3.0 U	3.4 U	2.4 U
tert-Butylbenzene	2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
Tetrachloroethene	2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
Tetrahydrofuran						
Toluene	2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
trans-1,2-Dichloroethene	2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
trans-1,3-Dichloropropene	2.4 U	2.7 U	2.2 U	5.6 U	6.4 U	4.6 U
trans-1,4-Dichloro-2-butene	12.8 U	14.6 U	11.4 U	14.9 U	17.0 U	12.3 U
Trichloroethene	2.6 U	2.9 U	2.3 U	3.0 U	3.4 U	2.4 U
Trichlorofluormethane	25.7 U	58.5 UJK	22.9 U	3.0 U	3.4 U	2.4 U
Vinyl Chloride	12.8 U	14.6 U	11.4 U	3.0 U	3.4 U	2.4 U

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for VOCs

Constituent	Station ID:	DR256	DR258	DR266	DR284	DR289	DR291
	Sample ID:	SD-DR256-0000	SD-DR258-0000	SD-DR266-0000	SD-DR284-0000	SD-DR289-0000	SD-DR291-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Volatile Organic Compounds (ug/kg)							
1,1,1,2-Tetrachloroethane		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
1,1,1-Trichloroethane		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
1,1,2,2-Tetrachloroethane		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
1,1,2-Trichloroethane		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
1,1-Dichloroethane		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
1,1-Dichloroethene		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
1,1-Dichloropropanone		5.5 U	4.7 U	7.6 UJL	5.9 U	6.6 U	7.6 U
1,1-Dichloropropene		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
1,2,3-Trichlorobenzene		5.5 U	4.7 U	7.6 UJL	5.9 U	6.6 U	7.6 U
1,2,3-Trichloropropane		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
1,2,4-Trimethylbenzene		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
1,2-Dibromo-3-chloropropane		13.7 U	11.8 U	19.0 U	14.7 U	16.5 U	19.0 U
1,2-Dibromoethane		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
1,2-Dichloroethane		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
1,2-Dichloropropane		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
1,3,5-Trimethylbenzene		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
1,3-Dichloropropane		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
1-Chlorobutane		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
2,2-Dichloropropane		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
2-Butanone		5.5 U	4.7 U	7.6 U	5.9 U	6.6 U	13.0
2-Chlorotoluene		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
2-Hexanone		5.5 U	4.7 U	7.6 UJL	5.9 U	6.6 U	7.6 U
2-Nitropropane		13.7 U	11.8 U	19.0 U	14.7 U	16.5 U	19.0 U
4-Chlorotoluene		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
4-Methyl-2-Pentanone		5.5 U	4.7 U	7.6 U	5.9 U	6.6 U	7.6 U

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for VOCs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR256 SD-DR256-0000 0 to 10 cm	DR258 SD-DR258-0000 0 to 10 cm	DR266 SD-DR266-0000 0 to 10 cm	DR284 SD-DR284-0000 0 to 10 cm	DR289 SD-DR289-0000 0 to 10 cm	DR291 SD-DR291-0000 0 to 10 cm
Acetone		27.4 UJK	23.5 UJK	38.0 UJK	29.4 UJK	33.1 UJK	38 UJK
Acrylonitrile							
Allyl chloride		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
Benzene		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
Bromobenzene		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
Bromochloromethane		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
Bromodichloromethane		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
Bromoform		5.5 U	4.7 U	7.6 UJL	5.9 U	6.6 U	7.6 U
Bromomethane		13.7 U	11.8 U	19.0 U	14.7 U	16.5 U	19.0 U
Carbon Disulfide		5.5 U	4.7 U	7.6 U	1.1 JQ	6.6 U	1.2 JQ
Carbon Tetrachloride		2.7 U	2.4 U	3.8 UJL	2.9 U	3.3 U	3.8 U
Chloroacetonitrile							
Chlorobenzene		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
Chloroethane		5.5 U	4.7 U	7.6 U	5.9 U	6.6 U	7.6 U
Chloroform		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
Chloromethane		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
cis-1,2-Dichloroethene		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
cis-1,3-Dichloropropene		2.9 U	2.5 U	4.0 UJL	3.1 U	3.5 U	4.0 U
Dibromochloromethane		2.7 U	2.4 U	3.8 UJL	2.9 U	3.3 U	3.8 U
Dibromomethane		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
Diethyl ether		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
Ethylbenzene		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
Ethylmethacrylate		2.7 U	2.4 U	3.8 UJL	2.9 U	3.3 U	3.8 U
Freon 113		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
Freon 12		2.7 U					
Isopropylbenzene		13.7 U	11.8 U	19.0 U	14.7 U	16.5 U	19.0 U
m,p-Xylene		5.5 U	4.7 U	7.6 U	5.9 U	6.6 U	7.6 U

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for VOCs

Constituent	Station ID:	DR256	DR258	DR266	DR284	DR289	DR291
	Sample ID:	SD-DR256-0000	SD-DR258-0000	SD-DR266-0000	SD-DR284-0000	SD-DR289-0000	SD-DR291-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Methacrylonitrile		13.7 U	11.8 U	19.0 U	14.7 U	16.5 U	19.0 U
Methyl acrylate		13.7 U	11.8 U	19.0 U	14.7 U	16.5 U	19.0 U
Methyl Iodide		2.7 U	2.4 U	3.8 UJL	2.9 U	3.3 U	3.8 U
Methyl Methacrylate		5.5 U	4.7 U	7.6 U	5.9 U	6.6 U	7.6 U
Methyl-t-butyl ether		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
Methylene Chloride		13.7 U	11.8 U	19.0 U	14.7 U	16.5 U	19.0 U
n-Butylbenzene		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
n-Propylbenzene		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
o-Xylene		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
p-Isopropyltoluene		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	1.6 JQ
Pentachloroethane		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
sec-Butylbenzene		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
Styrene		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
tert-Butylbenzene		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
Tetrachloroethene		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
Tetrahydrofuran							
Toluene		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
trans-1,2-Dichloroethene		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
trans-1,3-Dichloropropene		5.2 U	4.4 U	7.1 UJL	5.5 U	6.2 U	7.1 U
trans-1,4-Dichloro-2-butene		13.7 U	11.8 U	19.0 UJL	14.7 U	16.5 U	19.0 U
Trichloroethene		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
Trichlorofluormethane		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U
Vinyl Chloride		2.7 U	2.4 U	3.8 U	2.9 U	3.3 U	3.8 U

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for VOCs

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR297 SD-DR297-0000 0 to 10 cm	DR298 SD-DR298-0000 0 to 10 cm	DR299 SD-DR299-0000 0 to 10 cm	DR300 SD-DR300-0000 0 to 10 cm	DR301 SD-DR301-0000 0 to 10 cm
Volatile Organic Compounds (ug/kg)						
1,1,1,2-Tetrachloroethane		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
1,1,1-Trichloroethane		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
1,1,2,2-Tetrachloroethane		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
1,1,2-Trichloroethane		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
1,1-Dichloroethane		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
1,1-Dichloroethene		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
1,1-Dichloropropanone		3.0 U	3.1 U	3.1 U	3.2 U	3.1 U
1,1-Dichloropropene		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
1,2,3-Trichlorobenzene		3.0 U	3.1 U	3.1 U	3.2 U	3.1 U
1,2,3-Trichloropropane		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
1,2,4-Trimethylbenzene		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
1,2-Dibromo-3-chloropropane		7.6 U	7.8 U	7.7 U	8.1 U	7.7 U
1,2-Dibromoethane		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
1,2-Dichloroethane		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
1,2-Dichloropropane		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
1,3,5-Trimethylbenzene		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
1,3-Dichloropropane		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
1-Chlorobutane		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
2,2-Dichloropropane		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
2-Butanone		3.0 U	3.1 U	3.1 U	3.2 U	3.1 U
2-Chlorotoluene		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
2-Hexanone		3.0 U	3.1 U	3.1 U	3.2 U	3.1 U
2-Nitropropane		7.6 U	7.8 U	7.7 U	8.1 U	7.7 U
4-Chlorotoluene		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
4-Methyl-2-Pentanone		3.0 U	3.1 U	3.1 U	3.2 U	3.1 U

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for VOCs

Constituent	Station ID:	DR297	DR298	DR299	DR300	DR301
	Sample ID:	SD-DR297-0000	SD-DR298-0000	SD-DR299-0000	SD-DR300-0000	SD-DR301-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Acetone		15.2 U	15.5 UJK	15.4 UJK	16.2 UJK	15.5 UJK
Acrylonitrile		7.6 U				
Allyl chloride		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
Benzene		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
Bromobenzene		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
Bromochloromethane		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
Bromodichloromethane		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
Bromoform		3.0 U	3.1 U	3.1 U	3.2 U	3.1 U
Bromomethane		7.6 U	7.8 U	7.7 U	8.1 U	7.7 U
Carbon Disulfide		3.0 U	3.1 U	3.1 U	3.2 U	3.1 U
Carbon Tetrachloride		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
Chloroacetonitrile		7.6 U				
Chlorobenzene		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
Chloroethane		3.0 U	3.1 U	3.1 U	3.2 U	3.1 U
Chloroform		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
Chloromethane		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
cis-1,2-Dichloroethene		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
cis-1,3-Dichloropropene		1.6 U	1.6 U	1.6 U	1.7 U	1.6 U
Dibromochloromethane		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
Dibromomethane		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
Diethyl ether		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
Ethylbenzene		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
Ethylmethacrylate		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
Freon 113		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
Freon 12		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
Isopropylbenzene		7.6 U	7.8 U	7.7 U	8.1 U	7.7 U
m,p-Xylene		3.0 U	3.1 U	3.1 U	3.2 U	3.1 U

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for VOCs

Constituent	Station ID:	DR297	DR298	DR299	DR300	DR301
	Sample ID:	SD-DR297-0000	SD-DR298-0000	SD-DR299-0000	SD-DR300-0000	SD-DR301-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Methacrylonitrile		7.6 U		7.7 U	8.1 U	7.7 U
Methyl acrylate		7.6 U	7.8 U	7.7 U	8.1 U	7.7 U
Methyl Iodide		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
Methyl Methacrylate		3.0 U	3.1 U	3.1 U	3.2 U	3.1 U
Methyl-t-butyl ether		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
Methylene Chloride		7.6 U	7.8 U	7.7 U	8.1 U	7.7 U
n-Butylbenzene		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
n-Propylbenzene		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
o-Xylene		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
p-Isopropyltoluene		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
Pentachloroethane		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
sec-Butylbenzene		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
Styrene		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
tert-Butylbenzene		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
Tetrachloroethene		0.52 JQ	1.6 U	1.5 U	1.6 U	0.21 JQ
Tetrahydrofuran		7.6 U	7.8 U			
Toluene		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
trans-1,2-Dichloroethene		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
trans-1,3-Dichloropropene		2.8 U	2.9 U	2.9 U	3.0 U	2.9 U
trans-1,4-Dichloro-2-butene		7.6 U	7.8 U	7.7 U	8.1 U	7.7 U
Trichloroethene		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
Trichlorofluormethane		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U
Vinyl Chloride		1.5 U	1.6 U	1.5 U	1.6 U	1.5 U

Blank cells indicate no analysis were performed.

APPENDIX E-7

TOC/GRAIN SIZE (SURFACE SEDIMENT)

Duwamish River Sediment Investigation - Statistics for Surface Sediment Results for TOC and Grain Size

Constituent	Number of Samples Analyzed	Number of Detections	Detection Frequency (%)	Minimum Detected Value	Maximum Detected Value	Sample Number of Maximum Detected Value	Arithmetic Mean	Median Value
Conventional Parameters								
Total Organic Carbon (%)	300	300	100.0	0.08	9.23	SD-DR042-0000	2.198	2.190
Grain Size (%)								
>9525 microns-Fractional %	300	300	100.0	0.00	0.00	SD-DR004-0000	0.000	0.000
9525-4000 microns-Fractional %	300	300	100.0	0.00	58.85	SD-DR124-0000	0.874	0.000
4000-2000 microns-Fractional %	300	300	100.0	0.00	14.40	SD-DR209-0000	0.872	0.155
2000-1000 microns-Fractional %	300	300	100.0	0.00	37.01	SD-DR257-0000	1.751	0.770
1000-500 microns-Fractional %	300	300	100.0	0.24	62.75	SD-DR298-0000	4.934	2.150
500-250 microns-Fractional %	300	300	100.0	0.44	58.22	SD-DR172-0000	9.140	4.360
250-125 microns-Fractional %	300	300	100.0	0.46	32.20	SD-DR274-0000	7.428	5.290
125-62 microns-Fractional %	300	300	100.0	0.09	36.28	SD-DR167-0000	9.980	8.020
62-31 microns-Fractional %	300	291	97.0	0.06	30.52	SD-DR238-0000	11.781	11.570
31-15.6 microns-Fractional %	300	291	97.0	0.18	37.14	SD-DR113-0000-CC	15.580	15.540
15.6-7.8 microns-Fractional %	300	291	97.0	0.03	32.28	SD-DR241-0000	13.837	15.160
7.8-3.9 microns-Fractional %	300	291	97.0	0.07	21.00	SD-DR159-0000	8.719	8.370
3.9-2 microns-Fractional %	300	291	97.0	0.13	20.78	SD-DR015-0000	5.064	4.440
2-1 microns-Fractional %	300	291	97.0	0.01	7.78	SD-DR068-0000	3.214	2.825
<1 microns-Fractional %	300	291	97.0	0.23	15.30	SD-DR018-0000	7.007	6.470
Total Fines	300	291	97.0	1.32	104.99	SD-DR113-0000-CC	65.202	73.385
Total Sand	300	300	100.0	2.99	99.35	SD-DR297-0000	33.235	24.665

Bold text indicates constituent was detected one or more times.
n/a - Not Applicable

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID:	DR001	DR002	DR003	DR004	DR005	DR006
	Sample ID:	SD-DR001-0000	SD-DR002-0000	SD-DR003-0000	SD-DR004-0000	SD-DR005-0000	SD-DR006-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		3.01	2.31	2.12	2.56	2.30	2.72
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		3.74	0.00	2.02	0.00	0.00	4.54
4000-2000 microns-Fractional %		2.60	0.43	0.15	0.15	0.93	0.51
2000-1000 microns-Fractional %		1.60	1.48	1.24	0.84	1.26	1.08
1000-500 microns-Fractional %		2.27	1.56	2.35	1.15	1.59	1.24
500-250 microns-Fractional %		5.62	2.71	4.82	1.85	2.74	3.27
250-125 microns-Fractional %		6.48	3.36	5.69	3.49	6.69	8.32
125-62 microns-Fractional %		7.24	4.70	5.51	4.67	8.66	8.77
62-31 microns-Fractional %		9.78	7.28	7.49	7.49	6.70	6.31
31-15.6 microns-Fractional %		12.29	14.09	15.89	14.21	14.12	14.31
15.6-7.8 microns-Fractional %		17.33	18.88	21.41	21.46	19.50	21.15
7.8-3.9 microns-Fractional %		9.27	16.26	10.45	14.79	13.01	9.89
3.9-2 microns-Fractional %		6.78	9.31	6.65	10.42	7.50	5.86
2-1 microns-Fractional %		5.04	6.43	5.67	6.68	5.62	4.84
<1 microns-Fractional %		9.94	13.51	10.67	12.79	11.68	9.93
Total Fines		70.43 T	85.76 T	78.23 T	87.84 T	78.13 T	72.29 T
Total Sand		23.21 T	13.81 T	19.61 T	12 T	20.94 T	22.68 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR007 SD-DR007-0000 0 to 10 cm	DR008 SD-DR008-0000 0 to 10 cm	DR009 SD-DR009-0000 0 to 10 cm	DR010 SD-DR010-0000 0 to 10 cm	DR011 SD-DR011-0000 0 to 10 cm	DR012 SD-DR012-0000 0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		3.48	4.74	5.55	1.40	2.49	2.31
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.02	0.25	0.00	0.00	0.00	0.00
4000-2000 microns-Fractional %		0.17	1.19	0.11	1.09	0.25	0.11
2000-1000 microns-Fractional %		1.01	2.25	2.18	2.38	1.48	1.46
1000-500 microns-Fractional %		1.91	4.21	3.85	8.08	1.75	1.61
500-250 microns-Fractional %		7.37	8.69	6.87	27.88	5.70	2.47
250-125 microns-Fractional %		19.96	11.98	10.32	23.39	5.72	3.19
125-62 microns-Fractional %		9.74	8.88	8.95	11.66	6.63	6.68
62-31 microns-Fractional %		5.35	6.41	12.82	5.69	7.02	11.02
31-15.6 microns-Fractional %		21.68	36.38	35.56	4.25	15.50	15.69
15.6-7.8 microns-Fractional %		11.39	7.24	6.82	4.42	18.00	17.78
7.8-3.9 microns-Fractional %		6.35	3.05	3.32	3.13	12.93	14.48
3.9-2 microns-Fractional %		4.06	1.75	1.49	2.52	8.17	8.81
2-1 microns-Fractional %		3.44	1.64	1.47	1.36	5.10	4.57
<1 microns-Fractional %		7.54	6.10	6.24	4.12	11.74	12.13
Total Fines		59.81 T	62.57 T	67.72 T	25.49 T	78.46 T	84.48 T
Total Sand		39.99 T	36.01 T	32.17 T	73.39 T	21.28 T	15.41 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR013 / SD-DR013-0000 / 0 to 10 cm	DR014 / SD-DR014-0000 / 0 to 10 cm	DR015 / SD-DR015-0000 / 0 to 10 cm	DR016 / SD-DR016-0000 / 0 to 10 cm	DR017 / SD-DR017-0000 / 0 to 10 cm	DR018 / SD-DR018-0000 / 0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		2.16	2.45	2.62	2.79	2.74	2.21
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	1.36	0.00	0.46	0.00	0.00
4000-2000 microns-Fractional %		0.50	0.69	0.03	3.11	0.50 J	0.00
2000-1000 microns-Fractional %		1.50	2.08	1.29	2.04	1.70 J	0.65
1000-500 microns-Fractional %		1.86	1.89	1.36	1.61	1.49 J	1.22
500-250 microns-Fractional %		2.36	5.38	1.67	1.82	1.33 J	1.92
250-125 microns-Fractional %		2.94	5.75	0.89	1.16	1.17 J	0.96
125-62 microns-Fractional %		5.07	5.41	2.38	2.24	1.97 J	1.59
62-31 microns-Fractional %		6.61	5.91	5.97	6.36	4.36	5.95
31-15.6 microns-Fractional %		13.33	14.42	16.64	14.37	14.44	16.10
15.6-7.8 microns-Fractional %		19.48	17.75	19.88	17.87	21.77	21.21
7.8-3.9 microns-Fractional %		17.01	14.52	6.77	17.42	18.09	17.97
3.9-2 microns-Fractional %		10.57	9.02	20.78	9.73	10.77	10.69
2-1 microns-Fractional %		6.28	2.88	7.27	7.28	7.27	6.45
<1 microns-Fractional %		12.48	12.95	15.06	14.54	15.13	15.30
Total Fines		85.76 T	77.45 T	92.37 T	87.57 T	91.83 T	93.67 T
Total Sand		13.73 T	20.51 T	7.59 T	8.87 T	7.66 T	6.34 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR019 / SD-DR019-0000 / 0 to 10 cm	DR020 / SD-DR020-0000 / 0 to 10 cm	DR021 / SD-DR021-0000 / 0 to 10 cm	DR022 / SD-DR022-0000-CC / 0 to 10 cm	DR023 / SD-DR023-0000 / 0 to 10 cm	DR024 / SD-DR024-0000 / 0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		2.61	2.72	3.10	1.59	2.51	2.51
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
4000-2000 microns-Fractional %		0.10	2.82	0.43 J	1.56	0.09 J	0.40 J
2000-1000 microns-Fractional %		1.33	1.74	1.95 J	2.61	1.61 J	1.41 J
1000-500 microns-Fractional %		1.22	2.58	1.98 J	7.68	1.87 J	1.56 J
500-250 microns-Fractional %		1.63	4.94	3.16 J	20.85	2.55 J	2.07 J
250-125 microns-Fractional %		1.65	5.69	1.88 J	23.87	1.80 J	1.76 J
125-62 microns-Fractional %		1.99	4.08	4.33 J	7.46	3.39 J	3.78 J
62-31 microns-Fractional %		4.53	5.08	7.73	5.21	8.34	9.18
31-15.6 microns-Fractional %		17.53	10.29	15.58	8.06	19.34	18.80
15.6-7.8 microns-Fractional %		18.99	18.49	18.69	8.25	19.96	21.18
7.8-3.9 microns-Fractional %		18.93	15.04	15.75	6.94	15.39	14.26
3.9-2 microns-Fractional %		10.56	9.32	9.07	3.91	8.68	8.16
2-1 microns-Fractional %		6.79	6.84	6.33	2.80	5.27	5.66
<1 microns-Fractional %		14.75	13.08	13.11	6.05	11.71	11.77
Total Fines		92.08 T	78.14 T	86.26 T	41.22 T	88.69 T	89.01 T
Total Sand		7.82 T	19.03 T	13.3 T	62.47 T	11.22 T	10.58 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID:	DR025	DR026	DR027	DR028	DR030	DR031
	Sample ID:	SD-DR025-0000	SD-DR026-0000	SD-DR027-0000	SD-DR028-0000	SD-DR030-0000	SD-DR031-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		2.83	3.24	2.49	2.43	2.78	2.07
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	2.82	0.00	0.00	0.00	1.75
4000-2000 microns-Fractional %		0.87	2.73	0.40	0.29	0.08	3.57
2000-1000 microns-Fractional %		2.67	1.96	1.41	2.57	1.41	4.75
1000-500 microns-Fractional %		2.72	3.22	1.56	3.36	3.73	6.76
500-250 microns-Fractional %		3.75	5.79	2.07	6.79	9.32	18.67
250-125 microns-Fractional %		3.18	3.52	1.76	6.57	7.35	18.94
125-62 microns-Fractional %		5.13	5.01	3.78	5.61	4.92	10.55
62-31 microns-Fractional %		8.82	8.01	9.18	10.11	5.95	4.08
31-15.6 microns-Fractional %		17.13	14.76	18.80	14.47	22.50	4.96
15.6-7.8 microns-Fractional %		18.41	16.79	21.18	15.97	21.51	6.66
7.8-3.9 microns-Fractional %		13.29	12.14	14.26	15.51	7.56	6.14
3.9-2 microns-Fractional %		7.57	7.67	8.16	9.23	3.81	4.21
2-1 microns-Fractional %		5.28	4.80	5.66	0.44	4.08	2.97
<1 microns-Fractional %		11.19	10.78	11.77	9.08	7.78	5.98
Total Fines		81.69 T	74.95 T	89.01 T	74.81 T	73.19 T	35 T
Total Sand		17.45 T	19.5 T	10.58 T	24.9 T	26.73 T	59.67 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Station ID:	DR032	DR033	DR034	DR035	DR036	DR037
Sample ID:	SD-DR032-0000	SD-DR033-0000	SD-DR034-0000	SD-DR035-0000	SD-DR036-0000	SD-DR037-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Conventional Parameters						
Total Organic Carbon (%)	1.79	1.72	1.84	2.29	3.37	2.02
Grain Size (%)						
>9525 microns-Fractional %	0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %	0.00	0.00	0.00	0.00	5.32	0.00
4000-2000 microns-Fractional %	0.41	0.17	0.19	0.57	7.13	0.04
2000-1000 microns-Fractional %	1.32	0.75	1.34	2.65	8.33	0.22
1000-500 microns-Fractional %	5.70	2.11	2.95	2.72	12.58	4.39
500-250 microns-Fractional %	19.71	12.60	14.73	5.42	27.08	3.84
250-125 microns-Fractional %	11.19	18.72	10.69	7.02	24.88	1.76
125-62 microns-Fractional %	4.28	8.52	9.30	9.59	6.78	3.68
62-31 microns-Fractional %	4.49	6.29	7.22	10.44	0.42 J	5.50
31-15.6 microns-Fractional %	8.85	8.93	9.15	12.66	1.11 J	15.63
15.6-7.8 microns-Fractional %	12.32	10.68	11.21	15.86	1.44 J	21.48
7.8-3.9 microns-Fractional %	10.59	10.48	11.05	10.98	1.25 J	15.93
3.9-2 microns-Fractional %	6.63	6.99	7.43	6.58	0.77 J	9.70
2-1 microns-Fractional %	4.67	4.46	4.97	4.88	0.53 J	6.58
<1 microns-Fractional %	9.85	9.29	9.76	10.63	2.36 J	11.27
Total Fines	57.4 T	57.12 T	60.79 T	72.03 T	7.88 T	86.09 T
Total Sand	42.2 T	42.7 T	39.01 T	27.4 T	79.65 T	13.89 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR038 SD-DR038-0000 0 to 10 cm	DR039 SD-DR039-0000 0 to 10 cm	DR040 SD-DR040-0000 0 to 10 cm	DR041 SD-DR041-0000 0 to 10 cm	DR042 SD-DR042-0000 0 to 10 cm	DR043 SD-DR043-0000 0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		2.62	2.43	4.69	2.43	9.23	4.48
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.95	0.20	5.07	0.00	2.06	1.35
4000-2000 microns-Fractional %		1.94	1.25	5.71	0.04	8.84	0.72
2000-1000 microns-Fractional %		1.24	2.03	4.59	1.70	10.82	2.46
1000-500 microns-Fractional %		2.49	1.94	3.73	2.06	5.22	3.51
500-250 microns-Fractional %		5.11	3.31	4.79	3.63	2.87	4.32
250-125 microns-Fractional %		4.39	1.80	3.44	1.30	1.79	10.93
125-62 microns-Fractional %		5.97	2.32	2.56	2.74	1.38	19.84
62-31 microns-Fractional %		8.82	4.38	2.99	5.78	4.02	13.91
31-15.6 microns-Fractional %		11.99	14.05	11.85	15.90	21.09	10.49
15.6-7.8 microns-Fractional %		14.92	21.75	16.95	19.77	15.69	9.79
7.8-3.9 microns-Fractional %		12.84	16.09	12.53	16.41	7.28	7.69
3.9-2 microns-Fractional %		9.57	10.00	8.30	10.09	4.95	4.39
2-1 microns-Fractional %		5.95	7.02	5.62	6.68	3.73	2.97
<1 microns-Fractional %		13.81	13.86	11.86	13.89	10.26	7.64
Total Fines		77.9 T	87.15 T	70.1 T	88.52 T	67.02 T	56.88 T
Total Sand		19.2 T	11.4 T	19.11 T	11.43 T	22.08 T	41.06 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR044 / SD-DR044-0000 / 0 to 10 cm	DR045 / SD-DR045-0000 / 0 to 10 cm	DR046 / SD-DR046-0000 / 0 to 10 cm	DR047 / SD-DR047-0000 / 0 to 10 cm	DR048 / SD-DR048-0000 / 0 to 10 cm	DR049 / SD-DR049-0000 / 0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		2.08	2.92	2.26	1.40	2.03	2.64
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.00	0.19	0.00	0.00
4000-2000 microns-Fractional %		0.40	0.49	0.45	0.42	0.38	0.43 J
2000-1000 microns-Fractional %		1.41	0.42	2.11	0.87	1.16	1.48 J
1000-500 microns-Fractional %		1.59	1.36	2.21	2.61	3.41	1.56 J
500-250 microns-Fractional %		4.89	2.89	3.55	6.36	4.61	2.71 J
250-125 microns-Fractional %		11.44	17.97	7.20	13.98	3.72	3.36 J
125-62 microns-Fractional %		23.95	33.06	17.77	27.39	4.08	4.70 J
62-31 microns-Fractional %		13.69	16.89	17.24	17.49	5.91	7.28
31-15.6 microns-Fractional %		12.52	6.71	17.09	7.66	15.25	14.09
15.6-7.8 microns-Fractional %		11.69	5.73	11.34	5.99	18.08	18.88
7.8-3.9 microns-Fractional %		5.35	4.59	6.10	5.36	16.23	16.26
3.9-2 microns-Fractional %		3.71	3.20	4.24	3.90	8.93	9.31
2-1 microns-Fractional %		2.80	2.35	3.15	2.42	5.94	6.43
<1 microns-Fractional %		6.55	4.34	7.55	5.36	12.30	13.51
Total Fines		56.31 T	43.81 T	66.71 T	48.18 T	82.64 T	85.76 T
Total Sand		43.28 T	55.7 T	32.84 T	51.21 T	16.98 T	13.81 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Station ID:	DR050	DR051	DR052	DR053	DR054	DR055
Sample ID:	SD-DR050-0000	SD-DR051-0000	SD-DR052-0000	SD-DR053-0000-CC	SD-DR054-0000	SD-DR055-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Conventional Parameters						
Total Organic Carbon (%)	4.12	2.77	2.56	2.80	2.36	5.88
Grain Size (%)						
>9525 microns-Fractional %	0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %	1.77	0.52	0.00	5.23	0.00	0.00
4000-2000 microns-Fractional %	1.28	3.57	0.57 J	4.09	5.71 J	0.09
2000-1000 microns-Fractional %	0.93	4.75	2.65 J	2.21	4.59 J	0.23
1000-500 microns-Fractional %	1.56	6.76	2.72 J	2.88	3.73 J	1.16
500-250 microns-Fractional %	2.01	18.67	5.42 J	2.77	4.79 J	2.32
250-125 microns-Fractional %	2.21	18.94	7.02 J	2.75	3.44 J	2.30
125-62 microns-Fractional %	4.59	10.55	9.59 J	4.12	2.56 J	4.32
62-31 microns-Fractional %	9.35	4.08	10.44	10.08	2.99	6.28
31-15.6 microns-Fractional %	16.68	4.96	12.66	16.01	11.85	16.45
15.6-7.8 microns-Fractional %	21.84	6.66	15.86	17.01	16.95	19.34
7.8-3.9 microns-Fractional %	11.63	6.14	10.98	14.04	12.53	16.81
3.9-2 microns-Fractional %	8.71	4.21	6.58	9.00	8.30	9.46
2-1 microns-Fractional %	5.90	2.97	4.88	5.76	5.62	6.29
<1 microns-Fractional %	11.54	5.98	10.63	11.82	11.86	14.95
Total Fines	85.65 T	35 T	72.03 T	83.72 T	70.1 T	89.58 T
Total Sand	11.3 T	59.67 T	27.4 T	14.73 T	19.11 T	10.33 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR056 / SD-DR056-0000 / 0 to 10 cm	DR057 / SD-DR057-0000 / 0 to 10 cm	DR058 / SD-DR058-0000 / 0 to 10 cm	DR059 / SD-DR059-0000 / 0 to 10 cm	DR060 / SD-DR060-0000 / 0 to 10 cm	DR061 / SD-DR061-0000 / 0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		1.89	1.79	0.90	2.73	1.93	2.65
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.96	0.00	0.00	0.00
4000-2000 microns-Fractional %		0.00	0.38	2.02	0.15	0.16	0.02
2000-1000 microns-Fractional %		0.11	1.64	3.35	1.57	1.85	1.55
1000-500 microns-Fractional %		2.76	4.06	15.77	1.13	2.31	1.80
500-250 microns-Fractional %		2.21	7.94	24.30	1.18	4.03	4.79
250-125 microns-Fractional %		1.75	10.87	13.27	1.16	3.82	3.28
125-62 microns-Fractional %		2.81	12.71	9.97	2.82	8.12	6.55
62-31 microns-Fractional %		6.19	8.34	5.70	4.59	11.14	10.06
31-15.6 microns-Fractional %		14.87	11.73	5.59	24.95	14.49	15.95
15.6-7.8 microns-Fractional %		20.32	11.50	5.66	28.39	16.94	18.53
7.8-3.9 microns-Fractional %		17.43	10.08	4.58	9.56	14.01	12.88
3.9-2 microns-Fractional %		12.08	6.51	2.69	6.41	7.89	8.38
2-1 microns-Fractional %		5.47	4.31	1.90	6.07	6.78	4.98
<1 microns-Fractional %		13.98	9.94	4.24	12.01	8.47	11.23
Total Fines		90.34 T	62.41 T	30.36 T	91.98 T	79.72 T	82.01 T
Total Sand		9.64 T	37.22 T	66.66 T	7.86 T	20.13 T	17.97 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR062 / SD-DR062-0000 / 0 to 10 cm	DR063 / SD-DR063-0000 / 0 to 10 cm	DR064 / SD-DR064-0000 / 0 to 10 cm	DR065 / SD-DR065-0000 / 0 to 10 cm	DR066 / SD-DR066-0000 / 0 to 10 cm	DR067 / SD-DR067-0000 / 0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		2.18	2.62	2.58	2.41	2.25	0.82
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	1.57
4000-2000 microns-Fractional %		0.15	0.09 J	0.00	0.41	0.50	0.05
2000-1000 microns-Fractional %		0.66	2.26 J	3.40	4.44	1.50	0.70
1000-500 microns-Fractional %		2.98	2.14 J	2.13	2.80	1.86	6.33
500-250 microns-Fractional %		9.84	2.33 J	3.11	3.18	2.36	31.87
250-125 microns-Fractional %		8.10	1.62 J	2.32	2.67	2.94	25.16
125-62 microns-Fractional %		3.59	3.46 J	4.96	4.95	5.07	8.86
62-31 microns-Fractional %		6.76	8.49	10.24	11.88	6.61	3.99
31-15.6 microns-Fractional %		14.53	17.33	17.03	19.35	13.33	3.12
15.6-7.8 microns-Fractional %		18.79	21.16	18.84	18.34	19.48	6.21
7.8-3.9 microns-Fractional %		11.38	14.75	11.41	12.56	17.01	4.35
3.9-2 microns-Fractional %		7.92	8.49	10.86	6.51	10.57	2.99
2-1 microns-Fractional %		4.64	5.58	4.47	3.84	6.28	1.64
<1 microns-Fractional %		10.64	12.29	11.24	9.08	12.48	3.16
Total Fines		74.66 T	88.09 T	84.09 T	81.56 T	85.76 T	25.46 T
Total Sand		25.17 T	11.81 T	15.92 T	18.04 T	13.73 T	72.92 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR068 / SD-DR068-0000 / 0 to 10 cm	DR069 / SD-DR069-0000-CC / 0 to 10 cm	DR070 / SD-DR070-0000 / 0 to 10 cm	DR071 / SD-DR071-0000 / 0 to 10 cm	DR072 / SD-DR072-0000 / 0 to 10 cm	DR073 / SD-DR073-0000 / 0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		2.36	1.92	1.75	2.16	2.19	2.49
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
4000-2000 microns-Fractional %		0.00	2.27	0.06	0.00	0.29	0.15
2000-1000 microns-Fractional %		0.00	5.48	1.58	0.00	2.65	1.24
1000-500 microns-Fractional %		1.91 J	2.07	3.15	6.01 J	2.24	2.35
500-250 microns-Fractional %		2.86 J	2.13	10.77	4.73 J	2.86	4.82
250-125 microns-Fractional %		1.90 J	1.71	10.45	1.97 J	2.60	5.69
125-62 microns-Fractional %		3.94 J	3.79	6.03	3.51 J	4.51	5.51
62-31 microns-Fractional %		6.59	7.41	6.46	6.37	6.80	7.49
31-15.6 microns-Fractional %		14.53	15.41	12.99	15.16	16.69	15.89
15.6-7.8 microns-Fractional %		22.29	19.19	14.15	20.36	19.55	21.41
7.8-3.9 microns-Fractional %		15.50	15.81	11.70	14.65	15.72	10.45
3.9-2 microns-Fractional %		10.24	9.99	7.64	9.65	9.33	6.65
2-1 microns-Fractional %		7.78	6.25	4.76	6.35	5.46	5.67
<1 microns-Fractional %		12.46	12.85	10.27	11.23	11.29	10.67
Total Fines		89.39 T	86.91 T	67.97 T	83.77 T	84.84 T	78.23 T
Total Sand		10.61 T	15.18 T	31.98 T	16.22 T	14.86 T	19.61 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR074 / SD-DR074-0000 / 0 to 10 cm	DR075 / SD-DR075-0000 / 0 to 10 cm	DR076 / SD-DR076-0000 / 0 to 10 cm	DR077 / SD-DR077-0000 / 0 to 10 cm	DR078 / SD-DR078-0000 / 0 to 10 cm	DR079 / SD-DR079-0000 / 0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		2.46	2.31	0.10	1.61	2.07	2.18
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	1.43	0.00	0.00	0.00	0.00
4000-2000 microns-Fractional %		0.17	0.19	0.70	0.17	0.29 J	0.00
2000-1000 microns-Fractional %		0.75	1.34	0.14	0.37	0.30 J	0.07 J
1000-500 microns-Fractional %		2.11	2.95	27.80	2.81	1.29 J	0.81 J
500-250 microns-Fractional %		12.60	14.73	52.73	10.99	1.99 J	1.09 J
250-125 microns-Fractional %		18.72	10.69	11.78	10.21	1.69 J	1.19 J
125-62 microns-Fractional %		8.52	9.30	3.63	6.05	3.30 J	3.34 J
62-31 microns-Fractional %		6.29	7.22	0.01 U	6.51	6.64	5.09
31-15.6 microns-Fractional %		8.93	9.15	0.01 U	11.81	14.81	15.97
15.6-7.8 microns-Fractional %		10.68	11.21	0.01 U	15.32	22.16	23.04
7.8-3.9 microns-Fractional %		10.48	11.05	0.01 U	13.51	16.95	17.59
3.9-2 microns-Fractional %		6.99	7.43	0.01 U	7.73	10.94	11.18
2-1 microns-Fractional %		4.46	4.97	0.01 U	5.07	6.62	6.76
<1 microns-Fractional %		9.29	9.76	0.01 U	9.47	13.01	13.87
Total Fines		57.12 T	60.79 T	0.01 UT	69.42 T	91.13 T	93.5 T
Total Sand		42.7 T	39.01 T	96.08 T	30.43 T	8.57 T	6.5 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR080 SD-DR080-0000 0 to 10 cm	DR081 SD-DR081-0000 0 to 10 cm	DR082 SD-DR082-0000 0 to 10 cm	DR083 SD-DR083-0000 0 to 10 cm	DR084 SD-DR084-0000 0 to 10 cm	DR085 SD-DR085-0000 0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		1.82	1.78	1.97	2.29	1.23	1.29
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.85	1.81	0.00	0.00	0.00	0.00
4000-2000 microns-Fractional %		1.59	6.03	1.05	0.17	0.46	0.31
2000-1000 microns-Fractional %		0.75	4.50	1.06	0.15	1.19	2.00
1000-500 microns-Fractional %		2.38	8.22	2.47	1.69	6.29	8.13
500-250 microns-Fractional %		3.29	10.91	4.44	3.48	21.41	13.01
250-125 microns-Fractional %		2.99	5.02	4.73	3.36	12.32	7.18
125-62 microns-Fractional %		5.57	5.12	7.15	6.41	7.44	8.18
62-31 microns-Fractional %		7.79	2.12	10.44	8.25	5.94	7.70
31-15.6 microns-Fractional %		12.17	14.89	14.94	19.19	7.00	9.86
15.6-7.8 microns-Fractional %		19.74	13.24	20.31	27.42	11.48	12.22
7.8-3.9 microns-Fractional %		14.15	9.59	10.99	9.51	7.31	8.10
3.9-2 microns-Fractional %		10.22	5.55	6.73	5.81	5.68	6.42
2-1 microns-Fractional %		6.20	4.21	5.65	4.98	4.40	4.98
<1 microns-Fractional %		12.30	8.80	10.04	9.58	9.09	11.92
Total Fines		82.57 T	58.4 T	79.1 T	84.74 T	50.9 T	61.2 T
Total Sand		14.98 T	33.77 T	19.85 T	15.09 T	48.65 T	38.5 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Station ID:	DR086	DR087	DR088	DR089	DR090	DR091
Sample ID:	SD-DR086-0000	SD-DR087-0000	SD-DR088-0000	SD-DR089-0000	SD-DR090-0000	SD-DR091-0000
Constituent Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Conventional Parameters						
Total Organic Carbon (%)	1.97	1.67	1.68	1.92	2.13	0.86
Grain Size (%)						
>9525 microns-Fractional %	0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %	0.00	19.24	0.00	0.16	0.00	1.08
4000-2000 microns-Fractional %	0.34	0.41	0.95	7.13	1.25 J	1.31
2000-1000 microns-Fractional %	0.43	1.32	1.02	8.33	2.03 J	1.43
1000-500 microns-Fractional %	1.70	5.70	3.50	12.58	1.94 J	8.34
500-250 microns-Fractional %	2.98	19.71	6.99	27.08	3.31 J	40.56
250-125 microns-Fractional %	1.80	11.19	5.26	24.88	1.80 J	21.77
125-62 microns-Fractional %	6.86	4.28	7.31	6.78	2.32 J	3.58
62-31 microns-Fractional %	13.84	4.49	9.99	0.42	4.38	3.57
31-15.6 microns-Fractional %	18.70	8.85	22.05	1.11	14.05	4.59
15.6-7.8 microns-Fractional %	18.61	12.32	20.35	1.44	21.75	4.25
7.8-3.9 microns-Fractional %	11.21	10.59	7.49	1.25	16.09	3.25
3.9-2 microns-Fractional %	8.54	6.63	4.38	0.77	10.00	1.99
2-1 microns-Fractional %	4.79	4.67	3.59	0.53	7.02	1.39
<1 microns-Fractional %	10.20	9.85	7.14	2.36	13.86	2.89
Total Fines	85.89 T	57.4 T	74.99 T	7.88 T	87.15 T	21.93 T
Total Sand	13.77 T	42.2 T	24.08 T	79.65 T	11.4 T	75.68 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR092 SD-DR092-0000 0 to 10 cm	DR093 SD-DR093-0000 0 to 10 cm	DR094 SD-DR094-0000 0 to 10 cm	DR095 SD-DR095-0000 0 to 10 cm	DR096 SD-DR096-0000 0 to 10 cm	DR097 SD-DR097-0000 0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		0.70	2.55	1.02	2.17	1.95	2.99
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.00	4.42	0.00	0.00
4000-2000 microns-Fractional %		1.72	0.00	0.00	0.31	2.75	0.00
2000-1000 microns-Fractional %		4.85	1.76	0.46	0.48	1.99	0.05
1000-500 microns-Fractional %		17.18	2.82	6.19	1.98	4.67	1.45
500-250 microns-Fractional %		37.86	5.09	36.25	3.97	9.80	2.99
250-125 microns-Fractional %		12.89	5.13	15.39	2.03	5.11	2.60
125-62 microns-Fractional %		3.40	6.06	4.34	2.24	3.04	6.13
62-31 microns-Fractional %		3.65	12.77	5.05	7.34	6.82	14.84
31-15.6 microns-Fractional %		5.19	19.10	7.05	17.67	15.20	19.77
15.6-7.8 microns-Fractional %		4.68	17.93	8.52	20.57	16.83	21.40
7.8-3.9 microns-Fractional %		3.39	11.25	5.78	14.90	12.47	11.34
3.9-2 microns-Fractional %		1.68	5.64	3.65	8.13	6.83	6.71
2-1 microns-Fractional %		0.92	3.56	2.37	5.05	4.14	4.01
<1 microns-Fractional %		2.59	8.90	4.97	10.91	10.35	8.71
Total Fines		22.1 T	79.15 T	37.39 T	84.57 T	72.64 T	86.78 T
Total Sand		76.18 T	20.86 T	62.63 T	10.7 T	24.61 T	13.22 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID:	DR098	DR099	DR100	DR101	DR102	DR103
	Sample ID:	SD-DR098-0000	SD-DR099-0000	SD-DR100-0000	SD-DR101-0000	SD-DR102-0000	SD-DR103-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		1.84	1.66	0.61	1.73	2.15	2.84
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	18.17	0.00	3.56	3.87	0.00
4000-2000 microns-Fractional %		0.07	12.72	0.96	2.41	3.95	0.51 J
2000-1000 microns-Fractional %		0.38	7.63	1.63	1.44	2.86	0.43 J
1000-500 microns-Fractional %		1.93	14.33	12.38	2.28	5.40	2.93 J
500-250 microns-Fractional %		6.27	19.46	45.98	2.39	12.62	5.45 J
250-125 microns-Fractional %		3.69	5.02	14.72	1.58	5.86	3.40 J
125-62 microns-Fractional %		2.94	1.62	3.79	3.52	5.46	9.56 J
62-31 microns-Fractional %		4.45	0.17	1.88	10.00	11.80	11.82
31-15.6 microns-Fractional %		12.22	4.68	3.51	24.26	10.79	21.73
15.6-7.8 microns-Fractional %		23.72	6.08	5.03	26.01	13.85	17.42
7.8-3.9 microns-Fractional %		16.23	4.10	2.73	7.58	9.11	9.97
3.9-2 microns-Fractional %		9.89	2.31	3.54	4.37	5.06	5.86
2-1 microns-Fractional %		7.00	1.13	1.34	2.91	3.08	3.93
<1 microns-Fractional %		11.20	2.59	2.49	7.70	6.28	6.98
Total Fines		84.71 T	21.06 T	20.52 T	82.83 T	59.97 T	77.71 T
Total Sand		15.21 T	48.06 T	78.5 T	11.21 T	32.2 T	21.77 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR104 / SD-DR104-0000 / 0 to 10 cm	DR105 / SD-DR105-0000 / 0 to 10 cm	DR106 / SD-DR106-0000 / 0 to 10 cm	DR107 / SD-DR107-0000 / 0 to 10 cm	DR108 / SD-DR108-0000 / 0 to 10 cm	DR109 / SD-DR109-0000 / 0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		2.82	2.07	2.43	2.50	2.33	2.35
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
4000-2000 microns-Fractional %		0.06	0.00	0.00	0.16	0.00	0.00
2000-1000 microns-Fractional %		0.20	0.24	0.11 J	0.20	0.10	0.37
1000-500 microns-Fractional %		2.83	2.03	1.02 J	1.47	1.24	1.68
500-250 microns-Fractional %		5.04	7.92	1.32 J	3.04	3.52	2.36
250-125 microns-Fractional %		5.10	8.40	2.38 J	2.87	3.19	1.44
125-62 microns-Fractional %		11.70	17.48	6.13 J	3.77	3.29	3.61
62-31 microns-Fractional %		12.94	16.05	12.90	7.83	5.89	8.14
31-15.6 microns-Fractional %		16.90	14.09	22.51	22.14	19.35	22.73
15.6-7.8 microns-Fractional %		16.04	13.07	22.29	21.24	23.70	21.54
7.8-3.9 microns-Fractional %		10.50	7.35	12.23	15.25	16.58	14.07
3.9-2 microns-Fractional %		5.84	3.97	6.19	7.20	8.61	8.63
2-1 microns-Fractional %		4.91	3.02	4.51	5.79	5.27	4.25
<1 microns-Fractional %		7.95	6.38	8.41	9.05	9.26	11.18
Total Fines		75.08 T	63.93 T	89.04 T	88.5 T	88.66 T	90.54 T
Total Sand		24.87 T	36.07 T	10.96 T	11.35 T	11.34 T	9.46 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Station ID:	DR110	DR111	DR112	DR113	DR114	DR115
Sample ID:	SD-DR110-0000	SD-DR111-0000-CC	SD-DR112-0000	SD-DR113-0000-CC	SD-DR114-0000	SD-DR115-0000
Constituent / Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Conventional Parameters						
Total Organic Carbon (%)	2.67	2.26	2.64	2.72	2.51	1.30
Grain Size (%)						
>9525 microns-Fractional %	0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %	0.00	0.00	0.00	0.00	0.00	0.00
4000-2000 microns-Fractional %	0.06	1.41	0.49	0.00	1.27	0.16
2000-1000 microns-Fractional %	0.21	0.60	0.10	0.11 J	0.42	0.93
1000-500 microns-Fractional %	1.49	3.93	1.82	1.20 J	1.89	4.22
500-250 microns-Fractional %	3.76	5.93	3.97	1.14 J	3.90	10.83
250-125 microns-Fractional %	4.38	5.63	4.57	1.84 J	5.94	11.96
125-62 microns-Fractional %	7.26	12.63	9.63	5.36 J	15.10	25.54
62-31 microns-Fractional %	10.72	14.87	12.76	12.73	14.13	15.56
31-15.6 microns-Fractional %	17.21	17.23	20.94	37.14	18.05	9.82
15.6-7.8 microns-Fractional %	20.33	17.84	18.24	27.44	14.57	6.81
7.8-3.9 microns-Fractional %	12.94	9.01	10.57	9.75	9.01	4.92
3.9-2 microns-Fractional %	7.64	4.81	6.07	5.06	4.90	3.40
2-1 microns-Fractional %	4.84	3.31	3.39	4.11	3.39	2.46
<1 microns-Fractional %	9.16	7.19	7.44	8.76	7.42	3.38
Total Fines	82.84 T	74.26 T	79.41 T	104.99 T	71.47 T	46.35 T
Total Sand	17.1 T	28.72 T	20.09 T	9.65 T	27.25 T	53.48 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID:	DR116	DR117	DR118	DR119	DR120	DR121
	Sample ID:	SD-DR116-0000	SD-DR117-0000	SD-DR118-0000	SD-DR119-0000	SD-DR120-0000	SD-DR121-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		2.53	2.60	2.80	2.69	2.78	2.39
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.21 J	0.00	0.00	1.08	0.00
4000-2000 microns-Fractional %		0.00	0.06 J	0.09 J	0.00	0.72	0.00
2000-1000 microns-Fractional %		0.00	0.26 J	0.13 J	0.03 J	2.46	0.06 J
1000-500 microns-Fractional %		2.55 J	1.64 J	2.23 J	1.40 J	3.51	0.75 J
500-250 microns-Fractional %		2.81 J	2.46 J	2.81 J	1.85 J	4.32	1.08 J
250-125 microns-Fractional %		2.80 J	2.83 J	3.38 J	2.23 J	10.93	0.84 J
125-62 microns-Fractional %		7.92 J	8.79 J	8.76 J	8.82 J	19.84	2.24 J
62-31 microns-Fractional %		14.18	17.05	14.03	14.60	13.91	7.40
31-15.6 microns-Fractional %		24.37	23.46	23.45	23.07	10.49	24.42
15.6-7.8 microns-Fractional %		21.77	20.09	17.66	20.29	9.79	20.92
7.8-3.9 microns-Fractional %		9.45	8.97	10.58	9.91	7.69	16.19
3.9-2 microns-Fractional %		1.97	4.73	5.73	6.03	4.39	8.43
2-1 microns-Fractional %		5.90	3.15	3.55	4.08	2.97	5.55
<1 microns-Fractional %		6.27	6.29	7.58	7.70	7.64	12.12
Total Fines		83.91 T	83.74 T	82.58 T	85.68 T	56.88 T	95.03 T
Total Sand		16.08 T	15.98 T	17.31 T	14.33 T	41.06 T	4.97 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR122 SD-DR122-0000 0 to 10 cm	DR123 SD-DR123-0000 0 to 10 cm	DR124 SD-DR124-0000 0 to 10 cm	DR125 SD-DR125-0000 0 to 10 cm	DR126 SD-DR126-0000 0 to 10 cm	DR127 SD-DR127-0000 0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		2.18	2.42	2.78	2.85	3.09	2.78
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	58.85	0.00	0.19 J	0.00
4000-2000 microns-Fractional %		0.00	0.36	1.51	1.38 J	1.93 J	2.27 J
2000-1000 microns-Fractional %		0.34	0.57	0.77	1.12 J	4.26 J	5.48 J
1000-500 microns-Fractional %		1.28	2.43	0.81	1.35 J	2.07 J	1.83 J
500-250 microns-Fractional %		1.89	5.15	2.77	1.13 J	2.13 J	2.07 J
250-125 microns-Fractional %		2.02	5.64	4.66	1.26 J	1.71 J	1.71 J
125-62 microns-Fractional %		4.39	11.00	6.45	3.82 J	3.64 J	3.79 J
62-31 microns-Fractional %		9.14	17.97	2.12 J	15.00	7.41	5.12
31-15.6 microns-Fractional %		21.10	19.23	5.50 J	17.40	13.40	15.41
15.6-7.8 microns-Fractional %		19.84	16.13	5.40 J	19.31	19.19	18.84
7.8-3.9 microns-Fractional %		15.06	7.30	3.79 J	13.19	15.18	15.81
3.9-2 microns-Fractional %		8.57	4.17	2.54 J	7.65	9.99	9.14
2-1 microns-Fractional %		5.03	3.00	1.70 J	5.45	6.25	5.87
<1 microns-Fractional %		11.33	7.04	3.12 J	11.94	12.85	12.64
Total Fines		90.07 T	74.84 T	24.17 T	89.94 T	84.27 T	82.83 T
Total Sand		9.92 T	24.79 T	15.46 T	8.68 T	13.81 T	14.88 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Station ID:	DR128	DR129	DR130	DR131	DR132	DR133
Sample ID:	SD-DR128-0000	SD-DR129-0000	SD-DR130-0000	SD-DR131-0000-CC	SD-DR132-0000	SD-DR133-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Conventional Parameters						
Total Organic Carbon (%)	2.99	2.67	2.87	1.47	2.90	0.76
Grain Size (%)						
>9525 microns-Fractional %	0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %	0.00	0.00	0.00	0.43	0.00	0.00
4000-2000 microns-Fractional %	0.06 J	0.00	0.38	2.52	0.01	1.13
2000-1000 microns-Fractional %	1.58 J	0.08 J	1.16 J	4.05	1.47	2.81
1000-500 microns-Fractional %	3.15 J	1.81 J	3.41 J	9.56	1.72	21.89
500-250 microns-Fractional %	10.77 J	3.99 J	4.61 J	28.68	4.37	31.19
250-125 microns-Fractional %	10.45 J	2.30 J	3.72 J	31.80	3.74	8.08
125-62 microns-Fractional %	6.03 J	7.01 J	4.08 J	5.90	11.24	8.04
62-31 microns-Fractional %	6.46	13.95	5.91	3.90	13.68	6.08
31-15.6 microns-Fractional %	12.99	21.14	15.25	4.40	16.94	5.93
15.6-7.8 microns-Fractional %	14.15	19.13	18.08	3.79	15.49	4.38
7.8-3.9 microns-Fractional %	11.70	11.12	16.23	2.92	11.20	3.43
3.9-2 microns-Fractional %	7.64	6.40	8.93	1.73	6.81	2.25
2-1 microns-Fractional %	4.76	3.96	5.94	0.67	3.87	1.49
<1 microns-Fractional %	10.27	9.10	12.30	3.32	9.47	3.31
Total Fines	67.97 T	84.8 T	82.64 T	20.73 T	77.46 T	26.87 T
Total Sand	31.98 T	15.19 T	16.98 T	79.99 T	22.54 T	72.01 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR134 / SD-DR134-0000 / 0 to 10 cm	DR135 / SD-DR135-0000 / 0 to 10 cm	DR136 / SD-DR136-0000 / 0 to 10 cm	DR137 / SD-DR137-0000 / 0 to 10 cm	DR138 / SD-DR138-0000 / 0 to 10 cm	DR139 / SD-DR139-0000 / 0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		2.52	2.04	2.55	2.20	0.47	2.96
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.65	0.00	0.00	0.00
4000-2000 microns-Fractional %		0.20 J	1.72	2.67	1.87	0.37	0.11
2000-1000 microns-Fractional %		1.11 J	1.84	2.68	1.94	0.39	0.60
1000-500 microns-Fractional %		1.07 J	5.15	2.94	3.44	4.18	2.00
500-250 microns-Fractional %		2.04 J	18.57	4.97	9.88	30.22	6.73
250-125 microns-Fractional %		4.86 J	14.35	5.15	12.88	27.74	11.65
125-62 microns-Fractional %		10.36 J	10.35	11.72	22.89	23.72	12.93
62-31 microns-Fractional %		9.67	9.93	10.65	13.49	7.70 J	12.60
31-15.6 microns-Fractional %		20.62	11.94	21.42	10.23	1.41 J	28.45
15.6-7.8 microns-Fractional %		16.33	8.31	13.84	7.92	0.97 J	11.86
7.8-3.9 microns-Fractional %		11.73	6.34	9.01	5.77	0.80 J	4.81
3.9-2 microns-Fractional %		7.41	4.04	5.02	3.43	0.80 J	2.73
2-1 microns-Fractional %		4.40	1.91	2.67	1.65	0.19 J	1.59
<1 microns-Fractional %		10.20	5.55	6.60	4.61	1.52 J	3.92
Total Fines		80.36 T	48.02 T	69.21 T	47.1 T	13.39 T	65.96 T
Total Sand		19.44 T	50.26 T	27.46 T	51.03 T	86.25 T	33.91 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Station ID:	DR140	DR141	DR142	DR143	DR144	DR145
Sample ID:	SD-DR140-0000	SD-DR141-0000-CC	SD-DR142-0000	SD-DR143-0000	SD-DR144-0000	SD-DR145-0000
Constituent **Depth (cm bgs):**	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Conventional Parameters						
Total Organic Carbon (%)	0.09	2.27 J	0.35	0.82	1.84	2.46
Grain Size (%)						
>9525 microns-Fractional %	0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %	0.00	0.00	3.77	2.04	0.00	0.00
4000-2000 microns-Fractional %	0.30	1.48	0.97	2.85	1.13	0.00
2000-1000 microns-Fractional %	2.01	3.34	2.18	4.52	0.78	2.97
1000-500 microns-Fractional %	33.23	15.24	20.68	22.56	2.44	2.41
500-250 microns-Fractional %	54.78	23.96	53.49	35.54	8.63	2.74
250-125 microns-Fractional %	6.79	5.13	10.66	10.78	10.06	1.82
125-62 microns-Fractional %	0.82	5.74	2.23	5.60	6.67	4.84
62-31 microns-Fractional %	0.51	8.67	0.49 J	5.45	8.53	14.78
31-15.6 microns-Fractional %	0.20	11.84	1.35 J	2.80	17.10	21.58
15.6-7.8 microns-Fractional %	0.13	11.52	1.39 J	2.49	11.78	19.18
7.8-3.9 microns-Fractional %	0.22	6.33	1.02 J	1.97	16.27	11.71
3.9-2 microns-Fractional %	0.23	3.60	0.61 J	1.21	5.35	6.22
2-1 microns-Fractional %	0.01	2.20	0.20 J	0.84	3.45	3.34
<1 microns-Fractional %	0.76	4.96	0.97 J	1.36	7.81	8.41
Total Fines	2.06 T	49.12 T	6.03 T	16.12 T	70.29 T	85.22 T
Total Sand	97.63 T	53.41 T	89.24 T	79 T	28.58 T	14.78 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR146 SD-DR146-0000 0 to 10 cm	DR147 SD-DR147-0000 0 to 10 cm	DR148 SD-DR148-0000 0 to 10 cm	DR149 SD-DR149-0000 0 to 10 cm	DR150 SD-DR150-0000 0 to 10 cm	DR151 SD-DR151-0000 0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		2.63	2.71	4.51	2.01	2.18	2.68
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	8.69	0.00	0.00	0.00
4000-2000 microns-Fractional %		0.00	0.15 J	1.35	0.00	0.00	0.00
2000-1000 microns-Fractional %		0.05	0.49 J	1.47	0.29	0.09 J	0.00
1000-500 microns-Fractional %		1.45	1.04 J	4.29	1.52	1.83 J	1.36 J
500-250 microns-Fractional %		2.99	1.70 J	5.68	4.74	3.54 J	1.97 J
250-125 microns-Fractional %		2.60	2.76 J	3.99	7.05	3.10 J	3.17 J
125-62 microns-Fractional %		6.13	8.86 J	12.91	19.02	10.90 J	10.30 J
62-31 microns-Fractional %		14.84	13.73	17.94	19.04	16.89	15.09
31-15.6 microns-Fractional %		19.77	19.62	15.67	16.93	24.53	23.15
15.6-7.8 microns-Fractional %		21.40	16.98	12.41	12.82	18.77	17.76
7.8-3.9 microns-Fractional %		11.34	11.94	4.48	6.87	7.83	10.74
3.9-2 microns-Fractional %		6.71	7.21	3.34	3.67	3.75	5.31
2-1 microns-Fractional %		4.01	4.40	2.62	2.63	2.89	3.91
<1 microns-Fractional %		8.71	11.11	5.16	5.42	5.88	7.24
Total Fines		86.78 T	84.99 T	61.62 T	67.38 T	80.54 T	83.2 T
Total Sand		13.22 T	14.85 T	28.34 T	32.62 T	19.46 T	16.8 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID:	DR152	DR153	DR154	DR155	DR156	DR157
	Sample ID:	SD-DR152-0000	SD-DR153-0000	SD-DR154-0000	SD-DR155-0000	SD-DR156-0000	SD-DR157-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		2.37	2.19	2.33	2.70	2.75	5.47
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
4000-2000 microns-Fractional %		0.00	0.00	0.06	0.00	0.58	1.09
2000-1000 microns-Fractional %		0.09 J	0.29 J	1.60	1.11 J	1.74	3.69
1000-500 microns-Fractional %		2.39 J	1.47 J	7.47	1.06 J	2.43	7.18
500-250 microns-Fractional %		1.92 J	2.00 J	3.82	1.78 J	2.15	12.33
250-125 microns-Fractional %		1.21 J	1.74 J	1.68	3.64 J	3.78	14.16
125-62 microns-Fractional %		3.60 J	6.02 J	4.29	12.21 J	9.37	14.04
62-31 microns-Fractional %		8.88	17.21	10.21	13.21	14.07	11.87
31-15.6 microns-Fractional %		22.35	20.44	19.71	18.59	21.31	18.02
15.6-7.8 microns-Fractional %		22.62	17.62	18.27	16.48	18.53	6.53
7.8-3.9 microns-Fractional %		14.63	11.87	12.80	11.29	10.67	3.23
3.9-2 microns-Fractional %		7.61	6.60	6.31	6.67	5.66	1.67
2-1 microns-Fractional %		4.71	4.39	4.47	3.99	2.49	1.27
<1 microns-Fractional %		10.00	10.34	9.32	9.98	7.22	4.92
Total Fines		90.8 T	88.47 T	81.09 T	80.21 T	79.95 T	47.51 T
Total Sand		9.21 T	11.52 T	18.86 T	19.8 T	19.47 T	51.4 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR158 / SD-DR158-0000 / 0 to 10 cm	DR159 / SD-DR159-0000 / 0 to 10 cm	DR160 / SD-DR160-0000 / 0 to 10 cm	DR161 / SD-DR161-0000 / 0 to 10 cm	DR162 / SD-DR162-0000 / 0 to 10 cm	DR163 / SD-DR163-0000 / 0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		1.26	2.76	2.41	2.87	1.90	2.30
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	1.95	0.00	0.00	0.00	0.00
4000-2000 microns-Fractional %		0.70	2.33	8.84 J	0.00	0.22	0.01 J
2000-1000 microns-Fractional %		2.98	2.87	10.82 J	0.02 J	0.13	0.18 J
1000-500 microns-Fractional %		16.80	2.30	5.22 J	0.72 J	2.21	1.45 J
500-250 microns-Fractional %		26.44	3.43	2.87 J	1.11 J	9.21	1.61 J
250-125 microns-Fractional %		6.09	3.45	1.79 J	1.68 J	7.35	1.63 J
125-62 microns-Fractional %		6.89	10.09	1.38 J	7.89 J	10.58	5.02 J
62-31 microns-Fractional %		14.60	17.49	4.02	10.94	13.65	12.38
31-15.6 microns-Fractional %		2.04	16.23	21.09	19.77	15.33	23.09
15.6-7.8 microns-Fractional %		9.31	2.34	15.69	16.58	14.38	22.17
7.8-3.9 microns-Fractional %		4.80	21.00	7.28	14.82	9.90	13.03
3.9-2 microns-Fractional %		3.24	5.72	4.95	8.89	5.43	6.88
2-1 microns-Fractional %		2.53	2.67	3.73	5.84	3.58	3.93
<1 microns-Fractional %		3.57	8.13	10.26	11.74	8.02	8.63
Total Fines		40.09 T	73.58 T	67.02 T	88.58 T	70.29 T	90.11 T
Total Sand		59.2 T	22.14 T	22.08 T	11.42 T	29.48 T	9.89 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

	Station ID:	DR164	DR165	DR166	DR167	DR168	DR169
	Sample ID:	SD-DR164-0000	SD-DR165-0000	SD-DR166-0000	SD-DR167-0000	SD-DR168-0000	SD-DR169-0000
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		2.58	2.36	1.47	1.53	3.10	2.01
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.00	0.62	0.17	0.00
4000-2000 microns-Fractional %		0.00	0.00	0.00	0.63	1.11	0.25 J
2000-1000 microns-Fractional %		0.04 J	0.83	0.76	1.17	1.46	0.74 J
1000-500 microns-Fractional %		2.04 J	1.06	1.98	3.52	2.14	1.09 J
500-250 microns-Fractional %		3.36 J	1.48	7.41	8.63	4.35	1.69 J
250-125 microns-Fractional %		2.46 J	5.39	14.99	8.42	7.57	5.66 J
125-62 microns-Fractional %		7.56 J	14.57	17.89	36.28	19.86	26.43 J
62-31 microns-Fractional %		13.40	12.18 J	13.35	15.85 J	14.26	17.13
31-15.6 microns-Fractional %		21.59	17.66 J	13.89	8.80 J	16.67	16.34
15.6-7.8 microns-Fractional %		19.04	16.92 J	11.17	5.00 J	12.02	10.76
7.8-3.9 microns-Fractional %		12.06	11.85 J	7.19	3.53 J	7.45	7.51
3.9-2 microns-Fractional %		6.68	6.25 J	3.94	2.40 J	4.33	4.39
2-1 microns-Fractional %		3.43	3.96 J	2.14	1.38 J	2.36	2.27
<1 microns-Fractional %		8.34	7.83 J	5.28	3.77 J	6.25	5.74
Total Fines		84.54 T	76.65 T	56.96 T	40.73 T	63.34 T	64.14 T
Total Sand		15.46 T	23.33 T	43.03 T	58.02 T	35.38 T	35.61 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID:	DR170	DR171	DR172	DR173	DR174	DR175
	Sample ID:	SD-DR170-0000	SD-DR171-0000	SD-DR172-0000	SD-DR173-0000	SD-DR174-0000	SD-DR175-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		2.04	2.47	0.24	0.87	1.59	1.74
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.30 J	0.00	0.00	0.00	0.00	0.59 J
4000-2000 microns-Fractional %		0.15 J	0.00	0.31	0.04	0.26 J	0.32 J
2000-1000 microns-Fractional %		0.65 J	0.08 J	0.84	0.25	0.49 J	0.75 J
1000-500 microns-Fractional %		0.89 J	2.49 J	15.85	5.98	2.22 J	2.16 J
500-250 microns-Fractional %		1.67 J	2.83 J	58.22	31.05	4.95 J	7.24 J
250-125 microns-Fractional %		4.19 J	3.34 J	17.47	18.51	8.04 J	10.03 J
125-62 microns-Fractional %		15.60 J	10.75 J	3.53	19.50	33.45 J	14.54 J
62-31 microns-Fractional %		19.39	20.54	0.43	8.53	23.78 J	15.40 J
31-15.6 microns-Fractional %		22.47	21.18	0.75	4.79	10.93 J	19.11 J
15.6-7.8 microns-Fractional %		14.11	15.97	0.51	3.93	6.89 J	13.07 J
7.8-3.9 microns-Fractional %		8.27	8.87	0.60	2.68	3.11 J	6.21 J
3.9-2 microns-Fractional %		4.32	4.91	0.42	1.61	1.88 J	3.59 J
2-1 microns-Fractional %		2.38	2.54	0.09	1.12	1.40 J	2.22 J
<1 microns-Fractional %		5.61	6.49	0.99	2.00	2.59 J	4.75 J
Total Fines		76.55 T	80.5 T	3.79 T	24.66 T	50.58 T	64.35 T
Total Sand		23 T	19.49 T	95.91 T	75.29 T	49.15 T	34.72 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR176 / SD-DR176-0000 / 0 to 10 cm	DR177 / SD-DR177-0000 / 0 to 10 cm	DR178 / SD-DR178-0000-CC / 0 to 10 cm	DR179 / SD-DR179-0000 / 0 to 10 cm	DR180 / SD-DR180-0000 / 0 to 10 cm	DR181 / SD-DR181-0000 / 0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		2.62	2.87	3.44	2.83	2.63	2.34
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.14
4000-2000 microns-Fractional %		0.18	0.00	0.02	0.01	0.38	0.07
2000-1000 microns-Fractional %		0.49	0.08 J	0.89	0.29	0.96	0.52
1000-500 microns-Fractional %		1.49	1.68 J	1.87	2.07	5.56	2.86
500-250 microns-Fractional %		5.06	2.64 J	4.85	5.43	13.06	8.40
250-125 microns-Fractional %		7.90	3.67 J	8.92	7.36	5.99	6.21
125-62 microns-Fractional %		8.68	6.07 J	11.18	7.02	4.67	5.61
62-31 microns-Fractional %		15.62	11.26	12.33	9.86	5.09	9.22
31-15.6 microns-Fractional %		22.14	21.71	30.09	29.65	19.73	20.16
15.6-7.8 microns-Fractional %		14.02	22.20	20.19	21.39	19.30	18.00
7.8-3.9 microns-Fractional %		9.70	11.72	6.75	5.70	9.85	11.58
3.9-2 microns-Fractional %		5.25	6.58	3.15	3.40	5.10	5.32
2-1 microns-Fractional %		3.20	4.53	1.93	2.20	3.81	3.77
<1 microns-Fractional %		6.27	7.85	4.25	5.62	6.49	8.14
Total Fines		76.2 T	85.85 T	78.69 T	77.82 T	69.37 T	76.19 T
Total Sand		23.62 T	14.14 T	27.71 T	22.17 T	30.24 T	23.6 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR182 SD-DR182-0000 0 to 10 cm	DR183 SD-DR183-0000 0 to 10 cm	DR184 SD-DR184-0000 0 to 10 cm	DR185 SD-DR185-0000 0 to 10 cm	DR186 SD-DR186-0000 0 to 10 cm	DR187 SD-DR187-0000 0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		4.54	1.80	2.21	1.96	2.01	1.90
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	1.80
4000-2000 microns-Fractional %		1.71	0.27	0.00	0.14 J	0.33 J	2.67
2000-1000 microns-Fractional %		1.21	0.87	0.00	0.48 J	1.05 J	2.74
1000-500 microns-Fractional %		5.36	5.17	1.50 J	1.48 J	3.19 J	6.88
500-250 microns-Fractional %		22.13	10.08	1.15 J	1.00 J	5.31 J	30.76
250-125 microns-Fractional %		11.50	7.36	1.39 J	2.07 J	9.01 J	18.42
125-62 microns-Fractional %		5.54	7.61	5.10 J	8.25 J	14.82 J	4.60
62-31 microns-Fractional %		7.75	12.56	20.52	20.56	16.96	7.35
31-15.6 microns-Fractional %		12.39	24.87	28.55	26.69	20.92	9.17
15.6-7.8 microns-Fractional %		14.47	17.25	20.07	20.09	11.02	6.64
7.8-3.9 microns-Fractional %		7.19	4.78	8.65	7.88	6.93	3.50
3.9-2 microns-Fractional %		3.81	2.69	4.24	4.17	3.59	2.21
2-1 microns-Fractional %		2.26	1.85	2.66	1.84	1.95	0.64
<1 microns-Fractional %		4.67	4.66	6.17	5.33	4.94	2.62
Total Fines		52.54 T	68.66 T	90.86 T	86.56 T	66.31 T	32.13 T
Total Sand		45.74 T	31.09 T	9.14 T	13.28 T	33.38 T	63.4 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID:	DR188	DR189	DR190	DR191	DR192	DR193
	Sample ID:	SD-DR188-0000	SD-DR189-0000	SD-DR190-0000	SD-DR191-0000	SD-DR192-0000	SD-DR193-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		1.75	1.38	1.90	2.19	2.63	1.21
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.66
4000-2000 microns-Fractional %		0.00	0.20	0.08	0.10	0.88	1.17
2000-1000 microns-Fractional %		0.02 J	1.39	1.32	0.90	1.18	5.55
1000-500 microns-Fractional %		0.96 J	12.70	3.02	1.25	2.98	13.33
500-250 microns-Fractional %		1.30 J	24.45	6.30	1.17	12.87	19.73
250-125 microns-Fractional %		3.31 J	11.51	8.78	2.50	11.33	9.89
125-62 microns-Fractional %		13.43 J	8.69	17.09	9.17	12.38	9.26
62-31 microns-Fractional %		22.87	10.04	17.66	17.22	11.94	8.15
31-15.6 microns-Fractional %		12.63	10.24	15.73	25.94	16.54	11.87
15.6-7.8 microns-Fractional %		27.36	7.66	10.90	18.46	12.90	9.17
7.8-3.9 microns-Fractional %		7.17	4.74	7.71	9.78	7.31	3.23
3.9-2 microns-Fractional %		4.12	2.94	4.95	4.65	3.02	2.47
2-1 microns-Fractional %		2.14	1.75	1.79	2.83	1.87	1.50
<1 microns-Fractional %		4.69	3.68	4.67	6.03	4.78	4.02
Total Fines		80.98 T	41.05 T	63.41 T	84.91 T	58.36 T	40.41 T
Total Sand		19.02 T	58.74 T	36.51 T	14.99 T	40.74 T	57.76 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID:	DR194	DR195	DR196	DR197	DR198	DR199
	Sample ID:	SD-DR194-0000	SD-DR195-0000	SD-DR196-0000	SD-DR197-0000	SD-DR198-0000	SD-DR199-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		3.06	1.37	1.17	1.30	1.54	1.45
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.35
4000-2000 microns-Fractional %		0.00	0.07	0.24	0.26	0.25	0.22
2000-1000 microns-Fractional %		0.05 J	0.53	0.15	0.57	0.39	0.29
1000-500 microns-Fractional %		1.27 J	5.37	3.96	5.14	5.73	2.20
500-250 microns-Fractional %		1.50 J	18.50	14.83	20.53	26.01	10.61
250-125 microns-Fractional %		3.03 J	13.67	15.91	15.68	14.59	9.35
125-62 microns-Fractional %		7.26 J	13.15	23.43	12.98	14.35	22.84
62-31 microns-Fractional %		16.20	16.67	13.11 J	16.46	11.67	19.55
31-15.6 microns-Fractional %		23.13	11.84	11.14 J	11.10	9.99	14.20
15.6-7.8 microns-Fractional %		19.27	8.53	6.89 J	7.25	7.17	7.99
7.8-3.9 microns-Fractional %		11.50	4.92	4.16 J	3.31	3.76	4.34
3.9-2 microns-Fractional %		5.38	2.93	2.62 J	2.49	2.11	2.83
2-1 microns-Fractional %		3.60	1.01	1.05 J	1.12	1.09	1.96
<1 microns-Fractional %		7.82	2.80	2.50 J	3.12	2.88	3.27
Total Fines		86.9 T	48.7 T	41.47 T	44.85 T	38.67 T	54.14 T
Total Sand		13.11 T	51.22 T	58.28 T	54.9 T	61.07 T	45.29 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR200 / SD-DR200-0000 / 0 to 10 cm	DR201 / SD-DR201-0000 / 0 to 10 cm	DR202 / SD-DR202-0000 / 0 to 10 cm	DR203 / SD-DR203-0000 / 0 to 10 cm	DR204 / SD-DR204-0000 / 0 to 10 cm	DR205 / SD-DR205-0000 / 0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		1.73	1.70	1.57	1.06	1.09	2.22
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.54	0.00	0.00	0.00
4000-2000 microns-Fractional %		0.30	0.16	0.50	0.18	0.07	0.00
2000-1000 microns-Fractional %		1.23	0.54	0.75	0.13	0.09	0.03 J
1000-500 microns-Fractional %		2.99	8.96	4.50	0.69	0.68	1.16 J
500-250 microns-Fractional %		10.30	25.99	16.74	6.00	5.09	1.36 J
250-125 microns-Fractional %		11.36	5.58	16.36	18.63	19.39	2.99 J
125-62 microns-Fractional %		18.12	5.52	16.08	31.52	31.50	10.94 J
62-31 microns-Fractional %		19.25	13.91	11.85	18.84	17.09	22.72
31-15.6 microns-Fractional %		14.31	15.21	12.31	8.47	9.49	23.48
15.6-7.8 microns-Fractional %		8.87	9.73	7.65	5.66	6.05	16.96
7.8-3.9 microns-Fractional %		4.83	5.71	4.43	3.67	3.91	8.44
3.9-2 microns-Fractional %		2.90	3.13	3.24	1.92	2.38	4.20
2-1 microns-Fractional %		1.61	1.20	1.46	0.80	1.57	2.33
<1 microns-Fractional %		3.92	4.38	3.59	3.48	2.69	5.41
Total Fines		55.69 T	53.27 T	44.53 T	42.84 T	43.18 T	83.54 T
Total Sand		44 T	46.59 T	54.43 T	56.97 T	56.75 T	16.48 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR206 / SD-DR206-0000 / 0 to 10 cm	DR207 / SD-DR207-0000 / 0 to 10 cm	DR208 / SD-DR208-0000 / 0 to 10 cm	DR209 / SD-DR209-0000 / 0 to 10 cm	DR210 / SD-DR210-0000 / 0 to 10 cm	DR211 / SD-DR211-0000 / 0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		2.97	3.17	1.29	1.03	1.45	1.56
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	4.42	0.00	30.11	0.00	0.00
4000-2000 microns-Fractional %		0.03 J	6.02	1.22	14.40	0.00	0.03
2000-1000 microns-Fractional %		0.23 J	5.88	1.52	7.45	0.54	0.49
1000-500 microns-Fractional %		1.54 J	9.24	3.89	6.80	1.47	0.90
500-250 microns-Fractional %		1.21 J	16.78	10.01	10.21	6.79	0.90
250-125 microns-Fractional %		1.37 J	18.65	14.70	11.32	11.60	4.68
125-62 microns-Fractional %		3.81 J	10.79	23.31	6.83	19.13	20.09
62-31 microns-Fractional %		12.51	8.53	17.71	1.07	21.91	20.80
31-15.6 microns-Fractional %		35.44	5.51	10.18	3.20	14.29	22.03
15.6-7.8 microns-Fractional %		24.15	4.76	6.22	2.37	10.37	13.08
7.8-3.9 microns-Fractional %		7.24	3.06	3.79	1.88	5.90	6.71
3.9-2 microns-Fractional %		3.74	1.86	2.63	1.64	3.06	3.97
2-1 microns-Fractional %		2.48	1.38	1.56	0.60	1.58	2.40
<1 microns-Fractional %		6.25	3.12	3.25	2.12	3.36	3.92
Total Fines		91.81 T	28.22 T	45.34 T	12.88 T	60.47 T	72.91 T
Total Sand		8.16 T	61.34 T	53.43 T	42.61 T	39.53 T	27.06 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID:	DR212	DR213	DR214	DR215	DR216	DR217
	Sample ID:	SD-DR212-0000	SD-DR213-0000	SD-DR214-0000	SD-DR215-0000	SD-DR216-0000	SD-DR217-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		1.50	1.25	1.53	2.16	2.13	1.67
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
4000-2000 microns-Fractional %		0.14	0.00	0.14	0.00	0.00	0.20
2000-1000 microns-Fractional %		0.29	0.26	0.13	0.04 J	0.04 J	0.58
1000-500 microns-Fractional %		7.89	3.00	2.18	1.25 J	0.24 J	3.31
500-250 microns-Fractional %		15.04	9.16	15.12	1.62 J	1.98 J	12.72
250-125 microns-Fractional %		8.61	11.70	15.16	4.46 J	3.05 J	14.03
125-62 microns-Fractional %		23.26	24.55	10.44	12.48 J	8.55 J	14.18
62-31 microns-Fractional %		17.51 J	16.53 J	12.51	22.20	20.34	14.03
31-15.6 microns-Fractional %		10.41 J	13.48 J	14.49	21.26	26.63	14.31
15.6-7.8 microns-Fractional %		6.30 J	8.41 J	11.63	15.23	17.41	10.27
7.8-3.9 microns-Fractional %		3.78 J	5.13 J	6.87	8.30	7.89	6.20
3.9-2 microns-Fractional %		2.25 J	2.65 J	3.46	4.30	4.82	3.20
2-1 microns-Fractional %		1.26 J	1.59 J	2.69	2.74	2.94	2.07
<1 microns-Fractional %		3.25 J	3.54 J	5.18	6.13	6.12	4.89
Total Fines		44.76 T	51.33 T	56.83 T	80.16 T	86.15 T	54.97 T
Total Sand		55.09 T	48.67 T	43.03 T	19.85 T	13.86 T	44.82 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR218 SD-DR218-0000 0 to 10 cm	DR219 SD-DR219-0000 0 to 10 cm	DR220 SD-DR220-0000 0 to 10 cm	DR221 SD-DR221-0000 0 to 10 cm	DR222 SD-DR222-0000 0 to 10 cm	DR223 SD-DR223-0000-CC 0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		2.56	2.22	2.76	1.57	0.95	2.09
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.18 J	1.95 J	0.37	0.00
4000-2000 microns-Fractional %		0.00	0.14 J	0.01 J	2.33 J	0.00	0.00
2000-1000 microns-Fractional %		0.02 J	0.76 J	0.83 J	2.87 J	0.73	0.42 J
1000-500 microns-Fractional %		1.70 J	1.30 J	1.94 J	2.30 J	7.31	1.27 J
500-250 microns-Fractional %		1.19 J	0.89 J	1.35 J	3.43 J	22.08	3.72 J
250-125 microns-Fractional %		1.47 J	1.40 J	1.90 J	3.45 J	13.84	6.48 J
125-62 microns-Fractional %		6.08 J	7.66 J	7.49 J	10.09 J	19.36	11.60 J
62-31 microns-Fractional %		23.31	24.11	18.79	17.49	11.47	19.19
31-15.6 microns-Fractional %		24.40	24.22	24.23	16.23	9.06	19.53
15.6-7.8 microns-Fractional %		18.40	16.89	18.92	2.34	6.36	17.43
7.8-3.9 microns-Fractional %		9.25	8.83	9.80	21.00	4.03	9.60
3.9-2 microns-Fractional %		4.87	4.67	4.97	5.72	1.41	4.99
2-1 microns-Fractional %		2.66	2.66	3.22	2.67	1.29	2.83
<1 microns-Fractional %		6.65	6.47	6.38	8.13	2.69	6.47
Total Fines		89.54 T	87.85 T	86.31 T	73.58 T	36.31 T	80.04 T
Total Sand		10.46 T	12.01 T	13.51 T	22.14 T	63.32 T	23.49 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID:	DR224	DR225	DR226	DR227	DR228	DR229
	Sample ID:	SD-DR224-0000	SD-DR225-0000	SD-DR226-0000	SD-DR227-0000	SD-DR228-0000	SD-DR229-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		1.17	1.73	1.77	2.00	2.48	2.04
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
4000-2000 microns-Fractional %		0.00	0.00	0.39	0.00	0.00	0.05
2000-1000 microns-Fractional %		0.37	0.30	0.43	0.02 J	0.23 J	0.05
1000-500 microns-Fractional %		2.60	2.84	1.94	1.00 J	1.06 J	0.92
500-250 microns-Fractional %		7.96	7.18	11.07	0.96 J	0.95 J	1.17
250-125 microns-Fractional %		12.95	5.45	19.40	3.01 J	2.45 J	9.32
125-62 microns-Fractional %		29.52	12.90	20.99	14.22 J	11.16 J	20.84
62-31 microns-Fractional %		16.15	19.53	14.12	24.11	19.87	17.93
31-15.6 microns-Fractional %		11.01	18.80	10.80	22.21	23.65	17.20
15.6-7.8 microns-Fractional %		7.35	14.69	7.68	15.66	16.84	13.74
7.8-3.9 microns-Fractional %		4.37	6.89	4.76	7.68	8.52	7.63
3.9-2 microns-Fractional %		2.72	3.84	2.78	3.59	4.83	3.76
2-1 microns-Fractional %		1.51	2.34	1.48	2.19	2.82	2.29
<1 microns-Fractional %		3.49	5.24	4.15	5.33	7.63	5.10
Total Fines		46.6 T	71.33 T	45.77 T	80.77 T	84.16 T	67.65 T
Total Sand		53.4 T	28.67 T	53.83 T	19.21 T	15.85 T	32.3 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID:	DR230	DR231	DR232	DR233	DR234	DR235
	Sample ID:	SD-DR230-0000	SD-DR231-0000	SD-DR232-0000	SD-DR233-0000	SD-DR234-0000	SD-DR235-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		2.40	2.17	1.37	2.19	1.77	1.92
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
4000-2000 microns-Fractional %		0.00	0.02 J	0.31	0.00	0.00	0.00
2000-1000 microns-Fractional %		0.42 J	0.77 J	1.88	0.16	0.44	0.30 J
1000-500 microns-Fractional %		1.79 J	1.26 J	8.55	1.42	3.91	1.21 J
500-250 microns-Fractional %		1.57 J	2.91 J	19.38	3.77	9.08	1.11 J
250-125 microns-Fractional %		2.27 J	3.36 J	14.98	5.47	15.98	3.82 J
125-62 microns-Fractional %		8.26 J	16.79 J	11.29	13.90	15.84	14.46 J
62-31 microns-Fractional %		21.39	20.47	9.45	17.57	13.91	21.31
31-15.6 microns-Fractional %		22.36	19.20	11.30	20.14	12.21	20.37
15.6-7.8 microns-Fractional %		17.74	12.25	8.31	15.34	6.75	15.64
7.8-3.9 microns-Fractional %		10.16	9.02	5.14	8.82	10.98	8.58
3.9-2 microns-Fractional %		4.71	4.96	2.50	4.44	3.62	4.57
2-1 microns-Fractional %		2.96	2.80	1.54	2.57	2.10	2.14
<1 microns-Fractional %		6.36	6.18	5.37	6.40	5.17	6.48
Total Fines		85.68 T	74.88 T	43.61 T	75.28 T	54.74 T	79.09 T
Total Sand		14.31 T	25.09 T	56.08 T	24.72 T	45.25 T	20.9 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR236 SD-DR236-0000 0 to 10 cm	DR237 SD-DR237-0000 0 to 10 cm	DR238 SD-DR238-0000 0 to 10 cm	DR239 SD-DR239-0000 0 to 10 cm	DR240 SD-DR240-0000 0 to 10 cm	DR241 SD-DR241-0000 0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		0.85	1.46	1.78	1.69	3.60	3.56
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
4000-2000 microns-Fractional %		0.45	0.00	0.00	0.06 J	0.00	0.00
2000-1000 microns-Fractional %		0.98	0.22	0.00	0.03 J	0.14 J	0.14 J
1000-500 microns-Fractional %		9.86	9.03	0.70 J	1.45 J	1.02 J	1.33 J
500-250 microns-Fractional %		33.00	30.26	1.18 J	3.13 J	0.62 J	0.67 J
250-125 microns-Fractional %		10.42	5.88	2.58 J	6.67 J	0.66 J	0.49 J
125-62 microns-Fractional %		11.79	7.41	10.07 J	24.49 J	1.06 J	0.74 J
62-31 microns-Fractional %		11.80 J	16.73	30.52	24.39 J	6.06	4.42
31-15.6 microns-Fractional %		8.64 J	12.85	23.04	15.29 J	24.22	21.78
15.6-7.8 microns-Fractional %		4.66 J	7.84	15.09	9.73 J	29.00	32.28
7.8-3.9 microns-Fractional %		2.98 J	3.92	7.02	5.80 J	15.49	15.96
3.9-2 microns-Fractional %		2.08 J	1.86	3.61	3.60 J	6.62	7.66
2-1 microns-Fractional %		0.45 J	1.48	1.44	0.91 J	5.08	5.24
<1 microns-Fractional %		2.90 J	2.53	4.75	4.46 J	10.03	9.29
Total Fines		33.51 T	47.21 T	85.47 T	64.18 T	96.5 T	96.63 T
Total Sand		66.05 T	52.8 T	14.53 T	35.77 T	3.5 T	3.37 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID:	DR242	DR243	DR244	DR245	DR246	DR247
	Sample ID:	SD-DR242-0000-CC	SD-DR243-0000	SD-DR244-0000	SD-DR245-0000	SD-DR246-0000	SD-DR247-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		3.50	3.66	3.52	3.43	3.63	1.99
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
4000-2000 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
2000-1000 microns-Fractional %		0.04 J	0.00	0.45 J	0.99 J	0.86 J	0.33 J
1000-500 microns-Fractional %		1.11 J	1.06 J	0.76 J	1.19 J	1.37 J	0.80 J
500-250 microns-Fractional %		0.72 J	0.59 J	0.44 J	0.57 J	0.70 J	0.55 J
250-125 microns-Fractional %		0.66 J	0.69 J	0.46 J	0.58 J	0.79 J	1.34 J
125-62 microns-Fractional %		0.87 J	0.95 J	0.88 J	1.82 J	2.36 J	8.64 J
62-31 microns-Fractional %		5.62	8.03	6.53	10.29	17.12	25.79
31-15.6 microns-Fractional %		23.76	23.73	25.38	30.06	29.78	26.75
15.6-7.8 microns-Fractional %		30.98	26.80	26.03	21.22	19.07	16.10
7.8-3.9 microns-Fractional %		16.07	14.60	14.50	13.44	10.60	8.59
3.9-2 microns-Fractional %		8.98	7.94	8.18	6.32	5.12	3.93
2-1 microns-Fractional %		5.17	5.26	4.98	4.68	3.51	2.01
<1 microns-Fractional %		10.15	10.35	11.41	8.83	8.72	5.16
Total Fines		100.73 T	96.71 T	97.01 T	94.84 T	93.92 T	88.33 T
Total Sand		3.4 T	3.29 T	2.99 T	5.15 T	6.08 T	11.66 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID:	DR248	DR249	DR250	DR251	DR252	DR253
	Sample ID:	SD-DR248-0000	SD-DR249-0000	SD-DR250-0000	SD-DR251-0000	SD-DR252-0000	SD-DR253-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		2.28	1.48	1.89	1.88	1.67	1.56
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
4000-2000 microns-Fractional %		0.00	0.00	0.00	0.00	0.24	0.00
2000-1000 microns-Fractional %		0.39 J	0.20 J	0.18 J	0.16	8.86	0.41 J
1000-500 microns-Fractional %		0.99 J	0.59 J	0.75 J	0.77	42.15	1.28 J
500-250 microns-Fractional %		1.01 J	1.33 J	1.04 J	1.44	8.33	1.83 J
250-125 microns-Fractional %		3.11 J	6.61 J	5.32 J	10.70	2.31	7.60 J
125-62 microns-Fractional %		10.81 J	20.09 J	16.03 J	19.57	4.21	32.46 J
62-31 microns-Fractional %		27.98	24.73 J	23.55	20.65	6.72	17.40
31-15.6 microns-Fractional %		23.05	20.01 J	21.38	17.86	9.39	14.65
15.6-7.8 microns-Fractional %		14.18	12.10 J	15.06	11.45	6.67	9.05
7.8-3.9 microns-Fractional %		7.68	5.29 J	5.63	7.10	4.10	5.17
3.9-2 microns-Fractional %		3.65	2.95 J	3.89	3.46	2.40	3.34
2-1 microns-Fractional %		1.89	2.05 J	2.37	2.27	1.62	2.64
<1 microns-Fractional %		5.25	4.07 J	4.80	4.57	3.00	4.18
Total Fines		83.68 T	71.2 T	76.68 T	67.36 T	33.9 T	56.43 T
Total Sand		16.31 T	28.82 T	23.32 T	32.64 T	65.86 T	43.58 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Station ID:	DR254	DR255	DR256	DR257	DR258	DR259
Sample ID:	SD-DR254-0000	SD-DR255-0000	SD-DR256-0000	SD-DR257-0000	SD-DR258-0000	SD-DR259-0000
Constituent Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Conventional Parameters						
Total Organic Carbon (%)	1.90	1.81	2.06	0.15	1.55	2.94
Grain Size (%)						
>9525 microns-Fractional %	0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %	0.00	0.00	0.00	0.69	0.42	0.00
4000-2000 microns-Fractional %	1.38	0.00	0.00	12.57	1.16	0.00
2000-1000 microns-Fractional %	6.74	0.33	0.56 J	37.01	1.06	0.67 J
1000-500 microns-Fractional %	50.56	1.40	1.59 J	31.32	3.66	1.48 J
500-250 microns-Fractional %	36.21	1.96	1.62 J	8.87	9.42	2.16 J
250-125 microns-Fractional %	3.33	8.70	7.87 J	3.89	16.27	3.07 J
125-62 microns-Fractional %	0.46	18.53	22.99 J	3.28	15.25	8.52 J
62-31 microns-Fractional %	0.06 J	24.21	27.60	0.01 U	16.76	17.50
31-15.6 microns-Fractional %	0.18 J	16.14	19.14	0.01 U	14.76	24.60
15.6-7.8 microns-Fractional %	0.03 J	11.26	11.12	0.01 U	9.18	17.57
7.8-3.9 microns-Fractional %	0.07 J	6.66	3.64	0.01 U	5.22	9.65
3.9-2 microns-Fractional %	0.13 J	3.97	1.38	0.01 U	2.15	4.50
2-1 microns-Fractional %	0.15 J	2.32	0.37	0.01 U	1.89	3.50
<1 microns-Fractional %	0.70 J	4.52	2.12	0.01 U	2.81	6.78
Total Fines	1.32 T	69.08 T	65.37 T	0.01 UT	52.77 T	84.1 T
Total Sand	97.3 T	30.92 T	34.63 T	84.37 T	45.66 T	15.9 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR260 / SD-DR260-0000 / 0 to 10 cm	DR261 / SD-DR261-0000 / 0 to 10 cm	DR262 / SD-DR262-0000 / 0 to 10 cm	DR263 / SD-DR263-0000 / 0 to 10 cm	DR264 / SD-DR264-0000 / 0 to 10 cm	DR265 / SD-DR265-0000 / 0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		3.09	2.48	2.46	2.90	1.48	1.03
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.44	0.00	0.00	0.00	0.00
4000-2000 microns-Fractional %		0.10 J	0.11	0.00	0.00	0.00	0.08
2000-1000 microns-Fractional %		0.82 J	0.59	0.47	0.14 J	0.07	0.97
1000-500 microns-Fractional %		1.05 J	1.38	1.05	1.53 J	0.94	3.47
500-250 microns-Fractional %		0.59 J	2.09	1.52	3.06 J	2.60	16.83
250-125 microns-Fractional %		1.98 J	8.28	10.08	6.02 J	16.90	25.94
125-62 microns-Fractional %		6.25 J	12.27	17.10	8.68 J	24.08	17.76
62-31 microns-Fractional %		12.31	17.77	17.51	15.20	19.76	12.31
31-15.6 microns-Fractional %		29.45	23.44	20.43	25.83	14.33	8.44
15.6-7.8 microns-Fractional %		19.65	17.32	13.66	17.95	8.91	5.02
7.8-3.9 microns-Fractional %		10.76	5.91	6.42	8.64	5.18	3.64
3.9-2 microns-Fractional %		5.06	3.58	3.37	4.44	2.46	1.77
2-1 microns-Fractional %		3.78	1.74	2.68	2.57	1.61	1.63
<1 microns-Fractional %		8.19	5.08	5.70	5.95	3.15	2.15
Total Fines		89.2 T	74.84 T	69.77 T	80.58 T	55.4 T	34.96 T
Total Sand		10.69 T	24.61 T	30.22 T	19.43 T	44.59 T	64.97 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID:	DR266	DR267	DR268	DR269	DR270	DR271
	Sample ID:	SD-DR266-0000	SD-DR267-0000	SD-DR268-0000	SD-DR269-0000	SD-DR270-0000	SD-DR271-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		1.38	0.85	2.10	0.90	1.32	2.61
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.31	0.00	0.00	0.00	35.32
4000-2000 microns-Fractional %		0.00	0.00	0.00	0.00	0.10	9.29
2000-1000 microns-Fractional %		0.12	0.34	0.24	0.06	0.37	2.44
1000-500 microns-Fractional %		0.78	5.66	0.86	8.23	5.88	2.95
500-250 microns-Fractional %		4.98	17.73	4.02	52.34	32.72	5.72
250-125 microns-Fractional %		16.42	15.83	14.73	6.43	16.24	4.74
125-62 microns-Fractional %		23.25	25.44	25.28	4.12	10.24	3.12
62-31 microns-Fractional %		21.37 J	15.50 J	20.03	8.09	11.46	13.04 J
31-15.6 microns-Fractional %		12.93 J	6.97 J	13.11	8.02	8.94	8.32 J
15.6-7.8 microns-Fractional %		7.22 J	4.05 J	7.96	5.04	5.09	6.81 J
7.8-3.9 microns-Fractional %		4.93 J	3.07 J	5.43	2.88	3.51	3.72 J
3.9-2 microns-Fractional %		2.83 J	1.83 J	2.47	1.94	1.78	1.67 J
2-1 microns-Fractional %		1.94 J	1.05 J	2.04	0.87	1.31	1.11 J
<1 microns-Fractional %		3.23 J	2.22 J	3.82	1.97	2.35	1.75 J
Total Fines		54.45 T	34.69 T	54.86 T	28.81 T	34.44 T	36.42 T
Total Sand		45.55 T	65 T	45.13 T	71.18 T	65.45 T	18.97 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR272 / SD-DR272-0000 / 0 to 10 cm	DR273 / SD-DR273-0000 / 0 to 10 cm	DR274 / SD-DR274-0000 / 0 to 10 cm	DR275 / SD-DR275-0000 / 0 to 10 cm	DR276 / SD-DR276-0000 / 0 to 10 cm	DR277 / SD-DR277-0000 / 0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		0.11	1.66	1.39	1.06	1.51	1.86
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
4000-2000 microns-Fractional %		0.03	0.01	0.03	0.00	0.00	0.00
2000-1000 microns-Fractional %		0.21	0.27	0.08	0.09	0.07	0.00
1000-500 microns-Fractional %		0.89	2.66	1.02	1.41	3.05	0.83 J
500-250 microns-Fractional %		2.94	11.58	4.28	5.41	20.48	0.81 J
250-125 microns-Fractional %		14.31	17.90	32.20	23.89	23.99	1.50 J
125-62 microns-Fractional %		25.71	24.11	30.64	31.65	19.58	7.69 J
62-31 microns-Fractional %		28.35 J	21.22	13.01	17.01	9.57	23.43
31-15.6 microns-Fractional %		10.45 J	8.02	6.45	7.81	6.59	28.55
15.6-7.8 microns-Fractional %		5.95 J	4.69	3.53	4.19	5.10	17.41
7.8-3.9 microns-Fractional %		3.98 J	2.96	2.75	2.85	4.04	7.82
3.9-2 microns-Fractional %		2.43 J	2.27	2.03	2.14	2.49	3.82
2-1 microns-Fractional %		1.81 J	1.69	1.14	1.15	1.80	2.62
<1 microns-Fractional %		2.93 J	2.62	2.85	2.41	3.24	5.53
Total Fines		55.9 T	43.47 T	31.76 T	37.56 T	32.83 T	89.18 T
Total Sand		44.06 T	56.52 T	68.22 T	62.45 T	67.17 T	10.83 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID:	DR278	DR279	DR280	DR281	DR282	DR283
	Sample ID:	SD-DR278-0000	SD-DR279-0000	SD-DR280-0000	SD-DR281-0000	SD-DR282-0000	SD-DR283-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		3.27	1.82	2.53	3.64	2.58	2.47
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
4000-2000 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.02 J
2000-1000 microns-Fractional %		0.68 J	0.34 J	0.57 J	1.70 J	0.00	0.64 J
1000-500 microns-Fractional %		1.30 J	0.78 J	1.31 J	2.10 J	1.18 J	1.65 J
500-250 microns-Fractional %		1.56 J	0.62 J	0.83 J	2.24 J	1.35 J	1.28 J
250-125 microns-Fractional %		1.49 J	3.66 J	2.40 J	4.85 J	3.13 J	6.33 J
125-62 microns-Fractional %		4.48 J	15.36 J	11.36 J	10.48 J	10.76 J	12.63 J
62-31 microns-Fractional %		19.92	23.63	25.28	20.80 J	20.03	19.18
31-15.6 microns-Fractional %		28.38	22.96	23.23	22.51 J	22.75	23.77
15.6-7.8 microns-Fractional %		18.25	14.04	14.91	15.50 J	17.71	14.95
7.8-3.9 microns-Fractional %		9.88	7.47	8.03	6.29 J	8.56	8.06
3.9-2 microns-Fractional %		4.42	3.89	4.16	4.26 J	5.33	4.03
2-1 microns-Fractional %		2.59	1.86	2.27	3.05 J	2.50	2.15
<1 microns-Fractional %		7.04	5.39	5.65	6.22 J	6.70	5.30
Total Fines		90.48 T	79.24 T	83.53 T	78.63 T	83.58 T	77.44 T
Total Sand		9.51 T	20.76 T	16.47 T	21.37 T	16.42 T	22.53 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR284 SD-DR284-0000 0 to 10 cm	DR285 SD-DR285-0000 0 to 10 cm	DR286 SD-DR286-0000-CC 0 to 10 cm	DR287 SD-DR287-0000 0 to 10 cm	DR288 SD-DR288-0000 0 to 10 cm	DR289 SD-DR289-0000 0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		2.23	3.39	1.42	1.31	2.97	3.63
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
4000-2000 microns-Fractional %		0.10	0.00	0.01	0.23 J	0.06 J	0.03 J
2000-1000 microns-Fractional %		0.42	0.32 J	0.25	0.18 J	0.29 J	0.70 J
1000-500 microns-Fractional %		1.33	1.47 J	2.20	0.91 J	1.82 J	1.80 J
500-250 microns-Fractional %		2.28	2.59 J	7.44	4.12 J	1.90 J	1.81 J
250-125 microns-Fractional %		12.61	3.88 J	18.01	9.08 J	2.31 J	3.58 J
125-62 microns-Fractional %		16.24	8.12 J	18.98	29.66 J	8.00 J	11.40 J
62-31 microns-Fractional %		14.43	17.68	20.26	23.98 J	17.13	16.86
31-15.6 microns-Fractional %		18.77	27.44	14.87	12.15 J	24.05	22.29
15.6-7.8 microns-Fractional %		16.64	18.67	8.97	7.92 J	18.90	16.36
7.8-3.9 microns-Fractional %		6.18	7.52	5.66	4.08 J	9.89	9.59
3.9-2 microns-Fractional %		3.65	3.95	3.04	2.23 J	5.09	5.16
2-1 microns-Fractional %		2.20	2.21	1.67	2.17 J	3.36	2.57
<1 microns-Fractional %		5.16	6.15	3.72	3.31 J	7.22	7.86
Total Fines		67.03 T	83.62 T	58.19 T	55.84 T	85.64 T	80.69 T
Total Sand		32.88 T	16.38 T	46.88 T	43.95 T	14.32 T	19.29 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR290 / SD-DR290-0000 / 0 to 10 cm	DR291 / SD-DR291-0000 / 0 to 10 cm	DR292 / SD-DR292-0000-CC / 0 to 10 cm	DR293 / SD-DR293-0000 / 0 to 10 cm	DR294 / SD-DR294-0000 / 0 to 10 cm	DR295 / SD-DR295-0000 / 0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		4.01	3.79	5.29	1.74	0.15	0.15
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.13
4000-2000 microns-Fractional %		0.00	0.08	0.28	0.01	1.95	1.07
2000-1000 microns-Fractional %		0.56 J	0.57	1.47	0.23	11.36	6.45
1000-500 microns-Fractional %		1.79 J	1.64	3.34	0.81	40.93	32.32
500-250 microns-Fractional %		2.50 J	5.92	5.78	3.07	37.85	55.08
250-125 microns-Fractional %		5.40 J	18.13	7.93	16.88	3.67	2.23
125-62 microns-Fractional %		12.15 J	14.89	10.06	35.25	0.94	0.70
62-31 microns-Fractional %		17.44	14.70	18.32	19.10	1.70 J	0.01 U
31-15.6 microns-Fractional %		22.37	14.79	19.97	8.99	0.38 J	0.01 U
15.6-7.8 microns-Fractional %		14.56	10.28	13.58	5.62	0.31 J	0.01 U
7.8-3.9 microns-Fractional %		8.70	6.71	8.29	3.20	0.30 J	0.01 U
3.9-2 microns-Fractional %		4.28	3.91	4.49	2.51	0.27 J	0.01 U
2-1 microns-Fractional %		3.32	2.26	3.12	1.25	0.10 J	0.01 U
<1 microns-Fractional %		6.92	6.14	7.70	3.07	0.23 J	0.01 U
Total Fines		77.59 T	58.79 T	75.47 T	43.74 T	3.29 T	0.01 UT
Total Sand		22.4 T	41.15 T	28.58 T	56.24 T	94.75 T	96.78 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size

Constituent	Station ID:	DR296	DR297	DR298	DR299	DR300	DR301
	Sample ID:	SD-DR296-0000	SD-DR297-0000	SD-DR298-0000	SD-DR299-0000	SD-DR300-0000	SD-DR301-0000
	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Conventional Parameters							
Total Organic Carbon (%)		0.65	0.14	0.08	0.14	0.11	0.08
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		2.11	0.00	0.00	0.25	4.85	1.03
4000-2000 microns-Fractional %		4.24	0.18	0.12	2.18	11.58	4.58
2000-1000 microns-Fractional %		13.98	4.17	7.58	22.10	19.86	21.06
1000-500 microns-Fractional %		44.09	19.56	62.75	45.40	43.79	48.67
500-250 microns-Fractional %		34.16	57.78	27.19	25.72	15.75	21.78
250-125 microns-Fractional %		0.52	17.59	0.77	1.17	1.62	0.50
125-62 microns-Fractional %		0.19	0.25	0.32	0.27	1.11	0.09
62-31 microns-Fractional %		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
31-15.6 microns-Fractional %		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
15.6-7.8 microns-Fractional %		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
7.8-3.9 microns-Fractional %		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
3.9-2 microns-Fractional %		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
2-1 microns-Fractional %		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
<1 microns-Fractional %		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Total Fines		0.01 UT	0.01 UT	0.01 UT	0.01 UT	0.01 UT	0.01 UT
Total Sand		92.94 T	99.35 T	98.61 T	94.66 T	82.13 T	92.1 T

Blank cell indicate no analyses were performed.

APPENDIX E

STATISTICAL SUMMARY AND DATA LISTING

SUBSURFACE SEDIMENT

APPENDIX E-8

PESTICIDES/PCBS (SUBSURFACE SEDIMENT)

Duwamish River Sediment Investigation - Statistics for Subsurface Sediment Results for Pesticides and PCBs

Constituent	Number of Samples Analyzed	Number of Detections	Detection Frequency (%)	Minimum Detected Value	Maximum Detected Value	Sample Number of Maximum Detected Value	Arithmetic Mean	Median Value
Pesticides/PCBs (ug/kg)								
4,4'-DDD	16	7	43.8	2.00	14.00	SD-DR008-0020	4.125	2.000
4,4'-DDE	16	10	62.5	1.00	18.00	SD-DR021-0020	4.562	2.000
4,4'-DDT	16	0	0.0	n/a	n/a		2.687	2.000
Aldrin	16	0	0.0	n/a	n/a		1.062	1.000
alpha-BHC	16	0	0.0	n/a	n/a		1.000	1.000
alpha-Chlordane	16	0	0.0	n/a	n/a		1.375	1.000
beta-BHC	16	0	0.0	n/a	n/a		1.187	1.000
Dieldrin	16	2	12.5	3.00	5.00	SD-DR008-0020	2.250	2.000
Endosulfan I	16	0	0.0	n/a	n/a		1.000	1.000
Endosulfan II	16	0	0.0	n/a	n/a		2.000	2.000
Endosulfan Sulfate	16	0	0.0	n/a	n/a		2.125	2.000
Endrin	16	0	0.0	n/a	n/a		2.000	2.000
Endrin Aldehyde	16	1	6.3	10.00	10.00	SD-DR021-0000A	9.375	8.500
Endrin Ketone	16	0	0.0	n/a	n/a		2.000	2.000
gamma-BHC (Lindane)	16	0	0.0	n/a	n/a		1.000	1.000
gamma-Chlordane	16	0	0.0	n/a	n/a		1.750	1.000
Heptachlor	16	0	0.0	n/a	n/a		1.125	1.000
Heptachlor Epoxide	16	0	0.0	n/a	n/a		1.375	1.000
Methoxychlor	16	0	0.0	n/a	n/a		1.187	1.000
Toxaphene	16	0	0.0	n/a	n/a		10.000	10.000
Aroclor 1016	33	0	0.0	n/a	n/a		7.939	0.100
Aroclor 1221	33	0	0.0	n/a	n/a		15.818	0.100
Aroclor 1232	33	0	0.0	n/a	n/a		7.939	0.100
Aroclor 1242	33	19	57.6	22.00	2500.00	SD-DR021-0020	138.630	26.000
Aroclor 1248	33	0	0.0	n/a	n/a		7.939	0.100
Aroclor 1254	33	25	75.8	37.00	2200.00	SD-DR068-0000A	288.560	137.000
Aroclor 1260	33	24	72.7	22.00	678.00	SD-DR206-0000A	159.927	82.000
Total PCB	33	25	75.8	37.00	4043.00	SD-DR021-0020	583.439	244.000
Pesticides/PCBs - TOCN (ug/kg)								
Total PCB (TOCN)	33	25	75.8	1650.00	165000.00	SD-DR021-0020	29502.747	9880.000
PCB Congeners (ug/kg)								
2',3,4,4',5-Pentachlorobiphenyl (PCB123)	33	0	0.0	n/a	n/a		2.060	1.000
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	33	13	39.4	1.00	3.00	SD-DR025-0020	1.363	1.000

Bold text indicates constituent was detected one or more times.
n/a - Not Applicable

Duwamish River Sediment Investigation - Statistics for Subsurface Sediment Results for Pesticides and PCBs

Constituent	Number of Samples Analyzed	Number of Detections	Detection Frequency (%)	Minimum Detected Value	Maximum Detected Value	Sample Number of Maximum Detected Value	Arithmetic Mean	Median Value
PCB Congeners (ug/kg)								
2,2',3,3',4,4',5,6-Octachlorobiphenyl (P	33	12	36.4	1.00	6.00	SD-DR206-0000A	1.545	1.000
2,2',3,3',4,4',5-Heptachlorobiphenyl (PC	33	20	60.6	2.00	29.00	SD-DR206-0000A	6.666	3.000
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB12	33	22	66.7	1.00	27.00	SD-DR068-0000A	4.060	2.000
2,2',3,4',5,5',6-Heptachlorobiphenyl (PC	33	24	72.7	1.00	28.00	SD-DR206-0000A	6.303	4.000
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB13	33	26	78.8	1.00	160.00	SD-DR068-0000A	26.363	11.000
2,2',3,4,4',5,5'-Heptachlorobiphenyl (PC	33	25	75.8	1.00	53.00	SD-DR206-0000A	10.696	5.000
2,2',3,5'-Tetrachlorobiphenyl (PCB44)	33	24	72.7	1.00	52.00	SD-DR021-0020	7.939	3.000
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB15	33	25	75.8	2.00	98.00	SD-DR068-0000A	17.727	8.000
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)	33	24	72.7	1.00	130.00	SD-DR068-0000A	16.484	6.000
2,2',5,5'-Tetrachlorobiphenyl (PCB52)	33	24	72.7	1.00	150.00	SD-DR021-0020	14.090	5.000
2,2',5-Trichlorobiphenyl (PCB18)	33	20	60.6	1.00	270.00	SD-DR021-0020	12.030	1.000
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB16	33	11	33.3	1.00	11.00	SD-DR008-0020	2.090	1.000
2,3',4,4',5-Pentachlorobipheny (PCB118)	33	25	75.8	1.00	110.00	SD-DR068-0000A	14.000	6.000
2,3',4,4'-Tetrachlorobiphenyl (PCB66)	33	25	75.8	2.00	140.00	SD-DR021-0020	21.060	8.000
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB15	33	6	18.2	1.00	3.00	SD-DR025-0020	1.212	1.000
2,3,3',4,4',5,5'-Heptachlorobiphenyl (PC	33	1	3.0	1.00	1.00	SD-DR044-0020	1.000	1.000
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156	33	17	51.5	1.00	16.00	SD-DR068-0000A	2.636	1.000
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)	33	22	66.7	1.00	43.00	SD-DR068-0000A	6.424	2.000
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	33	3	9.1	2.00	5.00	SD-DR137-0000A-CC	1.515	1.000
2,4,4'-Trichlorobiphenyl (PCB28)	33	22	66.7	1.00	220.00	SD-DR021-0020	12.242	2.000
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB16	33	0	0.0	n/a	n/a		1.000	1.000
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	33	4	12.1	1.00	4.00	SD-DR025-0020	1.151	1.000
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	33	0	0.0	n/a	n/a		1.636	1.000
3,4,4',5-Tetrachlorobiphenyl (PCB81)	33	0	0.0	n/a	n/a		1.030	1.000
Decachlorobiphenyl (PCB209)	33	3	9.1	1.00	1.00	SD-DR025-0020	1.000	1.000

Bold text indicates constituent was detected one or more times.
n/a - Not Applicable

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR008	DR008	DR021	DR021	DR025	DR025
	Sample ID:	SD-DR008-0000A	SD-DR008-0020	SD-DR021-0000A	SD-DR021-0020	SD-DR025-0000A	SD-DR025-0020
	Depth (ft bgs):	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft
Pesticides/PCBs (ug/kg)							
4,4'-DDD		7	14	4	2 J	2 U	10
4,4'-DDE		4	12	4	18 J	2	7
4,4'-DDT		4 UIJ	3 UIJ	2 UJ	5 UIJ	2 UJ	3 UIJ
Aldrin		1 UJ	1 UJ	1 U	1 UJ	2 UIJ	1 UJ
alpha-BHC		1 U	1 U	1 U	1 UJ	1 U	1 U
alpha-Chlordane		3 UI	4 UI	1 U	1 UJ	1 U	2 UI
beta-BHC		1 U	1 U	2 UIJ	1 UJ	2 UI	1 U
Dieldrin		3 J	5 J	2 UJ	2 UJ	2 UJ	2 UJ
Endosulfan I		1 U	1 U	1 U	1 UJ	1 U	1 U
Endosulfan II		2 U	2 U	2 U	2 UJ	2 U	2 U
Endosulfan Sulfate		4 UI	2 U	2 U	2 UJ	2 U	2 U
Endrin		2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
Endrin Aldehyde		15 UI	25 UI	10	12 UIJ	7 UI	10 UI
Endrin Ketone		2 U	2 U	2 U	2 UJ	2 U	2 U
gamma-BHC (Lindane)		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
gamma-Chlordane		3 UI	6 UI	1 U	4 UIJ	1 U	2 UI
Heptachlor		1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Heptachlor Epoxide		2 UI	1 U	1 U	4 UIJ	1 U	1 U
Methoxychlor		4 UI	1 U	1 U	1 UJ	1 U	1 U
Toxaphene		10 U	10 U	10 U	10 UJ	10 U	10 U
Aroclor 1016		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor 1221		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor 1232		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor 1242		170	635	82	2500	40	83
Aroclor 1248		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR008	DR008	DR021	DR021	DR025	DR025
	Sample ID:	SD-DR008-0000A	SD-DR008-0020	SD-DR021-0000A	SD-DR021-0020	SD-DR025-0000A	SD-DR025-0020
	Depth (ft bgs):	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft
Aroclor 1254		373	594	254	1100	148	618
Aroclor 1260		214	379	192	443	98	453
Total PCB		757 T	1608 T	528 T	4043 T	286 T	1154 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		21000 T	72800 T	20700 T	165000 T	11100 T	45400 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		2 UI	4 UI	2 UI	7 UI	1 U	4 UI
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1	3	2	2	1 U	3
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 U	3	1	2	1 U	3
2,2',3,3',4,4',5-Heptachlorobiphenyl		6	16	5	14	3	15
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		5	6	3	12	2	8
2,2',3,4',5,5',6-Heptachlorobiphenyl		8	14	6	13	3	16
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		25	71	20	82	10 J	67
2,2',3,4,4',5,5'-Heptachlorobiphenyl		11	25	8	21	5	26
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		13	34	6	52	3	12
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		20	31	14	42	8	38
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		14	34	11	52	4 J	33
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		14 UI	41	8	150	4 J	20
2,2',5-Trichlorobiphenyl (PCB18)		14 J	40 J	4 J	270 J	2 J	4 J
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		6	11	1	5	1 U	4
2,3',4,4',5-Pentachlorobipheny (PCB118)		13	28	11	49	6	28
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		24	40	15	140	8	34
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 U	1	1 U	3	1 U	3
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	1 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		2	4	2	8	1	5
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		6	12	5	28	3	12

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR008	DR008	DR021	DR021	DR025	DR025
	Sample ID:	SD-DR008-0000A	SD-DR008-0020	SD-DR021-0000A	SD-DR021-0020	SD-DR025-0000A	SD-DR025-0020
	Depth (ft bgs):	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		2	2 UI	1 U	3 UI	1 U	2 UI
2,4,4'-Trichlorobiphenyl (PCB28)		16	50	7	220	3	7
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 U	1 U	1 U	1 U	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 U	2	1 U	1 U	1 U	4
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 UJ	5 UI	1 UJ	9 UJI	1 U	1 UJ
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 U	1 U	1 U	2 UI	1 U	1 U
Decachlorobiphenyl (PCB209)		1 U	1	1 U	1 U	1 U	1

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR044 SD-DR044-0000A 0 to 2 ft	DR044 SD-DR044-0020 2 ft to 4 ft	DR054 SD-DR054-0000A 0 to 2 ft	DR054 SD-DR054-0020 2 ft to 4 ft	DR068 SD-DR068-0000A 0 to 2 ft	DR101 SD-DR101-0000A 0 to 2 ft
Pesticides/PCBs (ug/kg)							
4,4'-DDD							2 U
4,4'-DDE							1 U
4,4'-DDT							2 UJ
Aldrin							1 UJ
alpha-BHC							1 U
alpha-Chlordane							1 U
beta-BHC							1 U
Dieldrin							2 UJ
Endosulfan I							1 U
Endosulfan II							2 U
Endosulfan Sulfate							2 U
Endrin							2 UJ
Endrin Aldehyde							2 U
Endrin Ketone							2 U
gamma-BHC (Lindane)							1 UJ
gamma-Chlordane							1 U
Heptachlor							1 UJ
Heptachlor Epoxide							1 U
Methoxychlor							1 U
Toxaphene							10 U
Aroclor 1016		20 U	20 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor 1221		40 U	40 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor 1232		20 U	20 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor 1242		26	272	25	68	70	0.1 U
Aroclor 1248		20 U	20 U	0.1 U	0.1 U	0.1 U	0.1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR044 SD-DR044-0000A 0 to 2 ft	DR044 SD-DR044-0020 2 ft to 4 ft	DR054 SD-DR054-0000A 0 to 2 ft	DR054 SD-DR054-0020 2 ft to 4 ft	DR068 SD-DR068-0000A 0 to 2 ft	DR101 SD-DR101-0000A 0 to 2 ft
Aroclor 1254		130	1100	145	451	2200	0.1 U
Aroclor 1260		77	560	82	234	309	0.1 U
Total PCB		233 T	1932 T	252 T	753 T	2579 T	0.1 UT
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		8690 T	87000 T	12700 T	51600 T	154000 T	5.49 UT
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 U	1 U	2 UI	3 UI	10 UI	1 U
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 U	3	1 U	2	1	1 U
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 U	4	1 U	2	1	1 U
2,2',3,3',4,4',5-Heptachlorobiphenyl		3	28	3	8	20	1 U
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		2	17	2	5	27	1 U
2,2',3,4',5,5',6-Heptachlorobiphenyl		4	21	4	9	10	1 U
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		11	110	12	33	160	1 U
2,2',3,4,4',5,5'-Heptachlorobiphenyl		6	41	5	14	22	1 U
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		4	33	4	10	18	1 U
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		9	78	9	22	98	1 U
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		8	90	8	19	130	1 U
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		5	49	5	14	38	1 U
2,2',5-Trichlorobiphenyl (PCB18)		1	14	1 J	4 J	4 J	1 UJ
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 U	5	1 U	2	8	1 U
2,3',4,4',5-Pentachlorobipheny (PCB118)		6	70	8	20	110	1 U
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		8	100	9	24	120	1 U
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 U	2	1 U	1	3	1 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1	1 U	1 U	1 U	1 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 U	10	1	3	16	1 U
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		2	33	4	9	43	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Pesticides/PCBs

Station ID:	DR044	DR044	DR054	DR054	DR068	DR101
Sample ID:	SD-DR044-0000A	SD-DR044-0020	SD-DR054-0000A	SD-DR054-0020	SD-DR068-0000A	SD-DR101-0000A
Constituent **Depth (ft bgs):**	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	0 to 2 ft
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	1 U	3 UI	1 U	2 UI	4 UI	1 U
2,4,4'-Trichlorobiphenyl (PCB28)	2	22	2	6	5	1 U
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	1 U	1 U	1 U	1 U	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	1 U	1 U	2	1 U	1	1 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)	1 U	5 UI	1 U	1 U	4 UI	1 U
3,4,4',5-Tetrachlorobiphenyl (PCB81)	1 U	1 U	1 U	1 U	1 U	1 U
Decachlorobiphenyl (PCB209)	1 U	1	1 U	1 U	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (ft bgs):						
	Station ID:	DR101	DR106	DR106	DR112	DR112	DR137
	Sample ID:	SD-DR101-0020	SD-DR106-0000A	SD-DR106-0020	SD-DR112-0000A	SD-DR112-0020	SD-DR137-0000A-CC
	Depth (ft bgs):	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft
Pesticides/PCBs (ug/kg)							
4,4'-DDD		2 UJ					8 J
4,4'-DDE		1 UJ					10 J
4,4'-DDT		2 UJ					2 UJ
Aldrin		1 UJ					1 UJ
alpha-BHC		1 UJ					1 U
alpha-Chlordane		1 UJ					1 U
beta-BHC		1 UJ					1 U
Dieldrin		2 UJ					2 UJ
Endosulfan I		1 UJ					1 U
Endosulfan II		2 UJ					2 U
Endosulfan Sulfate		2 UJ					2 UJ
Endrin		2 UJ					2 UJ
Endrin Aldehyde		2 UJ					12 UI
Endrin Ketone		2 UJ					2 U
gamma-BHC (Lindane)		1 UJ					1 UJ
gamma-Chlordane		1 UJ					1 U
Heptachlor		1 UJ					1 UJ
Heptachlor Epoxide		1 UJ					1 U
Methoxychlor		1 UJ					1 U
Toxaphene		10 UJ					10 U
Aroclor 1016		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	20 U
Aroclor 1221		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	40 U
Aroclor 1232		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	20 U
Aroclor 1242		0.1 U	0.1 U	0.1 U	34	44	80 J
Aroclor 1248		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR101 SD-DR101-0020 2 ft to 4 ft	DR106 SD-DR106-0000A 0 to 2 ft	DR106 SD-DR106-0020 2 ft to 4 ft	DR112 SD-DR112-0000A 0 to 2 ft	DR112 SD-DR112-0020 2 ft to 4 ft	DR137 SD-DR137-0000A-CC 0 to 2 ft
Aroclor 1254		0.1 U	39	0.1 U	140	178	226 J
Aroclor 1260		0.1 U	22	0.1 U	70	112	163 J
Total PCB		0.1 UT	61 T	0.1 UT	244 T	334 T	469 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		4.27 UT	2900 T	5.26 UT	9880 T	11400 T	19800 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 U	1 U	1 U	1 U	2 UI	2 UI
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	1 J
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	1 J
2,2',3,3',4,4',5-Heptachlorobiphenyl		1 U	1 U	1 U	3	4	7 UI
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 U	1 U	1 U	2	2	3 J
2,2',3,4',5,5',6-Heptachlorobiphenyl		1 U	1	1 U	3	5	7 J
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		1 U	3	1 U	10	14	19 J
2,2',3,4,4',5,5'-Heptachlorobiphenyl		1 U	2	1 U	5	7	13 J
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1 U	2	1 U	3	4	10 J
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		1 U	2	1 U	7	10	14 J
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		1 U	1 U	1 U	5	6	12 J
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		1 U	3	1 U	4	6	14 J
2,2',5-Trichlorobiphenyl (PCB18)		1 UJ	1 UJ	1 UJ	1 J	2 J	5 J
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 U	1 U	1 U	1 U	1 U	1 U
2,3',4,4',5-Pentachlorobipheny (PCB118)		1 U	2	1 U	5	7	9 J
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		1 U	3	1 U	8	10	18 J
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 U	1 U	1 U	1 U	1 U	1 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	1 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 U	1 U	1 U	2	2	1 J
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1 U	1 U	1 U	2	4	4 J

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR101	DR106	DR106	DR112	DR112	DR137
	Sample ID:	SD-DR101-0020	SD-DR106-0000A	SD-DR106-0020	SD-DR112-0000A	SD-DR112-0020	SD-DR137-0000A-CC
	Depth (ft bgs):	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 U	1 U	1 U	1 U	1 U	5 J
2,4,4'-Trichlorobiphenyl (PCB28)		1 U	2	1 U	5	6	7 J
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 U	1 U	1 U	1 U	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 U	1 U	1 U	1 U	1 U	1 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 U	1 U	1 U	1 U	1 U	2 UI
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 U	1 U	1 U	1 U	1 U	1 U
Decachlorobiphenyl (PCB209)		1 U	1 U	1 U	1 U	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR137 SD-DR137-0020-CC 2 ft to 4 ft	DR171 SD-DR171-0000A 0 to 2 ft	DR171 SD-DR171-0020 2 ft to 4 ft	DR206 SD-DR206-0000A 0 to 2 ft	DR206 SD-DR206-0020 2 ft to 4 ft	DR220 SD-DR220-0000A 0 to 2 ft
Pesticides/PCBs (ug/kg)							
4,4'-DDD		2 UJ			2 U	3	
4,4'-DDE		1 UJ			2	7	
4,4'-DDT		2 UJ			3 UIJ	5 UIJ	
Aldrin		1 UJ			1 UJ	1 UJ	
alpha-BHC		1 UJ			1 U	1 U	
alpha-Chlordane		1 UJ			1 U	1 U	
beta-BHC		1 UJ			2 UI	1 U	
Dieldrin		2 UJ			2 UJ	2 UJ	
Endosulfan I		1 UJ			1 U	1 U	
Endosulfan II		2 UJ			2 U	2 U	
Endosulfan Sulfate		2 UJ			2 UJ	2 UJ	
Endrin		2 UJ			2 UJ	2 UJ	
Endrin Aldehyde		2 UJ			25 UI	20 UI	
Endrin Ketone		2 UJ			2 U	2 U	
gamma-BHC (Lindane)		1 UJ			1 UJ	1 UJ	
gamma-Chlordane		1 UJ			1 U	2 UI	
Heptachlor		1 UJ			1 UJ	1 UJ	
Heptachlor Epoxide		1 UJ			1 U	3 UI	
Methoxychlor		1 UJ			1 U	1 U	
Toxaphene		10 UJ			10 U	10 U	
Aroclor 1016		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1221		40 U	40 U	40 U	40 U	40 U	40 U
Aroclor 1232		20 U	20 U	20 U	20 U	20 U	20 U
Aroclor 1242		20 U	20 U	32	110	20 U	128
Aroclor 1248		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR137	DR171	DR171	DR206	DR206	DR220
	Sample ID:	SD-DR137-0020-CC	SD-DR171-0000A	SD-DR171-0020	SD-DR206-0000A	SD-DR206-0020	SD-DR220-0000A
	Depth (ft bgs):	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft
Aroclor 1254		218 J	87	137	462	20 U	474
Aroclor 1260		512 J	58	95	678	20 U	230
Total PCB		730 T	145 T	264 T	1250 T	40 UT	832 T
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		36300 T	6440 T	11300 T	158000 T	1630 UT	34400 T
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 U	1 U	1 U	4 UI	1 U	4 UI
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		2 J	1 U	1 U	3	1 U	1
2,2',3,3',4,4',5,6-Octachlorobiphenyl		4 J	1 U	1 U	6	1 U	2
2,2',3,3',4,4',5-Heptachlorobiphenyl		20 J	3	5	29	1 U	9
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		4 J	2	2	8	1 U	7
2,2',3,4',5,5',6-Heptachlorobiphenyl		20 J	3	5	28	1 U	9
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		44 J	9	14	82	1 U	40
2,2',3,4,4',5,5'-Heptachlorobiphenyl		37 J	5	8	53	1 U	14
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		4 J	3	4	12	1 U	14
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		37 J	6	11	72	1 U	26
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		16 J	6	9	34	1 U	27
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		6 J	4	6	29	1 U	22
2,2',5-Trichlorobiphenyl (PCB18)		1 U	1	2	7	1 U	6
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 J	1 U	1 U	2	1 U	2
2,3',4,4',5-Pentachlorobipheny (PCB118)		9 J	4	7	22	1 U	24
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		15 J	7	10	36	1 U	34
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 U	1 U	1 U	1 U	1 U	1 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	1 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		3 J	1 U	1	6	1 U	4
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		3 J	2	3	8	1 U	13

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR137	DR171	DR171	DR206	DR206	DR220
	Sample ID:	SD-DR137-0020-CC	SD-DR171-0000A	SD-DR171-0020	SD-DR206-0000A	SD-DR206-0020	SD-DR220-0000A
	Depth (ft bgs):	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 U	1 U	1 U	2 UI	1 U	2
2,4,4'-Trichlorobiphenyl (PCB28)		2 J	1 U	3	9	1 U	13
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 U	1 U	1 U	1 U	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 U	1 U	1 U	1 U	1 U	1 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 U	1 U	1 U	1 U	1 U	2 UI
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 U	1 U	1 U	1 U	1 U	1 U
Decachlorobiphenyl (PCB209)		1 U	1 U	1 U	1 U	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR220 SD-DR220-0020 2 ft to 4 ft	DR224 SD-DR224-0000A 0 to 2 ft	DR224 SD-DR224-0020 2 ft to 3.33 ft	DR246 SD-DR246-0000A 0 to 2 ft	DR246 SD-DR246-0020 2 ft to 4 ft	DR269 SD-DR269-0000A 0 to 2 ft
Pesticides/PCBs (ug/kg)							
4,4'-DDD			2 U	2 U			
4,4'-DDE			1 U	1 U			
4,4'-DDT			2 UJ	2 UJ			
Aldrin			1 UJ	1 UJ			
alpha-BHC			1 U	1 U			
alpha-Chlordane			1 U	1 U			
beta-BHC			1 U	1 U			
Dieldrin			2 UJ	2 UJ			
Endosulfan I			1 U	1 U			
Endosulfan II			2 U	2 U			
Endosulfan Sulfate			2 U	2 U			
Endrin			2 UJ	2 UJ			
Endrin Aldehyde			2 U	2 U			
Endrin Ketone			2 U	2 U			
gamma-BHC (Lindane)			1 UJ	1 UJ			
gamma-Chlordane			1 U	1 U			
Heptachlor			1 UJ	1 UJ			
Heptachlor Epoxide			1 U	1 U			
Methoxychlor			1 U	1 U			
Toxaphene			10 U	10 U			
Aroclor 1016		20 U	0.1 U	0.1 U	0.1 U	0.1 U	20 U
Aroclor 1221		40 U	0.1 U	0.1 U	0.1 U	0.1 U	40 U
Aroclor 1232		20 U	0.1 U	0.1 U	0.1 U	0.1 U	20 U
Aroclor 1242		33	0.1 U	0.1 U	0.1 U	22	20 U
Aroclor 1248		20 U	0.1 U	0.1 U	0.1 U	0.1 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR220 SD-DR220-0020 2 ft to 4 ft	DR224 SD-DR224-0000A 0 to 2 ft	DR224 SD-DR224-0020 2 ft to 3.33 ft	DR246 SD-DR246-0000A 0 to 2 ft	DR246 SD-DR246-0020 2 ft to 4 ft	DR269 SD-DR269-0000A 0 to 2 ft
Aroclor 1254		110	0.1 U	0.1 U	58	114	20 U
Aroclor 1260		84	0.1 U	0.1 U	39	74	20 U
Total PCB		*227 T*	*0.1 UT*	*0.1 UT*	*97 T*	*210 T*	*40 UT*
Pesticides/PCBs - TOCN (ug/kg)							
Total PCB (TOCN)		9580 T	7.58 UT	8.06 UT	3530 T	7140 T	2230 UT
PCB Congeners (ug/kg)							
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		2 UI	1 U	1 U	1 U	1 U	1 U
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1	1 U	1 U	1 U	1 U	1 U
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1	1 U	1 U	1 U	1 U	1 U
2,2',3,3',4,4',5-Heptachlorobiphenyl		3	1 U	1 U	2 UI	2 UI	1 U
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		2	1 U	1 U	1 U	1	1 U
2,2',3,4',5,5',6-Heptachlorobiphenyl		4	1 U	1 U	1	3	1 U
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		11	1 U	1 U	5	1 U	2
2,2',3,4,4',5,5'-Heptachlorobiphenyl		6	1 U	1 U	2	5	1 U
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		3	1 U	1 U	1	2	1 U
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		8	1 U	1 U	3	6	1 U
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		5	1 U	1 U	2	5	1 U
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		5	1 U	1 U	2	4	1 U
2,2',5-Trichlorobiphenyl (PCB18)		1 U	1 UJ	1 UJ	1 UJ	1 J	1 U
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 U	1 U	1 U	1 U	1 U	1 U
2,3',4,4',5-Pentachlorobipheny (PCB118)		5	1 U	1 U	2	5	1 U
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		8	1 U	1 U	3	6	1 U
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 U	1 U	1 U	1 U	1 U	1 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 U	1 U	1 U	1 U	1 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 U	1 U	1 U	1 U	1 U	1 U
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		2	1 U	1 U	1 U	2	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (ft bgs):						
	Station ID:	DR220	DR224	DR224	DR246	DR246	DR269
	Sample ID:	SD-DR220-0020	SD-DR224-0000A	SD-DR224-0020	SD-DR246-0000A	SD-DR246-0020	SD-DR269-0000A
	Depth (ft bgs):	2 ft to 4 ft	0 to 2 ft	2 ft to 3.33 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 U	1 U	1 U	1 U	1 U	1 U
2,4,4'-Trichlorobiphenyl (PCB28)		3	1 U	1 U	1 U	2	1 U
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 U	1 U	1 U	1 U	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 U	1 U	1 U	1 U	1 U	1 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 U	1 U	1 U	1 U	1 U	1 U
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 U	1 U	1 U	1 U	1 U	1 U
Decachlorobiphenyl (PCB209)		1 U	1 U	1 U	1 U	1 U	1 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR269 / SD-DR269-0020 / 2 ft to 4 ft	DR284 / SD-DR284-0000A / 0 to 2 ft	DR284 / SD-DR284-0020 / 2 ft to 4 ft
Pesticides/PCBs (ug/kg)				
4,4'-DDD			2 U	2 U
4,4'-DDE			1	1 U
4,4'-DDT			2 UJ	2 UJ
Aldrin			1 UJ	1 UJ
alpha-BHC			1 U	1 U
alpha-Chlordane			1 U	1 U
beta-BHC			1 U	1 U
Dieldrin			2 UJ	2 UJ
Endosulfan I			1 U	1 U
Endosulfan II			2 U	2 U
Endosulfan Sulfate			2 U	2 UJ
Endrin			2 UJ	2 UJ
Endrin Aldehyde			2 U	2 U
Endrin Ketone			2 U	2 U
gamma-BHC (Lindane)			1 UJ	1 UJ
gamma-Chlordane			1 U	1 U
Heptachlor			3 UIJ	1 UJ
Heptachlor Epoxide			1 U	1 U
Methoxychlor			1 U	1 U
Toxaphene			10 U	10 U
Aroclor 1016		20 U	0.1 U	20 U
Aroclor 1221		40 U	0.1 U	40 U
Aroclor 1232		20 U	0.1 U	20 U
Aroclor 1242		20 U	0.1 U	20 U
Aroclor 1248		20 U	0.1 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Pesticides/PCBs

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR269 / SD-DR269-0020 / 2 ft to 4 ft	DR284 / SD-DR284-0000A / 0 to 2 ft	DR284 / SD-DR284-0020 / 2 ft to 4 ft
Aroclor 1254		20 U	37	69
Aroclor 1260		20 U	0.1 U	39
Total PCB		40 UT	37 T	108 T
Pesticides/PCBs - TOCN (ug/kg)				
Total PCB (TOCN)		3170 UT	1650 T	4220 T
PCB Congeners (ug/kg)				
2',3,4,4',5-Pentachlorobiphenyl (PCB123)		1 U	1 U	1 U
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl		1 U	1 U	1 U
2,2',3,3',4,4',5,6-Octachlorobiphenyl		1 U	1 U	1 U
2,2',3,3',4,4',5-Heptachlorobiphenyl		1 U	1 U	2
2,2',3,3',4,4'-Hexachlorobiphenyl (PCB128)		1 U	1 U	1
2,2',3,4',5,5',6-Heptachlorobiphenyl		1 U	1 U	2
2,2',3,4,4',5'-Hexachlorobiphenyl (PCB138)		1	2	6
2,2',3,4,4',5,5'-Heptachlorobiphenyl		1 U	1	3
2,2',3,5'-Tetrachlorobiphenyl (PCB44)		1 U	1 U	2
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB153)		1 U	2	4
2,2',4,5,5'-Pentachlorobiphenyl (PCB101)		1 U	1	4
2,2',5,5'-Tetrachlorobiphenyl (PCB52)		1 U	1	3
2,2',5-Trichlorobiphenyl (PCB18)		1 U	1 UJ	1
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)		1 U	1 U	1 U
2,3',4,4',5-Pentachlorobipheny (PCB118)		1 U	1	3
2,3',4,4'-Tetrachlorobiphenyl (PCB66)		1 U	2	5
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)		1 U	1 U	1 U
2,3,3',4,4',5,5'-Heptachlorobiphenyl		1 U	1 U	1 U
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)		1 U	1 U	1 U
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)		1 U	1 U	1

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Pesticides/PCBs

Constituent	Station ID:	DR269	DR284	DR284
	Sample ID:	SD-DR269-0020	SD-DR284-0000A	SD-DR284-0020
	Depth (ft bgs):	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft
2,3,4,4',5-Pentachlorobiphenyl (PCB114)		1 U	1 U	1 U
2,4,4'-Trichlorobiphenyl (PCB28)		1 U	1 U	1
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)		1 U	1 U	1 U
3,3',4,4',5-Pentachlorobiphenyl (PCB126)		1 U	1 U	1 U
3,3',4,4'-Tetrachlorobiphenyl (PCB 77)		1 U	1 U	1 U
3,4,4',5-Tetrachlorobiphenyl (PCB81)		1 U	1 U	1 U
Decachlorobiphenyl (PCB209)		1 U	1 U	1 U

Blank cell indicate no analyses were performed.

APPENDIX E-9

BNAS (SUBSURFACE SEDIMENT)

Duwamish River Sediment Investigation - Statistics for Subsurface Sediment Results for BNAs

Constituent	Number of Samples Analyzed	Number of Detections	Detection Frequency (%)	Minimum Detected Value	Maximum Detected Value	Sample Number of Maximum Detected Value	Arithmetic Mean	Median Value
Semi-Volatile Organic Compounds (ug/kg)								
1,2,4-Trichlorobenzene	33	0	0.0	n/a	n/a		20.000	20.000
1,2-Dichlorobenzene	**33**	**2**	**6.1**	**20.00**	**30.00**	**SD-DR008-0020**	**20.303**	**20.000**
1,3-Dichlorobenzene	33	0	0.0	n/a	n/a		20.000	20.000
1,4-Dichlorobenzene	**33**	**2**	**6.1**	**340.00**	**1400.00**	**SD-DR008-0000A**	**71.515**	**20.000**
2,4,5-Trichlorophenol	33	0	0.0	n/a	n/a		200.000	200.000
2,4,6-Trichlorophenol	33	0	0.0	n/a	n/a		200.000	200.000
2,4-Dichlorophenol	33	0	0.0	n/a	n/a		60.000	60.000
2,4-Dimethylphenol	33	0	0.0	n/a	n/a		20.000	20.000
2,4-Dinitrophenol	**33**	**1**	**3.0**	**300.00**	**300.00**	**SD-DR206-0000A**	**203.030**	**200.000**
2,4-Dinitrotoluene	33	0	0.0	n/a	n/a		200.000	200.000
2,6-Dinitrotoluene	33	0	0.0	n/a	n/a		200.000	200.000
2-Chloronaphthalene	33	0	0.0	n/a	n/a		20.000	20.000
2-Chlorophenol	33	0	0.0	n/a	n/a		20.000	20.000
2-Methyl-4,6-dinitrophenol	33	0	0.0	n/a	n/a		200.000	200.000
2-Methylnaphthalene	**33**	**7**	**21.2**	**20.00**	**90.00**	**SD-DR008-0000A**	**25.151**	**20.000**
2-Methylphenol	33	0	0.0	n/a	n/a		20.000	20.000
2-Nitroaniline	33	0	0.0	n/a	n/a		100.000	100.000
2-Nitrophenol	33	0	0.0	n/a	n/a		100.000	100.000
3,3'-Dichlorobenzidine	33	0	0.0	n/a	n/a		200.000	200.000
3- and 4-Methylphenol Coelution	**33**	**2**	**6.1**	**80.00**	**170.00**	**SD-DR008-0000A**	**26.363**	**20.000**
3-Nitroaniline	33	0	0.0	n/a	n/a		200.000	200.000
4-Bromophenyl Phenyl Ether	33	0	0.0	n/a	n/a		40.000	40.000
4-Chloro-3-methylphenol	33	0	0.0	n/a	n/a		40.000	40.000
4-Chloroaniline	33	0	0.0	n/a	n/a		60.000	60.000
4-Chlorophenyl Phenyl Ether	33	0	0.0	n/a	n/a		20.000	20.000
4-Nitroaniline	33	0	0.0	n/a	n/a		100.000	100.000
4-Nitrophenol	33	0	0.0	n/a	n/a		100.000	100.000
Benzoic Acid	**33**	**2**	**6.1**	**300.00**	**300.00**	**SD-DR206-0000A**	**206.060**	**200.000**
Benzyl Alcohol	33	0	0.0	n/a	n/a		50.000	50.000
Bis(2-chloroethoxy)methane	33	0	0.0	n/a	n/a		40.000	40.000
Bis(2-chloroethyl) Ether	33	0	0.0	n/a	n/a		40.000	40.000
Bis(2-chloroisopropyl) Ether	33	0	0.0	n/a	n/a		40.000	40.000
Bis(2-ethylhexyl) Phthalate	**33**	**29**	**87.9**	**30.00**	**6900.00**	**SD-DR008-0000A**	**740.909**	**450.000**
Butyl Benzyl Phthalate	**33**	**20**	**60.6**	**20.00**	**670.00**	**SD-DR008-0020**	**70.303**	**30.000**

Bold text indicates constituent was detected one or more times.
n/a - Not Applicable

Duwamish River Sediment Investigation - Statistics for Subsurface Sediment Results for BNAs

Constituent	Number of Samples Analyzed	Number of Detections	Detection Frequency (%)	Minimum Detected Value	Maximum Detected Value	Sample Number of Maximum Detected Value	Arithmetic Mean	Median Value
Semi-Volatile Organic Compounds (ug/kg)								
Carbazole	33	17	51.5	20.00	200.00	SD-DR054-0020	45.151	20.000
Di-n-butyl Phthalate	33	7	21.2	20.00	320.00	SD-DR008-0000A	31.515	20.000
Di-n-octyl Phthalate	33	2	6.1	30.00	50.00	SD-DR021-0000A	21.212	20.000
Dibenzofuran	33	11	33.3	20.00	70.00	SD-DR008-0000A	25.454	20.000
Diethyl Phthalate	33	0	0.0	n/a	n/a		20.000	20.000
Dimethyl Phthalate	33	5	15.2	20.00	40.00	SD-DR008-0000A	21.212	20.000
Hexachlorobenzene	33	0	0.0	n/a	n/a		20.000	20.000
Hexachlorobutadiene	33	0	0.0	n/a	n/a		20.000	20.000
Hexachlorocyclopentadiene	33	0	0.0	n/a	n/a		100.000	100.000
Hexachloroethane	33	0	0.0	n/a	n/a		20.000	20.000
Isophorone	33	0	0.0	n/a	n/a		20.000	20.000
N-Nitrosodi-n-propylamine	33	0	0.0	n/a	n/a		40.000	40.000
N-Nitrosodiphenylamine	33	0	0.0	n/a	n/a		40.000	40.000
Nitrobenzene	33	0	0.0	n/a	n/a		20.000	20.000
Pentachlorophenol (PCP)	33	2	6.1	70.00	300.00	SD-DR206-0000A	105.151	100.000
Phenol	33	4	12.1	20.00	80.00	SD-DR220-0020	23.030	20.000
Benz(a)anthracene	33	31	93.9	30.00	1500.00	SD-DR054-0020	254.242	150.000
Benzo(a)pyrene	33	31	93.9	30.00	1400.00	SD-DR054-0020	279.090	170.000
Benzo(b)fluoranthene	33	31	93.9	30.00	1500.00	SD-DR054-0020	315.151	180.000
Benzo(g,h,i)perylene	33	31	93.9	30.00	720.00	SD-DR054-0020	160.000	110.000
Benzo(k)fluoranthene	33	31	93.9	20.00	1100.00	SD-DR008-0000A	247.575	160.000
Benzofluoranthene (Total)	33	31	93.9	50.00	2500.00	SD-DR008-0000A	561.515	350.000
Chrysene	33	32	97.0	20.00	1700.00	SD-DR054-0020	333.333	190.000
Dibenz(a,h)anthracene	33	23	69.7	20.00	220.00	SD-DR054-0020	48.484	30.000
Fluoranthene	33	33	100.0	40.00	3400.00	SD-DR054-0020	578.181	320.000
Indeno(1,2,3-cd)pyrene	33	31	93.9	20.00	850.00	SD-DR054-0020	180.000	130.000
Pyrene	33	33	100.0	40.00	3800.00	SD-DR008-0000A	712.424	420.000
Total HPAH	33	33	100.0	80.00	15080.00	SD-DR054-0020	3094.545	1820.000
Acenaphthene	33	10	30.3	20.00	150.00	SD-DR054-0020	33.333	20.000
Acenaphthylene	33	6	18.2	20.00	30.00	SD-DR106-0020	20.909	20.000
Anthracene	33	26	78.8	20.00	480.00	SD-DR068-0000A	96.969	40.000
Fluorene	33	14	42.4	20.00	170.00	SD-DR008-0000A	43.030	20.000
Naphthalene	33	9	27.3	20.00	80.00	SD-DR008-0000A	25.454	20.000
Phenanthrene	33	33	100.0	20.00	1500.00	SD-DR054-0020	251.515	130.000

Bold text indicates constituent was detected one or more times.
n/a - Not Applicable

Duwamish River Sediment Investigation - Statistics for Subsurface Sediment Results for BNAs

Constituent	Number of Samples Analyzed	Number of Detections	Detection Frequency (%)	Minimum Detected Value	Maximum Detected Value	Sample Number of Maximum Detected Value	Arithmetic Mean	Median Value
Semi-Volatile Organic Compounds (ug/kg)								
Total LPAH	33	33	100.0	20.00	2310.00	SD-DR054-0020	410.606	170.000
Semi-Volatile Organic Compounds - TOCN (ug/kg)								
1,2,4-Trichlorobenzene	33	0	0.0	n/a	n/a		994.636	855.000
1,2-Dichlorobenzene	33	2	6.1	1010.00	1360.00	SD-DR008-0020	1008.424	855.000
1,4-Dichlorobenzene	33	2	6.1	15400.00	38900.00	SD-DR008-0000A	2595.818	889.000
2-Methylnaphthalene	33	7	21.2	1010.00	3170.00	SD-DR008-0020	1197.545	901.000
bis(2-Ethylhexyl)phthalate	33	29	87.9	2110.00	192000.00	SD-DR008-0000A	30841.393	19500.000
Butylbenzylphthalate	33	20	60.6	826.00	30300.00	SD-DR008-0020	2991.696	1610.000
Di-n-butylphthalate	33	7	21.2	784.00	8890.00	SD-DR008-0000A	1358.333	893.000
Di-n-octylphthalate	33	2	6.1	1510.00	1960.00	SD-DR021-0000A	1045.424	889.000
Dibenzofuran	33	11	33.3	778.00	4110.00	SD-DR054-0020	1254.727	893.000
Diethylphthalate	33	0	0.0	n/a	n/a		994.636	855.000
Dimethylphthalate	33	5	15.2	893.00	1270.00	SD-DR220-0020	1036.121	901.000
Hexachlorobenzene	33	0	0.0	n/a	n/a		994.636	855.000
Hexachlorobutadiene	33	0	0.0	n/a	n/a		994.636	855.000
N-Nitrosodiphenylamine	33	0	0.0	n/a	n/a		1988.484	1710.000
Benzo(a)anthracene	33	31	93.9	1280.00	103000.00	SD-DR054-0020	12413.939	7170.000
Benzo(a)pyrene	33	31	93.9	1280.00	95900.00	SD-DR054-0020	13412.727	7260.000
Benzo(g,h,i)perylene	33	31	93.9	1120.00	49300.00	SD-DR054-0020	7689.393	4730.000
Benzofluoranthene (Total)	33	31	93.9	2140.00	171000.00	SD-DR054-0020	26762.121	15000.000
Chrysene	33	32	97.0	1610.00	116000.00	SD-DR054-0020	16113.030	9470.000
Dibenz(a,h)anthracene	33	23	69.7	901.00	15100.00	SD-DR054-0020	2388.606	1580.000
Fluoranthene	33	33	100.0	3030.00	233000.00	SD-DR054-0020	28435.454	14700.000
Indeno(1,2,3-cd)pyrene	33	31	93.9	855.00	58200.00	SD-DR054-0020	8801.666	5560.000
Pyrene	33	33	100.0	3030.00	192000.00	SD-DR054-0020	33396.363	18400.000
Total HPAH (TOCN)	33	33	100.0	6060.00	1030000.00	SD-DR054-0020	148407.272	85800.000
Acenaphthene	33	10	30.3	787.00	10300.00	SD-DR054-0020	1625.878	952.000
Acenaphthylene	33	6	18.2	778.00	2050.00	SD-DR054-0020	1043.545	889.000
Anthracene	33	26	78.8	680.00	29500.00	SD-DR054-0020	4755.818	1710.000
Fluorene	33	14	42.4	683.00	10300.00	SD-DR054-0020	2093.393	1100.000
Naphthalene	33	9	27.3	952.00	3420.00	SD-DR054-0020	1221.060	952.000
Phenanthrene	33	33	100.0	1520.00	103000.00	SD-DR054-0020	12223.939	5780.000
Total LPAH (TOCN)	33	33	100.0	1520.00	158000.00	SD-DR054-0020	19770.303	7560.000

Bold text indicates constituent was detected one or more times.
n/a - Not Applicable

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for BNAs

Constituent	Station ID:	DR008	DR008	DR021	DR021	DR025	DR025
	Sample ID:	SD-DR008-0000A	SD-DR008-0020	SD-DR021-0000A	SD-DR021-0020	SD-DR025-0000A	SD-DR025-0020
	Depth (ft bgs):	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	30	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		1400	340	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene		90	70	20 U	40	20 U	30
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		170	80	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for BNAs

Station ID:	DR008	DR008	DR021	DR021	DR025	DR025
Sample ID:	SD-DR008-0000A	SD-DR008-0020	SD-DR021-0000A	SD-DR021-0020	SD-DR025-0000A	SD-DR025-0020
Constituent / Depth (ft bgs):	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 UJ	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 UJ	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	6900 J	2600 J	990	2000	560	800
Butyl Benzyl Phthalate	550	670	80	80	60	20 U
Carbazole	180	90 J	70	90	40	30
Di-n-butyl Phthalate	320	60	20	20 U	20 U	40
Di-n-octyl Phthalate	20 U	20 U	50	20 U	20 U	20 U
Dibenzofuran	70	50	20	40	20	20
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	40	20	20 U	20 U	20 U	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 U	100 U	100 U	100 U	100 U	100 U
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 U	100 U	100 U	100 U
Phenol	50	20	20 U	20 U	30	20 U
Benz(a)anthracene	1200	430	310	570	330	200
Benzo(a)pyrene	1200	430	490	530	430	340

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for BNAs

Constituent	Station ID:	DR008	DR008	DR021	DR021	DR025	DR025
	Sample ID:	SD-DR008-0000A	SD-DR008-0020	SD-DR021-0000A	SD-DR021-0020	SD-DR025-0000A	SD-DR025-0020
	Depth (ft bgs):	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft
Benzo(b)fluoranthene		1400	420	590	660	530	380
Benzo(g,h,i)perylene		580	270	270	250	230	190
Benzo(k)fluoranthene		1100	350	450	460	390	310
Benzofluoranthene (Total)		2500 T	770 T	1040 T	1120 T	920 T	690 T
Chrysene		1400	630	500	740	520	310
Dibenz(a,h)anthracene		150	80	70	70	60	50
Fluoranthene		2400	1100	780	1400	710	420
Indeno(1,2,3-cd)pyrene		630	250	280	270	260	200
Pyrene		3800	1500	1300	1500	1100	1000
Total HPAH		13860 T	5460 T	5040 T	6450 T	4560 T	3400 T
Acenaphthene		140	80	30	80	30	20
Acenaphthylene		20 U	20 U	20	30	20	20
Anthracene		360	400	140	200	110	80
Fluorene		170	140	40	110	40	40
Naphthalene		80	50	30	50	20 U	40
Phenanthrene		1400	470 J	300	480	220	190
Total LPAH		2150 T	1140 T	560 T	950 T	420 T	390 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		556 U	905 U	784 U	816 U	778 U	787 U
1,2-Dichlorobenzene		556 U	1360	784 U	816 U	778 U	787 U
1,4-Dichlorobenzene		38900	15400	784 U	816 U	778 U	787 U
2-Methylnaphthalene		2500	3170	784 U	1630	778 U	1180
bis(2-Ethylhexyl)phthalate		192000 J	118000 J	38800	81600	21800	31500
Butylbenzylphthalate		15300	30300	3140	3270	2330	787 U
Di-n-butylphthalate		8890	2710	784	816 U	778 U	1570
Di-n-octylphthalate		556 U	905 U	1960	816 U	778 U	787 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for BNAs

Constituent	Station ID:	DR008	DR008	DR021	DR021	DR025	DR025
	Sample ID:	SD-DR008-0000A	SD-DR008-0020	SD-DR021-0000A	SD-DR021-0020	SD-DR025-0000A	SD-DR025-0020
	Depth (ft bgs):	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft
Dibenzofuran		1940	2260	784	1630	778	787
Diethylphthalate		556 U	905 U	784 U	816 U	778 U	787 U
Dimethylphthalate		1110	905	784 U	816 U	778 U	787 U
Hexachlorobenzene		556 U	905 U	784 U	816 U	778 U	787 U
Hexachlorobutadiene		556 U	905 U	784 U	816 U	778 U	787 U
N-Nitrosodiphenylamine		1110 U	1810 U	1570 U	1630 U	1560 U	1570 U
Benzo(a)anthracene		33300	19500	12200	23300	12800	7870
Benzo(a)pyrene		33300	19500	19200	21600	16700	13400
Benzo(g,h,i)perylene		16100	12200	10600	10200	8950	7480
Benzofluoranthene (Total)		69400 T	34800 T	40800 T	45700 T	35800 T	27200 T
Chrysene		38900	28500	19600	30200	20200	12200
Dibenz(a,h)anthracene		4170	3620	2750	2860	2330	1970
Fluoranthene		66700	49800	30600	57100	27600	16500
Indeno(1,2,3-cd)pyrene		17500	11300	11000	11000	10100	7870
Pyrene		106000	67900	51000	61200	42800	39400
Total HPAH (TOCN)		385000 T	247000 T	198000 T	263000 T	177000 T	134000 T
Acenaphthene		3890	3620	1180	3270	1170	787
Acenaphthylene		556 U	905 U	784	1220	778	787
Anthracene		10000	18100	5490	8160	4280	3150
Fluorene		4720	6330	1570	4490	1560	1570
Naphthalene		2220	2260	1180	2040	778 U	1570
Phenanthrene		38900	21300 J	11800	19600	8560	7480
Total LPAH (TOCN)		59700 T	51600 T	22000 T	38800 T	16300 T	15400 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for BNAs

Constituent	Station ID:	DR044	DR044	DR054	DR054	DR068	DR101
	Sample ID:	SD-DR044-0000A	SD-DR044-0020	SD-DR054-0000A	SD-DR054-0020	SD-DR068-0000A	SD-DR101-0000A
	Depth (ft bgs):	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	0 to 2 ft
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene		20 U	20 U	20	30	30	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for BNAs

Station ID:	DR044	DR044	DR054	DR054	DR068	DR101
Sample ID:	SD-DR044-0000A	SD-DR044-0020	SD-DR054-0000A	SD-DR054-0020	SD-DR068-0000A	SD-DR101-0000A
Constituent **Depth (ft bgs):**	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	0 to 2 ft
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 UJ	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 UJ	40 U
Bis(2-ethylhexyl) Phthalate	20 U	370	1200	710	750	20 U
Butyl Benzyl Phthalate	20 U	20 U	50	30	40	20 U
Carbazole	20 U	20 U	80	200	190	20 U
Di-n-butyl Phthalate	*20 U*	*20 U*	*20 U*	*20 U*	*20 U*	30
Di-n-octyl Phthalate	20 U	20 U	30	20 U	20 U	20 U
Dibenzofuran	20 U	20 U	30	60	50	20 U
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 U	100 U	100 U	100 U	100 U	100 U
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 UJ	100 UJ	100 U	100 U	100 U	100 U
Phenol	20 U	20 U	20 U	20 U	20 U	20 U
Benz(a)anthracene	50	60	730	1500	350	50
Benzo(a)pyrene	40	100	830	1400	410	50

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for BNAs

Constituent	Station ID:	DR044	DR044	DR054	DR054	DR068	DR101
	Sample ID:	SD-DR044-0000A	SD-DR044-0020	SD-DR054-0000A	SD-DR054-0020	SD-DR068-0000A	SD-DR101-0000A
	Depth (ft bgs):	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	0 to 2 ft
Benzo(b)fluoranthene		40	120	850	1500	480	50
Benzo(g,h,i)perylene		30	60	460	720	220	50
Benzo(k)fluoranthene		40	100	640	990	370	50
Benzofluoranthene (Total)		80 T	220 T	1490 T	2490 T	850 T	100 T
Chrysene		50	90	920	1700	490	60
Dibenz(a,h)anthracene		20 U	20	140	220	70	20 U
Fluoranthene		120	120	1800	3400	910	120
Indeno(1,2,3-cd)pyrene		30	70	510	850	250	40
Pyrene		160	350	1700	2800	980	140
Total HPAH		560 T	1090 T	8580 T	15080 T	4530 T	610 T
Acenaphthene		20 U	20 U	60	150	30	20 U
Acenaphthylene		20 U	20 U	20 U	30	20 U	20 U
Anthracene		20	30	180	430	480	30
Fluorene		20	20 U	70	150	160	20 U
Naphthalene		20 U	20 U	20	50	20 U	20 U
Phenanthrene		60	70	630	1500	700	60
Total LPAH		100 T	100 T	960 T	2310 T	1370 T	90 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		746 U	901 U	1010 U	1370 U	1200 U	1100 U
1,2-Dichlorobenzene		746 U	901 U	1010	1370 U	1200 U	1100 U
1,4-Dichlorobenzene		746 U	901 U	1010 U	1370 U	1200 U	1100 U
2-Methylnaphthalene		746 U	901 U	1010	2050	1800	1100 U
bis(2-Ethylhexyl)phthalate		746 U	16700	60300	48600	44900	1100 U
Butylbenzylphthalate		746 U	901 U	2510	2050	2400	1100 U
Di-n-butylphthalate		746 U	901 U	1010 U	1370 U	1200 U	1650
Di-n-octylphthalate		746 U	901 U	1510	1370 U	1200 U	1100 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for BNAs

Station ID:	DR044	DR044	DR054	DR054	DR068	DR101
Sample ID:	SD-DR044-0000A	SD-DR044-0020	SD-DR054-0000A	SD-DR054-0020	SD-DR068-0000A	SD-DR101-0000A
Constituent / Depth (ft bgs):	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	0 to 2 ft
Dibenzofuran	746 U	901 U	1510	4110	2990	1100 U
Diethylphthalate	746 U	901 U	1010 U	1370 U	1200 U	1100 U
Dimethylphthalate	746 U	901 U	1010 U	1370 U	1200 U	1100 U
Hexachlorobenzene	746 U	901 U	1010 U	1370 U	1200 U	1100 U
Hexachlorobutadiene	746 U	901 U	1010 U	1370 U	1200 U	1100 U
N-Nitrosodiphenylamine	1490 U	1800 U	2010 U	2740 U	2400 U	2200 U
Benzo(a)anthracene	1870	2700	36700	103000	21000	2750
Benzo(a)pyrene	1490	4500	41700	95900	24600	2750
Benzo(g,h,i)perylene	1120	2700	23100	49300	13200	2750
Benzofluoranthene (Total)	2990 T	9910 T	74900 T	171000 T	50900 T	5490 T
Chrysene	1870	4050	46200	116000	29300	3300
Dibenz(a,h)anthracene	746 U	901	7040	15100	4190	1100 U
Fluoranthene	4480	5410	90500	233000	54500	6590
Indeno(1,2,3-cd)pyrene	1120	3150	25600	58200	15000	2200
Pyrene	5970	15800	85400	192000	58700	7690
Total HPAH (TOCN)	20900 T	49100 T	431000 T	1030000 T	271000 T	33500 T
Acenaphthene	746 U	901 U	3020	10300	1800	1100 U
Acenaphthylene	746 U	901 U	1010 U	2050	1200 U	1100 U
Anthracene	746	1350	9050	29500	28700	1650
Fluorene	746	901 U	3520	10300	9580	1100 U
Naphthalene	746 U	901 U	1010	3420	1200 U	1100 U
Phenanthrene	2240	3150	31700	103000	41900	3300
Total LPAH (TOCN)	3730 T	4500 T	48200 T	158000 T	82000 T	4950 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for BNAs

Constituent	Station ID:	DR101	DR106	DR106	DR112	DR112	DR137
	Sample ID:	SD-DR101-0020	SD-DR106-0000A	SD-DR106-0020	SD-DR112-0000A	SD-DR112-0020	SD-DR137-0000A-CC
	Depth (ft bgs):	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for BNAs

Station ID:	DR101	DR106	DR106	DR112	DR112	DR137
Sample ID:	SD-DR101-0020	SD-DR106-0000A	SD-DR106-0020	SD-DR112-0000A	SD-DR112-0020	SD-DR137-0000A-CC
Constituent / Depth (ft bgs):	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	1400	80	20 U	380	570	50
Butyl Benzyl Phthalate	20 U	20 U	20 U	60	50	20 U
Carbazole	20 U	20 U	20 U	30	30	20 U
Di-n-butyl Phthalate	20 U	20 U	30	20 U	20 U	20 U
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	20	20 U	20 U	20	20 U	20 U
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 U	100 U	100 U	100 U	100 U	100 U
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 U	100 U	100 U	100 U	100 U	100 UJ
Phenol	20 U	20 U	20 U	20 U	20 U	20 U
Benz(a)anthracene	30	80	170	230	300	40
Benzo(a)pyrene	30	90	190	240	400	40

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for BNAs

Station ID:	DR101	DR106	DR106	DR112	DR112	DR137
Sample ID:	SD-DR101-0020	SD-DR106-0000A	SD-DR106-0020	SD-DR112-0000A	SD-DR112-0020	SD-DR137-0000A-CC
Constituent **Depth (ft bgs):**	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft
Benzo(b)fluoranthene	30	90	140	310	450	40
Benzo(g,h,i)perylene	30	70	110	160	230	40
Benzo(k)fluoranthene	20	80	150	230	410	40
Benzofluoranthene (Total)	50 T	170 T	290 T	540 T	860 T	80 T
Chrysene	40	90	180	310	470	50
Dibenz(a,h)anthracene	20 U	20 U	30	40	70	20 U
Fluoranthene	110	160	230	550	470	100
Indeno(1,2,3-cd)pyrene	20	70	120	180	270	30
Pyrene	90	340	310	580	740	130
Total HPAH	400 T	1070 T	1630 T	2830 T	3810 T	510 T
Acenaphthene	20	20 U	20 U	20 U	20 U	20 U
Acenaphthylene	20 U	20 U	30	20 U	20 U	20 U
Anthracene	20	30	40	120	90	20 U
Fluorene	30	20 U	20 U	30	20	20 U
Naphthalene	20 U	20	20	20 U	20 U	20 U
Phenanthrene	80	100	70	170	180	60
Total LPAH	150 T	150 T	160 T	320 T	290 T	60 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)						
1,2,4-Trichlorobenzene	855 U	952 U	1050 U	810 U	683 U	844 U
1,2-Dichlorobenzene	855 U	952 U	1050 U	810 U	683 U	844 U
1,4-Dichlorobenzene	855 U	952 U	1050 U	810 U	683 U	844 U
2-Methylnaphthalene	855 U	952 U	1050 U	810 U	683 U	844 U
bis(2-Ethylhexyl)phthalate	59800	3810	1050 U	15400	19500	2110
Butylbenzylphthalate	855 U	952 U	1050 U	2430	1710	844 U
Di-n-butylphthalate	855 U	952 U	1580	810 U	683 U	844 U
Di-n-octylphthalate	855 U	952 U	1050 U	810 U	683 U	844 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for BNAs

Constituent	Station ID:	DR101	DR106	DR106	DR112	DR112	DR137
	Sample ID:	SD-DR101-0020	SD-DR106-0000A	SD-DR106-0020	SD-DR112-0000A	SD-DR112-0020	SD-DR137-0000A-CC
	Depth (ft bgs):	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft
Dibenzofuran		855	952 U	1050 U	810	683 U	844 U
Diethylphthalate		855 U	952 U	1050 U	810 U	683 U	844 U
Dimethylphthalate		855 U	952 U	1050 U	810 U	683 U	844 U
Hexachlorobenzene		855 U	952 U	1050 U	810 U	683 U	844 U
Hexachlorobutadiene		855 U	952 U	1050 U	810 U	683 U	844 U
N-Nitrosodiphenylamine		1710 U	1900 U	2110 U	1620 U	1370 U	1690 U
Benzo(a)anthracene		1280	3810	8950	9310	10200	1690
Benzo(a)pyrene		1280	4290	10000	9720	13700	1690
Benzo(g,h,i)perylene		1280	3330	5790	6480	7850	1690
Benzofluoranthene (Total)		2140 T	8100 T	15300 T	21900 T	29400 T	3380 T
Chrysene		1710	4290	9470	12600	16000	2110
Dibenz(a,h)anthracene		855 U	952 U	1580	1620	2390	844 U
Fluoranthene		4700	7620	12100	22300	16000	4220
Indeno(1,2,3-cd)pyrene		855	3330	6320	7290	9220	1270
Pyrene		3850	16200	16300	23500	25300	5490
Total HPAH (TOCN)		17100 T	51000 T	85800 T	115000 T	130000 T	21500 T
Acenaphthene		855	952 U	1050 U	810 U	683 U	844 U
Acenaphthylene		855 U	952 U	1580	810 U	683 U	844 U
Anthracene		855	1430	2110	4860	3070	844 U
Fluorene		1280	952 U	1050 U	1210	683	844 U
Naphthalene		855 U	952	1050	810 U	683 U	844 U
Phenanthrene		3420	4760	3680	6880	6140	2530
Total LPAH (TOCN)		6410 T	7140 T	8420 T	13000 T	9900 T	2530 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR137 SD-DR137-0020-CC 2 ft to 4 ft	DR171 SD-DR171-0000A 0 to 2 ft	DR171 SD-DR171-0020 2 ft to 4 ft	DR206 SD-DR206-0000A 0 to 2 ft	DR206 SD-DR206-0020 2 ft to 4 ft	DR220 SD-DR220-0000A 0 to 2 ft
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 U	200 U	300	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for BNAs

Station ID:	DR137	DR171	DR171	DR206	DR206	DR220
Sample ID:	SD-DR137-0020-CC	SD-DR171-0000A	SD-DR171-0020	SD-DR206-0000A	SD-DR206-0020	SD-DR220-0000A
Constituent **Depth (ft bgs):**	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft
4-Nitroaniline	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid	200 U	200 U	200 U	300	300	200 U
Benzyl Alcohol	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether	40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-ethylhexyl) Phthalate	450 J	300	460	520	350	160
Butyl Benzyl Phthalate	30	40	20 U	40	30	20
Carbazole	20	20	20 U	30	20	20 U
Di-n-butyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Di-n-octyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	20 U	20 U	20 U	20 U	20 U	20 U
Diethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene	100 U	100 U	100 U	100 U	100 U	100 U
Hexachloroethane	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine	40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine	40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene	20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)	100 UJ	100 UJ	100 UJ	300 J	100 UJ	100 UJ
Phenol	20 U	20 U	20 U	20 U	20 U	20 U
Benz(a)anthracene	150 J	180	140	210	180	60
Benzo(a)pyrene	200 J	190	170	230	150	70

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR137 SD-DR137-0020-CC 2 ft to 4 ft	DR171 SD-DR171-0000A 0 to 2 ft	DR171 SD-DR171-0020 2 ft to 4 ft	DR206 SD-DR206-0000A 0 to 2 ft	DR206 SD-DR206-0020 2 ft to 4 ft	DR220 SD-DR220-0000A 0 to 2 ft
Benzo(b)fluoranthene		260 J	230	190	290	180	80
Benzo(g,h,i)perylene		90	120	110	130	80	50
Benzo(k)fluoranthene		190 J	200	160	250	170	80
Benzofluoranthene (Total)		450 T	430 T	350 T	540 T	350 T	160 T
Chrysene		240 J	260	190	300	260	90
Dibenz(a,h)anthracene		30 J	40	30	40	30	20 U
Fluoranthene		310 J	300	270	440	470	140
Indeno(1,2,3-cd)pyrene		130 J	160	130	190	120	60
Pyrene		660	420	430	600	420	170
Total HPAH		2260 T	2100 T	1820 T	2680 T	2060 T	800 T
Acenaphthene		20 U	20 U	20 U	20 U	20 U	20 U
Acenaphthylene		20 U	20 U	20 U	20 U	20 U	20 U
Anthracene		40	40	40	40	50	20 U
Fluorene		20 U	20 U	20 U	20 U	20	20 U
Naphthalene		20 U	20 U	20 U	20 U	20 U	20 U
Phenanthrene		140 J	130	130	160	160	60
Total LPAH		180 T	170 T	170 T	200 T	230 T	60 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		995 U	889 U	855 U	2530 U	816 U	826 U
1,2-Dichlorobenzene		995 U	889 U	855 U	2530 U	816 U	826 U
1,4-Dichlorobenzene		995 U	889 U	855 U	2530 U	816 U	826 U
2-Methylnaphthalene		995 U	889 U	855 U	2530 U	816 U	826 U
bis(2-Ethylhexyl)phthalate		22400 J	13300	19700	65800	14300	6610
Butylbenzylphthalate		1490	1780	855 U	5060	1220	826
Di-n-butylphthalate		995 U	889 U	855 U	2530 U	816 U	826 U
Di-n-octylphthalate		995 U	889 U	855 U	2530 U	816 U	826 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR137 SD-DR137-0020-CC 2 ft to 4 ft	DR171 SD-DR171-0000A 0 to 2 ft	DR171 SD-DR171-0020 2 ft to 4 ft	DR206 SD-DR206-0000A 0 to 2 ft	DR206 SD-DR206-0020 2 ft to 4 ft	DR220 SD-DR220-0000A 0 to 2 ft
Dibenzofuran		995 U	889 U	855 U	2530 U	816 U	826 U
Diethylphthalate		995 U	889 U	855 U	2530 U	816 U	826 U
Dimethylphthalate		995 U	889 U	855 U	2530 U	816 U	826 U
Hexachlorobenzene		995 U	889 U	855 U	2530 U	816 U	826 U
Hexachlorobutadiene		995 U	889 U	855 U	2530 U	816 U	826 U
N-Nitrosodiphenylamine		1990 U	1780 U	1710 U	5060 U	1630 U	1650 U
Benzo(a)anthracene		7460 J	8000	5980	26600	7350	2480
Benzo(a)pyrene		9950 J	8440	7260	29100	6120	2890
Benzo(g,h,i)perylene		4480	5330	4700	16500	3270	2070
Benzofluoranthene (Total)		22400 T	19100 T	15000 T	68400 T	14300 T	6610 T
Chrysene		*11900 J*	*11600*	*8120*	*38000*	*10600*	*3720*
Dibenz(a,h)anthracene		1490 J	1780	1280	5060	1220	826 U
Fluoranthene		15400 J	13300	11500	55700	19200	5790
Indeno(1,2,3-cd)pyrene		6470 J	7110	5560	24100	4900	2480
Pyrene		32800	18700	18400	75900	17100	7020
Total HPAH (TOCN)		112000 T	93300 T	77800 T	339000 T	84100 T	33100 T
Acenaphthene		995 U	889 U	855 U	2530 U	816 U	826 U
Acenaphthylene		995 U	889 U	855 U	2530 U	816 U	826 U
Anthracene		1990	1780	1710	5060	2040	826 U
Fluorene		995 U	889 U	855 U	2530 U	816	826 U
Naphthalene		995 U	889 U	855 U	2530 U	816 U	826 U
Phenanthrene		6970 J	5780	5560	20300	6530	2480
Total LPAH (TOCN)		8960 T	7560 T	7260 T	25300 T	9390 T	2480 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for BNAs

Constituent	Station ID:	DR220	DR224	DR224	DR246	DR246	DR269
	Sample ID:	SD-DR220-0020	SD-DR224-0000A	SD-DR224-0020	SD-DR246-0000A	SD-DR246-0020	SD-DR269-0000A
	Depth (ft bgs):	2 ft to 4 ft	0 to 2 ft	2 ft to 3.33 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft
Semi-Volatile Organic Compounds (ug/kg)							
1,2,4-Trichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U	60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U	200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 U	200 U	200 U	200 U
2-Methylnaphthalene		20 U	20 U	20 U	20 U	20 U	20 U
2-Methylphenol		20 U	20 U	20 U	20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U	200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U	20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U	200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U	40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U	60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U	20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for BNAs

Constituent	Station ID:	DR220	DR224	DR224	DR246	DR246	DR269
	Sample ID:	SD-DR220-0020	SD-DR224-0000A	SD-DR224-0020	SD-DR246-0000A	SD-DR246-0020	SD-DR269-0000A
	Depth (ft bgs):	2 ft to 4 ft	0 to 2 ft	2 ft to 3.33 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft
4-Nitroaniline		100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol		100 U	100 U	100 U	100 U	100 U	100 U
Benzoic Acid		200 U	200 U	200 U	200 UJ	200 UJ	200 U
Benzyl Alcohol		50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroethyl) Ether		40 U	40 U	40 U	40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether		40 U	40 U	40 U	40 UJ	40 UJ	40 U
Bis(2-ethylhexyl) Phthalate		470	20 U	30	340	650	120
Butyl Benzyl Phthalate		50	20 U	20 U	30	60	20 U
Carbazole		30	20 U	20 U	20	20 U	20 U
Di-n-butyl Phthalate		20	20 U	20 U	20 U	20 U	20 U
Di-n-octyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran		20 U	20 U	20 U	20 U	20 U	20 U
Diethyl Phthalate		20 U	20 U	20 U	20 U	20 U	20 U
Dimethyl Phthalate		30	20 U	20 U	20 U	20 U	20 U
Hexachlorobenzene		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene		20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorocyclopentadiene		100 U	100 U	100 U	100 U	100 U	100 U
Hexachloroethane		20 U	20 U	20 U	20 U	20 U	20 U
Isophorone		20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodi-n-propylamine		40 U	40 U	40 U	40 U	40 U	40 U
N-Nitrosodiphenylamine		40 U	40 U	40 U	40 U	40 U	40 U
Nitrobenzene		20 U	20 U	20 U	20 U	20 U	20 U
Pentachlorophenol (PCP)		100 UJ	100 U	100 U	100 U	100 U	100 UJ
Phenol		80	20 U	20 U	20 U	20 U	20 U
Benz(a)anthracene		170	20 U	20 U	120	120	80
Benzo(a)pyrene		190	20 U	20 U	160	140	80

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR220 / SD-DR220-0020 / 2 ft to 4 ft	DR224 / SD-DR224-0000A / 0 to 2 ft	DR224 / SD-DR224-0020 / 2 ft to 3.33 ft	DR246 / SD-DR246-0000A / 0 to 2 ft	DR246 / SD-DR246-0020 / 2 ft to 4 ft	DR269 / SD-DR269-0000A / 0 to 2 ft
Benzo(b)fluoranthene		230	20 U	20 U	180	180	90
Benzo(g,h,i)perylene		130	20 U	20 U	130	100	60
Benzo(k)fluoranthene		170	20 U	20 U	160	140	80
Benzofluoranthene (Total)		400 T	20 UT	20 UT	340 T	320 T	170 T
Chrysene		230	20 U	20	180	160	120
Dibenz(a,h)anthracene		40	20 U	20 U	30	30	20 U
Fluoranthene		350	40	50	320	360	220
Indeno(1,2,3-cd)pyrene		170	20 U	20 U	140	100	70
Pyrene		440	40	50	310	330	190
Total HPAH		2120 T	80 T	120 T	1730 T	1660 T	990 T
Acenaphthene		20 U	20 U	20 U	20 U	20 U	20 U
Acenaphthylene		20 U	20 U	20 U	20 U	20 U	20 U
Anthracene		30	20 U	20 U	20	20	20 U
Fluorene		20 U	20 U	20 U	20 U	20 U	20 U
Naphthalene		20 U	20 U	20 U	20 U	20 U	20 U
Phenanthrene		180	20	30	110	100	100
Total LPAH		210 T	20 T	30 T	130 T	120 T	100 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)							
1,2,4-Trichlorobenzene		844 U	1520 U	1610 U	727 U	680 U	1120 U
1,2-Dichlorobenzene		844 U	1520 U	1610 U	727 U	680 U	1120 U
1,4-Dichlorobenzene		844 U	1520 U	1610 U	727 U	680 U	1120 U
2-Methylnaphthalene		844 U	1520 U	1610 U	727 U	680 U	1120 U
bis(2-Ethylhexyl)phthalate		19800	1520 U	2420	12400	22100	6700
Butylbenzylphthalate		2110	1520 U	1610 U	1090	2040	1120 U
Di-n-butylphthalate		844	1520 U	1610 U	727 U	680 U	1120 U
Di-n-octylphthalate		844 U	1520 U	1610 U	727 U	680 U	1120 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for BNAs

Constituent	Station ID:	DR220	DR224	DR224	DR246	DR246	DR269
	Sample ID:	SD-DR220-0020	SD-DR224-0000A	SD-DR224-0020	SD-DR246-0000A	SD-DR246-0020	SD-DR269-0000A
	Depth (ft bgs):	2 ft to 4 ft	0 to 2 ft	2 ft to 3.33 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft
Dibenzofuran		844 U	1520 U	1610 U	727 U	680 U	1120 U
Diethylphthalate		844 U	1520 U	1610 U	727 U	680 U	1120 U
Dimethylphthalate		1270	1520 U	1610 U	727 U	680 U	1120 U
Hexachlorobenzene		844 U	1520 U	1610 U	727 U	680 U	1120 U
Hexachlorobutadiene		844 U	1520 U	1610 U	727 U	680 U	1120 U
N-Nitrosodiphenylamine		1690 U	3030 U	3230 U	1450 U	1360 U	2230 U
Benzo(a)anthracene		7170	1520 U	1610 U	4360	4080	4470
Benzo(a)pyrene		8020	1520 U	1610 U	5820	4760	4470
Benzo(g,h,i)perylene		5490	1520 U	1610 U	4730	3400	3350
Benzofluoranthene (Total)		16900 T	1520 UT	1610 UT	12400 T	10900 T	9500 T
Chrysene		9700	1520 U	1610	6550	5440	6700
Dibenz(a,h)anthracene		1690	1520 U	1610 U	1090	1020	1120 U
Fluoranthene		14800	3030	4030	11600	12200	12300
Indeno(1,2,3-cd)pyrene		7170	1520 U	1610 U	5090	3400	3910
Pyrene		18600	3030	4030	11300	11200	10600
Total HPAH (TOCN)		89500 T	6060 T	9680 T	62900 T	56500 T	55300 T
Acenaphthene		844 U	1520 U	1610 U	727 U	680 U	1120 U
Acenaphthylene		844 U	1520 U	1610 U	727 U	680 U	1120 U
Anthracene		1270	1520 U	1610 U	727	680	1120 U
Fluorene		844 U	1520 U	1610 U	727 U	680 U	1120 U
Naphthalene		844 U	1520 U	1610 U	727 U	680 U	1120 U
Phenanthrene		7590	1520	2420	4000	3400	5590
Total LPAH (TOCN)		8860 T	1520 T	2420 T	4730 T	4080 T	5590 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR269 / SD-DR269-0020 / 2 ft to 4 ft	DR284 / SD-DR284-0000A / 0 to 2 ft	DR284 / SD-DR284-0020 / 2 ft to 4 ft
Semi-Volatile Organic Compounds (ug/kg)				
1,2,4-Trichlorobenzene		20 U	20 U	20 U
1,2-Dichlorobenzene		20 U	20 U	20 U
1,3-Dichlorobenzene		20 U	20 U	20 U
1,4-Dichlorobenzene		20 U	20 U	20 U
2,4,5-Trichlorophenol		200 U	200 U	200 U
2,4,6-Trichlorophenol		200 U	200 U	200 U
2,4-Dichlorophenol		60 U	60 U	60 U
2,4-Dimethylphenol		20 U	20 U	20 U
2,4-Dinitrophenol		200 U	200 U	200 U
2,4-Dinitrotoluene		200 U	200 U	200 U
2,6-Dinitrotoluene		200 U	200 U	200 U
2-Chloronaphthalene		20 U	20 U	20 U
2-Chlorophenol		20 U	20 U	20 U
2-Methyl-4,6-dinitrophenol		200 U	200 U	200 U
2-Methylnaphthalene		20 U	20 U	20 U
2-Methylphenol		20 U	20 U	20 U
2-Nitroaniline		100 U	100 U	100 U
2-Nitrophenol		100 U	100 U	100 U
3,3'-Dichlorobenzidine		200 U	200 U	200 U
3- and 4-Methylphenol Coelution		20 U	20 U	20 U
3-Nitroaniline		200 U	200 U	200 U
4-Bromophenyl Phenyl Ether		40 U	40 U	40 U
4-Chloro-3-methylphenol		40 U	40 U	40 U
4-Chloroaniline		60 U	60 U	60 U
4-Chlorophenyl Phenyl Ether		20 U	20 U	20 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for BNAs

Constituent	Station ID:	DR269	DR284	DR284
	Sample ID:	SD-DR269-0020	SD-DR284-0000A	SD-DR284-0020
	Depth (ft bgs):	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft
4-Nitroaniline		100 U	100 U	100 U
4-Nitrophenol		100 U	100 U	100 U
Benzoic Acid		200 U	200 UJ	200 U
Benzyl Alcohol		50 U	50 U	50 U
Bis(2-chloroethoxy)methane		40 U	40 U	40 U
Bis(2-chloroethyl) Ether		40 U	40 U	40 U
Bis(2-chloroisopropyl) Ether		40 U	40 UJ	40 U
Bis(2-ethylhexyl) Phthalate		140	370	650
Butyl Benzyl Phthalate		20 U	40	50
Carbazole		20 U	20 U	20 U
Di-n-butyl Phthalate		20 U	20 U	20 U
Di-n-octyl Phthalate		20 U	20 U	20 U
Dibenzofuran		20 U	20 U	20 U
Diethyl Phthalate		20 U	20 U	20 U
Dimethyl Phthalate		20 U	20	30
Hexachlorobenzene		20 U	20 U	20 U
Hexachlorobutadiene		20 U	20 U	20 U
Hexachlorocyclopentadiene		100 U	100 U	100 U
Hexachloroethane		20 U	20 U	20 U
Isophorone		20 U	20 U	20 U
N-Nitrosodi-n-propylamine		40 U	40 U	40 U
N-Nitrosodiphenylamine		40 U	40 U	40 U
Nitrobenzene		20 U	20 U	20 U
Pentachlorophenol (PCP)		70 J	100 U	100 U
Phenol		20 U	20 U	20 U
Benz(a)anthracene		90	110	110
Benzo(a)pyrene		70	150	130

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for BNAs

Constituent	Station ID:	DR269	DR284	DR284
	Sample ID:	SD-DR269-0020	SD-DR284-0000A	SD-DR284-0020
	Depth (ft bgs):	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft
Benzo(b)fluoranthene		70	160	140
Benzo(g,h,i)perylene		50	110	110
Benzo(k)fluoranthene		70	150	130
Benzofluoranthene (Total)		140 T	310 T	270 T
Chrysene		100	160	120
Dibenz(a,h)anthracene		20 U	30	30
Fluoranthene		310	330	270
Indeno(1,2,3-cd)pyrene		60	120	120
Pyrene		270	310	350
Total HPAH		1090 T	1630 T	1510 T
Acenaphthene		20 U	20 U	20 U
Acenaphthylene		20 U	20 U	20 U
Anthracene		20 U	20 U	20
Fluorene		20 U	20 U	20 U
Naphthalene		20 U	20 U	20 U
Phenanthrene		20	130	90
Total LPAH		20 T	130 T	110 T
Semi-Volatile Organic Compounds - TOCN (ug/kg)				
1,2,4-Trichlorobenzene		1590 U	893 U	781 U
1,2-Dichlorobenzene		1590 U	893 U	781 U
1,4-Dichlorobenzene		1590 U	893 U	781 U
2-Methylnaphthalene		1590 U	893 U	781 U
bis(2-Ethylhexyl)phthalate		11100	16500	25400
Butylbenzylphthalate		1590 U	1790	1950
Di-n-butylphthalate		1590 U	893 U	781 U
Di-n-octylphthalate		1590 U	893 U	781 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for BNAs

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR269 / SD-DR269-0020 / 2 ft to 4 ft	DR284 / SD-DR284-0000A / 0 to 2 ft	DR284 / SD-DR284-0020 / 2 ft to 4 ft
Dibenzofuran		1590 U	893 U	781 U
Diethylphthalate		1590 U	893 U	781 U
Dimethylphthalate		1590 U	893	1170
Hexachlorobenzene		1590 U	893 U	781 U
Hexachlorobutadiene		1590 U	893 U	781 U
N-Nitrosodiphenylamine		3170 U	1790 U	1560 U
Benzo(a)anthracene		7140	4910	4300
Benzo(a)pyrene		5560	6700	5080
Benzo(g,h,i)perylene		3970	4910	4300
Benzofluoranthene (Total)		11100 T	13800 T	10500 T
Chrysene		7940	7140	4690
Dibenz(a,h)anthracene		1590 U	1340	1170
Fluoranthene		24600	14700	10500
Indeno(1,2,3-cd)pyrene		4760	5360	4690
Pyrene		21400	13800	13700
Total HPAH (TOCN)		86500 T	72800 T	59000 T
Acenaphthene		1590 U	893 U	781 U
Acenaphthylene		1590 U	893 U	781 U
Anthracene		1590 U	893 U	781
Fluorene		1590 U	893 U	781 U
Naphthalene		1590 U	893 U	781 U
Phenanthrene		1590	5800	3520
Total LPAH (TOCN)		1590 T	5800 T	4300 T

Blank cell indicate no analyses were performed.

APPENDIX E-10

TOTAL INORGANICS (SUBSURFACE SEDIMENT)

Duwamish River Sediment Investigation - Statistics for Subsurface Sediment Results for Total Inorganics

Constituent	Number of Samples Analyzed	Number of Detections	Detection Frequency (%)	Minimum Detected Value	Maximum Detected Value	Sample Number of Maximum Detected Value	Arithmetic Mean	Median Value
Inorganics (Total) (mg/kg)								
Aluminum	33	33	100.0	15000.00	33000.00	SD-DR021-0020	23290.909	22200.000
Antimony	33	6	18.2	6.00	148.00	SD-DR054-0020	16.000	10.000
Arsenic	33	33	100.0	5.00	622.00	SD-DR054-0020	39.006	11.000
Barium	33	33	100.0	48.00	636.00	SD-DR054-0020	123.030	83.000
Beryllium	33	33	100.0	0.16	0.56	SD-DR054-0020	0.383	0.390
Cadmium	33	28	84.8	0.22	3.70	SD-DR021-0020	0.771	0.400
Calcium	33	33	100.0	4640.00	28100.00	SD-DR054-0000A	8796.060	6370.000
Chromium	33	33	100.0	19.00	88.00	SD-DR054-0020	36.121	30.000
Cobalt	33	33	100.0	7.00	40.00	SD-DR054-0020	11.454	10.000
Copper	33	33	100.0	26.00	802.00	SD-DR054-0000A	108.575	52.000
Iron	33	33	100.0	19300.00	65200.00	SD-DR054-0000A	31954.545	29200.000
Lead	33	33	100.0	6.62	625.00	SD-DR054-0020	97.483	33.400
Magnesium	33	33	100.0	4440.00	10800.00	SD-DR054-0000A	7803.030	7690.000
Manganese	33	33	100.0	173.00	937.00	SD-DR054-0000A	335.545	289.000
Mercury	33	33	100.0	0.06	1.44	SD-DR054-0020	0.303	0.200
Nickel	33	33	100.0	13.60	37.80	SD-DR054-0020	22.496	21.900
Potassium	33	33	100.0	1600.00	3900.00	SD-DR054-0000A	2875.757	2900.000
Selenium	33	10	30.3	0.60	1.00	SD-DR044-0020	2.666	4.000
Silver	33	33	100.0	0.05	3.03	SD-DR008-0020	0.659	0.410
Sodium	33	33	100.0	4170.00	14000.00	SD-DR044-0000A	9992.727	10600.000
Thallium	33	22	66.7	0.03	7.00	SD-DR101-0020	0.290	0.080
Tin	33	33	100.0	2.00	46.00	SD-DR054-0020	9.393	5.000
Vanadium	33	33	100.0	54.00	92.00	SD-DR021-0020	71.575	71.000
Zinc	33	33	100.0	42.00	1560.00	SD-DR054-0000A	230.909	115.000

Bold text indicates constituent was detected one or more times.
n/a - Not Applicable

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR008 SD-DR008-0000A 0 to 2 ft	DR008 SD-DR008-0020 2 ft to 4 ft	DR021 SD-DR021-0000A 0 to 2 ft	DR021 SD-DR021-0020 2 ft to 4 ft	DR025 SD-DR025-0000A 0 to 2 ft	DR025 SD-DR025-0020 2 ft to 4 ft
Inorganics (Total) (mg/kg)							
Aluminum		15700	21400	30200	33000	27300	27100
Antimony		9 J	26 J	10 UJ	6 J	10 UJ	10 UJ
Arsenic		19	13	18	24	14	16
Barium		82	91	157	216	114	102
Beryllium		0.16	0.29	0.46	0.44	0.39	0.41
Cadmium		2.5	3.0	1.1	3.7	0.4	1.4
Calcium		7020	7550	9430	10600	25800	18500
Chromium		51	61	41	69	36	52
Cobalt		9	9	11	12	11	11
Copper		192	129	114	132	82	81
Iron		24600 J	28200 J	37600 J	39400 J	35300 J	33500 J
Lead		436	483	128	222	60.4	71.1
Magnesium		7150	6940	9480	9940	9120	8820
Manganese		234	285	403	454	390	348
Mercury		0.92	0.61	0.38	0.64	0.23	0.75
Nickel		33.4	27.7	26.7	32.9	27.0	23.4
Potassium		1900	2500	3800	3900	3400	3600
Selenium		4 U	4 U	4 U	4 U	4 U	4 U
Silver		1.50	3.03	0.91	2.58	0.50	1.99
Sodium		9460	8950	12000	13400	11500	12100
Thallium		0.08 U	0.08 U	0.08 U	0.11	0.08 U	0.08 U
Tin		20	16	11	22	8	6
Vanadium		57	69	84	92	79	79
Zinc		420	258	302	634	152	146

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR044 SD-DR044-0000A 0 to 2 ft	DR044 SD-DR044-0020 2 ft to 4 ft	DR054 SD-DR054-0000A 0 to 2 ft	DR054 SD-DR054-0020 2 ft to 4 ft	DR068 SD-DR068-0000A 0 to 2 ft	DR101 SD-DR101-0000A 0 to 2 ft
Inorganics (Total) (mg/kg)							
Aluminum		20900	21000	28900	29100	29800	22200
Antimony		10 UJ	10 UJ	58 J	148 J	11 J	10 UJ
Arsenic		14	12	283	622	44	10
Barium		152	181	247	636	351	64
Beryllium		0.37	0.40	0.53	0.56	0.43	0.33
Cadmium		0.94	1.34	1.1	1.6	0.5	0.2 U
Calcium		6790	6700	28100	17000	8120	6000
Chromium		38	55	54	88	41	29
Cobalt		9	10	30	40	14	10
Copper		86	79	802	720	139	45
Iron		31000	29900	65200 J	56100 J	43300 J	29200 J
Lead		110	75.4	303	625	122	17.2
Magnesium		7770	8240	10800	9480	9550	7520
Manganese		249	266	937	588	453	278
Mercury		0.3	0.5	0.29	1.44	0.23	0.24
Nickel		18.6	19.9	28.9	37.8	26.4	23.3
Potassium		3100	3200	3900	3800	3900	2600
Selenium		0.8 J	1 J	4 U	4 U	4 U	4 U
Silver		0.94	1.67	0.85	1.29	0.55	0.14
Sodium		14000	11700	10500	10100	11500	8890
Thallium		0.13	0.11	0.09	0.16	0.08 U	0.08 U
Tin		21	21	35	46	9	4
Vanadium		61	69	87	81	79	76
Zinc		171	143	1560	1410	296	73

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR101 SD-DR101-0020 2 ft to 4 ft	DR106 SD-DR106-0000A 0 to 2 ft	DR106 SD-DR106-0020 2 ft to 4 ft	DR112 SD-DR112-0000A 0 to 2 ft	DR112 SD-DR112-0020 2 ft to 4 ft	DR137 SD-DR137-0000A-CC 0 to 2 ft
Inorganics (Total) (mg/kg)							
Aluminum		21600	22200	23100	25800	26300	21300
Antimony		10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Arsenic		8	12	11	13	14	9
Barium		76	81	65	92	113	74
Beryllium		0.32	0.33	0.33	0.37	0.41	0.46
Cadmium		0.2 U	0.3	0.3	0.3	0.4	0.43 J
Calcium		5680	21500	6100	6370	6550	5540
Chromium		26	29	28	33	34	27
Cobalt		9	9	9	11	11	10
Copper		40	50	46	57	72	42
Iron		27200 J	29000 J	30400 J	32200 J	33300 J	28000
Lead		9.81	30.3	22.7	28.8	51.0	29.2 J
Magnesium		6450	7160	6920	8240	8250	7040
Manganese		304	277	257	355	344	286
Mercury		0.15	0.24	0.25	0.17	0.17	0.2
Nickel		19.7	21.9	21.2	24.7	25.1	19
Potassium		2200	2600	2600	2900	3200	2500
Selenium		4 U	4 U	4 U	4 U	4 U	0.9 J
Silver		0.08	0.28	0.17	0.21	0.45	0.22
Sodium		7710	9760	8790	10600	10200	7530
Thallium		7.0	0.04 J	0.05 J	0.08 U	0.08 U	0.08
Tin		3	4	4	5	7	4
Vanadium		76	71	76	76	77	73
Zinc		59	90	79	115	140	79

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR137 SD-DR137-0020-CC 2 ft to 4 ft	DR171 SD-DR171-0000A 0 to 2 ft	DR171 SD-DR171-0020 2 ft to 4 ft	DR206 SD-DR206-0000A 0 to 2 ft	DR206 SD-DR206-0020 2 ft to 4 ft	DR220 SD-DR220-0000A 0 to 2 ft
Inorganics (Total) (mg/kg)							
Aluminum		20100 J	20400	20700	22300 J	22100	23400
Antimony		10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Arsenic		9	8	10	7 J	8	10
Barium		69	78	93	73 J	91	79
Beryllium		0.39 J	0.38	0.38	0.39 J	0.41	0.42
Cadmium		0.31	0.33	0.51	0.39 J	0.74	0.35
Calcium		5230 J	5930	5540	5850 J	6150	6110
Chromium		26 J	27	26	29 J	30	30
Cobalt		10 J	10	10	10 J	9	10
Copper		44	50	52	50 J	53	47
Iron		27000	27400	28000	28600 J	28600	30700
Lead		17.6	26.7	38.4	31.6 J	48.2	25.3
Magnesium		6520	7690	7520	8110 J	7020	8130
Manganese		269	289	283	282 J	276	320
Mercury		0.2 J	0.1 J	0.2 J	0.2 J	0.2	0.2 J
Nickel		18.3	20	16.9	19.9 J	17.6	22
Potassium		2200 J	2800	2900	3100 J	2600	2900
Selenium		0.9 J	0.9 J	0.8 J	2 UJ	2 U	0.7 J
Silver		0.16	0.22	0.44	0.33 J	0.54	0.22
Sodium		5870 J	10900	11100	10700 J	5870	11200
Thallium		0.13 J	0.07	0.07	0.07 J	0.10 J	0.08
Tin		4 J	6	5	5 J	6	5
Vanadium		69	62	62	65 J	65	70
Zinc		70	101	115	113 J	120	103

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR220 SD-DR220-0020 2 ft to 4 ft	DR224 SD-DR224-0000A 0 to 2 ft	DR224 SD-DR224-0020 2 ft to 3.33 ft	DR246 SD-DR246-0000A 0 to 2 ft	DR246 SD-DR246-0020 2 ft to 4 ft	DR269 SD-DR269-0000A 0 to 2 ft
Inorganics (Total) (mg/kg)							
Aluminum		21900	15000	18000	28900	28600	17200
Antimony		10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Arsenic		10	5.3	5.9	12	20	6
Barium		81	48	69	92	93	72
Beryllium		0.40	0.26	0.31	0.43	0.43	0.34
Cadmium		0.48	0.2 U	0.2 U	0.3	0.6	0.22
Calcium		5670	4640	5260	7050	6990	4900
Chromium		28	19	21	35	34	22
Cobalt		10	7	7	12	11	9
Copper		46	27	30	56	78	30
Iron		28500	19300 J	22400 J	37000 J	37300 J	23700
Lead		33.4	7.01	6.62	26.2	46.4	13.4
Magnesium		7420	4440	5000	9590	9180	6380
Manganese		280	173	256	384	368	311
Mercury		0.2 J	0.06	0.08	0.17	0.18	0.1 J
Nickel		18.9	13.6	14.5	25.8	23.2	18.3
Potassium		2800	1600	1800	3600	3600	1800
Selenium		0.7 J	1 U	1 U	4 U	4 U	0.7 J
Silver		0.41	0.05	0.06	0.19	0.67	0.10
Sodium		10700	6380	7070	13500	13600	6610
Thallium		0.08	0.03	0.08	0.08 U	0.04 J	0.03 J
Tin		4	4	2	4	5	3
Vanadium		64	60	66	85	83	54
Zinc		106	42	47	119	193	68

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR269 / SD-DR269-0020 / 2 ft to 4 ft	DR284 / SD-DR284-0000A / 0 to 2 ft	DR284 / SD-DR284-0020 / 2 ft to 4 ft
Inorganics (Total) (mg/kg)				
Aluminum		17400	24200	21500
Antimony		10 UJ	10 UJ	10 UJ
Arsenic		5	7	8
Barium		73	72	83
Beryllium		0.38	0.32	0.42
Cadmium		0.35	0.2 U	0.57
Calcium		5260	6520	5820
Chromium		20	29	24
Cobalt		8	10	10
Copper		26	41	45
Iron		24400	30400 J	27800
Lead		15.7	21.3	34.2
Magnesium		6040	7970	7620
Manganese		279	300	295
Mercury		0.1 J	0.10	0.2 J
Nickel		15.0	22.8	18.0
Potassium		1700	3000	2900
Selenium		2 U	4 U	0.6 J
Silver		0.22	0.13	0.66
Sodium		4170	11700	11700
Thallium		0.03 J	0.08 U	0.13 J
Tin		3	4	4
Vanadium		57	77	61
Zinc		76	100	120

Blank cell indicate no analyses were performed.

APPENDIX E-11

ORGANOTINS (SUBSURFACE SEDIMENT)

Duwamish River Sediment Investigation - Statistics for Subsurface Sediment Results for Organotins

Constituent	Number of Samples Analyzed	Number of Detections	Detection Frequency (%)	Minimum Detected Value	Maximum Detected Value	Sample Number of Maximum Detected Value	Arithmetic Mean	Median Value
Organotins (ug/kg)								
Di-n-butyltin (as Organotin)	25	19	76.0	7.00	250.00	SD-DR054-0000A	39.560	15.000
n-Butyltin (as Organotin)	25	9	36.0	7.00	170.00	SD-DR054-0020	26.680	7.000
Tetra-n-butyltin (as Organotin)	25	4	16.0	5.00	40.00	SD-DR054-0020	14.240	15.000
Tri-n-butyltin (as Organotin)	25	20	80.0	3.00	2500.00	SD-DR054-0000A	234.800	23.000
Organotins (TOCN) (ug/kg)								
Di-n-butyltin (as Organotin)	25	19	76.0	238.00	15100.00	SD-DR054-0020	2014.088	688.000
n-Butyltin (as Organotin)	25	9	36.0	299.00	11600.00	SD-DR054-0020	1342.120	324.000
Tetra-n-butyltin (as Organotin)	25	4	16.0	211.00	2740.00	SD-DR054-0020	701.640	588.000
Tri-n-butyltin (as Organotin)	25	20	80.0	127.00	144000.00	SD-DR054-0020	12903.352	1580.000

Bold text indicates constituent was detected one or more times.
n/a - Not Applicable

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Organotins

Constituent	Station ID:	DR008	DR008	DR021	DR021	DR025	DR025
	Sample ID:	SD-DR008-0000A	SD-DR008-0020	SD-DR021-0000A	SD-DR021-0020	SD-DR025-0000A	SD-DR025-0020
	Depth (ft bgs):	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft
Organotins (ug/kg)							
Di-n-butyltin (as Organotin)		51	120	52	39	32	9
n-Butyltin (as Organotin)		5 UJ	27 J	88 J	65 UIJ	40 J	35 UIJ
Tetra-n-butyltin (as Organotin)		15 UI	15 UI	15 UI	15 UI	15 UI	15 UI
Tri-n-butyltin (as Organotin)		130	67	280	120	130	22
Organotins (TOCN) (ug/kg)							
Di-n-butyltin (as Organotin)		1420	5430	2040	1590	1250	354
n-Butyltin (as Organotin)		139 UJ	1220 J	3450 J	2650 UIJ	1560 J	1380 UIJ
Tetra-n-butyltin (as Organotin)		417 UI	679 UI	588 UI	612 UI	584 UI	591 UI
Tri-n-butyltin (as Organotin)		3610	3030	11000	4900	5060	866

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Organotins

Constituent	Station ID:	DR054	DR054	DR068	DR101	DR101	DR112
	Sample ID:	SD-DR054-0000A	SD-DR054-0020	SD-DR068-0000A	SD-DR101-0000A	SD-DR101-0020	SD-DR112-0000A
	Depth (ft bgs):	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft
Organotins (ug/kg)							
Di-n-butyltin (as Organotin)		250	220	37	1 U	1 UJ	17
n-Butyltin (as Organotin)		120 J	170 J	10 J	1 UJ	1 UJ	8 J
Tetra-n-butyltin (as Organotin)		39	40	15 UI	3 U	3 UJ	15 UI
Tri-n-butyltin (as Organotin)		2500	2100	100	1 U	1 UJ	39
Organotins (TOCN) (ug/kg)							
Di-n-butyltin (as Organotin)		12600	15100	2220	54.9 U	42.7 UJ	688
n-Butyltin (as Organotin)		6030 J	11600 J	599 J	54.9 UJ	42.7 UJ	324 J
Tetra-n-butyltin (as Organotin)		1960	2740	898 UI	165 U	128 UJ	607 UI
Tri-n-butyltin (as Organotin)		126000	144000	5990	54.9 U	42.7 UJ	1580

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Organotins

Constituent	Station ID:	DR112	DR137	DR137	DR171	DR171	DR206
	Sample ID:	SD-DR112-0020	SD-DR137-0000A-CC	SD-DR137-0020-CC	SD-DR171-0000A	SD-DR171-0020	SD-DR206-0000A
	Depth (ft bgs):	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft
Organotins (ug/kg)							
Di-n-butyltin (as Organotin)		57	2 U	1 U	8	21	15
n-Butyltin (as Organotin)		18 J	18 UIJ	17 UIJ	5 UJ	7 J	5 UJ
Tetra-n-butyltin (as Organotin)		15 UI	5 J	5 J	15 UI	15 UI	15 UI
Tri-n-butyltin (as Organotin)		170	3	1 U	20	47	23
Organotins (TOCN) (ug/kg)							
Di-n-butyltin (as Organotin)		1950	84.4 U	49.8 U	356	897	1900
n-Butyltin (as Organotin)		614 J	759 UIJ	846 UIJ	222 UJ	299 J	633 UJ
Tetra-n-butyltin (as Organotin)		512 UI	211 J	249 J	667 UI	641 UI	1900 UI
Tri-n-butyltin (as Organotin)		5800	127	49.8 U	889	2010	2910

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Organotins

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR206 SD-DR206-0020 2 ft to 4 ft	DR224 SD-DR224-0000A 0 to 2 ft	DR224 SD-DR224-0020 2 ft to 3.33 ft	DR246 SD-DR246-0000A 0 to 2 ft	DR246 SD-DR246-0020 2 ft to 4 ft	DR284 SD-DR284-0000A 0 to 2 ft
Organotins (ug/kg)							
Di-n-butyltin (as Organotin)		7	1 U	1 U	7	7	18
n-Butyltin (as Organotin)		5 UJ	1 UJ	1 UIJ	5 UJ	5 UJ	5 UJ
Tetra-n-butyltin (as Organotin)		15 UI	3 U	3 U	15 UI	15 UI	15 UI
Tri-n-butyltin (as Organotin)		13	1 U	1 U	8	12	21
Organotins (TOCN) (ug/kg)							
Di-n-butyltin (as Organotin)		286	75.8 U	80.6 U	255	238	804
n-Butyltin (as Organotin)		204 UJ	75.8 UJ	80.6 UIJ	182 UJ	170 UJ	223 UJ
Tetra-n-butyltin (as Organotin)		612 UI	227 U	242 U	545 UI	510 UI	670 UI
Tri-n-butyltin (as Organotin)		531	75.8 U	80.6 U	291	408	938

Blank cells indicate no analysis were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for Organotins

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR284 / SD-DR284-0020 / 2 ft to 4 ft
Organotins (ug/kg)		
Di-n-butyltin (as Organotin)		15
n-Butyltin (as Organotin)		5 UJ
Tetra-n-butyltin (as Organotin)		15 UI
Tri-n-butyltin (as Organotin)		60
Organotins (TOCN) (ug/kg)		
Di-n-butyltin (as Organotin)		586
n-Butyltin (as Organotin)		195 UJ
Tetra-n-butyltin (as Organotin)		586 UI
Tri-n-butyltin (as Organotin)		2340

Blank cells indicate no analysis were performed.

APPENDIX E-12

TOC/GRAIN SIZE (SUBSURFACE SEDIMENT)

Duwamish River Sediment Investigation - Statistics for Subsurface Sediment Results for TOC and Grain Size

Constituent	Number of Samples Analyzed	Number of Detections	Detection Frequency (%)	Minimum Detected Value	Maximum Detected Value	Sample Number of Maximum Detected Value	Arithmetic Mean	Median Value
Conventional Parameters								
Total Organic Carbon (%)	33	33	100.0	0.79	3.60	SD-DR008-0000A	2.221	2.340
Grain Size (%)								
>9525 microns-Fractional %	33	33	100.0	0.00	0.00	SD-DR224-0000A	0.000	0.000
9525-4000 microns-Fractional %	33	33	100.0	0.00	11.91	SD-DR068-0000A	0.645	0.000
4000-2000 microns-Fractional %	33	33	100.0	0.00	3.76	SD-DR021-0000A	0.425	0.080
2000-1000 microns-Fractional %	33	33	100.0	0.01	2.80	SD-DR054-0020	0.771	0.510
1000-500 microns-Fractional %	33	33	100.0	0.25	7.78	SD-DR008-0000A	1.752	1.230
500-250 microns-Fractional %	33	33	100.0	0.36	23.43	SD-DR008-0000A	3.833	2.110
250-125 microns-Fractional %	33	33	100.0	0.81	36.47	SD-DR269-0020	6.442	3.960
125-62 microns-Fractional %	33	33	100.0	0.10	25.85	SD-DR224-0000A	10.306	8.520
62-31 microns-Fractional %	33	33	100.0	3.75	28.53	SD-DR224-0000A	13.813	14.290
31-15.6 microns-Fractional %	33	33	100.0	5.91	39.66	SD-DR246-0020	20.616	19.940
15.6-7.8 microns-Fractional %	33	33	100.0	5.41	31.21	SD-DR025-0020	18.842	19.140
7.8-3.9 microns-Fractional %	33	33	100.0	2.24	12.94	SD-DR025-0000A	8.087	8.650
3.9-2 microns-Fractional %	33	33	100.0	1.21	8.61	SD-DR068-0000A	4.569	4.250
2-1 microns-Fractional %	33	33	100.0	0.31	6.90	SD-DR021-0020	3.396	3.430
<1 microns-Fractional %	33	33	100.0	1.20	16.05	SD-DR021-0020	7.726	7.280
Total Fines	33	33	100.0	29.76	93.75	SD-DR137-0020-CC	77.052	79.280
Total Sand	33	33	100.0	5.58	69.43	SD-DR269-0020	23.106	20.720

Bold text indicates constituent was detected one or more times.
n/a - Not Applicable

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR008 SD-DR008-0000A 0 to 2 ft	DR008 SD-DR008-0020 2 ft to 4 ft	DR021 SD-DR021-0000A 0 to 2 ft	DR021 SD-DR021-0020 2 ft to 4 ft	DR025 SD-DR025-0000A 0 to 2 ft	DR025 SD-DR025-0020 2 ft to 4 ft
Conventional Parameters							
Total Organic Carbon (%)		3.60	2.21	2.55	2.45	2.57	2.54
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.47 J	0.00	0.00	0.53
4000-2000 microns-Fractional %		1.67	0.07	3.76 J	1.17	1.42 J	1.52
2000-1000 microns-Fractional %		2.65	0.69	2.15 J	1.85	1.66 J	1.01
1000-500 microns-Fractional %		7.78	1.94	1.34 J	1.55	1.56 J	1.58
500-250 microns-Fractional %		23.43	10.98	1.27 J	1.53	2.15 J	2.30
250-125 microns-Fractional %		26.21	10.96	1.58 J	1.36	3.17 J	1.51
125-62 microns-Fractional %		8.51	7.92	3.66 J	2.71	0.10 J	2.46
62-31 microns-Fractional %		3.75	11.33	6.33	3.99	10.78	6.52
31-15.6 microns-Fractional %		5.91	13.09	19.94	14.82	19.21	19.26
15.6-7.8 microns-Fractional %		7.07	12.99	26.21	28.80	21.74	31.21
7.8-3.9 microns-Fractional %		4.02	7.55	10.50	11.76	12.94	9.40
3.9-2 microns-Fractional %		2.55	5.60	6.68	7.50	8.09	5.35
2-1 microns-Fractional %		1.69	5.06	4.97	6.90	5.01	5.46
<1 microns-Fractional %		4.77	11.81	11.14	16.05	12.17	11.90
Total Fines		29.76 T	67.43 T	85.77 T	89.82 T	89.94 T	89.1 T
Total Sand		68.58 T	32.49 T	10 T	9 T	8.64 T	8.86 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR044 SD-DR044-0000A 0 to 2 ft	DR044 SD-DR044-0020 2 ft to 4 ft	DR054 SD-DR054-0000A 0 to 2 ft	DR054 SD-DR054-0020 2 ft to 4 ft	DR068 SD-DR068-0000A 0 to 2 ft	DR101 SD-DR101-0000A 0 to 2 ft
Conventional Parameters							
Total Organic Carbon (%)		2.68	2.22	1.99	1.46	1.67	1.82
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.65	0.00	0.00	11.91 J	0.00
4000-2000 microns-Fractional %		0.39	0.10	0.03	0.59	0.93 J	0.44 J
2000-1000 microns-Fractional %		1.08	0.91	1.78	2.80	1.77 J	0.64 J
1000-500 microns-Fractional %		1.90	0.64	6.91	5.40	3.03 J	0.91 J
500-250 microns-Fractional %		5.69	0.94	5.70	7.28	4.39 J	0.76 J
250-125 microns-Fractional %		7.42	0.93	5.80	6.17	3.25 J	1.11 J
125-62 microns-Fractional %		11.15	2.16	5.04	5.84	4.67 J	5.53 J
62-31 microns-Fractional %		10.44	6.69	7.31	8.08	4.75 J	16.17
31-15.6 microns-Fractional %		13.35	22.58	16.39	14.72	10.65 J	25.42
15.6-7.8 microns-Fractional %		18.98	26.85	17.82	18.51	14.74 J	25.14
7.8-3.9 microns-Fractional %		11.85	12.43	12.62	9.02	10.17 J	8.65
3.9-2 microns-Fractional %		2.89	7.56	6.07	6.17	8.61 J	4.39
2-1 microns-Fractional %		4.75	5.49	4.64	4.62	5.84 J	3.43
<1 microns-Fractional %		10.11	12.08	9.89	10.81	15.30 J	7.41
Total Fines		72.37 T	93.68 T	74.74 T	71.93 T	70.06 T	90.61 T
Total Sand		27.24 T	5.58 T	25.23 T	27.49 T	17.11 T	8.95 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for TOC and Grain Size

	Station ID:	DR101	DR106	DR106	DR112	DR112	DR137
	Sample ID:	SD-DR101-0020	SD-DR106-0000A	SD-DR106-0020	SD-DR112-0000A	SD-DR112-0020	SD-DR137-0000A-CC
Constituent	Depth (ft bgs):	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft	2 ft to 4 ft	0 to 2 ft
Conventional Parameters							
Total Organic Carbon (%)		2.34	2.10	1.90	2.47	2.93	2.46
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	7.56
4000-2000 microns-Fractional %		0.14 J	0.15 J	0.30 J	0.00	0.12	0.58
2000-1000 microns-Fractional %		0.61 J	0.32 J	0.37 J	0.12	0.09	0.75
1000-500 microns-Fractional %		0.61 J	0.93 J	0.78 J	1.16	1.21	2.04
500-250 microns-Fractional %		0.36 J	1.44 J	1.25 J	2.83	2.06	6.30
250-125 microns-Fractional %		1.25 J	1.68 J	2.75 J	4.37	4.17	10.50
125-62 microns-Fractional %		8.52 J	5.08 J	6.87 J	11.57	13.36	16.68
62-31 microns-Fractional %		19.94	15.35	14.00	14.34	11.25	17.91 J
31-15.6 microns-Fractional %		23.97	34.73	34.89	17.55	18.04	24.23
15.6-7.8 microns-Fractional %		17.30	22.42	22.54	18.10	21.38	19.72
7.8-3.9 microns-Fractional %		10.54	6.39	6.09	10.63	9.81	11.40
3.9-2 microns-Fractional %		5.66	2.72	2.90	6.44	5.79	6.49
2-1 microns-Fractional %		3.63	1.42	2.39	4.21	3.99	3.98
<1 microns-Fractional %		7.46	7.36	4.88	8.67	8.74	6.98
Total Fines		88.5 T	90.39 T	87.69 T	79.94 T	79 T	90.71 T
Total Sand		11.35 T	9.45 T	12.02 T	20.05 T	20.89 T	36.27 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR137 SD-DR137-0020-CC 2 ft to 4 ft	DR171 SD-DR171-0000A 0 to 2 ft	DR171 SD-DR171-0020 2 ft to 4 ft	DR206 SD-DR206-0000A 0 to 2 ft	DR206 SD-DR206-0020 2 ft to 4 ft	DR220 SD-DR220-0000A 0 to 2 ft
Conventional Parameters							
Total Organic Carbon (%)		2.62	2.25	2.34	0.79	2.45	2.42
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
4000-2000 microns-Fractional %		0.03 J	0.07 J	0.03	0.00	0.01	0.08 J
2000-1000 microns-Fractional %		0.08 J	0.14 J	0.08	0.51	0.71	0.17 J
1000-500 microns-Fractional %		0.70 J	1.21 J	1.08	1.30	1.83	0.95 J
500-250 microns-Fractional %		0.68 J	2.64 J	2.48	1.85	4.63	1.11 J
250-125 microns-Fractional %		2.46 J	3.96 J	5.30	5.18	4.98	2.15 J
125-62 microns-Fractional %		7.71 J	12.09 J	15.96	11.88	11.16	11.58 J
62-31 microns-Fractional %		19.39	18.30	17.36	16.65	15.71	20.19
31-15.6 microns-Fractional %		26.03	17.41	20.56	23.89	23.63	23.29
15.6-7.8 microns-Fractional %		24.64	16.84	19.19	19.89	20.84	19.14
7.8-3.9 microns-Fractional %		9.55	10.78	6.54	6.70	6.56	7.71
3.9-2 microns-Fractional %		4.25	5.60	3.06	4.12	3.57	4.20
2-1 microns-Fractional %		3.70	3.68	2.53	2.17	2.33	2.83
<1 microns-Fractional %		6.19	7.28	5.85	5.86	4.03	6.61
Total Fines		93.75 T	79.89 T	75.09 T	79.28 T	76.67 T	83.97 T
Total Sand		11.63 T	20.04 T	24.9 T	20.72 T	23.31 T	15.96 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR220 SD-DR220-0020 2 ft to 4 ft	DR224 SD-DR224-0000A 0 to 2 ft	DR224 SD-DR224-0020 2 ft to 3.33 ft	DR246 SD-DR246-0000A 0 to 2 ft	DR246 SD-DR246-0020 2 ft to 4 ft	DR269 SD-DR269-0000A 0 to 2 ft
Conventional Parameters							
Total Organic Carbon (%)		2.37	1.32	1.24	2.75	2.94	1.79
Grain Size (%)							
>9525 microns-Fractional %		0.00	0.00	0.00	0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.19 J	0.00	0.00	0.00
4000-2000 microns-Fractional %		0.00	0.00	0.00 J	0.07 J	0.00	0.00
2000-1000 microns-Fractional %		0.09 J	0.02 J	0.01 J	0.28 J	0.54 J	0.44
1000-500 microns-Fractional %		1.21 J	0.48 J	0.25 J	1.00 J	1.75 J	1.23
500-250 microns-Fractional %		2.11 J	1.26 J	0.50 J	0.75 J	1.31 J	5.17
250-125 microns-Fractional %		3.82 J	4.72 J	3.00 J	0.81 J	2.38 J	18.55
125-62 microns-Fractional %		14.70 J	25.85 J	24.04 J	3.93 J	6.04 J	22.56
62-31 microns-Fractional %		23.30	28.53	26.69	15.69	12.64	13.91
31-15.6 microns-Fractional %		25.52	16.60	18.29	24.65	39.66	15.93
15.6-7.8 microns-Fractional %		16.02	9.85	11.22	26.14	20.52	11.54
7.8-3.9 microns-Fractional %		4.42	3.96	4.81	10.05	4.83	4.72
3.9-2 microns-Fractional %		2.37	2.57	3.51	5.20	2.52	2.07
2-1 microns-Fractional %		1.98	2.05	2.38	3.42	2.08	1.22
<1 microns-Fractional %		4.46	4.12	5.12	8.03	5.71	2.65
Total Fines		78.07 T	67.68 T	72.02 T	93.18 T	87.96 T	52.04 T
Total Sand		21.93 T	32.33 T	27.8 T	6.77 T	12.02 T	47.95 T

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Subsurface Sediment Results for TOC and Grain Size

Constituent	Station ID: / Sample ID: / Depth (ft bgs):	DR269 / SD-DR269-0020 / 2 ft to 4 ft	DR284 / SD-DR284-0000A / 0 to 2 ft	DR284 / SD-DR284-0020 / 2 ft to 4 ft
Conventional Parameters				
Total Organic Carbon (%)		1.26	2.24	2.56
Grain Size (%)				
>9525 microns-Fractional %		0.00	0.00	0.00
9525-4000 microns-Fractional %		0.00	0.00	0.00
4000-2000 microns-Fractional %		0.03	0.33	0.00
2000-1000 microns-Fractional %		0.33	0.44	0.38
1000-500 microns-Fractional %		1.24	1.27	1.05
500-250 microns-Fractional %		16.59	2.81	1.96
250-125 microns-Fractional %		36.47	14.36	10.28
125-62 microns-Fractional %		14.80	20.45	15.52
62-31 microns-Fractional %		9.45	14.29	14.81
31-15.6 microns-Fractional %		10.73	20.91	24.51
15.6-7.8 microns-Fractional %		5.41	12.68	16.35
7.8-3.9 microns-Fractional %		2.24	3.77	4.48
3.9-2 microns-Fractional %		1.21	2.24	2.84
2-1 microns-Fractional %		0.31	1.48	2.44
<1 microns-Fractional %		1.20	4.96	5.38
Total Fines		30.55 T	60.33 T	70.81 T
Total Sand		69.43 T	39.33 T	29.19 T

Blank cell indicate no analyses were performed.

APPENDIX E

STATISTICAL SUMMARY AND DATA LISTING

SURFACE SEDIMENT POREWATER

APPENDIX E-13

TOTAL INORGANICS (SURFACE SEDIMENT POREWATER)

Duwamish River Sediment Investigation - Statistics for Sediment Porewater Results for Total Inorganics

Constituent	Number of Samples Analyzed	Number of Detections	Detection Frequency (%)	Minimum Detected Value	Maximum Detected Value	Sample Number of Maximum Detected Value	Arithmetic Mean	Median Value
Inorganics (Total) (ug/l)								
Aluminum	15	8	53.3	77.00	378.00	PW-DR055-0000	120.200	77.000
Antimony	15	1	6.7	30.00	30.00	PW-DR244-0000	45.666	50.000
Arsenic	15	12	80.0	26.00	114.00	PW-DR244-0000	52.866	43.000
Barium	15	15	100.0	4.00	214.00	PW-DR262-0000	64.200	62.000
Beryllium	15	0	0.0	n/a	n/a		5.000	5.000
Cadmium	15	4	26.7	4.00	4.00	PW-DR147-0000	4.733	5.000
Calcium	15	15	100.0	15300.00	347000.00	PW-DR018-0000	276486.666	320000.000
Chromium	15	0	0.0	n/a	n/a		10.000	10.000
Cobalt	15	0	0.0	n/a	n/a		10.000	10.000
Copper	15	4	26.7	1.00	5.00	PW-DR262-0000	3.800	4.000
Iron	15	15	100.0	186.00	18300.00	PW-DR244-0000	9036.733	10000.000
Lead	15	13	86.7	0.60	4.00	PW-DR109-0000	1.493	1.000
Magnesium	15	15	100.0	51000.00	1100000.00	PW-DR018-0000	893466.666	1040000.000
Manganese	15	15	100.0	13.00	5440.00	PW-DR244-0000	1999.266	2000.000
Mercury	15	0	0.0	n/a	n/a		0.100	0.100
Nickel	15	0	0.0	n/a	n/a		22.000	20.000
Potassium	15	15	100.0	41600.00	373000.00	PW-DR055-0000	291333.333	306000.000
Selenium	15	0	0.0	n/a	n/a		20.666	20.000
Silver	15	6	40.0	0.30	0.50	PW-DR301-0000	0.746	1.000
Sodium	15	15	100.0	1160000.00	9730000.00	PW-DR038-0000	7785333.333	8790000.000
Thallium	15	0	0.0	n/a	n/a		1.000	1.000
Tin	15	0	0.0	n/a	n/a		15.333	10.000
Vanadium	15	15	100.0	3.00	22.00	PW-DR244-0000	13.466	14.000
Zinc	15	3	20.0	4.00	6.00	PW-DR140-0000	9.000	10.000

Bold text indicates constituent was detected one or more times.
n/a - Not Applicable

Duwamish River Sediment Investigation - Full Data Listing of Sediment Porewater Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR018 / PW-DR018-0000 / 0 to 10 cm	DR038 / PW-DR038-0000 / 0 to 10 cm	DR055 / PW-DR055-0000 / 0 to 10 cm	DR096 / PW-DR096-0000-CC / 0 to 10 cm	DR109 / PW-DR109-0000 / 0 to 10 cm	DR133 / PW-DR133-0000 / 0 to 10 cm
Inorganics (Total) (ug/l)							
Aluminum		102	77 U	378	153	283	116
Antimony		50 U	50 U	50 U	50 U	50 U	50 U
Arsenic		59	67	63	74	103	43
Barium		83	36	71	70	62	46
Beryllium		5 U	5 U	5 U	5 U	5 U	5 U
Cadmium		5 U	5 U	5 U	5 U	4 J	5 U
Calcium		347000	324000	346000	336000	315000	322000
Chromium		10 U	10 U	10 U	10 U	10 U	10 U
Cobalt		10 U	10 U	10 U	10 U	10 U	10 U
Copper		4 UI	4 UI	4 UI	4 UI	5	4 UI
Iron		12500	13500	10000	14500	13100	14100
Lead		1 J	2 J	2	2	4	0.9 J
Magnesium		1100000	1090000	1100000	1040000	997000	1040000
Manganese		3000	2000	2080	3050	1780	2000
Mercury		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel		30 UI	20 UI	20 UI	20 UI	20 UI	30 UI
Potassium		365000	356000	373000	365000	341000	342000
Selenium		20 UI	20 UI	20 UI	20 UI	20 UI	20 UI
Silver		1 UI	0.4 J	1 UI	1 UI	0.3 J	1 UI
Sodium		9100000	9730000	9320000	8700000	8810000	8860000
Thallium		1 U	1 U	1 U	1 U	1 U	1 U
Tin		10 U	10 U	10 U	10 U	10 U	10 U
Vanadium		16	17	16	18	17	14
Zinc		10 U	10 U	10 U	10 U	5 J	10 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Sediment Porewater Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR140 / PW-DR140-0000 / 0 to 10 cm	DR147 / PW-DR147-0000 / 0 to 10 cm	DR181 / PW-DR181-0000 / 0 to 10 cm	DR228 / PW-DR228-0000 / 0 to 10 cm	DR244 / PW-DR244-0000 / 0 to 10 cm	DR260 / PW-DR260-0000 / 0 to 10 cm
Inorganics (Total) (ug/l)							
Aluminum		50 U	134	50 U	67 U	67 U	69 U
Antimony		5 U	50 U	50 U	50 U	30 J	50 U
Arsenic		10 U	93	34	31	114	36
Barium		28	43	74	104	45	74
Beryllium		5 U	5 U	5 U	5 U	5 U	5 U
Cadmium		5 U	4 J	4 J	5 U	4 J	5 U
Calcium		276000	327000	320000	300000	300000	324000
Chromium		10 U	10 U	10 U	10 U	10 U	10 U
Cobalt		10 U	10 U	10 U	10 U	10 U	10 U
Copper		4 UI	4 UI	4 UI	4 UI	4 UI	4 UI
Iron		188	14800	9870	1240	18300	4690
Lead		1 U	1 J	2	1 U	0.6 J	2
Magnesium		911000	1050000	1040000	1010000	978000	1040000
Manganese		13	2290	2200	1020	5440	1660
Mercury		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel		20 UI	20 UI	30 UI	20 UI	20 UI	20 UI
Potassium		294000	348000	306000	305000	290000	289000
Selenium		20 UI	20 UI	20 UI	20 UI	20 UI	20 UI
Silver		0.4 J	1 UI	1 UI	0.3 J	1 UI	1 UI
Sodium		8130000	8890000	8990000	8790000	8400000	8600000
Thallium		1 U	1 U	1 U	1 U	1 U	1 U
Tin		10 U	10 U	10 U	10 U	10 U	10 U
Vanadium		11	17	12	12	22	12
Zinc		6 J	10 U	10 U	4 J	10 U	10 U

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Sediment Porewater Results for Total Inorganics

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR262 / PW-DR262-0000 / 0 to 10 cm	DR298 / PW-DR298-0000 / 0 to 10 cm	DR301 / PW-DR301-0000 / 0 to 10 cm
Inorganics (Total) (ug/l)				
Aluminum		50 U	77	130
Antimony		50 U	50 U	50 U
Arsenic		26	10 U	30 UI
Barium		214	9	4 J
Beryllium		5 U	5 U	5 U
Cadmium		5 U	5 U	5 U
Calcium		271000	24000	15300
Chromium		10 U	10 U	10 U
Cobalt		10 U	10 U	10 U
Copper		5	2	1
Iron		8240	186	337
Lead		1	1	0.9
Magnesium		874000	81000	51000
Manganese		3390	36	30
Mercury		0.1 U	0.1 U	0.1 U
Nickel		20 UI	20 UI	20 UI
Potassium		296000	58400	41600
Selenium		20 UI	20 UI	30 UI
Silver		1 UI	0.3 J	0.5 J
Sodium		7720000	1580000	1160000
Thallium		1 U	1 U	1 U
Tin		10 U	50 UI	50 UI
Vanadium		11	3 J	4 J
Zinc		10 U	10 U	10 U

Blank cell indicate no analyses were performed.

APPENDIX E-14

ORGANOTINS (SURFACE SEDIMENT POREWATER)

Duwamish River Sediment Investigation - Statistics for Sediment Porewater Results for Organotins

Constituent	Number of Samples Analyzed	Number of Detections	Detection Frequency (%)	Minimum Detected Value	Maximum Detected Value	Sample Number of Maximum Detected Value	Arithmetic Mean	Median Value
Organotins (ug/l)								
Di-n-butyltin (as Organotin)	**15**	**4**	**26.7**	**0.00**	**0.01**	**PW-DR038-0000**	**0.039**	**0.050**
n-Butyltin (as Organotin)	15	0	0.0	n/a	n/a		0.050	0.050
Tetra-n-butyltin (as Organotin)	15	0	0.0	n/a	n/a		0.050	0.050
Tri-n-butyltin (as Organotin)	**15**	**8**	**53.3**	**0.00**	**0.08**	**PW-DR055-0000**	**0.038**	**0.050**

Bold text indicates constituent was detected one or more times.
n/a - Not Applicable

Duwamish River Sediment Investigation - Full Data Listing of Sediment Porewater Results for Organotins

	Station ID:	DR018	DR038	DR055	DR096	DR109	DR133
	Sample ID:	PW-DR018-0000	PW-DR038-0000	PW-DR055-0000	PW-DR096-0000-CC	PW-DR109-0000	PW-DR133-0000
Constituent	Depth (cm bgs):	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm	0 to 10 cm
Organotins (ug/l)							
Di-n-butyltin (as Organotin)		0.01 J	0.01 J	0.01 J	0.05 UJ	0.007 J	0.05 UJ
n-Butyltin (as Organotin)		0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ
Tetra-n-butyltin (as Organotin)		0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ
Tri-n-butyltin (as Organotin)		0.02 J	0.04 J	0.08 J	0.02 J	0.025 J	0.008 J

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Sediment Porewater Results for Organotins

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR140 PW-DR140-0000 0 to 10 cm	DR147 PW-DR147-0000 0 to 10 cm	DR181 PW-DR181-0000 0 to 10 cm	DR228 PW-DR228-0000 0 to 10 cm	DR244 PW-DR244-0000 0 to 10 cm	DR260 PW-DR260-0000 0 to 10 cm
Organotins (ug/l)							
Di-n-butyltin (as Organotin)		0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ
n-Butyltin (as Organotin)		0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ
Tetra-n-butyltin (as Organotin)		0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ
Tri-n-butyltin (as Organotin)		0.05 UIJ	0.02 J	0.05 UIJ	0.05 UIJ	0.009 J	0.05 UIJ

Blank cell indicate no analyses were performed.

Duwamish River Sediment Investigation - Full Data Listing of Sediment Porewater Results for Organotins

Constituent	Station ID: / Sample ID: / Depth (cm bgs):	DR262 / PW-DR262-0000 / 0 to 10 cm	DR298 / PW-DR298-0000 / 0 to 10 cm	DR301 / PW-DR301-0000 / 0 to 10 cm
Organotins (ug/l)				
Di-n-butyltin (as Organotin)		0.05 UJ	0.05 UJ	0.05 UJ
n-Butyltin (as Organotin)		0.05 UJ	0.05 UJ	0.05 UJ
Tetra-n-butyltin (as Organotin)		0.05 UJ	0.05 UJ	0.05 UJ
Tri-n-butyltin (as Organotin)		0.05 UIJ	0.05 UIJ	0.05 UIJ

Blank cell indicate no analyses were performed.

APPENDIX F

SCREENING GUIDELINES

Table F-1—Summary of Sediment Quality Guidelines

Compound	Long & Morgan[d]		WA State SMS[e]		AETs[f]		MacDonald et al.[g]		PSDDA[h]		EP Marine[i]	
	ER-L	ER-M	SQS	CSL	LAET	2LAET	TEL	PEL	SL	ML	CHRONIC	ACUTE
Inorganics (mg/kg DW)												
Antimony	2.0	25			150	200			150	200		
Arsenic	8.2	70	57	93	57	93	7.24	41.6	57	700	33	64
Cadmium	1.2	9.6	5.1	6.7	5.1	6.7	0.676	4.21	5.1	14	31	96
Chromium	81	370	260	270	260	270	52.3	160				
Copper	34	270	390	390	390	390	18.7	108	390	1,300	136[a]	216[a]
Lead	46.7	218	450	530	450	530	30.2	112	450	1,200	132[a]	3,360[a]
Mercury	0.15	0.71	0.41	0.59	0.41	0.59	0.13	0.7	0.41	2.3	0.032[a]	0.6[a]
Nickel	20.9	51.6			>140	>140	15.9	42.8	140	370		
Silver	1.0	3.7	6.1	6.1	6.1	6.1	0.73	1.77	6.1	8.4		
Zinc	150	410	410	960	410	960	124	271	410	3,800	760[a]	2,240[a]
BNAs (µg/kg DW)												
2-Methylnaphthalene	70	670			670	1,400	20.2	201	670	1,900		
Naphthalene	160	2,100			2,100	2,400	34.6	391	2,100	2,400	500[b,c]	42,000[a]
Acenaphthylene	44	640			1,300	1,300	5.87	128	560	1,300		
Acenaphthene	16	500			500	730	6.71	88.9	500	2,000	16,500[b]	23,000[b]
Fluorene	19	540			540	1,000	21.2	144	540	3,600	59[b,c]	
Phenanthrene	240	1,500			1,500	5,400	86.7	543.5	1,500	21,000	110[b,c]	
Anthracene	85	1,100			960	4,400	46.9	245	960	13,000	190[b,c]	
Total LPAH	552	3,160			5,200	13,000	312	1442	5,200	29,000		
Fluoranthene	600	5,100			1,700	2,500	113	1494	1,700	30,000	1,600[b,c]	36,000[a]
Pyrene	665	2,600			2,600	3,300	153	1398	2,600	16,000	850[b,c]	
Benzo(a)anthracene	261	1,600			1,300	1,600	74.8	693	1,300	5,100	1,600[b,c]	220,000[a]
Chrysene	384	2,800			1,400	2,800	107.8	846	1,400	21,000	1,200[b,c]	
Total Benzofluoranthenes					3,200	3,600			3,200	9,900		
Benzo(a)pyrene	430	1,600			1,600	3,000	88.8	763	1,600	3,600	18,000[b,c]	
Dibenz(a,h)anthracene	63	260			230	540	6.22	135	230	1,900	12,000[b,c]	
Benzo(g,h,i)perylene					670	720			670	3,200		
Total HPAH	1,700	9,600			12,000	17,000	655	6676	12,000	69,000		
Phenol			420	1,200	420	1,200			420	1,200		
2-Methylphenol			63	63	63	72			63	77		
4-Methylphenol			670	670	670	1,800			670	3,600		
2,4-Dimethylphenol			29	29	29	72			29	210		

Table F-1—Summary of Sediment Quality Guidelines

Compound	Long & Morgan[d]		WA State SMS[e]		AETs[f]		MacDonald et al.[g]		PSDDA[h]		EP Marine[i]	
	ER-L	ER-M	SQS	CSL	LAET	2LAET	TEL	PEL	SL	ML	CHRONIC	ACUTE
Pentachlorophenol			360	690	360	690			400	690		
Benzyl alcohol			57	73	57	73			57	870		
Benzoic acid			650	650	650	650			650	760		
1,2-Dichlorobenzene					35	50			35	110		
1,3-Dichlorobenzene					170	170			170			
1,4-Dichlorobenzene					110	120			110	120		
1,2,4-Trichlorobenzene					31	51			31	64		
Hexachlorobenzene					22	70			22	230		
Dimethylphthalate					71	160			1,400			
Diethylphthalate					200	200			1,200			
Di-n-butylphthalate					1,400	1,400			5,100			
Butylbenzylphthalate					63	900			970			
Bis(2-ethylhexyl)phthalate					1,300	1,900	182	2647	8,300			
Di-n-octylphthalate					6,200	6,200			6,200			
Dibenzofuran					540	700			540	1,700		
Hexachlorobutadiene					11	120			29	270		
Hexachloroethane									1,400	14,000		
n-Nitrosodiphenylamine					28	40			28	130		
BNAs (µg/kg TOCN)												
2-Methylnaphthalene			38,000	64,000								
Naphthalene			99,000	170,000								
Acenaphthylene			66,000	66,000								
Acenaphthene			16,000	57,000								
Fluorene			23,000	79,000								
Phenanthrene			100,000	480,000								
Anthracene			220,000	1,200,000								
Total LPAH			370,000	780,000								
Fluoranthene			960,000	1,200,000								
Pyrene			1,000,000	1,400,000								
Benzo(a)anthracene			110,000	270,000								
Chrysene			110,000	460,000								
Total Benzofluoranthenes			230,000	450,000								
Benzo(a)pyrene			99,000	210,000								
Indeno(1,2,3-cd)pyrene			34,000	88,000								

Table F-1—Summary of Sediment Quality Guidelines

Compound	Long & Morgan[d]		WA State SMS[e]		AETs[f]		MacDonald et al.[g]		PSDDA[h]		EP Marine[i]	
	ER-L	ER-M	SQS	CSL	LAET	2LAET	TEL	PEL	SL	ML	CHRONIC	ACUTE
Dibenz(a,h)anthracene			12,000	33,000								
Benzo(g,h,i)perylene			31,000	78,000								
Total HPAH			960,000	5,300,000								
1,2-Dichlorobenzene			2,300	2,300								
1,4-Dichlorobenzene			3,100	9,000								
1,2,4-Trichlorobenzene			810	1,800								
Hexachlorobenzene			380	2,300								
Dimethylphthalate			53,000	53,000								
Diethylphthalate			61,000	110,000								
Di-n-butylphthalate			220,000	1,700,000								
Butylbenzylphthalate			4,900	64,000								
Bis(2-ethylhexyl)phthalate			47,000	78,000								
Di-n-octylphthalate			58,000	4,500,000								
Dibenzofuran			15,000	58,000								
Hexachlorobutadiene			3,900	6,200								
n-Nitrosodiphenylamine			11,000	11,000								
VOCs (µg/kg DW)												
Ethylbenzene					10	33			10	50		
Tetrachloroethene					57	140			57	210		
Trichloroethene									160	1,600		
Xylene (Total)					40	100			40	160		
Pesticides (µg/kg DW)												
Aldrin									10			
Chlordane	0.5	6					2.26	4.79	10			
Dieldrin	0.02	8					0.72	4.3	10			
Endrin	0.02	45										
Heptachlor									10			
Lindane							0.32	0.99	10			
p,p'-DDD	2	20			16	43	1.22	7.81				
p,p'-DDE	2.2	27			9	15	2.07	374				
p,p'-DDT	1	7			34	34	1.19	4.77				
Total DDT	1.58	46.1					3.89	51.7	6.9	6.9		

Table F-1—Summary of Sediment Quality Guidelines

Compound	Long & Morgan[d]		WA State SMS[e]		AETs[f]		MacDonald et al.[g]		PSDDA[h]		EP Marine[i]	
	ER-L	ER-M	SQS	CSL	LAET	2LAET	TEL	PEL	SL	ML	CHRONIC	ACUTE
PCBs (µg/kg DW)												
Total PCB	22.7	180			130	1,000	21.6	189	130	3,100	280	
PCBs (µg/kg TOCN)												
Total PCB			12,000	65,000								

[a]Based on 4 percent TOC.
[b]Based on 1 percent TOC.
[c]99th percentile value
[d]Long, E.R. and L.G. Morgan. 1990 with 1995 update. The Potential for Biological Effects of Sediment-Sorbed Contaminants Tested in the National Status and Trends Program. NOAA T Memorandum NOS OMA 52.
[e]WAC 173-204
[f]Barrick, R., S. Becker, L. Brown, H. Beller, and R. Pastorak. 1988. Sediment Quality Values Refinement: 1988 Update and Evaluation of Puget Sound AET.
[g]MacDonald, D.D., R. Carr, F. Calder, E. Long, and C. Ingersoll. 1996. Development and Evaluation of Sediment Quality Guidelines for Florida Coastal Waters.
[h]PSDDA 1998 (http://www.nws.usace.army.mil/dmmo/sl_ml-t.htm)
[i]Equilibrium partitioning values as presented in Barrick et al., 1988 (see footnote f)
DW: Dry-weight
TOCN: Normalized to total organic carbon con
ER-L: Effects range-low
ER-M: Effects range-median.
SQS: Sediment quality standard
CSL: Cleanup screening level
AET: Apparent effects threshold
LAET: Lowest AET
2LAET: Second-lowest AET
TEL: Threshold effects level
PEL: Probable effects level
SL: Screening level
ML: Maximum level
Blank cell indicates criterion not available.

Table F-2—Summary of Porewater Screening Guidelines

Compound	Washington State Marine AWQC[c]		Federal Marine AWQC[d]	
	Chronic	Acute	Chronic	Acute
Inorganics (Total; µg/L)				
Antimony			500[b]	1500[b]
Arsenic	36[e]	69[e]	36	69
Cadmium	9.3[e]	42.3[e]	9.3	43
Chromium	50[e]	1108[e]	50	1100
Copper	3.7[e]	58[e]		2.9
Lead	8.5[e]	221[e]	8.5	220
Mercury	0.025	2.1[e]	0.025	2.1
Nickel	8.3[e]	75[e]	8.3	75
Selenium	71[e]	291[e]	71	300
Silver		2.2[e]	0.92[b]	2.3[b]
Thallium				2130[a]
Zinc	86[e]	95[e]	86	95
Organotins (µg/L)				
Tributyltin			0.01[b]	0.37[b]

[a]Insufficient data to develop criterion; value presented is the Lowest Observed Effect Level (LOEL).
[b]Proposed criterion.
[c]173-201A WAC (1997).
[d]U.S. EPA. 1995. Interim Draft Water Quality Criteria Summary.
[e]Total concentration back-calculated from dissolved criterion using marine conversion factors specified in WAC 173-201A.
AWQC: Ambient water quality criterion.
Blank cell indicates criterion not available.