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TECHNICAL MEMORANDUM

To: Mr. Brad Helland, Toxics Cleanup Program, Washington Department of Ecology

From: Mark Longtine, Ecology and Environment, Inc.

Date: June 30, 2009

Re: Final Report, Duwamish River Sediment Sampling and Analysis
Lower Duwamish Waterway Risk Assessment Technical Assistance
Contract No. C0700036, Work Assignment No. EANE003

The purpose of this memorandum is to briefly summarize the methods and results of the outfall survey and surface sediment sampling and analysis performed by Ecology and Environment, Inc. (E & E) on behalf of the Washington Department of Ecology (Ecology) on the Duwamish River between river mile (RM) 4.9 and RM 7.4. The work was performed under Contract No. C0700036, Work Assignment No. EANE003. The investigation was completed in accordance with the Final Duwamish River Sediment Sampling and Analysis Plan (SAP; E & E 2008).

The effort was conducted to support Ecology's contaminant loading study for the Lower Duwamish Waterway (LDW) site, a federal Comprehensive Environmental Response, compensation, and Liability Act (CERCLA) and State of Washington Model Toxics Control Act (MTCA) site, located in Seattle, Washington. Chemicals listed under the State's Sediment Management Standards (SMS; WAC 173-204-320) and other chemicals were identified as contaminants of concern in the LDW site in the Phase 2 Remedial Investigation Report (Windward 2007). The goal of this effort is to better understand the distribution of these chemicals in surface sediments upstream of RM 4.9. The results of this effort will further inform Ecology of potential upriver impacts to sediments in the Duwamish River. Further information on LDW site history, previous investigations, potential contaminant sources, and objectives of the present investigation are presented in the SAP (E & E 2008).

Outfall Survey

The spring 2008 sediment sampling focused on outfalls to evaluate possible inputs of sediment contaminants into the Duwamish River. Prior to the sampling event, available information on outfalls into the Duwamish River within the study area was obtained from the City of Tukwila. On January 25, 2008, E & E staff conducted a reconnaissance of the

study area and a preliminary outfall survey by paddling a kayak up and down the reach of the Duwamish River from approximately RM 4.8 to RM 6.5. The primary purpose of the reconnaissance and preliminary outfall survey was to confirm and augment the available information from the City of Tukwila on outfalls discharging to the river within the study area. The construction material and approximate diameter of the discharge pipe, height of the discharge pipe above the river level and flow rate at the time of the survey, and conditions of the adjacent river bank of each outfall were recorded in a logbook. In addition, each outfall was photographed, and the approximate location of each outfall was recorded with a non-survey grade global positioning system (GPS) unit.

Prior to the spring 2008 sediment sampling activities, information gathered during the January 25, 2008 outfall survey was compared and merged with the information provided by the City of Tukwila. Several outfalls documented by the City of Tukwila were not observed during the outfall survey; likewise, several outfalls noted during the outfall survey are not documented in information provided by the City of Tukwila. A preliminary summary of the available outfall information was presented in the SAP (E & E 2008).

During the spring 2008 sediment sampling event, information from the City of Tukwila and the January 25, 2008 outfall survey was verified and/or revised. In addition, as directed by Ecology at the time of the field event, a survey of outfalls along the reach of the Duwamish River from approximately RM 6.5 to 7.4 was performed. Approximate coordinates of all outfalls located between approximately RM 4.9 to 7.4 were surveyed using a differential global positioning system (DGPS) mounted on the sampling vessel. Coordinates were collected with the vessel positioned as close to the outfall discharge point as possible under the conditions, which locally included shallow or no water, low visibility due to murky water, and swift current. Those DGPS coordinates surveyed from locations away from the bank were collected with the DGPS receiver positioned along a line extending from the outfall perpendicular away from the shore. Figure 1 (Attachment A) illustrates the surveyed locations of outfalls. Table 1 (Attachment B) presents surveyed coordinates of the outfalls. Table 2 (Attachment B) summarizes the characteristics of the outfalls observed during the January 25, 2008, and/or spring 2008 outfall survey. Photographs of the outfalls and/or bank in the vicinity of the outfalls were provided to Ecology under separate cover.

Sampling

Surface sediment samples were collected by E & E between April 28 and May 9, 2008. Sampling activities were completed in accordance with the SAP (E & E 2008) except as noted below.

Samples were collected using a shallow draft vessel provided and operated by a Global Remote Sensing, LLC, under subcontract to E & E. A total of 116 surface sediment samples, including five field duplicates, were collected. Five field equipment blank samples also were collected. A description of samples collected is provided in Table 3 (Attachment B). An alphanumeric station identification and sample identification

scheme, generally following the approach outlined in the SAP (E & E 2008), was used to uniquely identify each station location and sample. As specified in the SAP (E & E 2008), samples were collected from the following types of locations: Duwamish River channel (DR locations); locations near the discharge points of outfalls (OS locations); locations within the Duwamish River approximately 15 meters (m) downstream of outfall discharge points (OR locations); and monitoring stations sampled during previous investigations near the Norfolk combined sewer overflow (NFK501 and NFK502 locations). In addition, under the direction provided by Ecology during the sampling event, samples also were collected from the banks of the Duwamish River at locations that appeared to be depositional environments (DRB locations) and at discharge points of selected newly identified outfalls upstream of RM 6.5 (OF locations). All sediment samples were collected either by a vessel-deployed van Veen sampler or by manual methods from bank and outfall locations. Samples were collected from nearly all of the proposed sample locations identified in the SAP (E & E 2008). It was not possible to collect samples at several planned locations due to the presence of rip rap, rocky bottom, or other conditions unsuitable for sediment sample collection. Planned locations that were not sampled are identified in Table 3 (Attachment B).

Sample locations were surveyed with a DGPS provided and operated by the vessel subcontractor. The DGPS receiver was mounted on the davit immediately overlying the sampling position for samples collected with the van Veen sampler. For bank and outfall samples collected manually from the shore, coordinates were surveyed using the vessel-mounted DGPS with the DGPS antenna positioned as close to the actual sampling point as possible. The distances of the lateral offset between the DGPS receiver and the sample location were not measured due to difficulties maintaining the vessel in a stable position. Surveyed sample locations are presented in Table 4 (Attachment B) and illustrated in Figure 2 (Attachment A).

Collected sediment material was placed into a decontaminated stainless steel bowl and thoroughly homogenized with a decontaminated stainless steel spoon. Separate aliquots were placed into individual sample jars for each laboratory analysis.

Laboratory Analysis

Samples were hand-delivered to subcontracted analytical laboratories for selected analyses as specified in the SAP (E & E 2008). Sediment sample aliquots collected for grain size (GS) and total organic carbon (TOC) analysis were submitted to Analytical Resources, Inc. (ARI), located in Tukwila, Washington. Aliquots collected for analysis for total metals, polychlorinated biphenyls (PCBs) as Aroclors, semivolatile organic compounds (SVOCs), polychlorinated dibenzo-p-dioxin compounds (dioxins), and polychlorinated dibenzofuran compounds (furans) were submitted to TestAmerica Laboratories, Inc. (TestAmerica), located in Tacoma, Washington. TestAmerica - Tacoma shipped the aliquots for dioxin/furan analysis to TestAmerica's Sacramento, California laboratory for analysis.

Selected sediment samples were analyzed immediately for specified analyses. The remainder of the samples were archived by the respective laboratories for subsequent analysis as directed by Ecology.

The laboratories provided electronic and hard copy data reports to E & E. E & E provided the data packages to Ecology under separate cover for Ecology to perform quality assurance review of the data.

Analytical Results

E & E prepared tables summarizing unvalidated laboratory analytical results. These tables are provided in Attachment B. Grain size (GS) and total organic carbon (TOC) results are presented in Table 5. Total metals results are presented in Table 6. Polychlorinated biphenyls (PCBs, as Aroclors) results are presented in Table 7. Semivolatile organic compounds (SVOCs) results are presented in Tables 8 through 16. Polychlorinated dibenzo-p-dioxin compounds (dioxins), and polychlorinated dibenzofuran (furans) results are presented in Table 17.

In cases where multiple analyses were performed on a sample, the result of the primary analysis is reported in the respective table. The reported method detection limit is presented as the numerical value for non-detect results.

In addition to presenting the reported laboratory results, E & E calculated values for: total PCBs; 2,3,7,8-tetrachlorinated dibenzo-p-dioxin (2,3,7,8-TCDD) toxic equivalency (TEQ) for dioxins and furans; benzo-a-pyrene (BaP) TEQ for carcinogenic polycyclic aromatic hydrocarbons (cPAHs), total low molecular weight polycyclic aromatic hydrocarbons (LPAHs), and total high molecular weight polycyclic aromatic hydrocarbons (HPAHs).

Total PCBs are reported as the sum of detected concentrations for all Aroclors. If all Aroclors were undetected, the single highest method detection limit (MDL) is reported to represent the sum of all compounds.

The 2,3,7,8-TCDD TEQ values were calculated following WAC 173-340-708(8)(d)(iii)(A). The concentration of each individual dioxin or furan congener was multiplied by its respective toxicity equivalency factor (TEF), and the resulting toxic equivalents were summed to calculate the 2,3,7,8-TCDD TEQ value. The seventeen dioxin and furan congeners included in the calculation are listed in Table 708-1 in the MTCA Cleanup Regulation (WAC 173-340). A value of one-half the MDL was used as the concentration for each of the non-detected results for individual dioxin or furan congeners. TEFs used in the calculation are from the World Health Organization (Van den Berg et al., 2006), following WAC 173-340-708(8)(d)(iii)(A).

BaP TEQ was calculated following WAC 173-340-708(e)(iii)(A) by multiplying the concentration of each individual cPAH constituent by its respective TEF and summing the resulting toxic equivalents to calculate the BaP TEQ value. The cPAHs included in the BaP TEQ calculation are benzo(a)anthracene, benzo(b)fluoranthene, benzo-

(k)fluoranthene, benzo(a)pyrene, chrysene, diben-zo(a,h)anthracene, and indeno(1,2,3-cd)pyrene, following WAC 173-340-708(e) and as listed in Table 708-2 in the MTCA Cleanup Regulation (WAC 173-340). A value of one-half the MDL was used as the concentration for each of the non-detected results for individual cPAHs. TEFs used in the calculation are from California Environmental Protection Agency (2005), as specified in WAC 173-340-708(e)(iii)(A).

The total HPAH result represents the sum of the detected concentrations of the following HPAH compounds: fluoranthene, pyrene, benz[a]anthracene, chrysene, benzo[fluoranthene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, indeno[1,2,3-c,d]pyrene, dibenzo[a,h]anthracene, and benzo[g,h,i]perylene. If all compounds were undetected, the total HPAH value is represented by the single highest MDL.

The total LPAH result represents the sum of the concentrations of the following LPAH compounds: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, and anthracene. The result is the sum of detected concentrations for these compounds. If all compounds were undetected, the total LPAH value is represented by the single highest MDL.

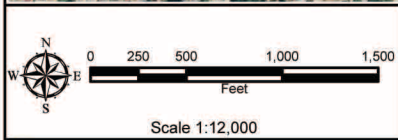
Results for GS, TOC, total arsenic, total PCBs, 2,3,7,8-TCDD TEQ, and BaP TEQ, are illustrated in Figures 3 through 5 (Attachment A)

References

- Cal-EPA, 2005. Air Toxics Hot Spots Program Risk Assessment Guidelines, Part II Technical Support Document for Describing Available Cancer Potency Factors. Office of Environmental Health Hazard Assessment, California Environmental Protection Agency. May 2005.
- Ecology and Environment, Inc. (E & E), 2008, Final Duwamish River Sediment Sampling and Analysis Plan, October 2008.
- Van den Berg et al., 2006. The 2005 World Health Organization Re-evaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-like Compounds. *Toxicological Sciences* 2006 93(2):223-241; doi:10.1093/toxsci/kfl055.

Attachment A

Figures



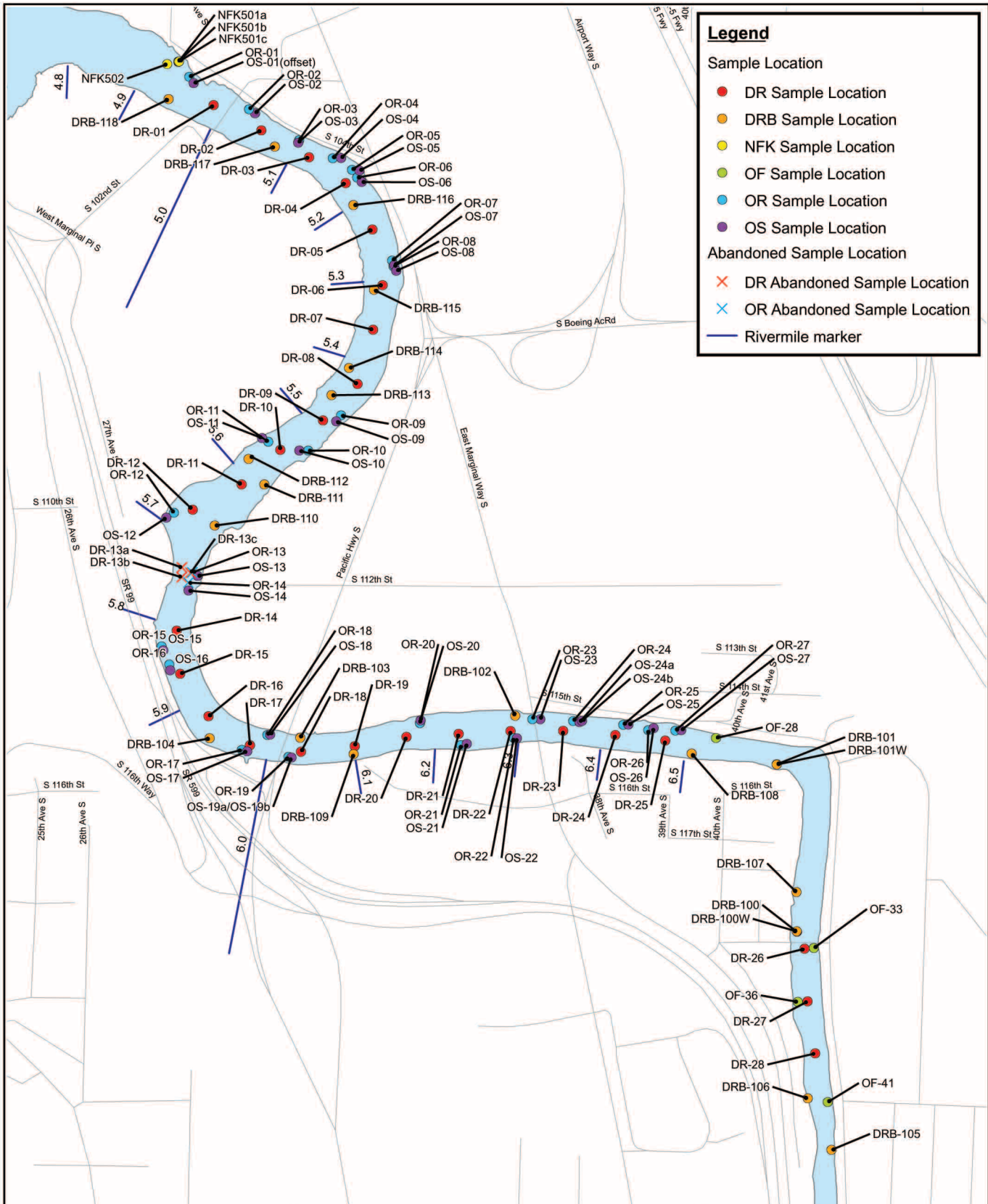
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DUWAMISH RIVER OUTFALL LOCATIONS

Tukwila, Washington

Figure 1
 OUTFALL LOCATION MAP

Job Id: 2330.WD06.01	
Date: 10/27/2008	GIS Analyst: avh
Map Source Information:	



N
W E
S

0 130 260 520 780 1,040
Feet

Scale 1:10,000

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**DUWAMISH RIVER
SEDIMENT SAMPLING**

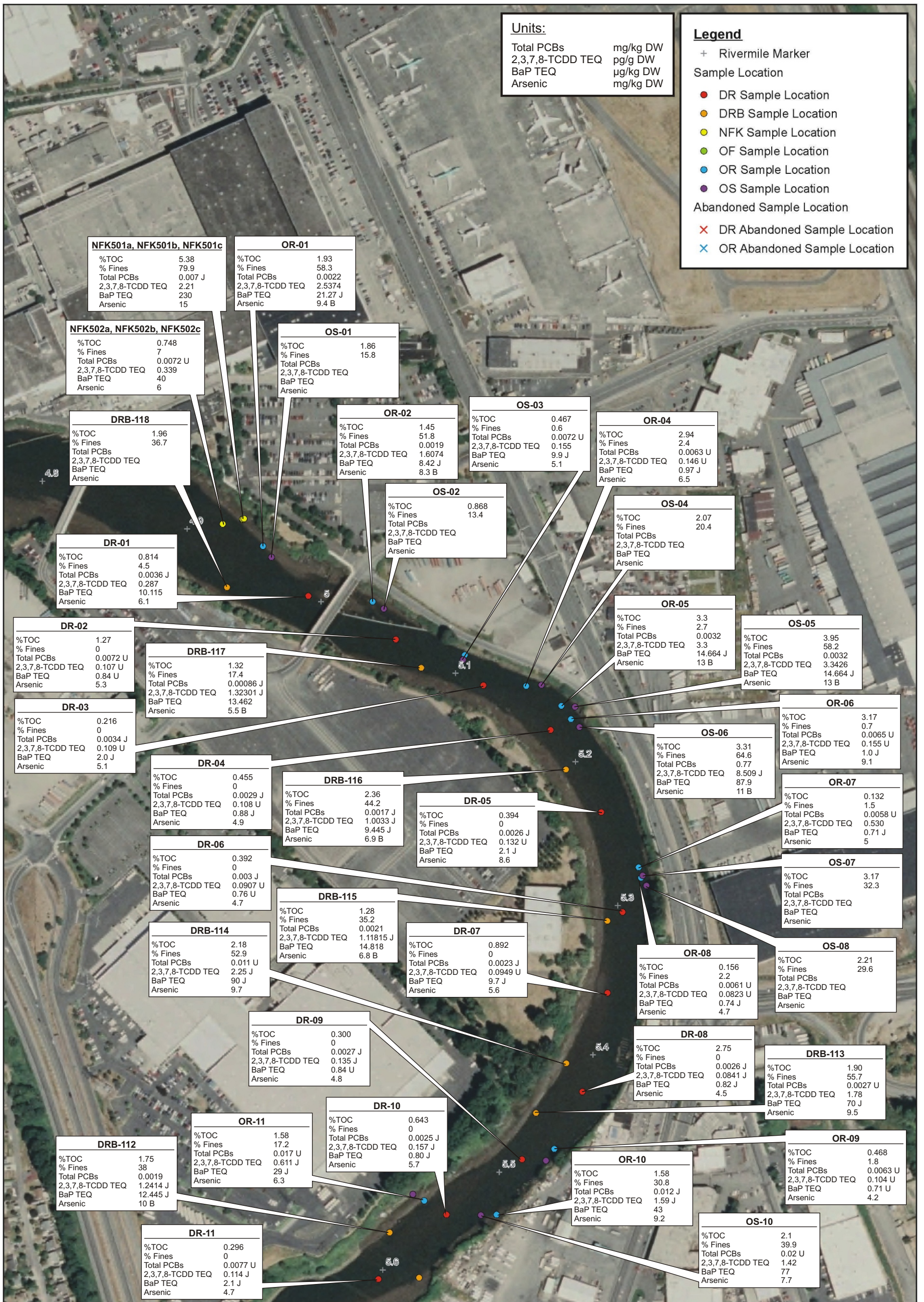
Tukwila, Washington

**Figure 2
SAMPLE LOCATION MAP**

Job Id:

Date: 8/26/2008 GIS Analyst: avh

Map Source Information:



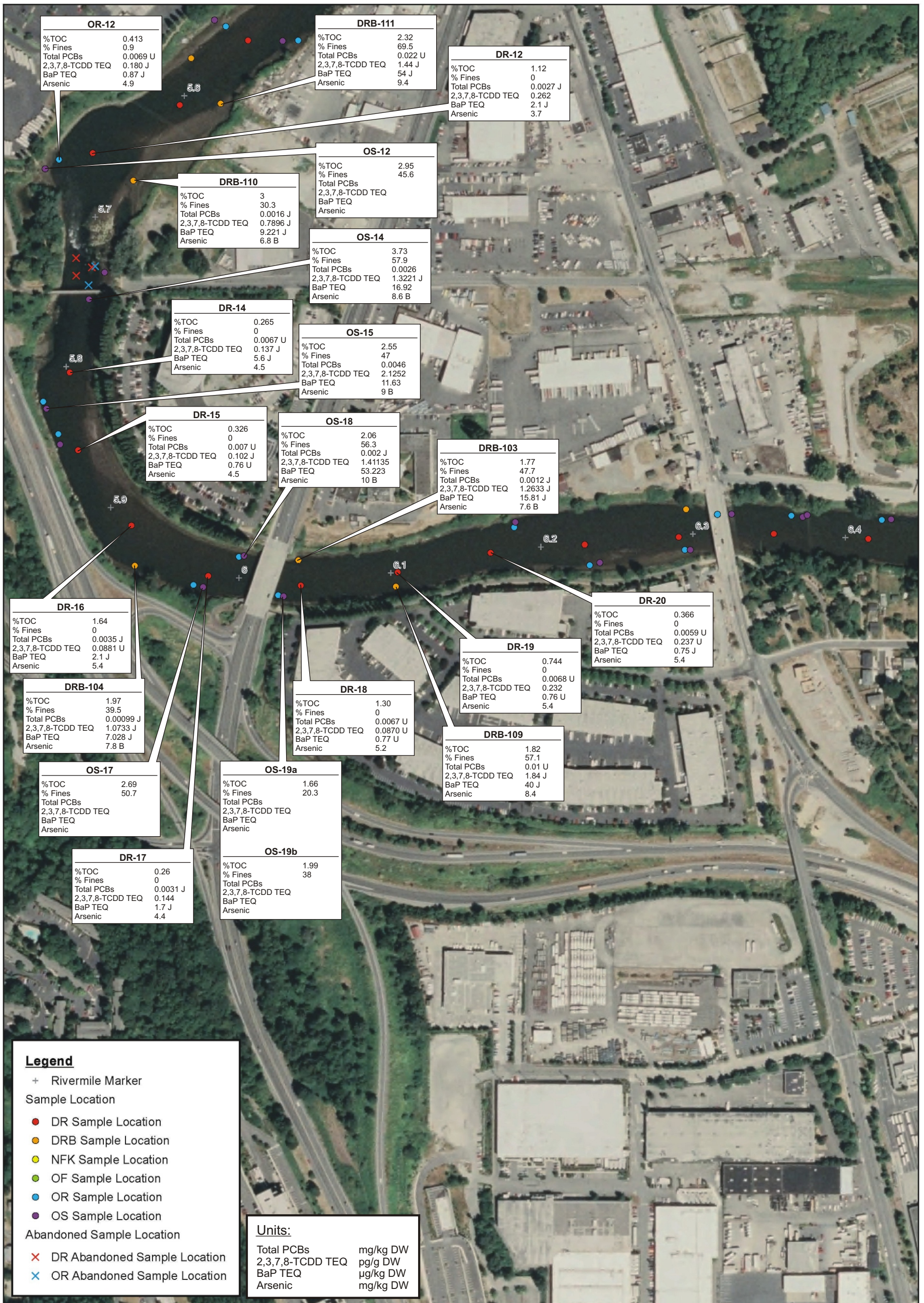
Scale: 1:3,600

DUWAMISH RIVER SEDIMENT SAMPLING RESULTS SPRING 2008

Tukwila, Washington

Figure 3 North Section

Job Number: 002330.WD06
 Map Reference: USDA NRC NAIP Ortho Image (2006)
 Date: 7-10-09
 Drawn by: avh



Legend

- + Rivermile Marker
- Sample Location
- DR Sample Location
- DRB Sample Location
- NFK Sample Location
- OF Sample Location
- OR Sample Location
- OS Sample Location
- Abandoned Sample Location
- ✕ DR Abandoned Sample Location
- ✕ OR Abandoned Sample Location

Units:

- Total PCBs mg/kg DW
- 2,3,7,8-TCDD TEQ pg/g DW
- BaP TEQ µg/kg DW
- Arsenic mg/kg DW



Scale: 1:3,600



**DUWAMISH RIVER
SEDIMENT SAMPLING RESULTS
SPRING 2008**

Tukwila, Washington

**Figure 4
Central Section**

Job Number: 002330.WD06

Map Reference: USDA NRC NAIP Ortho Image (2006)

Date: 7-10-09

Drawn by:
avh

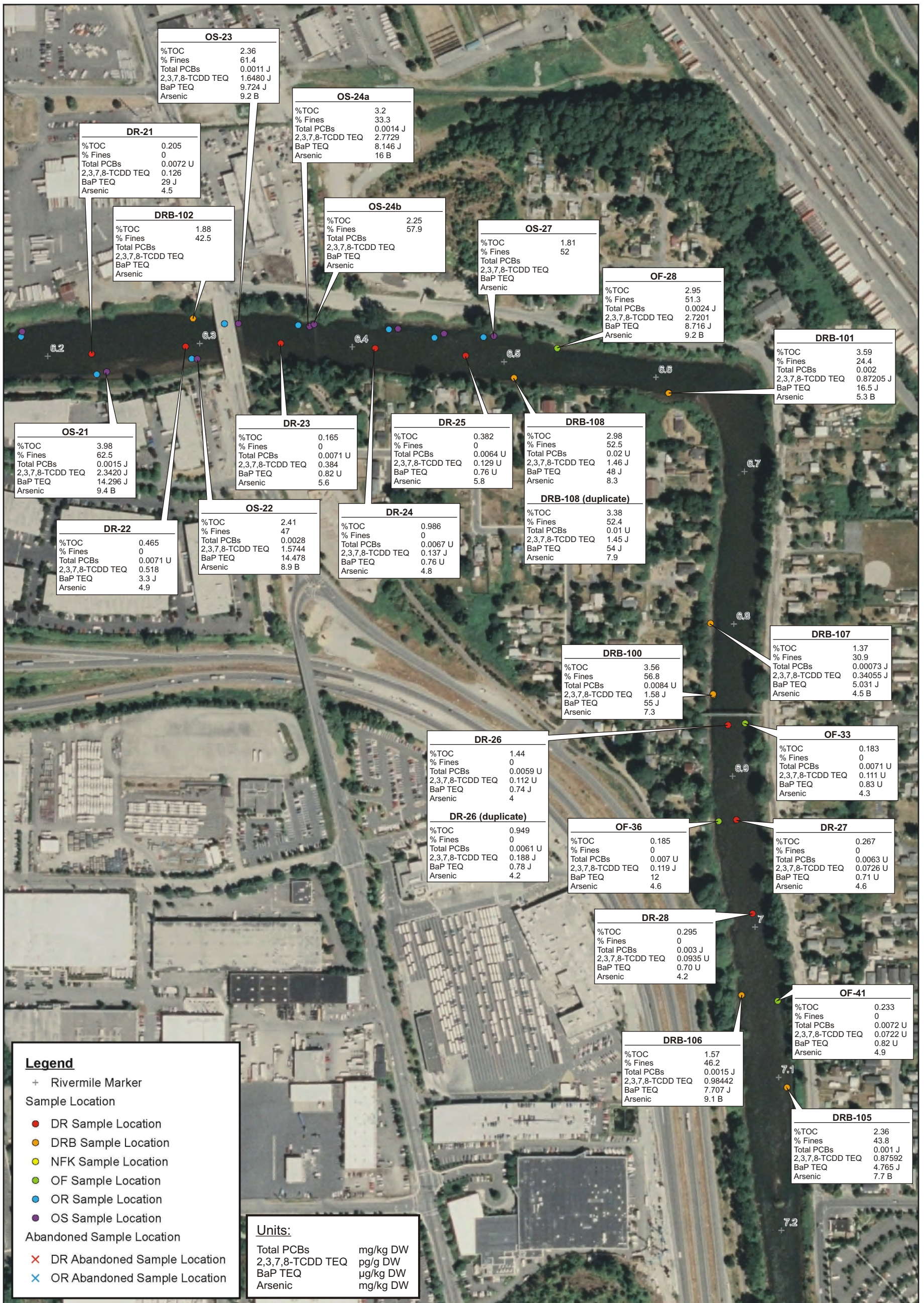


Figure 5
Southern Section

Job Number: 002330.WD06

Map Reference: USDA NRC NAIP Ortho Image (2006)

Date: 7-10-09

Drawn by:
avh

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**DUWAMISH RIVER
SEDIMENT SAMPLING RESULTS
SPRING 2008**

Tukwila, Washington

Attachment B

Tables

Table 1. Outfall Location Coordinates

Outfall ID	Washington State Plane North NAD83		WGS84	
	Y	X	Latitude	Longitude
1	1278677.9	190037.12	47.51154541	-122.2971512
2	1279062.29	189848.1	47.51104734	-122.2955816
3	1279331.5	189663.26	47.51055471	-122.2944783
4	1279600.57	189568.01	47.51030763	-122.2933824
5	1279715.01	189489.56	47.51009855	-122.2929134
6	1279728.53	189418.92	47.50990563	-122.2928533
7	1279932.7	188898.64	47.50849015	-122.2919874
8	1279945.24	188863.03	47.5083932	-122.291934
9	1279569.88	187920.89	47.50579128	-122.2933801
10	1279339.29	187738.38	47.50527903	-122.2942989
11	1279105.83	187817.5	47.50548374	-122.2952494
12	1278505.86	187319.61	47.50408776	-122.297638
13	1278701.63	186955.41	47.50309969	-122.2968181
14	1278649.54	186852.13	47.50281389	-122.2970209
15	1278489.7	186477.12	47.50177765	-122.2976385
16	1278525.96	186344.8	47.50141685	-122.2974817
17	1279011.72	185858.92	47.50011038	-122.2954795
18	1279156.27	185962.58	47.50040204	-122.2949028
20	1280097.08	186051.78	47.50069545	-122.2911043
21	1280403.21	185902.29	47.50030159	-122.2898546
22	1280730.8	185947.11	47.50044143	-122.288533
23	1280845.87	186058.81	47.50075356	-122.2880761
25	1281400.06	186032.51	47.50071017	-122.2858325
26	1281559.26	186010.01	47.50065673	-122.2851868
27	1281729.65	185992.94	47.50061876	-122.2844963
28	1281945.18	185935.13	47.50047144	-122.2836202
31	1282602.12	185288.47	47.49873284	-122.2809138
32	1282553.01	184857.77	47.49754976	-122.2810796
33	1282556.05	184615.56	47.49688602	-122.2810489
34	1282563.51	184432.5	47.49638463	-122.2810048
35	1282549.27	184401.46	47.49629882	-122.28106
36	1282457.84	184292.09	47.49599432	-122.2814215
37	1282591.71	184187.23	47.4957138	-122.2808721
40	1282635.61	183696.6	47.49437125	-122.2806572
41	1282645.11	183655.89	47.49426015	-122.2806157
19a and 19b	1279281.2	185823.68	47.50002781	-122.2943868
24a	1281091.58	186041.89	47.50071991	-122.287081
24b and 24c	1281107.47	186048.19	47.50073801	-122.2870172
29 and 30	1282588.96	185744.54	47.49998226	-122.2810017
38 and 39	1282586.33	183908.23	47.49494878	-122.2808726
42 and 43	1282654.96	183489.15	47.49380362	-122.2805632
44 and 45	1282806.29	182118.61	47.49005476	-122.2798469
46 and 47	1282954.02	182060.45	47.48990296	-122.2792451
A and B	1278521.06	190224.7	47.51205139	-122.2978002
Norfolk CSO/SD	1278597.45	190143.25	47.51183212	-122.2974849

Key:
 NAD83 = North American Datum 1983
 WGS84 = World Geodetic Survey 1984

Table 2. Outfall Description Summary

Outfall Identifier	Bank (facing downstream)	Outfall Construction Material	Estimated Diameter of Outfall Discharge Pipe (inches)	Estimated Elevation of Outfall Discharge Pipe Above Waterline at Time of Survey	Estimated Flow at Time of Survey	Bank Characteristics	Remarks
A	Right	Concrete	24	4	No flow	Riprap with mud, moderate slope	Located 5 feet downstream of outfall B.
B	Right	Concrete	12	4	No flow	Riprap with mud, moderate slope	Concrete pipe broken. Located 5 feet upstream of outfall A.
Norfolk CSO/Storm Drain	Right	Steel gate and concrete apron and slope retaining wall	48	0	10 gallons per minute	Concrete retaining wall and apron at base	Norfolk Combined Sewer Overflow/Storm Drain.
1	Right	Unknown	Unknown	Unknown	Unknown	Unknown	Outfall not visible at time of surveys. Location based on City of Tukwila information.
2	Right	Concrete	12	5	No flow	Riprap, steep slope	Located behind channel traffic diversion boom.
3	Right	Corrugated PVC	12	10	No flow	Riprap, steep slope	
4	Right	Unknown	Unknown	Unknown	Unknown	Unknown	Outfall not visible at time of surveys. Location based on City of Tukwila information.
5	Right	Steel	18	0.5	Trickle	Wood and riprap with some mud, piles.	
6	Right	Steel gate and concrete apron and slope retaining wall	48	0.5	10 gallons per minute	Concrete retaining wall and apron at base	DOT storm drain outfall.
7	Right	Concrete	18	6	No flow	Riprap, steep slope	
8	Right	Corrugated steel	18	2	Trickle	Riprap and debris with mud, moderate slope	Broken segment of concrete pipe adjacent to metal pipe.
9	Right	Corrugated steel	24	5	Possible low flow	Riprap, steep slope	
11	Left	Steel cover, unknown pipe material	48	5	No flow	Muddy bank with riprap in drainage channel	
10	Right	Steel	12	0.5	Trickle	Riprap with sand/mud, moderate slope	
12	Left	Concrete	24	7	None observed	Riprap with mud, bank appears to have slumped, moderate slope	
13	Right	Steel grate, unknown pipe material	Unknown	8	No flow	Mud, moderate slope	Estimated 30 feet downstream of 112th St. footbridge.
14	Right	Steel	36	8	No flow	Riprap, steep slope	Estimated 30 feet upstream of 112th St. footbridge. Steel grate.
15	Left	Corrugated steel	24	10	1 gallon per minute	Riprap, steep slope	
16	Left	Corrugated steel	24	10	1 gallon per minute	Riprap, steep slope	
17	Left	Unknown	Unknown	Unknown	Unknown	Muddy bank along channel. Bank in immediate vicinity of outfall not visible.	Riverton Creek Outfall. Outfall not visible from Duwamish River.
18	Right	Corrugated steel	24	4	No flow	Riprap, steep slope	Downstream of Tukwila International Blvd.
19a	Left	Steel	48	Partially submerged	Unknown	Riprap, steep slope	Upstream of Pacific Highway South. Steel gate is missing. Located five feet downstream of outfall 19b.
19b	Left	Steel	48	Partially submerged	Unknown	Riprap, steep slope	Upstream of Pacific Highway South. Steel gate. Located five feet upstream of outfall 19a.
20	Right	Steel	18	6	No flow	Brushy, steep slope, riprap in drainage channel below outfall	
21	Left	Steel	12	7	No flow	Muddy, steep	
22	Left	Corrugated steel w/ grate	36	5	Trickle	Riprap in drainage channel, adjacent bank muddy, steep slope	Downstream of Light Rail bridge and E. Marginal Way bridge.
23	Right	Concrete	24	3	No flow	Mixed rock, sand, and mud. Moderate slope	Just upstream of E. Marginal Way bridge.
24a	Right	Unknown	Unknown	Unknown	10 gallons per minute	Riprap	Located near concrete foundations of former bridge. Channel flow over riprap between two concrete pillars of former bridge.

Table 2. Outfall Description Summary

Outfall Identifier	Bank (facing downstream)	Outfall Construction Material	Estimated Diameter of Outfall Discharge Pipe (inches)	Estimated Elevation of Outfall Discharge Pipe Above Waterline at Time of Survey	Estimated Flow at Time of Survey	Bank Characteristics	Remarks
24b	Right	Concrete	12	1	No flow	Riprap and wood piles	Located near concrete foundations of former bridge. Discharge pipe at base of upstream concrete pillar of former bridge.
24c	Right	Corrugated steel	18	15	No flow	Riprap, steep slope	Located near concrete foundations of former bridge. Pipe at slope immediately upstream of upstream concrete pillar of former bridge.
25	Right	Concrete	12	15	No flow	Soil with grass and brush, steep slope	
26	Right	Concrete	12	15	No flow	Soil with grass and brush, steep slope	
27	Right	Corrugated steel	24	15	Trickle	Brushy, steep slope	
28	Right	Corrugated steel	18	20	No flow	Steep, vegetated, rocky in drainage channel	
29	Right	PVC	10	6	No flow	Steep riprap, partially vegetated	Approximately 10 feet upstream of outfall 30.
30	Right	Steel grate	36	10	5 gallons per minute	Steep riprap, partially vegetated	Approximately 10 feet downstream of outfall 29. Steel grate. Partially obscured by tree.
31	Right	Corrugated PVC	15	20	No flow	Steep slope, vegetated with riprap	
32	Right	Corrugated PVC	10	20	No flow	Steep slope, vegetated with riprap	
33	Right	Concrete	18	15	No flow	Steep vegetated bank	
34	Right	PVC	12	15	No flow	Steep riprap	
35	Right	Steel	12	15	No flow	Steep slope, vegetated	
36	Left	Steel	36	4	10 gallons per minute	Steep slope, vegetated with riprap	Outfall outfitted with rubber valve.
37	Right	Concrete	8	20	No flow	Steep, vegetated, with some rock	
38	Right	Corrugated PVC	10	10	No flow	Steep, vegetated, with riprap	
39	Right	Concrete	10	10	No flow	Very steep, vegetated with trees and vines	
40	Right	PVC encased in concrete block	10	4	No flow	Steep, rocky, vegetated	Outfall discharge pipe protrudes approximately 5 feet outward from bank
41	Right	Steel (flap)	36	5	No flow	Steep, vegetated with grass and trees	
42	Right	Corrugated PVC	12	20	No flow	Steep, riprap, vegetated	
43	Right	Concrete	12	20	No flow	Steep, riprap, vegetated	
44	Left	Concrete, steel flap	12	5	No flow	Steep, vegetated, muddy	
45	Right	Corrugated PVC	24	10	No flow	Moderate vegetated bank	
46	Left	Corrugated steel	60	0	Unknown	Moderate slope, vegetated, locally rocky and sandy	
47	Left	Concrete retaining wall, steel flap	12	10	No flow	Moderate slope, vegetated, locally rocky and sandy	

Table 3. Sample Collection Summary

Station ID	Sample ID	Sample Date	Sample Time	Description
DR-01	DR-01-VV-11	4/28/2008	1139	Silty sand, coarse/medium/fine, light brown surface layer, no odor.
DR-02	DR-02VV12	4/28/2008	1225	Sand, coarse/medium, brown, some charcoal, no odor.
DR-03	DR-03VV15	4/28/2008	1243	Sand, coarse/medium, light brown, no odor.
DR-04	DR-04VV15	4/28/2008	1323	Sand, medium/fine, light brown, no odor.
DR-05	DR-05VV15	4/28/2008	1340	Sand, medium/fine, light brown, no odor.
DR-06	DR-06VV16	4/28/2008	1359	Sand, medium/fine, coarse layer on top, light brown, no odor.
DR-07	DR-07VV15	4/28/2008	1419	Sand, medium/fine with some coarse, light brown, no odor.
DR-08	DR-08VV16	4/28/2008	1442	Sand, coarse/medium, some bark, light brown, no odor.
DR-09	DR-09VV15	4/28/2008	1458	Sand, medium/fine with some coarse, light brown, no odor.
DR-10	DR-10VV16	4/28/2008	1520	Sand, medium/fine with some coarse, abundant wood, light brown, no odor.
DR-11	DR-11VV13	4/28/2008	1543	Sand, mostly fine with some medium, light brown, no odor.
DR-12	DR-12VV14	4/28/2008	1608	Sand, mostly coarse with some medium and some fine gravel, dark brown, no odor.
DR-26	DR-26VV15	4/29/2008	1115	Sand, coarse/medium, light brown, no odor.
DR-26	DR-36VV15	4/29/2008	1123	Field duplicate of DR-26VV15.
DR-27	DR-27VV17	4/29/2008	1141	Sand, medium, light brown, no odor.
DR-28	DR-28VV15	4/29/2008	1155	Sand, coarse/medium, light brown, no odor.
DR-14	DR-14VV16	4/29/2008	1322	Sand, medium/fine with some coarse, light brown, no odor.
--	RS-01VV	4/29/2008	1409	Sample equipment rinsate blank #1.
DR-15	DR-15VV15	4/29/2008	1427	Sand, medium/fine with some coarse, light brown, no odor.
DR-16	DR-16VV15	4/29/2008	1451	Sand, coarse/medium with some gravel, light brown, no odor.
DR-17	DR-17VV16	4/29/2008	1512	Sand, medium/fine with some coarse, brown, no odor.
DR-18	DR-18VV14	4/29/2008	1535	Sand, medium/fine with some gravel, brown, no odor.
DR-19	DR-19VV15	4/30/2008	1004	Sand, medium/fine with some coarse, light brown, no odor.
DR-20	DR-20VV15	4/30/2008	1022	Sand, medium/fine with some coarse, brown, no odor.
DR-21	DR-21VV15	4/30/2008	1045	Sand, medium/fine with some coarse, brown, no odor.
DR-22	DR-22VV14	4/30/2008	1108	Sand, medium/fine with some coarse, brown, no odor.
DR-23	DR-23VV14	4/30/2008	1127	Sand, medium/fine with some coarse, brown, no odor.
DR-24	DR-24VV15	4/30/2008	1510	Sand, coarse with some fine gravel, brown, no odor.
DR-25	DR-25VV15	4/30/2008	1532	Sand, medium/fine with some coarse, brown, no odor.
NFK502a, NFK502b, NFK502c	NFK502VV12	4/30/2008	1713	NFK502a: Sand, very fine, with thin layer of silt on top, gray, no odor. NFK502b: Sand, very fine, with thin layer of silt on top, gray, no odor. NFK502c: Sand, very fine, with thin layer of silt on top, gray, some clay, no odor, coarse sand below very fine sand, annelid tubes.
OR-01	OR-01VV16	5/1/2008	1001	Sand and silt, brownish-olive, high moisture, brown sand layer and worm tubes.
OR-03	OR-03VV10	5/1/2008	1032	Sand, medium/fine, brown, no odor.
OF-28	OF-28HS10	5/1/2008	1325	Silt with some clay, brown-black, some plant material.
OF-33	OF-33VV10	5/1/2008	1413	Sand, medium with some coarse, brown, no odor.
OF-36	OF-36VV13	5/1/2008	1437	Sand, medium/fine, brown, no odor.
OF-41	OF-41VV16	5/1/2008	1519	Sand, medium/fine, brown, no odor.
NFK501a, NFK501b, NFK501c	NFK-501VV16	5/1/2008	1715	NFK501a: Silt with light brown surface layer, no odor. NFK501b: Silt with light brown surface layer, no odor. NFK501c: Silt with light brown surface layer, no odor.
OS-01	OS-01HS10	5/2/2008	0903	Silty sand with some gravel and cobbles, brown, upper 6-8 cm loose, below 6-8 cm compact.
OR-02	OR-02VV9	5/2/2008	0939	Silt and sand, black/gray in upper 6-8 cm, brown below, animal tubes.
OS-02	OS-02HS10	5/2/2008	0958	1-2 cm light brown silt grading down to black clay with cobbles and some sand.
OS-04	OS-04HS10	5/2/2008	1036	Thin layer of fine silt with animal tubes, overlying stiff orange clay, blue-green material.
OS-05	OS-05VV16	5/2/2008	1157	Silt, light brown at surface overlying gray-black, sulfur odor.
OS-06	OS-06HS10	5/2/2008	1237	Silt, very fine, light brown at surface (1 mm layer) overlying light gray clay.
OS-08	OS-08HS10	5/2/2008	1314	Silt, very fine, light brown at surface (1 mm layer) overlying light gray clay.
--	RS-02VV	5/2/2008	1331	Sample equipment rinsate blank #2.
OS-09	OS-09VV14	5/2/2008	1425	Sand, medium/fine with some silt, brown, no odor.
OS-11	OS-11VV10	5/2/2008	1451	Light brown, gray, no odor.
OS-12	OS-12HS10	5/2/2008	1543	Brown silt in layer on top with gravel and cobbles, compact.
OS-13	OS-13VV10	5/2/2008	1607	Fine sand, brown, no odor.

Table 3. Sample Collection Summary

Station ID	Sample ID	Sample Date	Sample Time	Description
OS-15	OS-15HS10	5/6/2008	0850	Fine sand and silt, light brown, with organic matter in upper 5 cm, overlying dark brown fine silt and clay.
OS-16	OS-16HS10	5/6/2008	0900	No description recorded.
OS-17	OS-17HS10	5/6/2008	0950	Silt, light to dark brown, overlying gray clay.
OS-18	OS-18HS10	5/6/2008	1010	Fine sand, light brown with organic material, overlying dark brown silt, overlying dark brown-black clay.
OS-19a	OS-19AHS10	5/6/2008	1040	Light brown surface sediment, overlying dark brown silt/clay, overlying gray clay.
OS-19b	OS-19BHS10	5/6/2008	1100	Dark brown silt.
OS-20	OS-20HS10	5/6/2008	1120	No description recorded.
OS-21	OS-21HS10	5/6/2008	1213	Red sand overlying dark brown silt, overlying gray/black clay, slight sewage odor.
OS-22	OS-22HS10	5/6/2008	1236	Sand, fine, red-brown, overlying dark brown silt, overlying black-brown clay.
OS-23	OS-23HS10	5/6/2008	1250	Sand, light brown-red, overlying dark brown silt, overlying dark gray clay.
OS-24a	OS-24AHS10	5/6/2008	1330	No description recorded.
OS-24b	OS-24BHS10	5/6/2008	1400	Dark brown clay, dry, some organic material.
OS-25	OS-25HS10	5/6/2008	1445	No description recorded.
OS-25	OS-50HS10	5/6/2008	1515	Field duplicate of OS-25HS10.
OS-26	OS-26HS10	5/6/2008	1530	No description recorded.
OS-27	OS-27HS10	5/6/2008	1545	Sand, red-brown, overlying dark brown silt, overlying gray-black clay.
--	RS-03VV	5/6/2008	1640	Sample equipment rinsate blank #3.
OR-15	OR-15VV11	5/7/2008	0939	Sand, coarse/medium, dark brown.
OR-16	OR-16VV15	5/7/2008	1001	Sand, coarse/medium, light to dark brown, with some black angular rock.
OR-17	OR-17VV16	5/7/2008	1020	Sand, coarse/medium, light to dark brown.
OR-18	OR-18VV16	5/7/2008	1037	Sand, light to dark brown.
OR-19	OR-19VV16	5/7/2008	1055	Sand, light to dark brown.
OR-20	OR-20VV16	5/7/2008	1144	Sand, coarse/medium/fine, brown.
OR-21	OR-21VV13	5/7/2008	1201	Sand, medium/fine, brown.
OR-22	OR-22VV08	5/7/2008	1221	Sand, fine with some medium.
OR-23	OR-23VV14	5/7/2008	1320	Sand, coarse/medium.
OR-24	OR-24VV14	5/7/2008	1338	Sand, coarse/medium.
OR-24	OR-50VV14	5/7/2008	1405	Field duplicate of OR-24VV14.
OR-25	OR-25VV13	5/7/2008	1426	Sand, coarse/medium.
OR-26	OR-26VV16	5/7/2008	1505	Sand, coarse/medium with some angular gravel.
OR-27	OR-27VV14	5/7/2008	1523	Sand, coarse to fine, silty.
DRB-100	DRB-100	5/7/2008	1555	Silt, red-gray-black.
DRB-101	DRB-101	5/7/2008	1609	Sand and silt.
--	RS-04VV	5/7/2008	1700	Sample equipment rinsate blank #4.
DRB-100	DRB-100W	5/8/2008	1135	Sandy silt.
DRB-101	DRB-101W	5/8/2008	1158	Sandy silt.
DRB-102	DRB-102E	5/8/2008	1225	Sandy silt.
DRB-103	DRB-103E	5/8/2008	1310	Sandy silt.
DRB-104	DRB-104W	5/8/2008	1355	Sandy silt.
DRB-105	DRB-105	5/9/2008	0910	Sandy silt.
DRB-106	DRB-106W	5/9/2008	0935	Sandy silt.
DRB-107	DRB-107W	5/9/2008	0952	Sandy silt, light brown, with red-brown sand lenses.
DRB-108	DRB-108W	5/9/2008	1020	Sandy silt.
DRB-108	DRB-50W	5/9/2008	1030	Field duplicate of DRB-108W.
DRB-109	DRB-109W	5/9/2008	1055	No description recorded.
DRB-110	DRB-110E	5/9/2008	1105	Sandy silt, brown.
DRB-111	DRB-111E	5/9/2008	1125	No description recorded.
DRB-112	DRB-112W	5/9/2008	1135	Sandy silt, drab-olive grading down to red-brown silt.
DRB-113	DRB-113W	5/9/2008	1230	Sandy silt, drab-olive.
DRB-114	DRB-114W	5/9/2008	1235	Sandy silt, drab-olive.
DRB-115	DRB-115W	5/9/2008	1305	Sandy silt with trace gravel.
DRB-116	DRB-116W	5/9/2008	1315	Sandy silt.
DRB-117	DRB-117W	5/9/2008	1335	No description recorded.
DRB-118	DRB-118W	5/9/2008	1350	No description recorded.
--	RS-05	5/9/2008	1430	Sample equipment rinsate blank #5.
DR-13	No sample collected. Station abandoned.			
OR-13	No sample collected. Station abandoned.			
OR-14	No sample collected			

Table 4. Sample Location Coordinates

Sample Location ID	Washington State Plane North NAD83		WGS84	
	Y	X	Latitude	Longitude
DR-01	1278801.67	189899.02	47.51117333	-122.2966399
DR-02	1279100.8	189740.3	47.51075387	-122.2954175
DR-03	1279399.45	189572.63	47.51030983	-122.2941964
DR-04	1279628.25	189411.9	47.50988117	-122.2932585
DR-05	1279795.88	189121.58	47.50909412	-122.292558
DR-06	1279860.07	188773.81	47.50814422	-122.2922717
DR-07	1279799.91	188495.07	47.50737707	-122.2924937
DR-08	1279702.65	188155.12	47.50644021	-122.292861
DR-09	1279487.25	187927.53	47.50580518	-122.2937149
DR-10	1279220.33	187743.61	47.50528717	-122.2947805
DR-11	1278977.83	187526.99	47.50468079	-122.2957448
DR-12	1278671.81	187369.3	47.50423261	-122.2969706
DR-13a	1278604.45	187007.93	47.50323858	-122.2972152
DR-13b	1278603.57	186946.98	47.50307147	-122.2972141
DR-13c	1278658.41	186974.22	47.503149	-122.2969944
DR-14	1278571	186613.3	47.50215516	-122.2973202
DR-15	1278592.65	186343.64	47.50141715	-122.2972118
DR-16	1278769.54	186077.92	47.50069804	-122.2964759
DR-17	1279030.32	185896.63	47.50021471	-122.2954072
DR-18	1279349.24	185855.1	47.50011748	-122.294114
DR-19	1279686.01	185891.21	47.50023397	-122.2927546
DR-20	1280008.61	185949.23	47.50040977	-122.2914543
DR-21	1280335.14	185968.07	47.50047836	-122.290135
DR-22	1280660.78	185984.58	47.50054051	-122.2888191
DR-23	1280989.85	185986.42	47.5005626	-122.2874882
DR-24	1281316.13	185960.04	47.50050719	-122.2861664
DR-25	1281628.02	185925.76	47.50042936	-122.2849023
DR-26	1282499.53	184623.71	47.49690544	-122.2812781
DR-27	No GPS recorded. Sample was collected with vessel in targeted position.			
DR-28	No GPS recorded. Sample was collected with vessel in targeted position.			
DRB-100	1282451.89	184729.43	47.49719276	-122.2814788
DRB-100W	1282451.05	184732.42	47.49720092	-122.2814825
DRB-101	1282326.23	185778.14	47.5000608	-122.2820669
DRB-101W	1282326.06	185776.69	47.50005682	-122.2820675
DRB-102	1280688.94	186080.1	47.50080379	-122.2887125
DRB-103	1279343.9	185942.51	47.50035679	-122.2941423
DRB-104	1278777.78	185939.51	47.50031909	-122.2964319
DRB-105	1282668.54	183365.73	47.49346603	-122.2804989
DRB-106	1282519.88	183688.8	47.4943439	-122.2811247
DRB-107	1282448.89	184977.47	47.49787249	-122.2815099
DRB-108	1281793.02	185844.01	47.50021381	-122.2842287
DRB-109	1279678.06	185841.72	47.50009791	-122.292783
DRB-110	1278809.71	187270.4	47.50396871	-122.2964051
DRB-111	1279119.15	187527.74	47.5046902	-122.2951732
DRB-112	1279021.52	187687.21	47.50512222	-122.2955804
DRB-113	1279540.11	188085.6	47.5062412	-122.2935132
DRB-114	1279649.83	188255.07	47.50671143	-122.2930824
DRB-115	1279806.22	188744.59	47.50806133	-122.2924873

Table 4. Sample Location Coordinates

Sample Location ID	Washington State Plane North NAD83		WGS84	
	Y	X	Latitude	Longitude
DRB-116	1279677.4	189273.12	47.50950333	-122.293049
DRB-117	1279185.69	189639.33	47.51048153	-122.2950663
DRB-118	1278520.87	189937.01	47.51126282	-122.2977788
NFK501a	1278581.21	190168.83	47.51190138	-122.2975525
NFK501b	1278581.53	190171.29	47.51190814	-122.2975514
NFK501c	1278586.58	190172.29	47.51191115	-122.2975311
NFK502	No GPS recorded. Sample was collected with vessel in targeted position.			
OF-28	1281945.67	185942.06	47.50049046	-122.2836187
OF-33	1282558.55	184628.66	47.49692205	-122.2810398
OF-36	1282457.84	184292.09	47.49599432	-122.2814215
OF-41	1282644.47	183665.47	47.49428637	-122.280619
OR-01	1278649.5	190076.05	47.51165064	-122.2972691
OR-02	No GPS recorded. Sample was collected with vessel in targeted position.			
OR-03	1279338.07	189679.68	47.51060006	-122.294453
OR-04	1279547.83	189566.2	47.51029993	-122.2935956
OR-05	1279667.9	189494.1	47.51010854	-122.2931044
OR-06	1279699.91	189447	47.50998111	-122.2929713
OR-07	1279919.61	188927.14	47.50856759	-122.2920426
OR-08	1279927.29	188890.48	47.50846751	-122.2920087
OR-09	1279600.36	187959.53	47.50589878	-122.2932598
OR-10	1279393.6	187738.59	47.50528243	-122.2940792
OR-11	1279144.71	187793.92	47.50542113	-122.2950903
OR-12	1278554.66	187349.58	47.50417245	-122.2974429
OR-13	No sample collected.			
OR-14	No sample collected.			
OR-15	1278476.78	186514.73	47.50188007	-122.2976937
OR-16	1278525.67	186401	47.50157088	-122.2974872
OR-17	1278978.46	185867.28	47.50013156	-122.2956147
OR-18	1279138.55	185960.14	47.50039443	-122.2949743
OR-19	1279270.18	185823.26	47.50002609	-122.2944314
OR-20	1280092.69	186034.25	47.50064717	-122.2911207
OR-21	1280350.59	185897.18	47.50028485	-122.290067
OR-22	1280680.88	185941.35	47.50042305	-122.2887345
OR-23	No GPS recorded. Sample was collected with vessel in targeted position.			
OR-24	1281052.18	186047.38	47.50073292	-122.2872407
OR-25	1281364.86	186023.99	47.500685	-122.2859742
OR-26	1281521.98	185990.78	47.5006021	-122.2853362
OR-27	1281691.67	185987.86	47.50060287	-122.2846496
OS-01	1278677.9	190037.12	47.51154541	-122.2971512
OS-02	1279062.29	189848.1	47.51104734	-122.2955816
OS-03	1279331.5	189663.26	47.51055471	-122.2944783
OS-04	1279600.57	189568.01	47.51030763	-122.2933824
OS-05	1279715.01	189489.56	47.51009855	-122.2929134
OS-06	1279728.53	189418.92	47.50990563	-122.2928533
OS-07	1279932.83	188898.14	47.50848879	-122.2919869
OS-08	1279945.24	188863.03	47.5083932	-122.291934
OS-09	1279569.88	187920.89	47.50579128	-122.2933801
OS-10	1279339.29	187738.38	47.50527903	-122.2942989

Table 4. Sample Location Coordinates

Sample Location ID	Washington State Plane North NAD83		WGS84	
	Y	X	Latitude	Longitude
OS-11	1279105.83	187817.5	47.50548374	-122.2952494
OS-12	1278505.86	187319.61	47.50408776	-122.297638
OS-13	1278701.63	186955.41	47.50309969	-122.2968181
OS-14	No GPS recorded. Sample was collected with vessel in targeted position.			
OS-15	1278487.27	186489.62	47.50181179	-122.2976493
OS-16	1278530.93	186365.33	47.50147339	-122.2974632
OS-17	1279011.72	185858.92	47.50011038	-122.2954795
OS-18	1279156.27	185962.58	47.50040204	-122.2949028
OS-19a/OS-19b	1279289.13	185819.02	47.50001545	-122.2943544
OS-20	1280097.08	186051.78	47.50069545	-122.2911043
OS-21	1280385.56	185904.73	47.50030736	-122.2899262
OS-22	1280699.87	185940.57	47.5004219	-122.2886576
OS-23	1280845.87	186058.81	47.50075356	-122.2880761
OS-24a	1281091.58	186041.89	47.50071991	-122.287081
OS-24b	1281107.47	186048.19	47.50073801	-122.2870172
OS-25	1281396.77	186024.96	47.50068931	-122.2858452
OS-26	1281554.99	186003.77	47.50063941	-122.2852036
OS-27	1281727.95	185990.64	47.50061236	-122.284503

Key:
 NAD83 = North American Datum 1983
 WGS84 = World Geodetic Survey 1984

Table 5. Grain Size and TOC Results

Sample ID	Station ID	% Moisture	% Solids	% TOC	Grain Size (%)				
					Gravel	Sand	Silt	Clay	Total %Fines
DR-01-VV-11	DR-01	23.3	76.7	0.814	6.8	88.5	3.4	1.1	4.5
DR-02VV12	DR-02	22.2	77.8	1.27	3.2	96.6	NA	NA	0
DR-03VV15	DR-03	21.9	78.1	0.216	0.3	99.4	NA	NA	0
DR-04VV15	DR-04	21.9	78.1	0.455	0.7	99.1	NA	NA	0
DR-05VV15	DR-05	20	80	0.394	1.2	98.6	NA	NA	0
DR-06VV16	DR-06	16.8	83.2	0.392	7	92.5	NA	NA	0
DR-07VV15	DR-07	10.4	89.6	0.892	6.2	93.7	NA	NA	0
DR-08VV16	DR-08	20.7	79.3	2.75	5	94.8	NA	NA	0
DR-09VV15	DR-09	27.8	72.2	0.3	2.9	96.7	NA	NA	0
DR-10VV16	DR-10	19.6	80.4	0.643	8.1	91.8	NA	NA	0
DR-11VV13	DR-11	24.6	75.4	0.296	< 0.1	99.8	NA	NA	0
DR-12VV14	DR-12	8.7	91.3	1.12	25.2	74	NA	NA	0
DR-14VV16	DR-14	17.2	82.8	0.265	2.9	95.8	NA	NA	0
DR-15VV15	DR-15	16	84	0.326	6.6	92.7	NA	NA	0
DR-16VV15	DR-16	14	86	1.64	5.5	94	NA	NA	0
DR-17VV16	DR-17	15.4	84.6	0.26	3.1	96.3	NA	NA	0
DR-18VV14	DR-18	21.8	78.2	1.3	1.8	97	NA	NA	0
DR-19VV15	DR-19	17.4	82.6	0.744	0.9	98.8	NA	NA	0
DR-20VV15	DR-20	11.4	88.6	0.366	1.9	97.2	NA	NA	0
DR-21VV15	DR-21	23.7	76.3	0.205	0.6	98.9	NA	NA	0
DR-22VV14	DR-22	16.5	83.5	0.465	2.3	97.4	NA	NA	0
DR-23VV14	DR-23	20.9	79.1	0.165	0.3	99.6	NA	NA	0
DR-24VV15	DR-24	16.2	83.8	0.986	3.8	95	NA	NA	0
DR-25VV15	DR-25	18.2	81.8	0.382	0.6	99.1	NA	NA	0
DR-26VV15	DR-26	10.5	89.5	1.44	7.8	91.9	NA	NA	0
DR-36VV15	DR-26	11.1	88.9	0.949	7.6	92.3	NA	NA	0
DR-27VV17	DR-27	13.5	86.5	0.267	1.6	97.8	NA	NA	0
DR-28VV15	DR-28	14	86	0.295	2.9	97	NA	NA	0
DRB-100	DRB-100	54	46	3.56	0.3	42.8	50.4	6.4	56.8
DRB-101	DRB-101	39.5	60.5	3.59	0.2	75.4	20.6	3.8	24.4
DRB-102E	DRB-102	40.4	59.6	1.88	0.3	57.3	33.6	8.9	42.5
DRB-103E	DRB-103	43.2	56.8	1.77	0.1	52.1	38.2	9.5	47.7
DRB-104W	DRB-104	47.3	52.7	1.97	< 0.1	60.5	34.2	5.3	39.5
DRB-105	DRB-105	44.2	55.8	2.36	< 0.1	56.1	36.3	7.5	43.8
DRB-106W	DRB-106	44.4	55.6	1.57	0.1	53.8	39.2	7	46.2
DRB-107W	DRB-107	34.7	65.3	1.37	1.7	67.5	26	4.9	30.9
DRB-108W	DRB-108	49.5	50.5	2.98	0.1	47.3	43.4	9.1	52.5
DRB-50W	DRB-108	49.1	50.9	3.38	0.2	47.4	43.8	8.6	52.4
DRB-109W	DRB-109	48.6	51.4	1.82	0.1	42.8	48.3	8.8	57.1
DRB-110E	DRB-110	41.4	58.6	3	< 0.1	69.7	25	5.3	30.3
DRB-111E	DRB-111	55.3	44.7	2.32	0.3	30.2	60.7	8.8	69.5
DRB-112W	DRB-112	43	57	1.75	0.1	61.9	31.3	6.7	38
DRB-113W	DRB-113	48.9	51.1	1.9	< 0.1	44.3	51.3	4.4	55.7
DRB-114W	DRB-114	52.8	47.2	2.18	< 0.1	47.2	41.9	11	52.9
DRB-115W	DRB-115	41	59	1.28	0.3	64.5	29.3	5.9	35.2
DRB-116W	DRB-116	47.6	52.4	2.36	0.2	55.5	35.3	8.9	44.2
DRB-117W	DRB-117	34.3	65.7	1.32	0.2	82.4	13.9	3.5	17.4
DRB-118W	DRB-118	43.4	56.6	1.96	0.5	62.9	29.9	6.8	36.7
NFK-501VV16	NFK501	61	39	5.38	< 0.1	20	73.3	6.6	79.9
NFK502VV12	NFK502	24.9	75.1	0.748	4.6	88.3	5.4	1.6	7
OF-28HS10	OF-28	47.1	52.9	2.95	0.6	48.2	44.2	7.1	51.3
OF-33VV10	OF-33	24.8	75.2	0.183	1.4	97.8	NA	NA	0
OF-36VV13	OF-36	21	79	0.185	0.9	98.8	NA	NA	0
OF-41VV16	OF-41	17.3	82.7	0.233	5.1	93.3	NA	NA	0
OR-01VV16	OR-01	52.4	47.6	1.93	0.4	41.2	50.8	7.5	58.3
OR-02VV9	OR-02	48.6	51.4	1.45	0.3	48	46.1	5.7	51.8
OR-04VV09	OR-04	14.6	85.4	2.94	4.3	93.3	NA	NA	2.4
OR-05VV10	OR-05	11.1	88.9	3.3	12.3	85.1	NA	NA	2.7
OR-06VV13	OR-06	15.1	84.9	3.17	9.5	89.8	NA	NA	0.7
OR-07VV13	OR-07	7.1	92.9	0.132	26.9	71.7	NA	NA	1.5
OR-08VV14	OR-08	11.5	88.5	0.156	10.3	87.6	NA	NA	2.2
OR-09VV14	OR-09	13.3	86.7	0.468	24.4	73.9	NA	NA	1.8
OR-10VV14	OR-10	42.1	57.9	1.58	0.1	69.1	26	4.8	30.8
OR-11VV12	OR-11	35.8	64.2	1.58	0.3	82.5	15.9	1.3	17.2

Table 5. Grain Size and TOC Results

Sample ID	Station ID	% Moisture	% Solids	% TOC	Grain Size (%)				
					Gravel	Sand	Silt	Clay	Total %Fines
OR-12VV05	OR-12	21.7	78.3	0.413	0.1	99	NA	NA	0.9
OS-01HS10	OS-01	33.3	66.7	1.86	41.7	42.6	12.3	3.5	15.8
OS-02HS10	OS-02	43.2	56.8	0.868	62.3	24.2	11.3	2.1	13.4
OS-03VV08	OS-03	20.9	79.1	0.467	0.2	99.2	NA	NA	0.6
OS-04HS10	OS-04	37.2	62.8	2.07	35.1	44.4	15.1	5.3	20.4
OS-05VV16	OS-05	59.6	40.4	3.95	1.7	40.1	50.4	7.8	58.2
OS-06HS10	OS-06	48.7	51.3	3.31	2.1	33.3	55.9	8.7	64.6
OS-07-HS10	OS-07	54.3	45.7	3.17	34.5	33.2	29.6	2.7	32.3
OS-08HS10	OS-08	37	63	2.21	31	39.2	24.2	5.4	29.6
OS-10HS10	OS-10	43.2	56.8	2.1	0.6	59.6	35.3	4.6	39.9
OS-12HS10	OS-12	44.1	55.9	2.95	7	47.4	36.1	9.5	45.6
OS-14HS10	OS-14	47	53	3.73	7	35.1	49.1	8.8	57.9
OS-15HS10	OS-15	45.1	54.9	2.55	4.4	48.5	39	8	47
OS-17HS10	OS-17	46.4	53.6	2.69	0.3	49.1	45.9	4.8	50.7
OS-18HS10	OS-18	50.7	49.3	2.06	0.5	43.2	52.7	3.6	56.3
OS-19AHS10	OS-19a	47.5	52.5	1.66	44.2	35.3	17.1	3.2	20.3
OS-19BHS10	OS-19b	45.7	54.3	1.99	10.3	51.7	32.1	5.9	38
OS-21HS10	OS-21	58.3	41.7	3.98	0.6	36.9	58.1	4.4	62.5
OS-22HS10	OS-22	49.5	50.5	2.41	0.7	52.3	42.1	4.9	47
OS-23HS10	OS-23	54	46	2.36	0.6	38	56	5.4	61.4
OS-24AHS10	OS-24a	52	48	3.2	21.5	45.2	29.4	4.0	33.3
OS-24BHS10	OS-24b	50.2	49.8	2.25	4.4	37.8	52.1	5.8	57.9
OS-27HS10	OS-27	50.5	49.5	1.81	0.3	47.8	44.8	7.2	52

TOC = Total organic carbon.

Table 6. Total Metals Analytical Results

Sample ID	Station ID	Unit	Sample Type	Aluminum	Antimony	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Zinc
DR-01-VV-11	DR-01	mg/kg DW	Sediment	7100	0.13 J B	6.1	0.09 J	9.2	14 B	4.6 B	0.015 J	11 B	0.078 J	0.018 J B	46 B
DR-02VV12	DR-02	mg/kg DW	Sediment	7700	0.1 J B	5.3	0.11 J	11	12 B	3.3 B	0.013 J	11 B	0.059 J	0.023 J B	40 B
DR-03VV15	DR-03	mg/kg DW	Sediment	6400	0.1 J B	5.1	0.11 J	11	11 B	3.7 B	0.019 J	11 B	0.16 J	0.014 J B	43 B
DR-04VV15	DR-04	mg/kg DW	Sediment	6700	0.12 J B	4.9	0.11 J	9.6	12 B	3.5 B	0.015 J	12 B	0.062 J	0.013 J B	43 B
DR-05VV15	DR-05	mg/kg DW	Sediment	6400	0.46 B	8.6	0.13 J	12	15 B	4.5 B	0.012 J	12 B	0.057 J	0.018 J B	58 B
DR-06VV16	DR-06	mg/kg DW	Sediment	5800	0.11 J B	4.7	0.096 J	8.9	11 B	3.1 B	0	11 B	0.059 J	0.013 J B	41 B
DR-07VV15	DR-07	mg/kg DW	Sediment	5800	0.086 J B	5.6	0.12 J	6.9	14 B	3.8 B	0	9.7 B	0.073 J	0.013 J B	41 B
DR-08VV16	DR-08	mg/kg DW	Sediment	6000	0.095 J B	4.5	0.093 J	9.5	11 B	3.3 B	0	12 B	0.048 J	0.012 J B	39 B
DR-09VV15	DR-09	mg/kg DW	Sediment	6400	0.099 J B	4.8	0.11 J	9.3	12 B	3.8 B	0	11 B	0.051 J	0.012 J B	43 B
DR-10VV16	DR-10	mg/kg DW	Sediment	6800	0.083 J B	5.7	0.13 J	11	13 B	3.4 B	0.031	12 B	0.065 J	0.015 J B	43 B
DR-11VV13	DR-11	mg/kg DW	Sediment	7200	0.13 J B	4.7	0.14 J	14	12 B	3.6 B	0.017 J	14 B	0.065 J	0.017 J B	47 B
DR-12VV14	DR-12	mg/kg DW	Sediment	4400	0.084 J B	3.7	0.15 J	6.2	10 B	6.1 B	0.0089 J	8.1 B	0.037 J	0.012 J B	27 B
DR-14VV16	DR-14	mg/kg DW	Sediment	6000	0.087 J B	4.5	0.089 J	8.8	12 B	3.1 B	0	12 B	0.048 J	0.012 J B	40 B
DR-15VV15	DR-15	mg/kg DW	Sediment	5500	0.077 J B	4.5	0.1 J	9.8	10 B	3 B	0.01 J	11 B	0.04 J	0.011 J B	37 B
DR-16VV15	DR-16	mg/kg DW	Sediment	6400	0.092 J B	5.4	0.11 J	8.9	13 B	4.7 B	0.02 J	12 B	0.087 J	0.014 J B	43 B
DR-17VV16	DR-17	mg/kg DW	Sediment	6000	0.077 J B	4.4	0.11 J B	8.6	11 B	2.9 B	0	11 B	0.054 J	0.013 J B	40 B
DR-18VV14	DR-18	mg/kg DW	Sediment	6400	0.1 J B	5.2	0.11 J B	8.7	12 B	3.3 B	0.017 J	11 B	0.06 J	0.018 J B	42 B
DR-19VV15	DR-19	mg/kg DW	Sediment	7300	0.13 J B	5.4	0.12 J	10	12 B	3.5 B	0.023	12 B	0.059 J	0.024 J B	46 B
DR-20VV15	DR-20	mg/kg DW	Sediment	6400	0.1 J B	5.4	0.12 J	12	12 B	3.1 B	0.019 J	11 B	0.061 J	0.021 J B	43 B
DR-21VV15	DR-21	mg/kg DW	Sediment	6800	0.093 J B	4.5	0.13 J	12	11 B	2.9 B	0.018 J	11 B	0.047 J	0.016 J B	42 B
DR-22VV14	DR-22	mg/kg DW	Sediment	7100	0.11 J B	4.9	0.11 J	13	12 B	3.1 B	0.049 J	13 B	0.049 J	0.02 J B	45 B
DR-23VV14	DR-23	mg/kg DW	Sediment	7800	0.11 J B	5.6	0.13 J	13	13 B	3.6 B	0.019 J	15 B	0.069 J	0.021 J B	51 B
DR-24VV15	DR-24	mg/kg DW	Sediment	6600	0.11 J B	4.8	0.12 J	10	12 B	3.4 B	0.022 J	12 B	0.056 J	0.018 J B	63 B
DR-25VV15	DR-25	mg/kg DW	Sediment	7600	0.11 J B	5.8	0.14 J	10	12 B	3.3 B	0.02 J	12 B	0.059 J	0.027 J B	49 B
DR-26VV15	DR-26	mg/kg DW	Sediment	5400	0.074 J B	4	0.095 J B	7.4	9.2 B	2.3 B	0.014 J	9.2 B	0.042 J	0.014 J B	34 B
DR-36VV15	DR-26	mg/kg DW	Sediment	5800	0.1 J B	4.2	0.11 J B	7.7	10 B	2.7 B	0.01 J	10 B	0.066 J	0.012 J B	36 B
DR-27VV17	DR-27	mg/kg DW	Sediment	6300	0.09 J B	4.6	0.096 J B	10	10 B	3 B	0.024	12 B	0.051 J	0.012 J B	39 B
DR-28VV15	DR-28	mg/kg DW	Sediment	6200	0.074 J B	4.2	0.11 J B	8.3	10 B	2.7 B	0.0087 U	10 B	0.043 J	0.014 J B	40 B
DRB-100W	DRB-100W	mg/kg DW	Sediment	14000	0.36 B	7.3	0.29 J	22	26 B	10 B	0.064 H	18 B	0.26 J	0.066 J B	68 B
DRB-101W	DRB-101	mg/kg DW	Sediment	NA	NA	5.3 B	NA	NA	NA	NA	NA	NA	NA	NA	NA
DRB-103E	DRB-103	mg/kg DW	Sediment	NA	NA	7.6 B	NA	NA	NA	NA	NA	NA	NA	NA	NA
DRB-104W	DRB-104	mg/kg DW	Sediment	NA	NA	7.8 B	NA	NA	NA	NA	NA	NA	NA	NA	NA
DRB-105	DRB-105	mg/kg DW	Sediment	NA	NA	7.7 B	NA	NA	NA	NA	NA	NA	NA	NA	NA
DRB-106W	DRB-106	mg/kg DW	Sediment	NA	NA	9.1 B	NA	NA	NA	NA	NA	NA	NA	NA	NA
DRB-107W	DRB-107	mg/kg DW	Sediment	NA	NA	4.5 B	NA	NA	NA	NA	NA	NA	NA	NA	NA
DRB-108W	DRB-108	mg/kg DW	Sediment	15000	0.45 B	8.3	0.32 J	23	29 B	10 B	0.073 H	21 B	0.36 J	0.076 J B	71 B
DRB-50W	DRB-108	mg/kg DW	Sediment	15000	0.41 B	7.9	0.31 J	21	27 B	9.5 B	0.053 H	20 B	0.32 J	0.068 J B	69 B
DRB-109W	DRB-109	mg/kg DW	Sediment	17000	0.43 B	8.4	0.32 J	27	31 B	9.2 B	0.14 H	21 B	0.34 J	0.075 J B	72 B
DRB-110E	DRB-110	mg/kg DW	Sediment	NA	NA	6.8 B	NA	NA	NA	NA	NA	NA	NA	NA	NA
DRB-111E	DRB-111	mg/kg DW	Sediment	17000	0.45 B	9.4	0.32 J	22	33 B	9.9 B	0.11 H	20 B	0.4 J	0.088 J B	69 B
DRB-112W	DRB-112	mg/kg DW	Sediment	NA	NA	10 B	NA	NA	NA	NA	NA	NA	NA	NA	NA
DRB-113W	DRB-113	mg/kg DW	Sediment	17000	0.49 B	9.5	0.35	24	33 B	12 B	0.13 H	20 B	0.32 J	0.082 J B	78 B
DRB-114W	DRB-114	mg/kg DW	Sediment	16000	0.52 B	9.7	0.34 J	26	33 B	13 B	0.098 H	21 B	0.34 J	0.096 J B	82 B
DRB-115W	DRB-115	mg/kg DW	Sediment	NA	NA	6.8 B	NA	NA	NA	NA	NA	NA	NA	NA	NA
DRB-116W	DRB-116	mg/kg DW	Sediment	NA	NA	6.9 B	NA	NA	NA	NA	NA	NA	NA	NA	NA
DRB-117W	DRB-117	mg/kg DW	Sediment	NA	NA	5.5 B	NA	NA	NA	NA	NA	NA	NA	NA	NA
NFK-501VV16	NFK501	mg/kg DW	Sediment	22000	2 B	15	0.42 J B	27	47 B	18 B	0.12	24 B	0.56 J	0.12 J B	120 B
NFK502VV12	NFK502	mg/kg DW	Sediment	8300	0.21 J B	6	0.15 J	13	17 B	5.8 B	0.048	14 B	0.087 J	0.028 J B	51 B
OF-28HS10	OF-28	mg/kg DW	Sediment	NA	NA	9.2 B	NA	NA	NA	NA	NA	NA	NA	NA	NA
OF-33VV10	OF-33	mg/kg DW	Sediment	6000	0.077 J B	4.3	0.085 J B	9.8	9.6 B	2.6 B	0.0077 U	11 B	0.049 J	0.013 J B	37 B

Table 6. Total Metals Analytical Results

Sample ID	Station ID	Unit	Sample Type	Aluminum	Antimony	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Zinc
OF-36VV13	OF-36	mg/kg DW	Sediment	7000	0.094 J B	4.6	0.088 J B	13	13 B	3.7 B	0.0089 J	13 B	0.048 J	0.015 J B	43 B
OF-41VV16	OF-41	mg/kg DW	Sediment	6500	0.081 J B	4.9	0.1 J B	9.4	11 B	2.9 B	0.012 J	11 B	0.047 J	0.014 J B	42 B
OR-01VV16	OR-01	mg/kg DW	Sediment	NA	NA	9.4 B	NA	NA	NA	NA	NA	NA	NA	NA	NA
OR-02VV9	OR-02	mg/kg DW	Sediment	NA	NA	8.3 B	NA	NA	NA	NA	NA	NA	NA	NA	NA
OR-04VV09	OR-04	mg/kg DW	Sediment	5400	0.49 B	6.5	0.13 J B	9.7 B	20	3.3 B	0.013 J	11	0.056 J	0.02 J B	42 B
OR-05VV10	OR-05	mg/kg DW	Sediment	5600	0.11 J B	5.9	0.12 J B	8.3 B	14	3.5 B	0.0099 U	11	0.037 J	0.02 J B	37 B
OR-06VV13	OR-06	mg/kg DW	Sediment	6300	0.1 J B	9.1	0.13 J B	9.3 B	12	3.4 B	0.028	12	0.045 J	0.019 J B	40 B
OR-07VV13	OR-07	mg/kg DW	Sediment	4800	0.075 J B	5	0.082 J B	8.6 B	8.8	2.6 B	0.0095 U	9.6	0.03 J	0.012 J B	32 B
OR-08VV14	OR-08	mg/kg DW	Sediment	5400	0.1 J B	4.7	0.1 J B	8.7 B	12	3.1 B	0.014 J	11	0.04 J	0.014 J B	38 B
OR-09VV14	OR-09	mg/kg DW	Sediment	5300	0.076 J B	4.2	0.12 J B	8.1 B	9.2	2.9 B	0.014 J	9.1	0.027 J	0.015 J B	34 B
OR-10VV14	OR-10	mg/kg DW	Sediment	12000	0.76 B	9.2	0.2 J B	21 B	25	12 B	0.052	18	0.22 J	0.059 J B	71 B
OR-11VV12	OR-11	mg/kg DW	Sediment	9300	0.24 J B	6.3	0.15 J B	18 B	19	7.8 B	0.029	14	0.15 J	0.039 J B	54 B
OR-12VV05	OR-12	mg/kg DW	Sediment	6500	0.12 J B	4.9	0.12 J B	13 B	11	3.2 B	0.01 U	12	0.043 J	0.019 J B	42 B
OS-03VV08	OS-03	mg/kg DW	Sediment	6400	0.11 J B	5.1	0.12 J B	10 B	11	3.6 B	1.4	11	0.051 J	0.016 J B	42 B
OS-05VV16	OS-05	mg/kg DW	Sediment	NA	NA	13 B	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS-06HS10	OS-06	mg/kg DW	Sediment	NA	NA	11 B	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS-10HS10	OS-10	mg/kg DW	Sediment	13000	0.48 B	7.7	0.35 B	21 B	29	17 B	0.075	19	0.3 J	0.086 J B	77 B
OS-14HS10	OS-14	mg/kg DW	Sediment	NA	NA	8.6 B	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS-15HS10	OS-15	mg/kg DW	Sediment	NA	NA	9 B	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS-18HS10	OS-18	mg/kg DW	Sediment	NA	NA	10 B	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS-21HS10	OS-21	mg/kg DW	Sediment	NA	NA	9.4 B	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS-22HS10	OS-22	mg/kg DW	Sediment	NA	NA	8.9 B	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS-23HS10	OS-23	mg/kg DW	Sediment	NA	NA	9.2 B	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS-24AHS10	OS-24	mg/kg DW	Sediment	NA	NA	16 B	NA	NA	NA	NA	NA	NA	NA	NA	NA
RS-01VV	Rinsate	mg/L	Water	0.037	0.00033 U	0.0006 U	0.00016 U	0.00055 U	0.1	0.0091	0.000055 U	0.25	0.00065 U	0.00008 U	0.19
RS-02VV	Rinsate	mg/L	Water	0.03	0.00041 J	0.0006 U	0.00016 U	0.00055 U	0.00055 U	0.096	0.000055 U	0.00046 U	0.00065 U	0.00008 U	0.0067 J
RS-03VV	Rinsate	mg/L	Water	0.028	0.00033 U	0.0006 U	0.00016 U	0.00055 U	0.00055 U	0.00022 U	0.000055 U	0.00046 U	0.00065 U	0.00008 U	0.0071
RS-04VV	Rinsate	mg/L	Water	0.028	0.00033 U	0.0006 U	0.00016 U	0.00055 U	0.00055 U	0.00022 U	0.000055 U	0.00046 U	0.00065 U	0.00008 U	0.0057 J
RS-05	Rinsate	mg/L	Water	0.028	0.00033 U	0.0006 U	0.00016 U	0.00055 U	0.00055 U	0.00022 U	0.000055 U	0.00046 U	0.00065 U	0.00008 U	0.0063 J

Notes:

Results shown with a "B" qualifier denote the compound was found in the blank as well as the sample.

Results shown with a "H" qualifier indicate that the sample exceeded holding time limitations.

Results shown with a "J" qualifier denote a result less than the reporting limit but greater than or equal to the MDL and the concentration is an approximate value.

Results shown with a "U" qualifier are nondetected concentrations and reported as the Method Detection Limit (MDL).

NA = Not analyzed.

mg/kg = Milligrams per kilogram.

mg/L = Milligrams per liter.

DW = Dry weight.

Table 7. PCBs as Aroclors

Sample ID	Station ID	Units	Sample Type	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260	Total PCBs*
DR-01-VV-11	DR-01	mg/kg DW	Sediment	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.0018 U	0.0036 J	0.0036 J
DR-02VV12	DR-02	mg/kg DW	Sediment	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0019 U	0.0019 U	0.0072 U
DR-03VV15	DR-03	mg/kg DW	Sediment	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.0018 U	0.0034 J	0.0034 J
DR-04VV15	DR-04	mg/kg DW	Sediment	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.0018 U	0.0029 J	0.0029 J
DR-05VV15	DR-05	mg/kg DW	Sediment	0.0074 U	0.0074 U	0.0074 U	0.0074 U	0.0074 U	0.0019 U	0.0026 J	0.0026 J
DR-06VV16	DR-06	mg/kg DW	Sediment	0.0065 U	0.0065 U	0.0065 U	0.0065 U	0.0065 U	0.0017 U	0.003 J	0.003 J
DR-07VV15	DR-07	mg/kg DW	Sediment	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0016 U	0.0023 J	0.0023 J
DR-08VV16	DR-08	mg/kg DW	Sediment	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.0018 U	0.0026 J	0.0026 J
DR-09VV15	DR-09	mg/kg DW	Sediment	0.0073 U	0.0073 U	0.0073 U	0.0073 U	0.0073 U	0.0019 U	0.0027 J	0.0027 J
DR-10VV16	DR-10	mg/kg DW	Sediment	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0018 U	0.0025 J	0.0025 J
DR-11VV13	DR-11	mg/kg DW	Sediment	0.0077 U	0.0077 U	0.0077 U	0.0077 U	0.0077 U	0.002 U	0.002 U	0.0077 U
DR-12VV14	DR-12	mg/kg DW	Sediment	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0016 U	0.0027 J	0.0027 J
DR-14VV16	DR-14	mg/kg DW	Sediment	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0017 U	0.0017 U	0.0067 U
DR-15VV15	DR-15	mg/kg DW	Sediment	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.0018 U	0.0018 U	0.007 U
DR-16VV15	DR-16	mg/kg DW	Sediment	0.0062 U	0.0062 U	0.0062 U	0.0062 U	0.0062 U	0.0016 U	0.0035 J	0.0035 J
DR-17VV16	DR-17	mg/kg DW	Sediment	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0016 U	0.0031 J	0.0031 J
DR-18VV14	DR-18	mg/kg DW	Sediment	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0017 U	0.0017 U	0.0067 U
DR-19VV15	DR-19	mg/kg DW	Sediment	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0018 U	0.0018 U	0.0068 U
DR-20VV15	DR-20	mg/kg DW	Sediment	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0015 U	0.0015 U	0.0059 U
DR-21VV15	DR-21	mg/kg DW	Sediment	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0019 U	0.0019 U	0.0072 U
DR-22VV14	DR-22	mg/kg DW	Sediment	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0018 U	0.0018 U	0.0071 U
DR-23VV14	DR-23	mg/kg DW	Sediment	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0018 U	0.0018 U	0.0071 U
DR-24VV15	DR-24	mg/kg DW	Sediment	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0017 U	0.0017 U	0.0067 U
DR-25VV15	DR-25	mg/kg DW	Sediment	0.0064 U	0.0064 U	0.0064 U	0.0064 U	0.0064 U	0.0016 U	0.0016 U	0.0064 U
DR-26VV15	DR-26	mg/kg DW	Sediment	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0015 U	0.0015 U	0.0059 U
DR-27VV17	DR-27	mg/kg DW	Sediment	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0016 U	0.0016 U	0.0063 U
DR-28VV15	DR-28	mg/kg DW	Sediment	0.0062 U	0.0062 U	0.0062 U	0.0062 U	0.0062 U	0.0016 U	0.003 J	0.003 J
DR-36VV15	DR-26	mg/kg DW	Sediment	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0016 U	0.0016 U	0.0061 U
DRB-100W	DRB-100W	mg/kg DW	Sediment	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0022 U	0.0022 U	0.0084 U
DRB-101W	DRB-101	mg/kg DW	Sediment	0.00053 U	0.0013 U	0.0012 U	0.00035 U	0.00022 U	0.002 U	0.0005 U	0.002
DRB-103E	DRB-103	mg/kg DW	Sediment	0.00056 U	0.0014 U	0.0012 U	0.00037 U	0.00023 U	0.0012 J	0.00053 U	0.0012 J
DRB-104W	DRB-104	mg/kg DW	Sediment	0.00056 U	0.0014 U	0.0012 U	0.00037 U	0.00023 U	0.00099 J	0.00052 U	0.00099 J
DRB-105	DRB-105	mg/kg DW	Sediment	0.00058 U	0.0014 U	0.0013 U	0.00038 U	0.00023 U	0.001 J	0.00054 U	0.001 J
DRB-106W	DRB-106	mg/kg DW	Sediment	0.00056 U	0.0014 U	0.0012 U	0.00037 U	0.00023 U	0.0015 J	0.00053 U	0.0015 J
DRB-107W	DRB-107	mg/kg DW	Sediment	0.00046 U	0.0012 U	0.001 U	0.0003 U	0.00019 U	0.00073 J	0.00043 U	0.00073 J
DRB-108W	DRB-108	mg/kg DW	Sediment	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0052 U	0.0052 U	0.02 U
DRB-109W	DRB-109	mg/kg DW	Sediment	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0026 U	0.0026 U	0.01 U
DRB-110E	DRB-110	mg/kg DW	Sediment	0.00056 U	0.0014 U	0.0012 U	0.00037 U	0.00023 U	0.0016 J	0.00053 U	0.0016 J
DRB-111E	DRB-111	mg/kg DW	Sediment	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.0057 U	0.0057 U	0.022 U
DRB-112W	DRB-112	mg/kg DW	Sediment	0.00057 U	0.0014 U	0.0012 U	0.00037 U	0.00023 U	0.0019 U	0.00053 U	0.0019
DRB-113W	DRB-113	mg/kg DW	Sediment	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.0027 U	0.0027 U	0.0027 U
DRB-114W	DRB-114	mg/kg DW	Sediment	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.0028 U	0.0028 U	0.011 U
DRB-115W	DRB-115	mg/kg DW	Sediment	0.00053 U	0.0013 U	0.0011 U	0.00034 U	0.00021 U	0.0021 U	0.00049 U	0.0021
DRB-116W	DRB-116	mg/kg DW	Sediment	0.00059 U	0.0015 U	0.0013 U	0.00039 U	0.00024 U	0.0017 J	0.00055 U	0.0017 J
DRB-117W	DRB-117	mg/kg DW	Sediment	0.00046 U	0.0012 U	0.001 U	0.0003 U	0.00019 U	0.00086 J	0.00043 U	0.00086 J
DRB-50W	DRB-108	mg/kg DW	Sediment	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0026 U	0.0026 U	0.01 U
NFK-501VV16	NFK501	mg/kg DW	Sediment	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.0037 U	0.007 J	0.007 J

Table 7. PCBs as Aroclors

Sample ID	Station ID	Units	Sample Type	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260	Total PCBs*
NFK502VV12	NFK502	mg/kg DW	Sediment	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0019 U	0.0019 U	0.0072 U
OF-28HS10	OF-28	mg/kg DW	Sediment	0.00067 U	0.0017 U	0.0015 U	0.00044 U	0.00027 U	0.0024 J	0.00063 U	0.0024 J
OF-33VV10	OF-33	mg/kg DW	Sediment	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0018 U	0.0018 U	0.0071 U
OF-36VV13	OF-36	mg/kg DW	Sediment	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.0018 U	0.0018 U	0.007 U
OF-41VV16	OF-41	mg/kg DW	Sediment	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0019 U	0.0019 U	0.0072 U
OR-01VV16	OR-01	mg/kg DW	Sediment	0.00063 U	0.0016 U	0.0014 U	0.00041 U	0.00026 U	0.0022 U	0.00059 U	0.0022
OR-02VV9	OR-02	mg/kg DW	Sediment	0.00058 U	0.0015 U	0.0013 U	0.00038 U	0.00024 U	0.0019 U	0.00055 U	0.0019
OR-04VV09	OR-04	mg/kg DW	Sediment	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0016 U	0.0016 U	0.0063 U
OR-05VV10	OR-05	mg/kg DW	Sediment	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0016 U	0.0016 U	0.0063 U
OR-06VV13	OR-06	mg/kg DW	Sediment	0.0065 U	0.0065 U	0.0065 U	0.0065 U	0.0065 U	0.0017 U	0.0017 U	0.0065 U
OR-07VV13	OR-07	mg/kg DW	Sediment	0.0058 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U	0.0015 U	0.0015 U	0.0058 U
OR-08VV14	OR-08	mg/kg DW	Sediment	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0016 U	0.0016 U	0.0061 U
OR-09VV14	OR-09	mg/kg DW	Sediment	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0016 U	0.0016 U	0.0063 U
OR-10VV14	OR-10	mg/kg DW	Sediment	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.0047 U	0.012 J	0.012 J
OR-11VV12	OR-11	mg/kg DW	Sediment	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.0045 U	0.0045 U	0.017 U
OR-12VV05	OR-12	mg/kg DW	Sediment	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0018 U	0.0018 U	0.0069 U
OS-03VV08	OS-03	mg/kg DW	Sediment	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0019 U	0.0019 U	0.0072 U
OS-05VV16	OS-05	mg/kg DW	Sediment	0.00071 U	0.0018 U	0.0015 U	0.00046 U	0.00029 U	0.0032 U	0.00066 U	0.0032
OS-06HS10	OS-06	mg/kg DW	Sediment	0.00061 U	0.0015 U	0.0013 U	0.0004 U	0.00025 U	0.77	0.00057 U	0.77
OS-10HS10	OS-10	mg/kg DW	Sediment	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0051 U	0.0051 U	0.02 U
OS-14HS10	OS-14	mg/kg DW	Sediment	0.00058 U	0.0014 U	0.0013 U	0.00038 U	0.00023 U	0.0026 U	0.00054 U	0.0026
OS-15HS10	OS-15	mg/kg DW	Sediment	0.00057 U	0.0014 U	0.0012 U	0.00037 U	0.00023 U	0.0046 U	0.00053 U	0.0046
OS-18HS10	OS-18	mg/kg DW	Sediment	0.00066 U	0.0017 U	0.0014 U	0.00043 U	0.00027 U	0.002 J	0.00062 U	0.002 J
OS-21HS10	OS-21	mg/kg DW	Sediment	0.00075 U	0.0019 U	0.0016 U	0.00049 U	0.0003 U	0.0015 J	0.0007 U	0.0015 J
OS-22HS10	OS-22	mg/kg DW	Sediment	0.00062 U	0.0015 U	0.0014 U	0.00041 U	0.00025 U	0.0028 U	0.00058 U	0.0028
OS-23HS10	OS-23	mg/kg DW	Sediment	0.0007 U	0.0018 U	0.0015 U	0.00046 U	0.00029 U	0.0011 J	0.00066 U	0.0011 J
OS-24AHS10	OS-24	mg/kg DW	Sediment	0.00067 U	0.0017 U	0.0015 U	0.00044 U	0.00027 U	0.0014 J	0.00063 U	0.0014 J
RS-01VV	Rinsate	mg/L	Water	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.048 U	0.048 U	0.077 U
RS-02VV	Rinsate	mg/L	Water	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.048 U	0.048 U	0.077 U
RS-03VV	Rinsate	mg/L	Water	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U	0.05 U	0.05 U	0.081 U
RS-04VV	Rinsate	mg/L	Water	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.062 U	0.062 U	0.099 U
RS-05	Rinsate	mg/L	Water	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.049 U	0.049 U	0.079 U

Notes:

Results shown with a "J" qualifier denote a result less than the reporting limit but greater than or equal to the MDL and the concentration is an approximate value.

Results shown with a "U" qualifier are nondetected concentrations and reported as the Method Detection Limit (MDL).

*Total PCBs are reported as the sum of detected concentrations for all Aroclors. If all Aroclors were undetected, the single highest MDL is reported to represent the sum of all compounds

DW = Dry weight.

mg/kg = Milligrams per kilogram.

mg/L = Milligrams per liter.

Table 8. Carcinogenic PAHs

Sample ID	Station ID	Units	Sample Type	Benzo[a] pyrene	Benzo[a] anthracene	Benzo[b] fluoranthene	Benzo[k] fluoranthene	Chrysene	Dibenz(a,h) anthracene	Indeno[1,2,3-cd]	BaP TEQ
DR-01-VV-11	DR-01	ug/kg DW	Sediment	11 U	11	21	5.6	14	1.5 U	6.4	10.115
DR-02VV12	DR-02	ug/kg DW	Sediment	1.1 U	0.87 U	0.72 U	0.92 U	1 U	1.6 U	1.6 U	0.841 U
DR-03VV15	DR-03	ug/kg DW	Sediment	1.7 J	0.85 U	0.71 U	0.9 U	0.98 U	1.6 U	1.6 U	1.9879 J
DR-04VV15	DR-04	ug/kg DW	Sediment	1.1 U	0.86 J	0.7 U	0.89 U	0.97 U	1.6 U	1.6 U	0.8804 J
DR-05VV15	DR-05	ug/kg DW	Sediment	1.7 J	0.85 U	0.7 U	0.9 U	0.98 U	1.6 U	1.7 J	2.0774 J
DR-06VV16	DR-06	ug/kg DW	Sediment	1 U	0.77 U	0.64 U	0.82 U	0.89 U	1.4 U	1.4 U	0.7560 U
DR-07VV15	DR-07	ug/kg DW	Sediment	7.3	7.4	7.7	2.5 J	7.6	1.9 J	4 J	9.726 J
DR-08VV16	DR-08	ug/kg DW	Sediment	1 U	0.8 U	0.87 J	0.85 U	0.93 U	1.5 U	1.5 U	0.8242 J
DR-09VV15	DR-09	ug/kg DW	Sediment	1.1 U	0.85 U	0.71 U	0.9 U	0.98 U	1.6 U	1.6 U	0.8379 U
DR-10VV16	DR-10	ug/kg DW	Sediment	1 U	0.77 U	0.76 J	0.82 U	0.89 U	1.4 U	1.4 U	0.8000 J
DR-11VV13	DR-11	ug/kg DW	Sediment	1.7 J	0.88 U	0.73 U	0.93 U	1 U	1.6 U	1.7 J	2.082 J
DR-12VV14	DR-12	ug/kg DW	Sediment	1.8 J	0.71 U	0.68 J	0.75 U	0.81 U	1.3 U	1.3 U	2.0751 J
DR-14VV16	DR-14	ug/kg DW	Sediment	4.2	3.7	4.8	1.5 J	3.3	1.5 U	2.6 J	5.568 J
DR-15VV15	DR-15	ug/kg DW	Sediment	1 U	0.78 U	0.65 U	0.83 U	0.9 U	1.4 U	1.4 U	0.758 U
DR-16VV15	DR-16	ug/kg DW	Sediment	1.8 J	0.74 U	1 J	0.78 U	0.91 J	1.4 U	1.4 U	2.1251 J
DR-17VV16	DR-17	ug/kg DW	Sediment	1.4 J	0.74 U	0.61 U	0.79 U	0.85 U	1.4 U	1.4 U	1.6513 J
DR-18VV14	DR-18	ug/kg DW	Sediment	1 U	0.79 U	0.66 U	0.84 U	0.91 U	1.5 U	1.5 U	0.7691 U
DR-19VV15	DR-19	ug/kg DW	Sediment	1 U	0.77 U	0.64 U	0.82 U	0.89 U	1.4 U	1.4 U	0.7560 U
DR-20VV15	DR-20	ug/kg DW	Sediment	0.94 U	0.82 J	0.6 U	0.77 U	0.83 U	1.3 U	1.3 U	0.7547 J
DR-21VV15	DR-21	ug/kg DW	Sediment	21	21	29	10	24	3.2 J	15	29.06 J
DR-22VV14	DR-22	ug/kg DW	Sediment	2.7 J	1.5 J	1.2 J	0.9 U	1.3 J	1.7 J	1.6 U	3.278 J
DR-23VV14	DR-23	ug/kg DW	Sediment	1.1 U	0.83 U	0.69 U	0.88 U	0.96 U	1.5 U	1.5 U	0.8248 U
DR-24VV15	DR-24	ug/kg DW	Sediment	1 U	0.78 U	0.65 U	0.83 U	0.9 U	1.4 U	1.4 U	0.758 U
DR-25VV15	DR-25	ug/kg DW	Sediment	1 U	0.77 U	0.64 U	0.82 U	0.89 U	1.4 U	1.4 U	0.7560 U
DR-26VV15	DR-26	ug/kg DW	Sediment	0.93 U	0.77 J	0.59 U	0.75 U	0.82 U	1.3 U	1.3 U	0.7431 J
DR-36VV15	DR-26	ug/kg DW	Sediment	0.93 U	0.71 U	1.1 J	0.75 U	0.82 U	1.3 U	1.3 U	0.7821 J
DR-27VV17	DR-27	ug/kg DW	Sediment	0.95 U	0.73 U	0.61 U	0.77 U	0.84 U	1.3 U	1.3 U	0.7147 U
DR-28VV15	DR-28	ug/kg DW	Sediment	0.92 U	0.7 U	0.58 U	0.75 U	0.81 U	1.3 U	1.3 U	0.6956 U
DRB-100W	DRB-100W	ug/kg DW	Sediment	38 J	42	63	25 J	49	19 U	25 J	54.94 J
DRB-101W	DRB-101	ug/kg DW	Sediment	12	9.9	15	5.7	12	4.5 J	8.7	16.50 J
DRB-103E	DRB-103	ug/kg DW	Sediment	11	9.8	16	5.7	12	5.6 J	9.8	15.81 J
DRB-104W	DRB-104	ug/kg DW	Sediment	5.3 J	3.4 J	5.2	2.9 J	4.8	0.39 U	5.1 J	7.028 J
DRB-105	DRB-105	ug/kg DW	Sediment	3.9 J	1.5 J	2.7 J	0.85 J	2 J	0.4 U	3.2 J	4.765 J
DRB-106W	DRB-106	ug/kg DW	Sediment	5.9	3.4 J	6.4	2.2 J	4.7	0.39 U	5.4 J	7.707 J
DRB-107W	DRB-107	ug/kg DW	Sediment	4 J	2 J	3.1	1.1 J	2.5 J	0.32 U	3.7 J	5.031 J
DRB-108W	DRB-108	ug/kg DW	Sediment	34 J	31 J	54	15 J	39 J	23 U	27 J	48.24 J
DRB-50W	DRB-108	ug/kg DW	Sediment	38 J	32 J	59	24 J	42 J	22 U	29 J	53.92 J
DRB-109W	DRB-109	ug/kg DW	Sediment	27 J	26 J	47	16 J	34 J	21 U	23 J	39.59 J
DRB-110E	DRB-110	ug/kg DW	Sediment	7	4.6	7.9	3.1 J	5.2	0.38 U	5.9 J	9.221 J
DRB-111E	DRB-111	ug/kg DW	Sediment	39 J	31 J	55	19 J	42 J	25 U	30 J	54.17 J
DRB-112W	DRB-112	ug/kg DW	Sediment	8.8	6.8	11	4.4 J	8.5	4.6 J	8.8	12.445 J
DRB-113W	DRB-113	ug/kg DW	Sediment	52 J	39 J	67	22 J	55	22 U	40 J	70.45 J
DRB-114W	DRB-114	ug/kg DW	Sediment	63	58	100	33 J	77	24 U	58 J	89.87 J
DRB-115W	DRB-115	ug/kg DW	Sediment	11	9.2	14	5.4	12	0.36 U	8.2	14.818
DRB-116W	DRB-116	ug/kg DW	Sediment	7.2	4.3 J	8.8	3.3 J	6.4	0.41 U	5.2 J	9.445 J
DRB-117W	DRB-117	ug/kg DW	Sediment	10	7.5	14	5	9.6	0.31 U	7	13.462
NFK-501VV16	NFK501	ug/kg DW	Sediment	160	160	290	80	210	25	98	227.4
NFK502VV12	NFK502	ug/kg DW	Sediment	25	53	61	15	59	1.5 U	13	39.87
OF-28HS10	OF-28	ug/kg DW	Sediment	6.6	3.1 J	5.3	2.9 J	3.6 J	4 J	5.5 J	8.716 J

Table 8. Carcinogenic PAHs

Sample ID	Station ID	Units	Sample Type	Benzo[a]pyrene	Benzo[a]anthracene	Benzo[b]fluoranthene	Benzo[k]fluoranthene	Chrysene	Dibenz(a,h)anthracene	Indeno[1,2,3-cd]	BaP TEQ
OF-33VV10	OF-33	ug/kg DW	Sediment	1.1 U	0.83 U	0.69 U	0.89 U	0.96 U	1.5 U	1.5 U	0.8253 U
OF-36VV13	OF-36	ug/kg DW	Sediment	9.3	9	10	4	9.9	1.5 U	5.1	12.284
OF-41VV16	OF-41	ug/kg DW	Sediment	1.1 U	0.82 U	0.68 U	0.87 U	0.95 U	1.5 U	1.5 U	0.8233 U
OR-01VV16	OR-01	ug/kg DW	Sediment	15	12	23	9.1	22	5.4 J	11	21.27 J
OR-02VV9	OR-02	ug/kg DW	Sediment	6.5	4.3 J	6.6	2.4 J	5	0.4 U	5.2 J	8.42 J
OR-04VV09	OR-04	ug/kg DW	Sediment	0.99 U	1.2 J	1.6 J	0.8 U	1.8 J	1.4 U	1.4 U	0.973 J
OR-05VV10	OR-05	ug/kg DW	Sediment	0.95 U	1.5 J	0.76 J	0.77 U	1.2 J	1.3 U	1.3 U	0.882 J
OR-06VV13	OR-06	ug/kg DW	Sediment	1 U	2.2 J	1.2 J	0.81 U	2.8 J	1.4 U	1.4 U	1.049 J
OR-07VV13	OR-07	ug/kg DW	Sediment	0.89 U	0.68 U	0.6 J	0.72 U	0.78 U	1.3 U	1.3 U	0.7089 J
OR-08VV14	OR-08	ug/kg DW	Sediment	0.94 U	0.72 U	0.64 J	0.76 U	0.83 U	1.3 U	1.3 U	0.7422 J
OR-09VV14	OR-09	ug/kg DW	Sediment	0.95 U	0.73 U	0.6 U	0.77 U	0.84 U	1.3 U	1.3 U	0.7142 U
OR-10VV14	OR-10	ug/kg DW	Sediment	32	27	53	19	41	1.9 U	1.9 U	42.500
OR-11VV12	OR-11	ug/kg DW	Sediment	21	17	35	11	26	4.7 J	14	29.43 J
OR-12VV05	OR-12	ug/kg DW	Sediment	1.1 U	0.87 J	0.7 U	0.89 U	0.97 U	1.5 U	1.5 U	0.8714 J
OS-03VV08	OS-03	ug/kg DW	Sediment	7.1	8.8	10	3.1 J	6.5	1.5 U	4.3 J	9.860 J
OS-05VV16	OS-05	ug/kg DW	Sediment	12	5.7	9.5	3.7 J	13	0.48 U	6.2 J	14.664 J
OS-06HS10	OS-06	ug/kg DW	Sediment	57	80	120	45	120	15	37	87.9
OS-10HS10	OS-10	ug/kg DW	Sediment	55	48	88	30	69	10	35	76.79
OS-14HS10	OS-14	ug/kg DW	Sediment	12	11	19	7.4	16	0.4 U	10	16.92
OS-15HS10	OS-15	ug/kg DW	Sediment	8.3	6.1	11	5.4	11	0.39 U	9.5	11.630
OS-18HS10	OS-18	ug/kg DW	Sediment	38	34	62	24	50	0.46 U	27	53.223
OS-21HS10	OS-21	ug/kg DW	Sediment	9.9	8.3	19	7	15	0.51 U	7.9 J	14.296 J
OS-22HS10	OS-22	ug/kg DW	Sediment	11	8	12	5.6	9.6	0.43 U	8	14.478
OS-23HS10	OS-23	ug/kg DW	Sediment	7	5.6	11	5 J	10	0.48 U	4.4 J	9.724 J
OS-24AHS10	OS-24	ug/kg DW	Sediment	6.4	3.3 J	5.3	2.2 J	4.3 J	0.46 U	6 J	8.146 J
RS-01VV	Rinsate	ug/L	Water	0.026 U	0.032 U	0.045 U	0.054 U	0.044 U	0.045 U	0.05 U	NA
RS-02VV	Rinsate	ug/L	Water	0.026 U	0.032 U	0.045 U	0.054 U	0.044 U	0.045 U	0.05 U	NA
RS-03VV	Rinsate	ug/L	Water	0.027 U	0.033 U	0.045 U	0.054 U	0.044 U	0.045 U	0.05 U	NA
RS-04VV	Rinsate	ug/L	Water	0.033 U	0.041 U	0.057 U	0.068 U	0.056 U	0.057 U	0.063 U	NA
RS-05	Rinsate	ug/L	Water	0.026 U	0.032 U	0.045 U	0.053 U	0.044 U	0.045 U	0.049 U	NA

Notes:

Results shown with a "U" qualifier are nondetected concentrations and reported as the Method Detection Limit (MDL).

Results shown with a "J" qualifier indicate that the associated numerical value is an estimated quantity because the reported concentrations were less than the sample quantization limits or because quality control criteria limits were not met.

BaP TEQ was calculated following WAC 173-340-708(e) by multiplying the concentration of each individual cPAH constituent by its respective TEF and summing the resulting toxic equivalents to calculate the BaP TEQ value. The cPAHs included in the BaP TEQ calculation are benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene, following WAC 173-340-708(e) and as listed in Table 708-2 in the MTCA Cleanup Regulation (WAC 173-340). A value of one-half the detection limit was used as the concentration for each of the non-detected results for individual cPAHs. TEFs used in the calculation are from California Environmental Protection Agency (2005), as specified in WAC 173-340-708(e).

DW = Dry weight

NA = Not applicable

ug/kg = Micrograms per kilogram

ug/L = Micrograms per liter

Table 9. LPAHs

Sample ID	Station ID	Unit	Sample Type	1-Methylnaphthalene	2-Chloronaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Fluorene	Naphthalene	Phenanthrene	Total LPAH**
DR-01-VV-11	DR-01	ug/kg DW	Sediment	1.1 U*	0.23 U*	0.38 U*	0.69 U	0.33 J	1.3 J	0.68 J	0.69 U*	9.8	12.11 J
DR-02VV12	DR-02	ug/kg DW	Sediment	1.2 U*	0.25 U*	0.41 U*	0.76 U	0.31 U	0.58 U	0.35 U	0.76 U*	0.53 U	0.76 U
DR-03VV15	DR-03	ug/kg DW	Sediment	1.1 U*	0.25 U*	0.41 U*	0.75 U	0.3 U	0.56 U	0.34 U	0.75 U*	0.52 U	0.75 U
DR-04VV15	DR-04	ug/kg DW	Sediment	1.1 U*	0.25 U*	0.4 U*	0.74 U	0.3 U	0.56 U	0.34 U	0.74 U*	0.52 U	0.74 U
DR-05VV15	DR-05	ug/kg DW	Sediment	1.1 U*	0.25 U*	0.4 U*	0.74 U	0.3 U	0.56 U	0.34 U	0.74 U*	0.52 U	0.74 U
DR-06VV16	DR-06	ug/kg DW	Sediment	1 U*	0.23 U*	0.37 U*	0.68 U	0.27 U	0.51 U	0.31 U	0.68 U*	0.47 U	0.68 U
DR-07VV15	DR-07	ug/kg DW	Sediment	0.96 U*	0.21 U*	0.95 J*	2.9	0.25 U	4.6	3	0.68 J*	17	28.18 J
DR-08VV16	DR-08	ug/kg DW	Sediment	1.1 U*	0.23 U*	0.41 J*	0.7 U	0.28 U	0.53 U	0.32 U	0.7 U*	1.5 J	1.5 J
DR-09VV15	DR-09	ug/kg DW	Sediment	1.1 U*	0.25 U*	0.41 U*	0.75 U	0.3 U	0.56 U	0.34 U	0.75 U*	0.53 J	0.53 J
DR-10VV16	DR-10	ug/kg DW	Sediment	1 U*	0.23 U*	0.38 J*	0.68 U	0.27 U	0.51 U	0.31 U	0.68 U*	1.8 J	1.8 J
DR-11VV13	DR-11	ug/kg DW	Sediment	1.2 U*	0.26 U*	0.42 U*	0.77 U	0.31 U	0.58 U	0.35 U	0.77 U*	0.54 U	0.77 U
DR-12VV14	DR-12	ug/kg DW	Sediment	0.94 U*	0.21 U*	0.81 J*	0.62 U	0.25 U	0.47 U	0.28 U	0.62 U*	1 J	1 J
DR-14VV16	DR-14	ug/kg DW	Sediment	1.1 U*	0.23 U	0.38 U	0.7 U	0.28 U	0.86 J	0.32 J	0.7 U*	4.8	5.98 J
DR-15VV15	DR-15	ug/kg DW	Sediment	1 U*	0.23 U*	0.37 U*	0.68 U	0.28 U	0.52 U	0.31 U	0.68 U*	0.83 J	0.83 J
DR-16VV15	DR-16	ug/kg DW	Sediment	0.99 U*	0.22 U*	0.54 J*	0.65 U	0.26 U	0.49 U	0.29 U	0.65 U*	1.2 J	1.2 J
DR-17VV16	DR-17	ug/kg DW	Sediment	2.4 J*	0.22 U*	3.5*	0.65 U	0.26 U	0.49 U	0.3 U	0.65 U*	1.9 J	1.9 J
DR-18VV14	DR-18	ug/kg DW	Sediment	1.1 U*	0.23 U*	0.38 U*	0.69 U	0.28 U	0.52 U	0.32 U	0.69 U*	0.84 J	0.84 J
DR-19VV15	DR-19	ug/kg DW	Sediment	1 U	0.23 U*	0.37 U*	0.68 U	0.27 U	0.51 U	0.31 U	0.68 U*	0.47 U	0.68 U
DR-20VV15	DR-20	ug/kg DW	Sediment	0.97 U	0.21 U*	0.65 J*	0.63 U	0.26 U	0.48 U	0.29 U	0.63 U*	0.95 J	0.95 J
DR-21VV15	DR-21	ug/kg DW	Sediment	1.1 U	0.25 U*	0.46 J*	3.2 U	0.3 U	3.9	3.8	0.74 U*	54	61.7
DR-22VV14	DR-22	ug/kg DW	Sediment	1.1 U	0.25 U*	0.75 J*	0.75 U	0.57 J	0.97 J	0.88 J	0.75 U*	1.7 J	4.12 J
DR-23VV14	DR-23	ug/kg DW	Sediment	1.1 U	0.24 U*	0.4 U*	0.73 U	0.29 U	0.55 U	0.33 U	0.73 U*	0.51 U	0.73 U
DR-24VV15	DR-24	ug/kg DW	Sediment	1 U	0.23 U	0.43 J*	0.69 U	0.28 U	0.52 U	0.31 U	0.69 U	1.4 J	1.4 J
DR-25VV15	DR-25	ug/kg DW	Sediment	1 U	0.23 U	0.37 U*	0.68 U	0.27 U	0.51 U	0.31 U	0.68 U	1.1 J	1.1 J
DR-26VV15	DR-26	ug/kg DW	Sediment	0.95 U*	0.21 U*	0.57 J*	0.62 U	0.25 U	0.47 U	0.28 U	0.62 U	1.6 J	1.6 J
DR-36VV15	DR-26	ug/kg DW	Sediment	0.95 U	0.21 U*	0.7 J*	0.62 U	0.25 U	0.47 U	0.28 U	0.62 U*	1.5 J	1.5 J
DR-27VV17	DR-27	ug/kg DW	Sediment	0.98 U*	0.21 U*	0.35 U*	0.64 U	0.26 U	0.48 U	0.29 U	0.64 U	0.46 J	0.46 J
DR-28VV15	DR-28	ug/kg DW	Sediment	0.94 U*	0.21 U*	0.43 J*	0.62 U	0.25 U	0.46 U	0.28 U	0.62 U*	1 J	1 J
DRB-100W	DRB-100W	ug/kg DW	Sediment	14 U	3 U*	4.9 U	9 U	3.6 U	6.8 U	4.1 U	9 U	28 J	28 J
DRB-101W	DRB-101	ug/kg DW	Sediment	0.36 J	--	0.45 J	1.4 J	0.27 U	2.8 J	1.2 J	0.37 U	14	19.4 J
DRB-103E	DRB-103	ug/kg DW	Sediment	0.7 J	--	0.79 J	0.4 J	0.28 U	2.2 J	0.21 U	0.39 U	9.7	12.3 J
DRB-104W	DRB-104	ug/kg DW	Sediment	0.32 U	--	0.41 U	0.28 U	0.28 U	0.57 J	0.21 U	0.39 U	3.2 J	3.77 J
DRB-105	DRB-105	ug/kg DW	Sediment	0.32 U	--	0.41 U	0.29 U	0.29 U	0.29 J	0.22 U	0.4 U	1.7 J	1.99 J
DRB-106W	DRB-106	ug/kg DW	Sediment	1.3 J	--	1.4 J	0.28 U	0.28 U	0.51 J	0.21 U	0.39 U	4	4.51 J
DRB-107W	DRB-107	ug/kg DW	Sediment	0.35 J	--	0.33 U	0.23 U	0.23 U	0.62 J	0.17 U	0.32 U	2.6 J	3.22 J
DRB-108W	DRB-108	ug/kg DW	Sediment	16 U	3.6 U*	5.8 U	11 U	4.3 U	8.1 U	4.9 U	11 U	35 J	35 J
DRB-50W	DRB-108	ug/kg DW	Sediment	16 U	3.5 U	5.8 U	11 U	4.3 U	9.4 J	4.9 U	11 U	37 J	46.4 J
DRB-109W	DRB-109	ug/kg DW	Sediment	16 U	3.4 U*	5.6 U	10 U	4.1 U	7.7 U	4.7 U	10 U	31 J	31 J
DRB-110E	DRB-110	ug/kg DW	Sediment	0.45 J	--	0.4 U	0.28 U	0.28 U	1.1 J	0.21 U	0.38 U	5.1	6.2 J
DRB-111E	DRB-111	ug/kg DW	Sediment	18 U	3.9 U*	6.4 U	12 U	4.7 U	9.3 J	5.4 U	12 U	36 J	45.3 J
DRB-112W	DRB-112	ug/kg DW	Sediment	1.1 J	--	0.82 J	0.28 U	0.28 U	1.3 J	0.21 U	0.39 U	6	7.3 J
DRB-113W	DRB-113	ug/kg DW	Sediment	16 U	3.4 U*	5.6 U	10 U	4.1 U	12 J	4.7 U	10 U	52	64 J
DRB-114W	DRB-114	ug/kg DW	Sediment	17 U	3.7 U*	6.1 U	11 U	4.5 U	16 J	5.1 U	11 U	61	77 J
DRB-115W	DRB-115	ug/kg DW	Sediment	0.58 J	--	0.75 J	0.7 J	0.26 U	1.8 J	0.2 U	0.36 U	11	13.5 J
DRB-116W	DRB-116	ug/kg DW	Sediment	0.37 J	--	0.51 J	0.3 U	0.3 U	0.92 J	0.22 U	0.41 U	5.5	6.42 J
DRB-117W	DRB-117	ug/kg DW	Sediment	0.48 J	--	0.5 J	0.55 J	0.23 U	1.2 J	1 J	0.31 U	12	14.75 J
NFK501VV16	NFK501	ug/kg DW	Sediment	4.6 J	0.47 U	5.6	8.6	3.3 J	28	12	5.1	170	227 J
NFK502VV12	NFK502	ug/kg DW	Sediment	1.1 U	0.24 U	1.4 J*	1.7 J	0.29 U	4.8	3.6	0.71 U*	20	30.1 J
OF-28HS10	OF-28	ug/kg DW	Sediment	0.37 U	--	0.48 U	4.2 U	0.33 U	0.5 J	0.25 U	0.46 U	2.6 J	3.1 J
OF-33VV10	OF-33	ug/kg DW	Sediment	1.1 U	0.24 U	0.4 U	0.73 U	0.3 U	0.55 U	0.33 U	0.73 U	0.51 U	0.73 U
OF-36VV13	OF-36	ug/kg DW	Sediment	1.1 U	0.24 U	0.39 U	0.72 U	0.29 U	3	0.75 J	0.72 U	15	18.75 J
OF-41VV16	OF-41	ug/kg DW	Sediment	1.1 U	0.24 U	0.39 U	0.72 U	0.29 U	0.54 U	0.33 U	0.72 U	0.51 U	0.72 U
OR-01VV16	OR-01	ug/kg DW	Sediment	0.71 J	--	0.64 J	1.5 J	0.31 U	1.6 J	2.3 J	0.43 U	42	47.4 J
OR-02VV9	OR-02	ug/kg DW	Sediment	0.33 U	--	0.42 U	0.29 U	0.29 U	0.58 J	0.22 U	0.4 U	4.1	4.68 J
OR-04VV09	OR-04	ug/kg DW	Sediment	1.5 J	0.22 U	2 J	0.66 U	0.27 U	0.51 J	0.3 U	0.66 U	3.3	3.81 J
OR-05VV10	OR-05	ug/kg DW	Sediment	3.4 J	0.21 U	3.8	0.64 U	0.26 U	0.63 J	0.29 U	1.8 J	5.3	7.73 J
OR-06VV13	OR-06	ug/kg DW	Sediment	7.9	0.22 U	11	0.67 U	0.27 U	1.2 J	0.93 J	3.7	8.6	14.43 J
OR-07VV13	OR-07	ug/kg DW	Sediment	0.91 U	0.2 U	0.32 U	0.6 U	0.24 U	0.45 U	0.27 U	0.6 U	0.82 J	0.82 J
OR-08VV14	OR-08	ug/kg DW	Sediment	0.96 U	0.21 U	0.43 J	0.63 U	0.25 U	0.48 U	0.29 U	0.63 U	0.66 J	0.66 J
OR-09VV14	OR-09	ug/kg DW	Sediment	5.8	0.21 U	7.8	0.64 U	0.26 U	0.48 U	0.29 U	3.4	3.6	7
OR-10VV14	OR-10	ug/kg DW	Sediment	2.8 J	0.31 U	3.3	1.4 J	0.37 U	5.3	3.5	2.2 J	31	43.4 J
OR-11VV12	OR-11	ug/kg DW	Sediment	1.6 J	0.28 U	2 J	1.3 J	0.34 U	3.3	0.39 U	1.4 J	19	25 J
OR-12VV05	OR-12	ug/kg DW	Sediment	1.1 U	0.24 U	0.45 J	0.73 U	0.3 U	0.55 U	0.33 U	0.73 U	0.98 J	0.98 J
OS-03VV08	OS-03	ug/kg DW	Sediment	1.1 U	0.24 U	0.39 U	0.72 U	0.29 U	1 J	0.33 U	0.72 U	2.6	3.6 J
OS-05VV16	OS-05	ug/kg DW	Sediment	0.4 U	--	0.54 J	0.4 J	0.35 U	1.8 J	0.26 U	0.48 U	8.4	10.6 J
OS-06HS10	OS-06	ug/kg DW	Sediment	1.3 J	--	1.9 J	2 J	3.3 J	15	4.5	1.8 J	50	76.6 J

Table 9. LPAHs

Sample ID	Station ID	Unit	Sample Type	1-Methylnaphthalene	2-Chloronaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Fluorene	Naphthalene	Phenanthrene	Total LPAH**
OS-10HS10	OS-10	ug/kg DW	Sediment	3.2J	0.34U	4.2	2.3J	1.6J	10	6.1	3.2J	54	77.2 J
OS-14HS10	OS-14	ug/kg DW	Sediment	1.3J	--	1.5J	0.69J	0.48J	1.9J	0.22U	1.4J	12	16.47 J
OS-15HS10	OS-15	ug/kg DW	Sediment	0.32U	--	0.55J	0.28U	0.28U	1.1J	0.21U	0.39U	5.9	7 J
OS-18HS10	OS-18	ug/kg DW	Sediment	5.4J	--	5.9	3.3J	0.33U	8	0.25U	4.5	51	66.8 J
OS-21HS10	OS-21	ug/kg DW	Sediment	2.2J	--	2.6J	1.3J	0.71J	2J	0.28U	0.51U	14	18.01 J
OS-22HS10	OS-22	ug/kg DW	Sediment	0.58J	--	0.56J	0.8J	0.31U	1.7J	0.23U	0.43U	6.8	9.3 J
OS-23HS10	OS-23	ug/kg DW	Sediment	2.1J	--	2.4J	0.35U	0.48J	1J	0.26U	0.48U	9.9	11.38 J
OS-24AHS10	OS-24	ug/kg DW	Sediment	0.38U	--	0.48U	0.33U	0.33U	0.29U	0.25U	0.46U	2.3J	2.3 J
RS-01VV	Rinsate	ug/L	Water	0.051U	0.029U	0.054U	0.012U	0.025U	0.018U	0.041U	0.034J B	0.023U	NA
RS-02VV	Rinsate	ug/L	Water	0.051U	0.029U	0.054U	0.012U	0.025U	0.019U	0.041U	0.014U	0.023U	NA
RS-03VV	Rinsate	ug/L	Water	0.051U	0.03U	0.054U	0.012U	0.026U	0.019U	0.041U	0.029J	0.024U	NA
RS-04VV	Rinsate	ug/L	Water	0.064U	0.037U	0.068U	0.015U	0.032U	0.023U	0.052U	0.017U	0.03U	NA
RS-05	Rinsate	ug/L	Water	0.05U	0.029U	0.053U	0.012U	0.025U	0.018U	0.041U	0.014U	0.023U	NA

Notes:
 Results shown with a "B" qualifier indicate that the compound was detected in the associated blank.
 Results shown with a "U" qualifier are nondetected concentrations and reported as the Method Detection Limit (MDL).
 Results shown with a "J" qualifier denote a result less than the reporting limit but greater than or equal to the MDL and the concentration is an approximate value.
 Results shown with a "*" qualifier indicate that the Lab Control Sample (LCS) or the Lab Control Sample Duplicate (LCSD) exceeded the control limits.
 **The total LPAH result represents the sum of the concentrations of the following LPAH compounds: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, and anthracene. The result is the sum of detected concentrations for these compounds. If all compounds were undetected, the total LPAH value is represented by the single highest MDL.

-- = Not analyzed.
 DW = Dry weight
 NA = Not applicable
 ug/kg = Micrograms per kilogram
 ug/L = Micrograms per liter

Table 10. HPAHs

Sample ID	Station ID	Units	Sample Type	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Benzofluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Indeno[1,2,3-cd]	Pyrene	Total HPAH*
DR-01-VV-11	DR-01	ug/kg DW	Sediment	11	11	21	6.8	5.6	27	14	1.5U	35	6.4	27	164.8
DR-02VV12	DR-02	ug/kg DW	Sediment	0.87U	1.1U	0.72U	0.98U	0.92U	1.3U	1U	1.6U	0.41U	1.6U	1J	1J
DR-03VV15	DR-03	ug/kg DW	Sediment	0.85U	1.7J	0.71U	0.96U	0.9U	1.3U	0.98U	1.6U	0.5J	1.6U	0.49J	2.69J
DR-04VV15	DR-04	ug/kg DW	Sediment	0.86J	1.1U	0.7U	0.95U	0.89U	1.3U	0.97U	1.6U	0.93J	1.6U	0.82J	2.61J
DR-05VV15	DR-05	ug/kg DW	Sediment	0.85U	1.7J	0.7U	0.95U	0.9U	1.3U	0.98U	1.6U	0.46J	1.7J	0.61J	4.47J
DR-06VV16	DR-06	ug/kg DW	Sediment	0.77U	1U	0.64U	0.87U	0.82U	1.2U	0.89U	1.4U	0.37U	1.4U	0.32U	1.4U
DR-07VV15	DR-07	ug/kg DW	Sediment	7.4	7.3	7.7	3.1	2.5J	12	7.6	1.9J	19	4J	16	88.5J
DR-08VV16	DR-08	ug/kg DW	Sediment	0.8U	1U	0.87J	0.9U	0.85U	1.2U	0.93U	1.5U	1J	1.5U	0.84J	2.71J
DR-09VV15	DR-09	ug/kg DW	Sediment	0.85U	1.1U	0.71U	0.96U	0.9U	1.3U	0.98U	1.6U	1.1J	1.6U	0.82J	1.92J
DR-10VV16	DR-10	ug/kg DW	Sediment	0.77U	1U	0.76J	0.87U	0.82U	1.2U	0.89U	1.4U	1.5J	1.4U	1.3J	3.56J
DR-11VV13	DR-11	ug/kg DW	Sediment	0.88U	1.7J	0.73U	0.99U	0.93U	1.4U	1U	1.6U	0.55J	1.7J	0.56J	4.51J
DR-12VV14	DR-12	ug/kg DW	Sediment	0.71U	1.8J	0.68J	0.79U	0.75U	1.1U	0.81U	1.3U	0.9J	1.3U	1J	4.38J
DR-14VV16	DR-14	ug/kg DW	Sediment	3.7	4.2	4.8	1.7J	1.5J	6.1	3.3	1.5U	8.9	2.6J	6.1	42.9J
DR-15VV15	DR-15	ug/kg DW	Sediment	0.78U	1U	0.65U	0.88U	0.83U	1.2U	0.9U	1.4U	0.67J	1.4U	0.6J	1.27J
DR-16VV15	DR-16	ug/kg DW	Sediment	0.74U	1.8J	1J	0.88J	0.78U	1.3J	0.91J	1.4U	1.2J	1.4U	1.1J	8.19J
DR-17VV16	DR-17	ug/kg DW	Sediment	0.74U	1.4J	0.61U	0.83U	0.79U	1.1U	0.85U	1.4U	0.57J	1.4U	0.56J	2.53J
DR-18VV14	DR-18	ug/kg DW	Sediment	0.79U	1U	0.66U	0.89U	0.84U	1.2U	0.91U	1.5U	0.53J	1.5U	0.63J	1.16J
DR-19VV15	DR-19	ug/kg DW	Sediment	0.77U	1U	0.64U	0.86U	0.82U	1.2U	0.89U	1.4U	0.37U	1.4U	0.32U	1.4U
DR-20VV15	DR-20	ug/kg DW	Sediment	0.82J	0.94U	0.6U	0.81U	0.77U	1.1U	0.83U	1.3U	0.94J	1.3U	0.94J	2.7J
DR-21VV15	DR-21	ug/kg DW	Sediment	21	21	29	13	10	39	24	3.2J	84	15	57	316.2J
DR-22VV14	DR-22	ug/kg DW	Sediment	1.5J	2.7J	1.2J	1.2J	0.9U	2.2J	1.3J	1.7J	1.3J	1.6U	1.3J	14.4J
DR-23VV14	DR-23	ug/kg DW	Sediment	0.83U	1.1U	0.69U	0.93U	0.88U	1.3U	0.96U	1.5U	0.4U	1.5U	0.35U	1.5U
DR-24VV15	DR-24	ug/kg DW	Sediment	0.78U	1U	0.65U	0.88U	0.83U	1.2U	0.9U	1.4U	0.75J	1.4U	0.65J	1.4J
DR-25VV15	DR-25	ug/kg DW	Sediment	0.77U	1U	0.64U	0.87U	0.82U	1.2U	0.89U	1.4U	0.7J	1.4U	0.64J	1.34J
DR-26VV15	DR-26	ug/kg DW	Sediment	0.77J	0.93U	0.59U	0.8U	0.75U	1.1U	0.82U	1.3U	0.88J	1.3U	0.87J	2.52J
DR-36VV15	DR-26	ug/kg DW	Sediment	0.71U	0.93U	1.1J	0.8U	0.75U	1.7J	0.82U	1.3U	1.6J	1.3U	1.6J	6J
DR-27VV17	DR-27	ug/kg DW	Sediment	0.73U	0.95U	0.61U	0.82U	0.77U	1.1U	0.84U	1.3U	0.35J	1.3U	0.34J	0.69J
DR-28VV15	DR-28	ug/kg DW	Sediment	0.7U	0.92U	0.58U	0.79U	0.75U	1.1U	0.81U	1.3U	0.59J	1.3U	0.58J	1.17J
DRB-100W	DRB-100W	ug/kg DW	Sediment	42	38J	63	28J	25J	94	49	19U	72	25J	68	504J
DRB-101W	DRB-101	ug/kg DW	Sediment	9.9	12	15	7.5	5.7	--	12	4.5J	25	8.7	22	122.3J
DRB-103E	DRB-103	ug/kg DW	Sediment	9.8	11	16	9.7	5.7	--	12	5.6J	23	9.8	20	122.6J
DRB-104W	DRB-104	ug/kg DW	Sediment	3.4J	5.3J	5.2	3.7J	2.9J	--	4.8	0.39U	8	5.1J	6.6	45J
DRB-105	DRB-105	ug/kg DW	Sediment	1.5J	3.9J	2.7J	0.27U	0.85J	--	2J	0.4U	2.6J	3.2J	2.1J	18.85J
DRB-106W	DRB-106	ug/kg DW	Sediment	3.4J	5.9	6.4	3.8J	2.2J	--	4.7	0.39U	7.6	5.4J	6.8	46.2J
DRB-107W	DRB-107	ug/kg DW	Sediment	2J	4J	3.1	2.7J	1.1J	--	2.5J	0.32U	4.3	3.7J	3.7	27.1J
DRB-108W	DRB-108	ug/kg DW	Sediment	31J	34J	54	37J	15J	69J	39J	23U	66	27J	61	433J
DRB-50W	DRB-108	ug/kg DW	Sediment	32J	38J	59	29J	24J	81	42J	22U	76	29J	67	477J
DRB-109W	DRB-109	ug/kg DW	Sediment	26J	27J	47	26J	16J	63J	34J	21U	58	23J	49	369J
DRB-110E	DRB-110	ug/kg DW	Sediment	4.6	7	7.9	4.4	3.1J	--	5.2	0.38U	10	5.9J	8.7	56.8J
DRB-111E	DRB-111	ug/kg DW	Sediment	31J	39J	55	34J	19J	75J	42J	25U	71	30J	66	462J
DRB-112W	DRB-112	ug/kg DW	Sediment	6.8	8.8	11	8.5	4.4J	--	8.5	4.6J	15	8.8	13	89.4J
DRB-113W	DRB-113	ug/kg DW	Sediment	39J	52J	67	44J	22J	94	55	22U	100	40J	94	607J
DRB-114W	DRB-114	ug/kg DW	Sediment	58	63	100	63	33J	140	77	24U	150	58J	130	872J
DRB-115W	DRB-115	ug/kg DW	Sediment	9.2	11	14	7.8	5.4	--	12	0.36U	24	8.2	19	110.6J
DRB-116W	DRB-116	ug/kg DW	Sediment	4.3J	7.2	8.8	0.28U	3.3J	--	6.4	0.41U	11	5.2J	8.8	55J
DRB-117W	DRB-117	ug/kg DW	Sediment	7.5	10	14	5.7	5	--	9.6	0.31U	26	7	19	103.8
NFK-501VV16	NFK501	ug/kg DW	Sediment	160	160	290	110	80	82	210	25	470	98	360	2045
NFK502VV12	NFK502	ug/kg DW	Sediment	53	25	61	12	15	76	59	1.5U	170	13	140	624
OF-28HS10	OF-28	ug/kg DW	Sediment	3.1J	6.6	5.3	3.9J	2.9J	--	3.6J	4J	6.3	5.5J	5.6	46.8J

Table 10. HPAHs

Sample ID	Station ID	Units	Sample Type	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Benzofluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Indeno[1,2,3-cd]	Pyrene	Total HPAH*
OF-33VV10	OF-33	ug/kg DW	Sediment	0.83U	1.1U	0.69U	0.94U	0.89U	1.3U	0.96U	1.5U	0.4U	1.5U	0.35U	1.5
OF-36VV13	OF-36	ug/kg DW	Sediment	9	9.3	10	5.5	4	16	9.9	1.5U	27	5.1	23	118.8
OF-41VV16	OF-41	ug/kg DW	Sediment	0.82U	1.1U	0.68U	0.92U	0.87U	1.3U	0.95U	1.5U	0.39U	1.5U	0.4J	0.4 J
OR-01VV16	OR-01	ug/kg DW	Sediment	12	15	23	9.6	9.1	--	22	5.4J	75	11	54	236.1 J
OR-02VV9	OR-02	ug/kg DW	Sediment	4.3J	6.5	6.6	2.4J	2.4J	--	5	0.4U	11	5.2J	8.3	51.7 J
OR-04VV09	OR-04	ug/kg DW	Sediment	1.2J	0.99U	1.6J	0.85U	0.8U	2J	1.8J	1.4U	2.9	1.4U	2.5	12 J
OR-05VV10	OR-05	ug/kg DW	Sediment	1.5J	0.95U	0.76J	0.82U	0.77U	1.4J	1.2J	1.3U	7.1	1.3U	6.8	18.76 J
OR-06VV13	OR-06	ug/kg DW	Sediment	2.2J	1U	1.2J	0.85U	0.81U	2.2J	2.8J	1.4U	5.8	1.4U	5.8	20 J
OR-07VV13	OR-07	ug/kg DW	Sediment	0.68U	0.89U	0.6J	0.76U	0.72U	1.2J	0.78U	1.3U	1.1J	1.3U	1.1J	4 J
OR-08VV14	OR-08	ug/kg DW	Sediment	0.72U	0.94U	0.64J	0.81U	0.76U	1.1U	0.83U	1.3U	0.81J	1.3U	0.79J	2.24 J
OR-09VV14	OR-09	ug/kg DW	Sediment	0.73U	0.95U	0.6U	0.82U	0.77U	1.1U	0.84U	1.3U	0.96J	1.3U	0.9J	1.86 J
OR-10VV14	OR-10	ug/kg DW	Sediment	27	32	53	29	19	77	41	1.9U	76	1.9U	62	416
OR-11VV12	OR-11	ug/kg DW	Sediment	17	21	35	17	11	49	26	4.7J	46	14	37	277.7 J
OR-12VV05	OR-12	ug/kg DW	Sediment	0.87J	1.1U	0.7U	0.94U	0.89U	1.3U	0.97U	1.5U	0.82J	1.5U	0.79J	2.48 J
OS-03VV08	OS-03	ug/kg DW	Sediment	8.8	7.1	10	4.8	3.1J	120	6.5	1.5U	12	4.3J	10	186.6 J
OS-05VV16	OS-05	ug/kg DW	Sediment	5.7	12	9.5	9.3	3.7J	--	13	0.48U	17	6.2J	26	102.4 J
OS-06HS10	OS-06	ug/kg DW	Sediment	80	57	120	35	45	--	120	15	160	37	140	809
OS-10HS10	OS-10	ug/kg DW	Sediment	48	55	88	42	30	14	69	10	140	35	110	641
OS-14HS10	OS-14	ug/kg DW	Sediment	11	12	19	14	7.4	--	16	0.4U	24	10	20	133.4
OS-15HS10	OS-15	ug/kg DW	Sediment	6.1	8.3	11	8.2	5.4	--	11	0.39U	16	9.5	13	88.5
OS-18HS10	OS-18	ug/kg DW	Sediment	34	38	62	30	24	--	50	0.46U	86	27	77	428
OS-21HS10	OS-21	ug/kg DW	Sediment	8.3	9.9	19	8.1	7	--	15	0.51U	23	7.9J	20	118.2 J
OS-22HS10	OS-22	ug/kg DW	Sediment	8	11	12	6.1	5.6	--	9.6	0.43U	19	8	16	95.3
OS-23HS10	OS-23	ug/kg DW	Sediment	5.6	7	11	7.2	5J	--	10	0.48U	16	4.4J	14	80.2 J
OS-24AHS10	OS-24	ug/kg DW	Sediment	3.3J	6.4	5.3	4J	2.2J	--	4.3J	0.46U	6.5	6J	5.8	43.8 J
RS-01VV	Rinsate	ug/L	Water	0.032U	0.026U	0.045U	0.058U	0.054U	0.045U	0.044U	0.045U	0.026U	0.05U	0.019U	NA
RS-02VV	Rinsate	ug/L	Water	0.032U	0.026U	0.045U	0.059U	0.054U	0.045U	0.044U	0.045U	0.026U	0.05U	0.02U	NA
RS-03VV	Rinsate	ug/L	Water	0.033U	0.027U	0.045U	0.059U	0.054U	0.045U	0.044U	0.045U	0.027U	0.05U	0.02U	NA
RS-04VV	Rinsate	ug/L	Water	0.041U	0.033U	0.057U	0.074U	0.068U	0.045U	0.056U	0.057U	0.033U	0.063U	0.025U	NA
RS-05	Rinsate	ug/L	Water	0.032U	0.026U	0.045U	0.058U	0.053U	0.045U	0.044U	0.045U	0.026U	0.049U	0.019U	NA

Notes:

Results shown with a "U" qualifier are nondetected concentrations and reported as the Method Detection Limit (MDL).

Results shown with a "J" qualifier denote a result less than the reporting limit but greater than or equal to the MDL and the concentration is an approximate value.

*The total HPAH result represents the sum of the detected concentrations of the following HPAH compounds: fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzofluoranthene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, indeno[1,2,3-c,d]pyrene, dibenzo[a,h]anthracene, and benzo[g,h,i]perylene. If all compounds were undetected, the total HPAH value is represented by the single highest MDL.

-- = Not analyzed.

DW = Dry weight

NA = Not applicable

ug/kg = Micrograms per kilogram

ug/L = Micrograms per liter

Table 11. Phthalates

Sample ID	Station ID	Units	Sample Type	Bis (2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethyl phthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate
DR-01-VV-11	DR-01	ug/kg DW	Sediment	29 U	6.7 J	1.6 J B	0.94 U	7.8 J B	4 U
DR-02VV12	DR-02	ug/kg DW	Sediment	32 U	3.9 U	0.96 U	1 U	1.7 U	4.4 U
DR-03VV15	DR-03	ug/kg DW	Sediment	31 U	4.4 J	2.2 J B	1 U	7.5 J B	4.3 U
DR-04VV15	DR-04	ug/kg DW	Sediment	31 U	4.6 J	1.8 J B	1 U	7.3 J B	4.3 U
DR-05VV15	DR-05	ug/kg DW	Sediment	31 U	4.8 J	1.9 J B	1 U	7.4 J B	4.3 U
DR-06VV16	DR-06	ug/kg DW	Sediment	28 U	4.3 J	1.8 J B	0.91 U	7 J B	3.9 U
DR-07VV15	DR-07	ug/kg DW	Sediment	26 U	3.5 J	1.6 J B	0.85 U	15 J B	3.6 U
DR-08VV16	DR-08	ug/kg DW	Sediment	30 U	4.4 J	2.1 J B	0.95 U	7.3 J B	4.1 U
DR-09VV15	DR-09	ug/kg DW	Sediment	31 U	5.4 J	1.7 J B	1 U	7.4 J B	4.3 U
DR-10VV16	DR-10	ug/kg DW	Sediment	28 U	3.4 U	2 J B	0.91 U	6.8 J B	3.9 U
DR-11VV13	DR-11	ug/kg DW	Sediment	32 U	15	2.6 J B	1 U	13 J B	4.5 U
DR-12VV14	DR-12	ug/kg DW	Sediment	26 U	8.3 J	0.78 U	0.84 U	20 J B	3.6 U
DR-14VV16	DR-14	ug/kg DW	Sediment	29 U	9.3 J	1.8 J B	0.94 U	11 J B	4 U
DR-15VV15	DR-15	ug/kg DW	Sediment	29 U	9.9 J	1.8 J B	0.93 U	10 J B	4 U
DR-16VV15	DR-16	ug/kg DW	Sediment	27 U	8.7 J	0.82 U	0.87 U	13 J B	3.7 U
DR-17VV16	DR-17	ug/kg DW	Sediment	27 U	7.1 J	1.9 J B	0.88 U	12 J B	3.8 U
DR-18VV14	DR-18	ug/kg DW	Sediment	29 U	14	0.88 U	0.94 U	11 J B	4 U
DR-19VV15	DR-19	ug/kg DW	Sediment	28 U	7.7 J B	0.85 U	0.91 U	10 J B	3.9 U
DR-20VV15	DR-20	ug/kg DW	Sediment	27 U	6.9 J B	0.8 U	0.85 U	9.1 J B	3.7 U
DR-21VV15	DR-21	ug/kg DW	Sediment	31 U	7.6 J B	0.94 U	1 U	11 J B	4.3 U
DR-22VV14	DR-22	ug/kg DW	Sediment	31 U	9 J B	1.4 J B	1 U	12 J B	4.3 U
DR-23VV14	DR-23	ug/kg DW	Sediment	31 U	6.7 J B	0.92 U	0.99 U	10 J B	4.2 U
DR-24VV15	DR-24	ug/kg DW	Sediment	29 U	3.5 U	0.87 U	0.93 U	9.8 J B	4 U
DR-25VV15	DR-25	ug/kg DW	Sediment	29 U	7 J B	0.86 U	0.92 U	9.6 J B	3.9 U
DR-26VV15	DR-26	ug/kg DW	Sediment	26 U	11 J	1.7 J B	0.84 U	10 J B	3.6 U
DR-36VV15	DR-26	ug/kg DW	Sediment	26 U	6.7 J B	0.78 U	0.84 U	8.9 J B	3.6 U
DR-27VV17	DR-27	ug/kg DW	Sediment	27 U	11	2.1 J B	0.86 U	13 J B	3.7 U
DR-28VV15	DR-28	ug/kg DW	Sediment	26 U	7.3 J	0.78 U	0.83 U	12 J B	3.6 U
DRB-100W	DRB-100W	ug/kg DW	Sediment	380 U	46 U	11 U	12 U	21 J	52 U
DRB-108W	DRB-108	ug/kg DW	Sediment	450 U	55 U	14 U	15 U	25 U	490
DRB-50W	DRB-108	ug/kg DW	Sediment	450 U	54 U	13 U	14 U	24 U	490
DRB-109W	DRB-109	ug/kg DW	Sediment	430 U	52 U	13 U	14 U	23 U	460
DRB-111E	DRB-111	ug/kg DW	Sediment	500 U	60 U	15 U	16 U	27 J	540
DRB-113W	DRB-113	ug/kg DW	Sediment	430 U	52 U	13 U	14 U	23 U	470
DRB-114W	DRB-114	ug/kg DW	Sediment	470 U	57 U	14 U	15 U	26 U	520
NFK-501VV16	NFK501	ug/kg DW	Sediment	720	86 B	7.8 J B	12 J	29 J B	99
NFK502VV12	NFK502	ug/kg DW	Sediment	92 J	19 B	1.1 J B	0.96 U	11 J B	13 J
OF-33VV10	OF-33	ug/kg DW	Sediment	31 U	15 B	0.92 U	0.99 U	10 J B	4.2 U

Table 11. Phthalates

Sample ID	Station ID	Units	Sample Type	Bis (2-ethylhexyl) phthalate	Butyl benzyl phthalate	Diethyl phthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate
OF-36VV13	OF-36	ug/kg DW	Sediment	30 U	17 B	3.1 J B	0.97 U	10 J B	4.1 U
OF-41VV16	OF-41	ug/kg DW	Sediment	30 U	16 B	3 J B	0.97 U	10 J B	4.2 U
OR-04VV09	OR-04	ug/kg DW	Sediment	28 U	21 B	2.3 J B	0.89 U	9.6 J B	3.8 U
OR-05VV10	OR-05	ug/kg DW	Sediment	27 U	20 B	2.8 J B	0.86 U	9.8 J B	3.7 U
OR-06VV13	OR-06	ug/kg DW	Sediment	28 U	22 B	2.7 J B	3.9 J	9.8 J B	3.9 U
OR-07VV13	OR-07	ug/kg DW	Sediment	25 U	18 B	2.6 J B	0.81 U	9.4 J B	3.5 U
OR-08VV14	OR-08	ug/kg DW	Sediment	27 U	19 B	3 J B	0.85 U	8.5 J B	3.7 U
OR-09VV14	OR-09	ug/kg DW	Sediment	27 U	21 B	2.2 J B	0.86 U	8.3 J B	3.7 U
OR-10VV14	OR-10	ug/kg DW	Sediment	320	93 B	4.1 J B	8.8 J	17 J B	44
OR-11VV12	OR-11	ug/kg DW	Sediment	130 J	46 B	3.4 J B	1.1 U	16 J B	4.9 U
OR-12VV05	OR-12	ug/kg DW	Sediment	31 U	28 B	3 J B	0.99 U	11 J B	4.3 U
OS-03VV08	OS-03	ug/kg DW	Sediment	30 U	23 B	2.2 J B	0.98 U	10 J B	4.2 U
OS-10HS10	OS-10	ug/kg DW	Sediment	430	240 B	6 J B	19	60 B	47
RS-01VV	Rinsate	ug/L	Water	1.1 J B	0.67 J	0.15 J B	0.12 U	0.83 J B	0.18 U
RS-02VV	Rinsate	ug/L	Water	0.68 J B	0.29 J B	0.1 J B	0.12 U	0.51 J B	0.18 U
RS-03VV	Rinsate	ug/L	Water	1.1 J B	0.59 J B	0.092 U	0.12 U	0.73 J	0.18 U
RS-04VV	Rinsate	ug/L	Water	1.3 J B	1.4 J B	0.11 U	0.15 U	1.1 J	0.22 U
RS-05	Rinsate	ug/L	Water	0.88 J B	0.23 U	0.09 U	0.12 U	0.78 J	0.17 U

Notes:

Results shown with a "B" qualifier indicate that the compound was detected in the associated blank.

Results shown with a "U" qualifier are nondetected concentrations and reported as the Method Detection Limit (MDL).

Results shown with a "J" qualifier denote a result less than the reporting limit but greater than or equal to the MDL and the concentration is an approximate value.

DW = Dry weight

ug/kg = Micrograms per kilogram

ug/L = Micrograms per liter

Table 12. Organonitrogens

Sample ID	Station ID	Units	Sample Type	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Nitroaniline	3,3'-Dichlorobenzidine	3-Nitroaniline	4-Chloroaniline	4-Nitroaniline	Carbazole	Nitrobenzene	N-Nitrosodi-n-propylamine	N-Nitroso diphenylamine
DR-01-VV-11	DR-01	ug/kg DW	Sediment	1.7U	2.3U	2.3U	1.1U*	3.5U	3.3U	2.3U	4U	1.8U*	3.2U*	1.8U
DR-02VV12	DR-02	ug/kg DW	Sediment	1.9U	2.5U	2.5U	1.2U*	3.9U	3.6U	2.5U	4.4U	2U*	3.5U*	2U
DR-03VV15	DR-03	ug/kg DW	Sediment	1.8U	2.5U	2.5U	1.2U*	3.8U	3.5U	2.5U	4.3U	2U*	3.4U*	2U
DR-04VV15	DR-04	ug/kg DW	Sediment	1.8U	2.5U	2.5U	1.2U*	3.8U	3.5U	2.5U	4.3U	1.9U*	3.4U*	1.9U
DR-05VV15	DR-05	ug/kg DW	Sediment	1.8U	2.5U	2.5U	1.2U*	3.8U	3.5U	2.5U	4.3U	2U*	3.4U*	2U
DR-06VV16	DR-06	ug/kg DW	Sediment	1.7U	2.3U	2.3U	1.1U*	3.4U	3.2U	2.3U	3.9U	1.8U*	3.1U*	1.8U
DR-07VV15	DR-07	ug/kg DW	Sediment	1.5U	2.1U	2.1U	1U*	3.2U	3U	2.1U	3.6U	1.7U*	2.9U*	1.7U
DR-08VV16	DR-08	ug/kg DW	Sediment	1.7U	2.3U	2.3U	1.1U*	3.6U	3.3U	2.3U	4.1U	1.9U*	3.2U*	1.9U
DR-09VV15	DR-09	ug/kg DW	Sediment	1.8U	2.5U	2.5U	1.2U*	3.8U	3.5U	2.5U	4.3U	2U*	3.4U*	2U
DR-10VV16	DR-10	ug/kg DW	Sediment	1.7U	2.3U	2.3U	1.1U*	3.4U	3.2U	2.3U	3.9U	1.8U*	3.1U*	1.8U
DR-11VV13	DR-11	ug/kg DW	Sediment	1.9U	2.6U	2.6U	1.2U*	3.9U	3.7U	2.6U	4.5U	2U*	3.5U*	2U
DR-12VV14	DR-12	ug/kg DW	Sediment	1.5U	2.1U	2.1U	0.99U*	3.1U	2.9U	2.1U	3.6U	1.6U*	2.8U*	1.6U
DR-14VV16	DR-14	ug/kg DW	Sediment	1.7U	2.3U	2.3U	1.1U*	3.5U	3.3U	2.3U	4U	1.8U*	3.2U*	1.8U
DR-15VV15	DR-15	ug/kg DW	Sediment	1.7U	2.3U	2.3U	1.1U*	3.5U	3.2U	2.3U	4U	1.8U*	3.1U*	1.8U
DR-16VV15	DR-16	ug/kg DW	Sediment	1.6U	2.2U	2.2U	1U*	3.3U	3.1U	2.2U	3.7U	1.7U*	2.9U*	1.7U
DR-17VV16	DR-17	ug/kg DW	Sediment	1.6U	2.2U	2.2U	1U*	3.3U	3.1U	2.2U	3.8U	1.7U*	3U*	1.7U
DR-18VV14	DR-18	ug/kg DW	Sediment	1.7U	2.3U	2.3U	1.1U*	3.5U	3.3U	2.3U	4U	1.8U*	3.2U*	1.8U
DR-19VV15	DR-19	ug/kg DW	Sediment	1.7U	2.3U	2.3U	1.1U*	3.4U	3.2U	2.3U	3.9U	1.8U*	3.1U*	1.8U
DR-20VV15	DR-20	ug/kg DW	Sediment	1.6U	2.1U	2.1U	1U	3.2U	3U	2.1U	3.7U	1.7U*	2.9U	1.7U
DR-21VV15	DR-21	ug/kg DW	Sediment	1.8U	2.5U	2.5U	1.2U	3.8U	3.5U	2.5U	9.4J	2U*	3.4U	2U
DR-22VV14	DR-22	ug/kg DW	Sediment	1.8U	2.5U	2.5U	1.2U	3.8U	3.5U	2.5U	4.3U	2U*	3.4U	2U
DR-23VV14	DR-23	ug/kg DW	Sediment	1.8U	2.4U	2.4U	1.2U	3.7U	3.5U	2.4U	4.2U	1.9U*	3.3U	1.9U
DR-24VV15	DR-24	ug/kg DW	Sediment	1.7U	2.3U	2.3U	1.1U	3.5U	3.3U	2.3U	4U	1.8U*	3.1U	1.8U
DR-25VV15	DR-25	ug/kg DW	Sediment	1.7U	2.3U	2.3U	1.1U	3.4U	3.2U	2.3U	3.9U	1.8U*	3.1U	1.8U
DR-26VV15	DR-26	ug/kg DW	Sediment	1.5U	2.1U	2.1U	0.99U*	3.2U	2.9U	2.1U	3.6U	1.6U*	2.8U*	1.6U
DR-36VV15	DR-26	ug/kg DW	Sediment	5.7J	2.1U	2.1U	0.99U	3.2U	2.9U	2.1U	3.6U	1.6U*	2.8U*	1.6U
DR-27VV17	DR-27	ug/kg DW	Sediment	1.6U	2.1U	2.1U	1U*	3.3U	3U	2.1U	3.7U	1.7U*	2.9U*	1.7U
DR-28VV15	DR-28	ug/kg DW	Sediment	1.5U	2.1U	2.1U	0.98U*	3.1U	2.9U	2.1U	3.6U	1.6U*	2.8U*	1.6U
DRB-100W	DRB-100W	ug/kg DW	Sediment	22U	30U	30U	14U	46U	43U	30U	52U	24U	41U	24U*
DRB-108W	DRB-108	ug/kg DW	Sediment	26U	36U	36U	17U	55U	51U	36U	62U	28U	49U	28U*
DRB-50W	DRB-108	ug/kg DW	Sediment	26U	35U	35U	17U	54U	50U	35U	62U	28U	49U	28U*
DRB-109W	DRB-109	ug/kg DW	Sediment	25U	34U	34U	16U	52U	48U	34U	59U	27U	47U	27U*
DRB-111E	DRB-111	ug/kg DW	Sediment	29U	39U	39U	19U	60U	56U	39U	68U	31U	54U	31U*
DRB-113W	DRB-113	ug/kg DW	Sediment	25U	34U	34U	16U	52U	49U	34U	59U	27U	47U	27U*
DRB-114W	DRB-114	ug/kg DW	Sediment	28U	37U	37U	18U	57U	53U	37U	65U	30U	51U	30U*
NFK-501VV16	NFK501	ug/kg DW	Sediment	3.5U	4.7U	4.7U	2.3U	7.2U	6.7U	4.7U	53	3.7U	6.5U	3.7U
NFK502VV12	NFK502	ug/kg DW	Sediment	1.8U	2.4U	2.4U	1.1U	3.6U	3.4U	2.4U	4.1U	1.9U*	3.3U	1.9U
OF-33VV10	OF-33	ug/kg DW	Sediment	1.8U	2.4U	2.4U	1.2U	3.7U	3.5U	2.4U	4.2U	1.9U	3.3U	1.9U
OF-36VV13	OF-36	ug/kg DW	Sediment	1.8U	2.4U	2.4U	1.1U	3.6U	3.4U	2.4U	4.1U	1.9U	3.3U	1.9U
OF-41VV16	OF-41	ug/kg DW	Sediment	1.8U	2.4U	2.4U	1.2U	3.7U	3.4U	2.4U	4.2U	1.9U	3.3U	1.9U
OR-04VV09	OR-04	ug/kg DW	Sediment	1.6U	2.2U	2.2U	1.1U	3.4U	3.1U	2.2U	3.8U	1.7U	3U	1.7U
OR-05VV10	OR-05	ug/kg DW	Sediment	1.6U	2.1U	2.1U	1U	3.2U	3U	2.1U	3.7U	1.7U	2.9U	1.7U
OR-06VV13	OR-06	ug/kg DW	Sediment	1.6U	2.2U	2.2U	1.1U	3.4U	3.2U	2.2U	3.9U	1.8U	3U	1.8U
OR-07VV13	OR-07	ug/kg DW	Sediment	1.5U	2U	2U	0.95U	3U	2.8U	2U	3.5U	1.6U	2.7U	1.6U
OR-08VV14	OR-08	ug/kg DW	Sediment	1.6U	2.1U	2.1U	1U	3.2U	3U	2.1U	3.7U	1.7U	2.9U	1.7U
OR-09VV14	OR-09	ug/kg DW	Sediment	1.6U	2.1U	2.1U	1U	3.2U	3U	2.1U	3.7U	1.7U	2.9U	1.7U
OR-10VV14	OR-10	ug/kg DW	Sediment	2.2U	3.1U	3.1U	1.5U	4.7U	4.3U	3.1U	8.5J	2.4U	4.2U	2.4U
OR-11VV12	OR-11	ug/kg DW	Sediment	2.1U	2.8U	2.8U	1.4U	4.3U	4U	2.8U	6.4J	2.2U	3.9U	2.2U
OR-12VV05	OR-12	ug/kg DW	Sediment	1.8U	2.4U	2.4U	1.2U	3.7U	3.5U	2.4U	4.3U	1.9U	3.3U	1.9U
OS-03VV08	OS-03	ug/kg DW	Sediment	1.8U	2.4U	2.4U	1.2U	3.7U	3.4U	2.4U	4.2U	1.9U	3.3U	1.9U
OS-10HS10	OS-10	ug/kg DW	Sediment	2.5U	3.4U	3.4U	1.6U	5.1U	4.8U	3.4U	16J	2.6U	4.6U	2.6U
RS-01VV	Rinsate	ug/L	Water	0.12U	0.14U	0.11U	1.6U	0.54U	0.18U	0.18U	0.088U	0.073U	0.19U	0.13U
RS-02VV	Rinsate	ug/L	Water	0.12U	0.14U	0.11U	1.6U	0.55U	0.19U	0.18U	0.088U	0.073U	0.2U	0.13U
RS-03VV	Rinsate	ug/L	Water	0.12U	0.14U	0.11U	1.6U	0.55U	0.19U	0.18U	0.089U	0.074U	0.2U	0.13U
RS-04VV	Rinsate	ug/L	Water	0.15U	0.17U	0.14U	2U	0.69U	0.23U	0.22U	0.11U	0.093U	0.25U	0.16U
RS-05	Rinsate	ug/L	Water	0.12U	0.14U	0.11U	1.5U	0.54U	0.18U	0.17U	0.087U	0.073U	0.19U	0.13U

Notes:
 Results shown with a "J" qualifier denote a result less than the reporting limit but greater than or equal to the MDL and the concentration is an approximate value.
 Results shown with a "U" qualifier are nondetected concentrations and reported as the Method Detection Limit (MDL).
 Results shown with a "*" qualifier indicate that the Lab Control Sample (LCS) or the Lab Control Sample Duplicate (LCS-D) exceeded the control limits.
 DW = Dry weight
 ug/kg = Micrograms per kilogram
 ug/L = Micrograms per liter

Table 13. Ionizable Organics

Sample ID	Station ID	Units	Sample Type	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	3 & 4 Methylphenol	4,6-Dinitro-2-methylphenol	4-Chloro-3-methylphenol	4-Nitrophenol	Benzoic acid	Benzyl alcohol	Pentachlorophenol	Phenol
DR-01-VV-11	DR-01	ug/kg DW	Sediment	2.8 U	4 U	2.3 U*	2.3 U*	25 U	2.8 U*	3.4 U*	2.8 U*	6.4 U*	33 U	2.7 U	32 U	100 U	3.6 U*	7 J	3.3 U*
DR-02VV12	DR-02	ug/kg DW	Sediment	3.1 U	4.4 U	2.5 U*	2.5 U*	27 U	3.1 U*	3.7 U*	3.1 U*	7.1 U*	36 U	2.9 U	35 U	300 J	53 *	4.1 U	3.6 U*
DR-03VV15	DR-03	ug/kg DW	Sediment	3 U	4.3 U	2.5 U*	2.5 U*	27 U	3 U*	3.7 U*	3 U*	6.9 U*	35 U	2.9 U	34 U	110 U	3.9 U*	4.1 U	3.5 U*
DR-04VV15	DR-04	ug/kg DW	Sediment	3 U	4.3 U	2.5 U*	2.5 U*	27 U	3 U*	3.6 U*	3 U*	6.9 U*	35 U	2.9 U	34 U	110 U	3.9 U*	4 U	3.5 U*
DR-05VV15	DR-05	ug/kg DW	Sediment	3 U	4.3 U	2.5 U*	2.5 U*	27 U	3 U*	3.7 U*	3 U*	6.9 U*	35 U	2.9 U	34 U	110 U	3.9 U*	4 U	3.5 U*
DR-06VV16	DR-06	ug/kg DW	Sediment	2.7 U	3.9 U	2.3 U*	2.3 U*	24 U	2.7 U*	3.3 U*	2.7 U*	6.3 U*	32 U	2.6 U	31 U	98 U	3.6 U*	3.7 U	3.2 U*
DR-07VV15	DR-07	ug/kg DW	Sediment	2.5 U	3.6 U	2.1 U*	2.1 U*	23 U	2.5 U*	3.1 U*	2.5 U*	5.8 U*	30 U	2.4 U	29 U	92 U	3.3 U*	3.4 U	3 U*
DR-08VV16	DR-08	ug/kg DW	Sediment	2.8 U	4.1 U	2.3 U*	2.3 U*	25 U	2.8 U*	3.5 U*	2.8 U*	6.5 U*	33 U	2.7 U	32 U	100 U	3.7 U*	3.8 U	3.3 U*
DR-09VV15	DR-09	ug/kg DW	Sediment	3 U	4.3 U	2.5 U*	2.5 U*	27 U	3 U*	3.7 U*	3 U*	6.9 U*	35 U	2.9 U	34 U	110 U	3.9 U*	4.1 U	3.5 U*
DR-10VV16	DR-10	ug/kg DW	Sediment	2.7 U	3.9 U	2.3 U*	2.3 U*	24 U	2.7 U*	3.3 U*	2.7 U*	6.3 U*	32 U	2.6 U	31 U	98 U	3.6 U*	3.7 U	3.2 U*
DR-11VV13	DR-11	ug/kg DW	Sediment	3.1 U	4.5 U	2.6 U*	2.6 U*	28 U	3.1 U*	3.8 U*	3.1 U*	7.2 U*	37 U	3 U	35 U	110 U	4.1 U*	4.2 U	3.7 U*
DR-12VV14	DR-12	ug/kg DW	Sediment	2.5 U	3.6 U	2.1 U*	2.1 U*	22 U	2.5 U*	3 U*	2.5 U*	5.8 U*	29 U	2.4 U	28 U	90 U	3.3 U*	3.4 U	2.9 U*
DR-14VV16	DR-14	ug/kg DW	Sediment	2.8 U	4 U	2.3 U*	2.3 U*	25 U	2.8 U*	3.4 U*	2.8 U*	6.5 U*	33 U	2.7 U	32 U	100 U	3.7 U*	3.8 U	3.3 U*
DR-15VV15	DR-15	ug/kg DW	Sediment	2.8 U	4 U	2.3 U*	2.3 U*	25 U	2.8 U*	3.4 U*	2.8 U*	6.4 U*	32 U	2.6 U	31 U	100 U	3.6 U*	3.7 U	3.2 U*
DR-16VV15	DR-16	ug/kg DW	Sediment	2.6 U	3.7 U	2.2 U*	2.2 U*	23 U	2.6 U*	3.2 U*	2.6 U*	6 U*	31 U	2.5 U	29 U	94 U	3.4 U*	3.5 U	3.1 U*
DR-17VV16	DR-17	ug/kg DW	Sediment	2.6 U	3.8 U	2.2 U*	2.2 U*	23 U	2.6 U*	3.2 U*	2.6 U*	6 U*	31 U	2.5 U	30 U	94 U	3.4 U*	3.5 U	3.1 U*
DR-18VV14	DR-18	ug/kg DW	Sediment	2.8 U	4 U	2.3 U*	2.3 U*	25 U	2.8 U*	3.4 U*	2.8 U*	6.4 U*	33 U	2.7 U	32 U	100 U	3.6 U*	3.8 U	3.3 U*
DR-19VV15	DR-19	ug/kg DW	Sediment	2.7 U	3.9 U	2.3 U*	2.3 U*	24 U	2.7 U*	3.3 U*	2.7 U*	6.3 U*	32 U	2.6 U	31 U	98 U	3.6 U*	3.7 U	3.2 U*
DR-20VV15	DR-20	ug/kg DW	Sediment	2.6 U	3.7 U	2.1 U	2.1 U*	23 U	2.6 U*	3.1 U*	2.6 U*	5.9 U*	30 U	6.1 J	29 U	92 U	3.3 U	3.4 U	3 U*
DR-21VV15	DR-21	ug/kg DW	Sediment	3 U	4.3 U	2.5 U*	2.5 U*	27 U	3 U*	3.6 U*	3 U*	6.9 U*	35 U	2.9 U	34 U	110 U	3.9 U	6.8 J	3.5 U*
DR-22VV14	DR-22	ug/kg DW	Sediment	3 U	4.3 U	2.5 U*	2.5 U*	27 U	3 U*	3.7 U*	3 U*	6.9 U*	35 U	8.2 J	34 U	110 U	3.9 U	4.1 U	3.5 U*
DR-23VV14	DR-23	ug/kg DW	Sediment	2.9 U	4.2 U	2.4 U	2.4 U*	26 U	2.9 U*	3.6 U*	2.9 U*	6.8 U*	35 U	2.8 U	33 U	110 U	3.8 U	4 U	3.5 U*
DR-24VV15	DR-24	ug/kg DW	Sediment	2.8 U	4 U	2.3 U*	2.3 U*	25 U	2.8 U*	3.4 U*	2.8 U*	6.4 U*	33 U	2.7 U	31 U	100 U	3.6 U	6.3 J	3.3 U*
DR-25VV15	DR-25	ug/kg DW	Sediment	2.7 U	3.9 U	2.3 U*	2.3 U*	24 U	2.7 U*	3.3 U*	2.7 U*	6.3 U*	32 U	2.6 U	31 U	99 U	3.6 U	3.7 U	3.2 U*
DR-26VV15	DR-26	ug/kg DW	Sediment	2.5 U	3.6 U	2.1 U*	2.1 U*	22 U	2.5 U*	3.1 U*	2.5 U*	5.8 U*	29 U	2.4 U	28 U	91 U	3.3 U*	3.4 U	2.9 U*
DR-36VV15	DR-26	ug/kg DW	Sediment	2.5 U	3.6 U	2.1 U*	2.1 U*	22 U	2.5 U*	3 U*	2.5 U*	5.8 U*	29 U	2.4 U	28 U	90 U	3.3 U	3.4 U	2.9 U*
DR-27VV17	DR-27	ug/kg DW	Sediment	2.6 U	3.7 U	2.1 U*	2.1 U*	23 U	2.6 U*	3.1 U*	2.6 U*	5.9 U*	30 U	2.5 U	29 U	93 U	3.4 U*	5.9 J	3 U*
DR-28VV15	DR-28	ug/kg DW	Sediment	2.5 U	3.6 U	2.1 U*	2.1 U*	22 U	2.5 U*	3 U*	2.5 U*	5.7 U*	29 U	2.4 U	28 U	90 U	3.2 U*	3.3 U	2.9 U*
DRB-100W	DRB-100W	ug/kg DW	Sediment	36 U	52 U	30 U	30 U*	320 U	36 U	44 U	36 U	84 U	430 U	35 U	410 U	3100 J B	47 U	49 U	43 U
DRB-108W	DRB-108	ug/kg DW	Sediment	43 U	62 U	36 U	36 U*	390 U	43 U	53 U	43 U	890 U	510 U	41 U	490 U	3600 J B	57 U	58 U	51 U
DRB-50W	DRB-108	ug/kg DW	Sediment	43 U	62 U	35 U	35 U*	380 U	43 U	52 U	43 U	940 U	500 U	41 U	490 U	3600 J B	56 U	58 U	50 U
DRB-109W	DRB-109	ug/kg DW	Sediment	41 U	59 U	34 U	34 U*	370 U	41 U	50 U	41 U	930 U	480 U	39 U	470 U	3500 J B	54 U	56 U	48 U
DRB-111E	DRB-111	ug/kg DW	Sediment	47 U	68 U	39 U	39 U*	420 U	47 U	58 U	47 U	1000 U	560 U	45 U	540 U	1700 U	62 U	64 U	120 J
DRB-113W	DRB-113	ug/kg DW	Sediment	41 U	59 U	34 U	34 U*	370 U	41 U	50 U	41 U	1000 U	490 U	40 U	470 U	3500 J B	54 U	56 U	99 J
DRB-114W	DRB-114	ug/kg DW	Sediment	45 U	65 U	37 U	37 U*	400 U	45 U	55 U	45 U	430 U	530 U	43 U	510 U	3800 J B	59 U	61 U	59 J
NFK501VV16	NFK501	ug/kg DW	Sediment	5.7 U	8.2 U	4.7 U	4.7 U*	51 U	5.7 U	7 U	5.7 U	13 U	67 U	5.5 U	65 U	210 U	7.5 U	7.7 U	6.7 U
NFK502VV12	NFK502	ug/kg DW	Sediment	2.9 U	4.1 U	2.4 U	2.4 U*	26 U	2.9 U*	3.5 U*	2.9 U*	6.6 U*	34 U	2.8 U	33 U	100 U	3.8 U	3.9 U	3.4 U*
OF-33VV10	OF-33	ug/kg DW	Sediment	3 U	4.2 U	2.4 U	2.4 U	26 U	3 U	3.6 U	3 U	6.8 U	35 U	2.8 U	33 U	110 U	3.9 U	4 U	3.5 U
OF-36VV13	OF-36	ug/kg DW	Sediment	2.9 U	4.1 U	2.4 U	2.4 U	26 U	2.9 U	3.5 U	2.9 U	6.7 U	34 U	2.8 U	33 U	100 U	3.8 U	3.9 U	3.4 U
OF-41VV16	OF-41	ug/kg DW	Sediment	2.9 U	4.2 U	2.4 U	2.4 U	26 U	2.9 U	3.5 U	2.9 U	6.7 U	34 U	2.8 U	33 U	110 U	3.8 U	3.9 U	3.4 U
OR-04VV09	OR-04	ug/kg DW	Sediment	2.7 U	3.8 U	2.2 U	2.2 U	24 U	2.7 U	3.2 U	2.7 U	6.1 U	31 U	2.6 U	30 U	96 U	3.5 U	3.6 U	3.1 U
OR-05VV10	OR-05	ug/kg DW	Sediment	2.6 U	3.7 U	2.1 U	2.1 U	23 U	2.6 U	3.1 U	2.6 U	5.9 U	30 U	2.5 U	29 U	93 U	3.4 U	3.5 U	3 U
OR-06VV13	OR-06	ug/kg DW	Sediment	2.7 U	3.9 U	2.2 U	2.2 U	24 U	2.7 U	3.3 U	2.7 U	6.2 U	32 U	2.6 U	30 U	97 U	3.5 U	3.6 U	3.2 U
OR-07VV13	OR-07	ug/kg DW	Sediment	2.4 U	3.5 U	2 U	2 U	21 U	2.4 U	2.9 U	2.4 U	5.5 U	28 U	2.3 U	27 U	87 U	3.1 U	3.2 U	2.8 U
OR-08VV14	OR-08	ug/kg DW	Sediment	2.5 U	3.7 U	2.1 U	2.1 U	23 U	2.5 U	3.1 U	2.5 U	5.9 U	30 U	2.4 U	29 U	92 U	3.3 U	3.4 U	3 U
OR-09VV14	OR-09	ug/kg DW	Sediment	2.6 U	3.7 U	2.1 U	2.1 U	23 U	2.6 U	3.1 U	2.6 U	5.9 U	30 U	2.5 U	29 U	93 U	3.4 U	3.5 U	3 U
OR-10VV14	OR-10	ug/kg DW	Sediment	3.7 U	5.3 U	3.1 U	3.1 U	33 U	3.7 U	4.5 U	3.7 U	34 U	43 U	3.5 U	42 U	140 J	4.8 U	9.7 J	23 U
OR-11VV12	OR-11	ug/kg DW	Sediment	3.4 U	4.9 U	2.8 U	2.8 U	30 U	3.4 U	4.2 U	3.4 U	7.9 U	40 U	3.3 U	39 U	290 J	4.5 U	4.6 U	4 U
OR-12VV05	OR-12	ug/kg DW	Sediment	3 U	4.3 U	2.4 U	2.4 U	26 U	3 U	3.6 U	3 U	6.8 U	35 U	2.8 U	33 U	110 U	3.9 U	4 U	3.5 U
OS-03VV08	OS-03	ug/kg DW	Sediment	2.9 U	4.2 U	2.4 U	2.4 U	26 U	2.9 U	3.6 U	2.9 U	6.7 U	34 U	2.8 U	33 U	110 U	3.8 U	3.9 U	3.4 U
OS-10HS10	OS-10	ug/kg DW	Sediment	4.1 U	5.8 U	3.4 U	3.4 U	36 U	4.1 U	4.9 U	4.1 U	19 J	48 U	3.9 U	46 U	150 U	5.3 U	15 J	14 J
RS-01VV	Rinsate	ug/L	Water	0.083 U	0.097 U	0.13 U	0.18 U	0.56 U	0.21 U	0.37 U	0.2 U	0.17 U	0.52 U	0.14 U	1.6 U	0.2 U	0.13 U	0.13 U	0.072 U
RS-02VV	Rinsate	ug/L	Water	0.083 U	0.098 U	0.13 U	0.18 U	0.57 U	0.22 U	0.37 U	0.21 U	0.17 U	0.52 U	0.14 U	1.6 U	0.21 U	0.13 U	0.13 U	0.072 U
RS-03VV	Rinsate	ug/L	Water	0.084 U	0.099 U	0.13 U	0.18 U	0.57 U	0.22 U	0.37 U	0.21 U	0.17 U	0.52 U	0.14 U	1.6 U	0.21 U	0.13 U	0.13 U	0.073 U
RS-04VV	Rinsate	ug/L	Water	0.11 U	0.12 U	0.16 U	0.22 U	0.72 U	0.27 U	0.47 U	0.26 U	0.21 U	0.66 U	0.17 U	2 U	0.26 U	0.16 U	0.16 U	0.091 U
RS-05	Rinsate	ug/L	Water	0.082 U	0.097 U	0.13 U	0.17 U	0.56 U	0.21 U	0.37 U	0.2 U	0.16 U	0.51 U	0.14 U	1.5 U	0.2 U	0.13 U	0.13 U	0.072 U

Notes:
 Results shown with a "B" qualifier indicate that the compound was detected in the associated blank.
 Results shown with a "U" qualifier are nondetected concentrations and reported as the Method Detection Limit (MDL).
 Results shown with a "J" qualifier denote a result less than the reporting limit but greater than or equal to the MDL and the concentration is an approximate value.
 Results shown with a "*" qualifier indicate that the Lab Control Sample (LCS) or the Lab Control Sample Duplicate (LCSD) exceeded the control limits.
 DW = Dry weight
 ug/kg = Micrograms per kilogram
 ug/L = Micrograms per liter

Table 14. Ethers

Sample ID	Station ID	Units	Sample Type	4-Bromophenyl phenyl ether	4-Chlorophenyl phenyl ether	Bis (2-chloroisopropyl) ether	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl) ether
DR-01-VV-11	DR-01	ug/kg DW	Sediment	1.2 U	1.9 U	4.1 U*	3 U*	3.6 U*
DR-02VV12	DR-02	ug/kg DW	Sediment	1.3 U	2.1 U	4.5 U*	3.3 U*	4 U*
DR-03VV15	DR-03	ug/kg DW	Sediment	1.3 U	2.1 U	4.5 U*	3.3 U*	3.9 U*
DR-04VV15	DR-04	ug/kg DW	Sediment	1.3 U	2.1 U	4.4 U*	3.2 U*	3.9 U*
DR-05VV15	DR-05	ug/kg DW	Sediment	1.3 U	2.1 U	4.4 U*	3.3 U*	3.9 U*
DR-06VV16	DR-06	ug/kg DW	Sediment	1.2 U	1.9 U	4 U*	3 U*	3.6 U*
DR-07VV15	DR-07	ug/kg DW	Sediment	1.1 U	1.8 U	3.8 U*	2.8 U*	3.3 U*
DR-08VV16	DR-08	ug/kg DW	Sediment	1.2 U	2 U	4.2 U*	3.1 U*	3.7 U*
DR-09VV15	DR-09	ug/kg DW	Sediment	1.3 U	2.1 U	4.4 U*	3.3 U*	3.9 U*
DR-10VV16	DR-10	ug/kg DW	Sediment	1.2 U	1.9 U	4 U*	3 U*	3.6 U*
DR-11VV13	DR-11	ug/kg DW	Sediment	1.4 U	2.2 U	4.6 U*	3.4 U*	4.1 U*
DR-12VV14	DR-12	ug/kg DW	Sediment	1.1 U	1.7 U	3.7 U*	2.7 U*	3.3 U*
DR-14VV16	DR-14	ug/kg DW	Sediment	1.2 U	2 U	4.1 U*	3.1 U*	3.7 U*
DR-15VV15	DR-15	ug/kg DW	Sediment	1.2 U	1.9 U	4.1 U*	3 U*	3.6 U*
DR-16VV15	DR-16	ug/kg DW	Sediment	1.1 U	1.8 U	3.9 U*	2.8 U*	3.4 U*
DR-17VV16	DR-17	ug/kg DW	Sediment	1.1 U	1.8 U	3.9 U*	2.8 U*	3.4 U*
DR-18VV14	DR-18	ug/kg DW	Sediment	1.2 U	1.9 U	4.1 U*	3 U*	3.6 U*
DR-19VV15	DR-19	ug/kg DW	Sediment	1.2 U	1.9 U	4 U*	3 U	3.6 U*
DR-20VV15	DR-20	ug/kg DW	Sediment	1.1 U	1.8 U	3.8 U*	2.8 U	3.3 U*
DR-21VV15	DR-21	ug/kg DW	Sediment	1.3 U	2.1 U	4.4 U*	3.3 U	3.9 U*
DR-22VV14	DR-22	ug/kg DW	Sediment	1.3 U	2.1 U	4.4 U*	3.3 U	3.9 U*
DR-23VV14	DR-23	ug/kg DW	Sediment	1.3 U	2 U	4.3 U*	3.2 U	3.8 U*
DR-24VV15	DR-24	ug/kg DW	Sediment	1.2 U	1.9 U	4.1 U*	3 U	3.6 U*
DR-25VV15	DR-25	ug/kg DW	Sediment	1.2 U	1.9 U	4 U*	3 U	3.6 U*
DR-26VV15	DR-26	ug/kg DW	Sediment	1.1 U	1.7 U	3.7 U*	2.7 U*	3.3 U*
DR-36VV15	DR-26	ug/kg DW	Sediment	1.1 U	1.7 U	3.7 U*	2.7 U	3.3 U*
DR-27VV17	DR-27	ug/kg DW	Sediment	1.1 U	1.8 U	3.8 U*	2.8 U*	3.4 U*
DR-28VV15	DR-28	ug/kg DW	Sediment	1.1 U	1.7 U	3.7 U*	2.7 U*	3.2 U*
DRB-100W	DRB-100W	ug/kg DW	Sediment	16 U	25 U	54 U	39 U	47 U
DRB-108W	DRB-108	ug/kg DW	Sediment	19 U	30 U	64 U	47 U	57 U
DRB-50W	DRB-108	ug/kg DW	Sediment	19 U	30 U	63 U	47 U	56 U
DRB-109W	DRB-109	ug/kg DW	Sediment	18 U	29 U	61 U	45 U	54 U
DRB-111E	DRB-111	ug/kg DW	Sediment	21 U	33 U	70 U	52 U	62 U
DRB-113W	DRB-113	ug/kg DW	Sediment	18 U	29 U	61 U	45 U	54 U
DRB-114W	DRB-114	ug/kg DW	Sediment	20 U	32 U	67 U	49 U	59 U
NFK-501VV16	NFK501	ug/kg DW	Sediment	2.5 U	4 U	8.5 U	6.2 U	7.5 U
NFK502VV12	NFK502	ug/kg DW	Sediment	1.3 U	2 U	4.3 U*	3.1 U	3.8 U*
OF-33VV10	OF-33	ug/kg DW	Sediment	1.3 U	2.1 U	4.4 U	3.2 U	3.9 U

Table 14. Ethers

Sample ID	Station ID	Units	Sample Type	4-Bromophenyl phenyl ether	4-Chlorophenyl phenyl ether	Bis (2-chloroisopropyl) ether	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl) ether
OF-36VV13	OF-36	ug/kg DW	Sediment	1.3 U	2 U	4.3 U	3.1 U	3.8 U
OF-41VV16	OF-41	ug/kg DW	Sediment	1.3 U	2 U	4.3 U	3.2 U	3.8 U
OR-04VV09	OR-04	ug/kg DW	Sediment	1.2 U	1.9 U	3.9 U	2.9 U	3.5 U
OR-05VV10	OR-05	ug/kg DW	Sediment	1.1 U	1.8 U	3.8 U	2.8 U	3.4 U
OR-06VV13	OR-06	ug/kg DW	Sediment	1.2 U	1.9 U	4 U	2.9 U	3.5 U
OR-07VV13	OR-07	ug/kg DW	Sediment	1 U	1.7 U	3.6 U	2.6 U	3.1 U
OR-08VV14	OR-08	ug/kg DW	Sediment	1.1 U	1.8 U	3.8 U	2.8 U	3.3 U
OR-09VV14	OR-09	ug/kg DW	Sediment	1.1 U	1.8 U	3.8 U	2.8 U	3.4 U
OR-10VV14	OR-10	ug/kg DW	Sediment	1.6 U	2.6 U	5.5 U	4 U	4.8 U
OR-11VV12	OR-11	ug/kg DW	Sediment	1.5 U	2.4 U	5.1 U	3.7 U	4.5 U
OR-12VV05	OR-12	ug/kg DW	Sediment	1.3 U	2.1 U	4.4 U	3.2 U	3.9 U
OS-03VV08	OS-03	ug/kg DW	Sediment	1.3 U	2 U	4.3 U	3.2 U	3.8 U
OS-10HS10	OS-10	ug/kg DW	Sediment	1.8 U	2.8 U	6 U	4.4 U	5.3 U
RS-01VV	Rinsate	ug/L	Water	0.097 U	0.12 U	0.086 U	0.092 U	0.18 U
RS-02VV	Rinsate	ug/L	Water	0.098 U	0.12 U	0.086 U	0.093 U	0.18 U
RS-03VV	Rinsate	ug/L	Water	0.099 U	0.12 U	0.087 U	0.094 U	0.18 U
RS-04VV	Rinsate	ug/L	Water	0.12 U	0.15 U	0.11 U	0.12 U	0.22 U
RS-05	Rinsate	ug/L	Water	0.097 U	0.12 U	0.085 U	0.092 U	0.17 U

Notes:

Results shown with a "U" qualifier are nondetected concentrations and reported as the Method Detection Limit (MDL).

Results shown with a "J" qualifier denote a result less than the reporting limit but greater than or equal to the MDL and the concentration is an approximate value.

Results shown with a "*" qualifier indicate that the Lab Control Sample (LCS) or the Lab Control Sample Duplicate (LCSD) exceeded the control limits.

DW = Dry weight

ug/kg = Micrograms per kilogram

ug/L = Micrograms per liter

Table 15. Chlorinated Benzenes

Sample ID	Station ID	Unit	Sample Type	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Hexachlorobenzene
DR-01-VV-11	DR-01	ug/kg DW	Sediment	1.2 U*	2.1 U*	1.5 U*	0.92 U*	1.3 U
DR-02VV12	DR-02	ug/kg DW	Sediment	1.3 U*	2.3 U*	1.6 U*	1 U*	1.5 U
DR-03VV15	DR-03	ug/kg DW	Sediment	1.3 U*	2.2 U*	1.6 U*	1 U*	1.4 U
DR-04VV15	DR-04	ug/kg DW	Sediment	1.3 U*	2.2 U*	1.6 U*	0.99 U*	1.4 U
DR-05VV15	DR-05	ug/kg DW	Sediment	1.3 U*	2.2 U*	1.6 U*	0.99 U*	1.4 U
DR-06VV16	DR-06	ug/kg DW	Sediment	1.2 U*	2 U*	1.4 U*	0.9 U*	1.3 U
DR-07VV15	DR-07	ug/kg DW	Sediment	1.1 U*	1.9 U*	1.3 U*	0.84 U*	1.2 U
DR-08VV16	DR-08	ug/kg DW	Sediment	1.2 U*	2.1 U*	1.5 U*	0.94 U*	1.4 U
DR-09VV15	DR-09	ug/kg DW	Sediment	1.3 U*	2.2 U*	1.6 U*	0.99 U*	1.4 U
DR-10VV16	DR-10	ug/kg DW	Sediment	1.2 U*	2 U*	1.4 U*	0.9 U*	1.3 U
DR-11VV13	DR-11	ug/kg DW	Sediment	1.3 U*	2.3 U*	1.6 U*	1 U*	1.5 U
DR-12VV14	DR-12	ug/kg DW	Sediment	1.1 U*	1.8 U*	1.3 U*	0.82 U*	1.2 U
DR-14VV16	DR-14	ug/kg DW	Sediment	1.2 U*	2.1 U*	1.5 U*	0.93 U*	1.3 U
DR-15VV15	DR-15	ug/kg DW	Sediment	1.2 U*	2 U*	1.4 U*	0.91 U*	1.3 U
DR-16VV15	DR-16	ug/kg DW	Sediment	1.1 U*	1.9 U*	1.4 U*	0.86 U*	1.2 U
DR-17VV16	DR-17	ug/kg DW	Sediment	1.1 U*	1.9 U*	1.4 U*	0.86 U*	1.3 U
DR-18VV14	DR-18	ug/kg DW	Sediment	1.2 U*	2.1 U*	1.5 U*	0.92 U*	1.3 U
DR-19VV15	DR-19	ug/kg DW	Sediment	1.2 U*	2 U*	1.4 U*	0.9 U*	1.3 U
DR-20VV15	DR-20	ug/kg DW	Sediment	1.1 U*	1.9 U*	1.3 U*	0.84 U*	1.2 U
DR-21VV15	DR-21	ug/kg DW	Sediment	1.3 U*	2.2 U*	1.6 U*	0.99 U*	1.4 U
DR-22VV14	DR-22	ug/kg DW	Sediment	1.3 U*	2.2 U*	1.6 U*	0.99 U*	1.4 U
DR-23VV14	DR-23	ug/kg DW	Sediment	1.3 U*	2.2 U*	1.5 U*	0.97 U*	1.4 U
DR-24VV15	DR-24	ug/kg DW	Sediment	1.2 U*	2 U*	1.4 U*	0.92 U*	1.3 U
DR-25VV15	DR-25	ug/kg DW	Sediment	1.2 U*	2 U*	1.4 U*	0.9 U*	1.3 U
DR-26VV15	DR-26	ug/kg DW	Sediment	1.1 U*	1.9 U*	1.3 U*	0.83 U*	1.2 U
DR-36VV15	DR-26	ug/kg DW	Sediment	1.1 U*	1.9 U*	1.3 U*	0.83 U*	1.2 U
DR-27VV17	DR-27	ug/kg DW	Sediment	1.1 U*	1.9 U*	1.3 U*	0.85 U*	1.2 U
DR-28VV15	DR-28	ug/kg DW	Sediment	1.1 U*	1.8 U*	1.3 U*	0.82 U*	1.2 U
DRB-100W	DRB-100W	ug/kg DW	Sediment	16 U	27 U	19 U	12 U	17 U
DRB-108W	DRB-108	ug/kg DW	Sediment	19 U	32 U	23 U	14 U	21 U
DRB-50W	DRB-108	ug/kg DW	Sediment	18 U	32 U	22 U	14 U	21 U
DRB-109W	DRB-109	ug/kg DW	Sediment	18 U	30 U	21 U	14 U	20 U
DRB-111E	DRB-111	ug/kg DW	Sediment	20 U	35 U	25 U	16 U	23 U
DRB-113W	DRB-113	ug/kg DW	Sediment	18 U	31 U	22 U	14 U	20 U
DRB-114W	DRB-114	ug/kg DW	Sediment	20 U	34 U	24 U	15 U	22 U
NFK-501VV16	NFK501	ug/kg DW	Sediment	2.5 U	4.2 U	3 U	1.9 U	2.7 U
NFK502VV12	NFK502	ug/kg DW	Sediment	1.2 U*	2.1 U*	1.5 U*	0.95 U*	1.4 U
OF-33VV10	OF-33	ug/kg DW	Sediment	1.3 U	2.2 U	1.5 U	0.98 U	1.4 U

Table 15. Chlorinated Benzenes

Sample ID	Station ID	Unit	Sample Type	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Hexachlorobenzene
OF-36VV13	OF-36	ug/kg DW	Sediment	1.2 U	2.1 U	1.5 U	0.95 U	1.4 U
OF-41VV16	OF-41	ug/kg DW	Sediment	1.3 U	2.2 U	1.5 U	0.96 U	1.4 U
OR-04VV09	OR-04	ug/kg DW	Sediment	1.1 U	2 U	1.4 U	0.88 U	1.3 U
OR-05VV10	OR-05	ug/kg DW	Sediment	1.1 U	1.9 U	1.3 U	0.85 U	1.2 U
OR-06VV13	OR-06	ug/kg DW	Sediment	1.2 J	2 U	1.4 U	0.89 U	1.3 U
OR-07VV13	OR-07	ug/kg DW	Sediment	1 U	1.8 U	1.3 U	0.79 U	1.2 U
OR-08VV14	OR-08	ug/kg DW	Sediment	1.1 U	1.9 U	1.3 U	0.84 U	1.2 U
OR-09VV14	OR-09	ug/kg DW	Sediment	1.1 U	1.9 U	1.3 U	0.85 U	1.2 U
OR-10VV14	OR-10	ug/kg DW	Sediment	1.6 U	2.7 U	1.9 U	1.2 U	1.8 U
OR-11VV12	OR-11	ug/kg DW	Sediment	1.5 U	2.5 U	1.8 U	1.1 U	1.6 U
OR-12VV05	OR-12	ug/kg DW	Sediment	1.3 U	2.2 U	1.5 U	0.98 U	1.4 U
OS-03VV08	OS-03	ug/kg DW	Sediment	1.3 U	2.2 U	1.5 U	0.96 U	1.4 U
OS-10HS10	OS-10	ug/kg DW	Sediment	1.7 U	3 U	2.1 U	1.3 U	1.9 U
RS-01VV	Rinsate	ug/L	Water	0.097 U	0.11 U	0.11 U	0.12 U	0.08 U
RS-02VV	Rinsate	ug/L	Water	0.098 U	0.11 U	0.11 U	0.12 U	0.08 U
RS-03VV	Rinsate	ug/L	Water	0.099 U	0.11 U	0.11 U	0.12 U	0.081 U
RS-04VV	Rinsate	ug/L	Water	0.12 U	0.14 U	0.14 U	0.15 U	0.1 U
RS-05	Rinsate	ug/L	Water	0.097 U	0.11 U	0.11 U	0.12 U	0.079 U

Notes:

Results shown with a "U" qualifier are nondetected concentrations and reported as the Method Detection Limit (MDL).

Results shown with a "J" qualifier denote a result less than the reporting limit but greater than or equal to the MDL and the concentration is an approximate value.

Results shown with a "*" qualifier indicate that the Lab Control Sample (LCS) or the Lab Control Sample Duplicate (LCSD) exceeded the control limits.

DW = Dry weight

ug/kg = Micrograms per kilogram

ug/L = Micrograms per liter

Table 16. Other SVOCs

Sample ID	Station ID	Units	Sample Type	Dibenzofuran		Isophorone		Hexachlorobutadiene		Hexachlorocyclopentadiene		Hexachloroethane	
DR-01-VV-11	DR-01	ug/kg DW	Sediment	2.1	U	3.2	U	1.6	U*	3	U*	2.6	U*
DR-02VV12	DR-02	ug/kg DW	Sediment	2.3	U	3.5	U	1.7	U*	3.3	U*	2.8	U*
DR-03VV15	DR-03	ug/kg DW	Sediment	2.2	U	3.4	U	1.7	U*	3.3	U*	2.8	U*
DR-04VV15	DR-04	ug/kg DW	Sediment	2.2	U	3.4	U	1.7	U*	3.2	U*	2.7	U*
DR-05VV15	DR-05	ug/kg DW	Sediment	2.2	U	3.4	U	1.7	U*	3.3	U*	2.7	U*
DR-06VV16	DR-06	ug/kg DW	Sediment	2	U	3.1	U	1.5	U*	3	U*	2.5	U*
DR-07VV15	DR-07	ug/kg DW	Sediment	1.9	U	2.9	U	1.4	U*	2.8	U*	2.3	U*
DR-08VV16	DR-08	ug/kg DW	Sediment	2.1	U	3.2	U	1.6	U*	3.1	U*	2.6	U*
DR-09VV15	DR-09	ug/kg DW	Sediment	2.2	U	3.4	U	1.7	U*	3.3	U*	2.7	U*
DR-10VV16	DR-10	ug/kg DW	Sediment	2	U	3.1	U	1.5	U*	3	U*	2.5	U*
DR-11VV13	DR-11	ug/kg DW	Sediment	2.3	U	3.5	U	1.8	U*	3.4	U*	2.8	U*
DR-12VV14	DR-12	ug/kg DW	Sediment	1.8	U	2.8	U	1.4	U*	2.7	U*	2.3	U*
DR-14VV16	DR-14	ug/kg DW	Sediment	2.1	U	3.2	U	1.6	U*	3.1	U*	2.6	U*
DR-15VV15	DR-15	ug/kg DW	Sediment	2	U	3.1	U	1.6	U*	3	U*	2.5	U*
DR-16VV15	DR-16	ug/kg DW	Sediment	1.9	U	2.9	U	1.5	U*	2.8	U*	2.4	U*
DR-17VV16	DR-17	ug/kg DW	Sediment	1.9	U	3	U	1.5	U*	2.8	U*	2.4	U*
DR-18VV14	DR-18	ug/kg DW	Sediment	2.1	U	3.2	U	1.6	U*	3	U*	2.6	U*
DR-19VV15	DR-19	ug/kg DW	Sediment	2	U	3.1	U	1.5	U*	3	U	2.5	U*
DR-20VV15	DR-20	ug/kg DW	Sediment	1.9	U	2.9	U	1.4	U*	2.8	U	2.3	U*
DR-21VV15	DR-21	ug/kg DW	Sediment	2.2	U	3.4	U	1.7	U*	3.3	U	2.7	U*
DR-22VV14	DR-22	ug/kg DW	Sediment	2.2	U	3.4	U	1.7	U*	3.3	U	2.7	U*
DR-23VV14	DR-23	ug/kg DW	Sediment	2.2	U	3.3	U	1.7	U*	3.2	U	2.7	U*
DR-24VV15	DR-24	ug/kg DW	Sediment	2	U	3.1	U	1.6	U*	3	U	2.5	U*
DR-25VV15	DR-25	ug/kg DW	Sediment	2	U	3.1	U	1.5	U*	3	U	2.5	U*
DR-26VV15	DR-26	ug/kg DW	Sediment	1.9	U	2.8	U	1.4	U*	2.7	U*	2.3	U*
DR-36VV15	DR-26	ug/kg DW	Sediment	1.9	U	2.8	U	1.4	U*	2.7	U	2.3	U*
DR-27VV17	DR-27	ug/kg DW	Sediment	1.9	U	2.9	U	1.5	U*	2.8	U*	2.4	U*
DR-28VV15	DR-28	ug/kg DW	Sediment	1.8	U	2.8	U	1.4	U*	2.7	U*	2.3	U*
DRB-100W	DRB-100W	ug/kg DW	Sediment	27	U	41	U	20	U	39	U	33	U
DRB-108W	DRB-108	ug/kg DW	Sediment	32	U	49	U	25	U	47	U	40	U
DRB-50W	DRB-108	ug/kg DW	Sediment	32	U	49	U	24	U	47	U	39	U
DRB-109W	DRB-109	ug/kg DW	Sediment	30	U	47	U	23	U	45	U	38	U
DRB-111E	DRB-111	ug/kg DW	Sediment	35	U	54	U	27	U	52	U	43	U
DRB-113W	DRB-113	ug/kg DW	Sediment	31	U	47	U	23	U	45	U	38	U
DRB-114W	DRB-114	ug/kg DW	Sediment	34	U	51	U	26	U	49	U	41	U
NFK-501VV16	NFK501	ug/kg DW	Sediment	6.9	J	6.5	U	3.2	U	6.2	U	5.2	U
NFK502VV12	NFK502	ug/kg DW	Sediment	2.1	U	3.3	U	1.6	U*	3.1	U	2.6	U*
OF-33VV10	OF-33	ug/kg DW	Sediment	2.2	U	3.3	U	1.7	U	3.2	U	2.7	U
OF-36VV13	OF-36	ug/kg DW	Sediment	2.1	U	3.2	U	1.6	U	3.1	U	2.6	U
OF-41VV16	OF-41	ug/kg DW	Sediment	2.2	U	3.3	U	1.6	U	3.2	U	2.7	U
OR-04VV09	OR-04	ug/kg DW	Sediment	2	U	3	U	1.5	U	2.9	U	2.4	U
OR-05VV10	OR-05	ug/kg DW	Sediment	1.9	U	2.9	U	1.5	U	2.8	U	2.4	U

Table 16. Other SVOCs

Sample ID	Station ID	Units	Sample Type	Dibenzofuran		Isophorone		Hexachlorobutadiene		Hexachlorocyclopentadiene		Hexachloroethane	
OR-06VV13	OR-06	ug/kg DW	Sediment	3.2	J	3	U	1.5	U	2.9	U	2.5	U
OR-07VV13	OR-07	ug/kg DW	Sediment	1.8	U	2.7	U	1.4	U	2.6	U	2.2	U
OR-08VV14	OR-08	ug/kg DW	Sediment	1.9	U	2.9	U	1.4	U	2.8	U	2.3	U
OR-09VV14	OR-09	ug/kg DW	Sediment	1.9	U	2.9	U	1.5	U	2.8	U	2.4	U
OR-10VV14	OR-10	ug/kg DW	Sediment	2.7	U	4.2	U	2.1	U	4	U	3.4	U
OR-11VV12	OR-11	ug/kg DW	Sediment	2.5	U	3.9	U	1.9	U	3.7	U	3.1	U
OR-12VV05	OR-12	ug/kg DW	Sediment	2.2	U	3.3	U	1.7	U	3.2	U	2.7	U
OS-03VV08	OS-03	ug/kg DW	Sediment	2.2	U	3.3	U	1.6	U	3.2	U	2.7	U
OS-10HS10	OS-10	ug/kg DW	Sediment	3	U	4.6	U	2.3	U	4.4	U	3.7	U
RS-01VV	Rinsate	ug/L	Water	0.095	U	0.11	U	0.16	U	0.12	U	0.13	U
RS-02VV	Rinsate	ug/L	Water	0.096	U	0.11	U	0.16	U	0.12	U	0.13	U
RS-03VV	Rinsate	ug/L	Water	0.097	U	0.11	U	0.16	U	0.12	U	0.13	U
RS-04VV	Rinsate	ug/L	Water	0.12	U	0.14	U	0.2	U	0.15	U	0.16	U
RS-05	Rinsate	ug/L	Water	0.095	U	0.11	U	0.15	U	0.12	U	0.13	U

Notes:

Results shown with a "U" qualifier are nondetected concentrations and reported as the Method Detection Limit (MDL).

Results shown with a "J" qualifier denote a result less than the reporting limit but greater than or equal to the MDL and the concentration is an approximate value.

Results shown with a "*" qualifier indicate that the Lab Control Sample (LCS) or the Lab Control Sample Duplicate (LCSD) exceeded the control limits.

DW = Dry weight

ug/kg = Micrograms per kilogram

ug/L = Micrograms per liter

