*L*ower *D*uwamish *W*aterway *G*roup

Port of Seattle / City of Seattle / King County / The Boeing Company

TECHNICAL MEMORANDUM: SUMMARY OF CHEMISTRY DATASETS TO BE USED IN THE PHASE 2 RI/FS – ADDENDUM 2

FINAL

For submittal to

The US Environmental Protection Agency
Region 10
Seattle, WA

The Washington State Department of Ecology
Northwest Regional Office
Bellevue, WA

November 5, 2007

Prepared by: Wind Ward environmental LLC

200 West Mercer Street, Suite 401 ⬩ Seattle, Washington ⬩ 98119

Table of Contents

List of Tables

Acronyms

ARI	Analytical Resources, Inc.
CAS	Columbia Analytical Services, Inc.
CCV	continuing calibration verification
CSO	combined sewer overflow
DMMU	dredged material management unit
DQO	data quality objective
DSOA	Duwamish Sediment Other Area
Ecology	Washington State Department of Ecology
ENR	enhanced natural recovery
EPA	US Environmental Protection Agency
FS	feasibility study
ICP-MS	inductively coupled plasma-mass spectrometry
KC WQA	King County Water Quality Assessment
LDW	Lower Duwamish Waterway
LDWG	Lower Duwamish Waterway Group
MCS	MCS Environmental, Inc.
MDL	method detection limit
MS/MSD	matrix spike / matrix spike duplicate
NOAA	National Oceanic and Atmospheric Administration
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
PSDDA	Puget Sound Dredged Disposal Analysis
PSEP	Puget Sound Estuary Program
QA/QC	quality assurance / quality control
QA1	summary data validation
QA2	full data validation
QAPP	quality assurance project plan
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
RI	remedial investigation
RM	river mile
RPD	relative percent difference
RSD	relative standard deviation
SPMD	semipermeable membrane device
SRM	standard reference material

Acronyms

SVOC	semivolatile organic compound
TBT	tributyltin
TOC	total organic carbon
TPH	total petroleum hydrocarbons
USACE	US Army Corps of Engineers
VOC	volatile organic compound
Windward	Windward Environmental LLC

1.0 Introduction

The Lower Duwamish Waterway Group (LDWG) is conducting a Remedial Investigation/Feasibility Study (RI/FS) of the Lower Duwamish Waterway (LDW). As part of the RI/FS, historical chemistry data have been compiled. The Phase 1 RI report, which was completed by Windward Environmental LLC (Windward) in 2003 (2003), was based on existing sediment and tissue chemistry data that were considered acceptable for use in Phase 1 (Windward 2001a, 2001b). The Phase 1 database was finalized, as agreed to by the US Environmental Protection Agency (EPA) and the Washington Department of Ecology (Ecology), in December 2001. Chemistry data collected or made available to Windward after that time were not incorporated into the Phase 1 RI.

Phase 2 of the RI and the FS will consider the following data, in addition to those data used in Phase 1:

- Data collected by other parties prior to the end of 2001, but not discovered during Phase 1 data compilation
- Data collected by parties other than LDWG after 2001
- Data collected by LDWG members for purposes other than the RI/FS, including Early Action Area investigations
- Data collected specifically for the Phase 2 RI, as described in the Phase 2 RI work plan (Windward 2004)

These data are being combined with the data used in Phase 1 to characterize the nature and extent of contamination in the LDW, and to assess the risks to humans, fish, wildlife, and benthic invertebrates. In February 2005, a technical memorandum (Windward 2005b) documenting the data quality of sediment and tissue chemistry datasets used in Phase 1 and data collected after 2001 was prepared after additional chemistry data, as described above, were compiled. In October 2005, an addendum to that technical memorandum (Windward 2005c) was prepared that documented the quality of additional data compiled after the original memorandum was completed. This second addendum to Windward (2005b) describes the quality of additional datasets identified since the first addendum was prepared. Data collected specifically for the Phase 2 RI are not included in this addendum because separate data reports that document data quality have been prepared.

The data quality objectives (DQOs) described in the original technical memorandum (Windward 2005b) were also used to review the additional datasets summarized in this addendum. Section 2 of this addendum presents a summary of the data quality reviews recently conducted by Windward. Appendix A presents a summary of all datasets reviewed to date, including those previously summarized in the previous memoranda (Windward 2005b, 2005c). Appendix B summarizes the data qualifier changes that were made based on Windward's data quality reviews that are summarized in this addendum.

2.0 Summary of Data Quality Review

2.1 Dataset Summary

This section lists the LDW chemistry datasets not previously summarized in the previous memoranda (Windward 2005b, 2005c) that are now being considered for use in the Phase 2 RI. Chemistry data from two surface sediment sampling events, Jorgensen August 2004 and Rhône-Poulenc 2004, were included in the baseline surface sediment dataset as defined in the *Technical Memorandum: criteria for defining the baseline surface sediment dataset for use in the lower Duwamish waterway Phase 2 RI/FS* (Windward 2006c) and used in the LDW baseline human health risk assessment (Windward 2006b) and LDW baseline ecological risk assessment (Windward 2006a).

Table 2-1. Chemistry datasets reviewed by Windward for this addendum

Sampling Event	Event Code	Year	Chemicals	Number of Samples by Matrix	Reference
Duwamish Diagonal March 2006 cap monitoring – year 2, perimeter sediment characterization, and ENR cap sediment characterization – year 1	DuwDiagMarch 2006	2006	TOC, total solids, grain size, metals, SVOCs, PCB Aroclors, organochlorine pesticides	23 samples and 3 field duplicate samples; 8 grab samples collected with 6 in. coring device; 18 samples composited using equal aliquots of 3-10 grab samples collected using a van Veen grab sampler (0-10 cm)	King County (2006a; 2006b; 2007)
Duwamish River/Elliott Bay/Green River Water Column PCB Congener Survey	KC 2005 Water Sampling	2005	PCB congeners	28 water samples collected over 4 months at 4 locations; 2 locations in the Duwamish River were sampled at both surface and bottom depths of the water column; all samples analyzed for PCB congeners and conventional field parameters	Mickelson and Williston (2006)
Duwamish Diagonal Jan-Feb 2005 post-dredge perimeter - before thin-layer cap placement	DuwDiagJan 2005	2005	TOC, total solids, grain size, metals, SVOCs, PCB Aroclors, organochlorine pesticides	22 sediment samples using van Veen grab sampler (0-10 cm)	King County (2005e)
Duwamish Diagonal Mar 2005 post-dredge perimeter - after thin-layer cap placement	DuwDiagMarch 2005	2005	TOC, total solids, grain size, metals, SVOCs, PCB Aroclors, organochlorine pesticides	8 sediment samples (1 duplicate sample) using a diver-actuated coring device from the top 10 cm of sediment	King County (2005d)
Duwamish Diagonal April 2005 baseline cap monitoring - year 1	DuwDiagApril 2005	2005	TOC, total solids, grain size, metals, SVOCs, PCB Aroclors, organochlorine pesticides	7 sediment grab samples (1 replicate) using van Veen grab samplers from the top 10 cm of sediment	King County (2005c)

SAMPLING EVENT	EVENT CODE	YEAR	CHEMICALS	NUMBER OF SAMPLES BY MATRIX	REFERENCE
Boeing Developmental Center 2005 Annual Sampling of South Storm Drain System – Year 2	Boeing Developmental Center-2005	2005	PCB Aroclors, TOC, total solids	3 surface (0-2 cm) sediment grab samples (1 field duplicate sample) collected using disposable plastic spoons	Calibre (2006)
Boeing Developmental Center 2004 Annual Sampling of South Storm Drain System – Year 1	Boeing Developmental Center-2004	2004	PCB Aroclors, TOC, total solids	3 surface (0-2 cm) sediment grab samples (1 field duplicate sample) collected using disposable plastic spoons	Calibre (2005)
Triad approach (immunoassay as a real-time measure) to characterize PCB in a Washington riverine sediment site	Jorgensen August2004	2004	PCB Aroclors, TOC, SVOCs, grain size, metals	18 surface (<10 cm) sediment samples (2 duplicate samples) using the van Veen sampler and 50 subsurface sediment samples from 17 locations collected by vibracorer (1-6 ft, samples generally at 1-ft intervals)	Herrera (2005) EPA (2005a; 2004a)
Upriver (Area 1) sediment characterization	JorgensenApril 2004	2004	Metals, PCB Aroclors, TOC, total solids, grain size	75 subsurface sediment samples from 22 sediment cores (2 duplicate cores) from 20 locations using the MudMole (6.8 to 10.6-ft cores; samples generally at 1-ft intervals)	MCS (2004c)
Rhône-Poulenc surface/subsurface sediment/porewater	RhônePoulenc 2004	2004	VOCs, metals, organochlorine pesticides, PCB Aroclors, TOC, total solids	50 sediment samples (8 duplicate samples) from 21 locations using a clam gun; cores were divided into upper (0-10 cm) and lower (>10 cm) samples; 16 porewater samples for chemistry parameters (1 duplicate sample, and 1 additional sample analyzed only for field parameters) collected using a piezometer or a seepage meter	EPA (2005b)
Duwamish Diagonal June 2004 baseline cap monitoring - year 0 (post-cap placement)	DuwDiagJune 2004	2004	TOC, total solids, grain size, metals, PCB Aroclors, SVOCs	8 surface sediment grabs using the van Veen sampler from the top 10 cm	King County (2005f)
Boeing Plant 2 DSOA additional vertical characterization - Phase 2	DSOAvertchar2	2004	PCB Aroclors, TOC, total solids	28 subsurface samples from 15 sediment cores (2 duplicate cores) from 15 locations using the MudMole (3.7 to 10.6-ft cores; samples generally at 1-ft intervals)	MCS (2004a)
Boeing Plant 2 DSOA additional vertical characterization - Phase 3	DSOAvertchar3	2004	PCB Aroclors, TOC, total solids	5 sediment cores from 4 new locations and one reoccupied location using the MudMole (5.4 to 9.9-ft cores; samples generally at 1-ft intervals)	MCS (2004b)
Final preliminary site investigation report for the South Park Bridge project	SouthPark Bridge	2003	metals, TBT, VOCs, SVOCs, organochlorine pesticides, PCB Aroclors, TOC	11 subsurface sediment samples from 2 locations (rotary drill unit) from depths up to 100 ft (samples collected at 2.5 ft intervals in top 10 ft, and at several deeper 2.5 ft intervals to 100 ft)	Wilbur Consulting (2004)

SAMPLING EVENT	EVENT CODE	YEAR	CHEMICALS	NUMBER OF SAMPLES BY MATRIX	REFERENCE
PSDDA dredged sediment characterization for Glacier NW	Glacier NW	2002	Metals, SVOCs, organochlorine pesticides, PCB Aroclors, TOC	3 sediment samples from 3 DMMUs (9 composited 5.5-12.6 ft vibracores); 3 sediment samples from 3 DMMUs (11 composited 8.8-12.9 ft vibracores)	PIE (2002)

PCB – polychlorinated biphenyl

SVOC – semivolatile organic compound

PSDDA – Puget Sound Dredged Disposal Analysis

TBT – tributyl tin

TOC – total organic carbon

TPH – total petroleum hydrocarbons

VOC – volatile organic compound

ENR – enhanced natural recovery

DMMU – dredged material management unit

2.2 DATA QUALITY REVIEW SUMMARY

This section summarizes the data quality reviews conducted by Windward on the datasets listed in Table 2-1. A summary of the data quality reviews is presented in Table 2-2. Specific data quality issues researched by Windward for particular datasets are described in greater detail later in this section, as referenced in the "Summary" column of Table 2-2. The data quality review conclusions are also summarized in Appendix A.

Table 2-2. Summary of data quality reviews conducted by Windward for datasets not previously reviewed in data quality review technical memoranda (Windward 2005b, 2005c)

EVENT CODE	YEAR	SUMMARY	ACCEPTABLE FOR ALL PHASE 2 USES?
DuwDiagMarch 2006	2006	see Section 2.2.1	yes
KC 2005 Water Sampling	2005	see Section 2.2.2	yes
DuwDiagJan 2005	2005	see Section 2.2.3	yes
DuwDiagMarch 2005	2005	see Section 2.2.4	yes
DuwDiagApril 2005	2005	see Section 2.2.5	yes
Boeing DevelopmentalCenter-2005	2005	see Section 2.2.6	yes
Boeing DevelopmentalCenter-2005	2004	see Section 2.2.7	yes
Jorgensen August2004	2004	see Section 2.2.8	yes
JorgensenApril2004	2004	data validation consistent with EPA guidelines; validation qualifiers added to database (see Section 2.2.9)	yes
RhônePoulenc2004	2004	see Section 2.2.10	yes
DuwDiagJune 2004	2004	see Section 2.2.11	yes
DSOAvertchar2	2004	data validation consistent with EPA guidelines; validation qualifiers added to database (see Section 2.2.12)	yes
DSOAvertchar3	2004	data validation consistent with EPA guidelines; data are acceptable as reported (see Section 2.2.13)	yes
SouthPark Bridge	2003	data validation consistent with EPA guidelines; validation qualifiers are acceptable as reported (see Section 2.2.14)	yes
Glacier NW	2002	data validation consistent with EPA guidelines; validation qualifiers are acceptable as reported (see Section 2.2.15)	yes

Each of the datasets listed in Table 2-2 have received some degree of validation. Summaries of data validations for datasets not previously reviewed in Windward (2005b), but now considered acceptable for use in Phase 2 based on the reviews summarized in this memorandum, are included in Sections 2.2.1 through 2.2.15.

2.2.1 Duwamish/Diagonal – March 2006

Twenty-six surface sediment samples were collected on March 7-10, 2006 from the Duwamish / Diagonal Sediment Remediation Program site. For the perimeter and second-year cap monitoring, three to ten grab samples were collected from each location using a 0.1-m^2 van Veen grab sampler from the top 10 cm of sediment. Equal volume subsamples from each of the ten grab samples were homogenized together for each location. The ENR cap monitoring samples were collected as single grab samples using a 6 in. diameter, diver-actuated coring device. The samples were analyzed by King County Environmental Laboratory (KCEL) for conventional parameters (TOC by SM5310-B, total solids by SM2540-G, grain size distribution by PSEP 1986), metals (EPA 3050A / 6010B, mercury by EPA 7471A), SVOCs (EPA 8270), PCB Aroclors (EPA 8082), and organochlorine pesticides (8081A). All analytical data and laboratory quality control (QC) procedures were evaluated and reviewed by King County following QA1 guidelines (PTI 1989).

Two samples, L38325-8 and L38325-9, from locations DUD_2B and DUD_3B respectively, were comprised mostly of gravel, with finer material interspersed between the gravel. For these two samples, the entire contents of the van Veen grab samplers were taken to the laboratory. At the laboratory, these samples were run through a 1-cm sieve to remove a majority of the large rocks and gravel from the sample prior to placing the remaining material into the sample jars for analysis. The sieving process removed approximately 30% of the total weight of the sample volume that was originally collected.

The container used for pesticide and PCB analyses for sample L38325-9 broke and the Teflon-lined lid was lost while in frozen storage. Upon discovery, this sample was thawed and transferred into another container. As a result, there is a potential for cross-contamination and constituent losses for some pesticides; PCB concentrations were assumed to be stable. All of the pesticide and PCB data for this sample were H-qualified by KCEL to document this sample handling and storage anomaly. These results were mapped to a JK-qualifier by Windward to indicate an estimated concentration with unknown bias, for both detected concentrations and RLs for non-detects.

Conventional analyses (TOC, total solids, and grain size distribution) results were acceptable. All results for the clay fraction were E-qualified by King County because of high %RSD for the laboratory triplicate analyses. Seventeen silver results were E-qualified by King County for high RPD between the laboratory replicate and original sample. Windward mapped these silver and clay results to JK to indicate an estimated concentration with unknown bias. All antimony results were G-qualified by the laboratory because of low matrix spike (MS) recoveries (31 - 44%). Antimony was never detected, and Windward mapped all of the antimony results to JL (estimated value, low bias), per EPA national functional guidelines for inorganic data review (EPA 2004b).

Di-n-butyl phthalate was detected in all of the method blanks at concentrations above the method detection limit (MDL), ranging from 5.0 µg/kg dw to 8.4 µg/kg dw. One method blank also had detected concentrations above the MDL for bis(2-ethylhexyl)phthalate (8.3 µg/kg dw) and butyl benzyl phthalate (7.1 µg/kg dw). All results associated with these method blanks were qualified with a B flag by the laboratory to indicate estimated concentrations. Windward compared the detected sample concentrations to the concentrations in the associated method blank. Sample concentrations that were less than ten times the blank concentration were considered non-detect at elevated reporting limits (22 samples for di-n-butyl phthalate, 2 samples for bis(2-ethylhexyl)phthalate, and 6 samples for butyl benzyl phthalate), and were qualified by Windward as undetected (U). Detected sample concentrations that are ten times greater than the concentration of the associated method blank were not qualified, per EPA (1999) functional guidelines for organic data review.

Nine sample results were X-flagged by King County because of extremely low matrix spike recovery (2%) for 2,4-dimethylphenol. All results were non-detect for this chemical, and were rejected (R qualifier) by Windward. Nine results for Aroclor-1260 were L qualified by King County because of high MS recovery. Windward mapped the associated detected results to JH for high bias, and an associated non-detect result was mapped without qualification.

Twelve results for methoxychlor and 4,4'-DDT were E-qualified by King County because the closing continuing calibration verification (CCV) recoveries were below QC limits. Additionally, all 26 results for 4,4'-DDT were qualified by the laboratory with an L flag because of high standard reference material (SRM) recoveries, ranging from 263 - 292%. Windward mapped these 12 methoxychlor results to JL, to indicate a potential low bias. The 12 results for 4,4'-DDT associated with both low CCV and high SRM recoveries were mapped to JK (estimated concentration; unknown bias). The remaining 14 results for 4,4'-DDT that were associated with only the high SRM recoveries were qualified with a JH by Windward. The undetected results are unaffected by high bias, so these were mapped without qualification.

PCB Aroclors were reported as detected concentrations above the MDL only when a positive identification of the Aroclor pattern was determined by the analyst. Several results for Aroclor 1016, Aroclor 1232, and Aroclor 1242 were reported as non-detected by the laboratory with elevated MDLs and RLs because chromatographic interferences from more prominent Aroclors was observed. These MDLs and RLs were elevated to a point equal to or above the chromatographic interferences, and were always associated with non-detect results. These chromatographic interferences do not impact the final RLs; therefore, they are reported without additional qualification in the project database.

The sample-specific qualifier changes identified during Windward's review are shown in Appendix B. Form 1s and QC summary reports were included in the data report and were reviewed by Windward. The data from this event, except R-qualified results, are usable for all purposes in Phase 2. These validation qualifiers were incorporated into the LDW project database.

2.2.2 King County Water Sampling – 2005

Twenty-eight water samples were collected at four locations: two in the LDW and one each in Elliott Bay and the Green River. Samples were collected from both the surface and bottom of the water column at the two LDW locations; samples were collected from a single depth at the Elliott Bay and Green River locations. Samples were collected during four sampling events, with each event revisiting the same four stations in August, September, November, and December 2005. The sampling events included two dry-season, low-flow events and two wet-season, higher flow events. These samples were collected in Niskin® bottles deployed on a conductivity / temperature / depth rosette array from a boat. The Green River location was sampled manually from the entry bridge into Fort Dent Park. All samples were analyzed by Axys Analytical Services, Inc. for PCB congeners using EPA Method 1668A (modified). Conventional parameters were analyzed by the King County Environmental Laboratory (KCEL) using SM5310-B for dissolved and total organic carbon, SM2540-C for total dissolved solids, and SM2540-D for total suspended solids. Conventional data were validated by KCEL assessing method requirements and the QC requirements outlined in the Sampling and Analysis Plan (King County 2005a). Data validation for PCB congeners was performed by KCEL following EPA data validation guidelines for low concentration organics methods (EPA 2001). The PCB data were re-evaluated by Windward using EPA guidance for PCB congener analysis (EPA 1995).

Detected concentrations in the method blanks were evaluated relative to the concentrations found in the samples. Sample concentrations for specific congeners that were less than 5 times the concentration of the associated method blank were B-flagged with data validation qualifiers. All B-flagged results were mapped to U-qualifiers, and reported as non-detected with elevated RLs. Windward evaluated the method blank concentrations relative to the laboratory and field replicate samples, and the congeners with detected concentrations less than 5 times the associated method blank concentration were mapped to U-qualifiers by Windward. Several PCB congener results were K-qualified by the laboratory to indicate that a method ion abundance criterion was not met, and that the reported concentration represents the estimated maximum possible concentration and may be a false positive result. All K-qualified results were mapped to U-qualifiers as non-detect at the reported concentration, as a result of the data validation by KCEL.

Non-detected results for 91 PCB congeners in two samples (52 results for sample P36893-3 and 39 results for sample P36893-5) were rejected during data validation because of low recoveries of labeled PCB congener standards. Detected results associated with the low recoveries in these two samples were J-qualified as estimated, unless they were K-qualified by Axys, in which case they were UJK-qualified by Windward to indicate non-detected results with RLs of unknown bias. Because a significant number of PCB congeners (19 to 25%) were rejected, the total PCB congener concentrations were not calculated for these two samples.

Select detected PCB congener results that had a RPD greater than 50% between the original sample and its associated laboratory duplicate or field replicate sample were J-qualified by Windward to indicate estimated concentrations.

These validation qualifiers were incorporated into the LDW project database. The data from this event are usable for all purposes in Phase 2.

2.2.3 Duwamish/Diagonal – January 2005

Twenty-two surface sediment grab samples were collected by van Veen grab from January 31-February 2, 2005 from the Duwamish / Diagonal Sediment Remediation Program site. Samples were collected using a van Veen grab sampler from the top 10 cm of sediment. The samples were analyzed for conventional parameters (TOC by SM5310-B, total solids by SM2540-B, grain size distribution by ASTM D422), metals (EPA 3050A / 6010B, mercury by EPA 245.5), SVOCs (EPA 8270), and PCB Aroclors and organochlorine pesticides (EPA 8082 and 8081A, respectively). The King County Environmental Laboratory conducted all analyses of the surface sediment samples. All analytical data and laboratory QC procedures were evaluated and reviewed by King County following QA1 guidelines (PTI 1989).

Conventional analyses (TOC, total solids, and grain size distribution) results were acceptable without qualifiers. Several sample results for silver, beryllium, and cadmium were qualified by the data validator with the L flag for high standard reference material (SRM) recovery. These detected results were mapped to a JH validation qualifier (estimated value, high bias). Antimony results (all undetected) were qualified X by the laboratory because of low SRM recoveries (0%), and G qualified for low matrix spike recoveries (21 and 26%). Windward mapped these laboratory qualifiers to J (estimated value) for the 10 samples associated with the MS recovery of 26%. The non-detected results for the 12 samples associated with the MS recovery of 21% were rejected (R qualifier), per EPA national functional guidelines for inorganic data review (EPA 2004b).

All di-n-butyl phthalate results were qualified with the B flag because contamination was reported in the method blank at a concentration above the method detection limit

(MDL) of 5.0 µg/kg dw. The detected results for this compound were all less than 10x the blank concentration of 19.5 µg/kg dw. Consequently, these results were qualified by Windward as undetected (U) per EPA (1999) functional guidelines for organic data review. Matrix spike recoveries for aniline were flagged X for low recovery (<10%) in all samples. Windward R-qualified these results. Undetected results for beta-BHC were qualified by the laboratory with a UL flag because of high MS recovery (>150%). High matrix spike recovery does not affect undetected results, so no validation qualifier was added. Results for phenol, fluorene, phenanthrene, benzoic acid, dibenzofuran, Aroclor 1016, Aroclor 1248, and Aroclor 1260 were E-qualified for all samples because laboratory replicate sample RPDs were outside of project QC guidelines. Windward mapped these results to JK (estimated concentration; unknown bias) for all detected results.

These validation qualifiers were incorporated into the LDW project database. The sample-specific qualifier changes identified during Windward's review are shown in Appendix B. Form 1s were included in the data report. The data from this event, except R-qualified results, are usable for all purposes in Phase 2.

2.2.4 Duwamish/Diagonal – March 2005

Eight surface sediment samples, including one replicate, were collected by van Veen grab on March 16 and 24, 2005 as part of the Duwamish/Diagonal Sediment Remediation Program. Samples were collected from the top 10 cm of sediment using a stainless steel diver-actuated coring device (15-cm diameter). The samples were analyzed for conventional parameters (TOC by SM5310-B, total solids by SM2540-B, grain size distribution by ASTM D422), metals (EPA 3050A/6010B, mercury by EPA 245.5), SVOCs (EPA 8270), and PCB Aroclors and organochlorine pesticides (EPA 8082 and 8081A, respectively). The King County Environmental Laboratory conducted all analyses of the surface sediment samples. All analytical data and laboratory QC procedures were evaluated and reviewed by King County following QA1 guidelines (PTI 1989).

Antimony results (all undetected) for the samples were qualified with an X flag due to low SRM recovery (0%) and a G flag because of low matrix spike recovery (60%) outside the QC limit. Windward mapped these results to a J qualifier.

All di-n-butyl phthalate results were qualified with the B flag because contamination was reported in the method blank at a concentration above the MDL of 5.0 µg/kg dw. The detected results for this compound were all less than 10x the blank concentration of 11.1 µg/kg dw. Consequently, these results were qualified by Windward as undetected (U) per EPA (1999) functional guidelines for organic data review. Results for 4,4'-DDT (all undetected) were L-flagged for high SRM recovery. High SRM recovery does not affect undetected results, so no validation qualifier was added. Undetected results for 2,4-dimethylphenol, N-nitrosodiphenylamine, aniline, and pyridine were flagged X due to low matrix spike recovery (<10%). Windward mapped this result to an R qualifier per EPA (1999) functional guidelines.

These validation qualifiers were incorporated into the LDW project database. The sample-specific qualifier changes identified during Windward's review are shown in Appendix B. Form 1s were included in the data report. The data from this event, except R-qualified results, should be usable for all purposes in Phase 2.

2.2.5 Duwamish/Diagonal – April 2005

Seven surface sediment samples, including one replicate, were collected by van Veen grab on April 27, 2005 from the Duwamish / Diagonal Sediment Remediation Program site. Samples were collected from the top 10 cm of sediment using a van Veen grab sampler.

The samples were analyzed for conventional parameters (TOC by SM5310-B, total solids by SM2540-B, grain size distribution by ASTM D422), metals (EPA 3050A / 6010B, mercury by EPA 245.5), SVOCs (EPA 8270), and PCB Aroclors and organochlorine pesticides (EPA 8082 and 8081A, respectively). The King County Environmental Laboratory conducted all analyses of the surface sediment samples. All analytical data and laboratory QC procedures were evaluated and reviewed by King County following QA1 guidelines (PTI 1989).

Antimony results (all undetected) for all samples were qualified GX because of very low SRM recovery (0%) and low matrix spike recovery (27%), outside of QC limits. Windward mapped these results to a J qualifier. All di-n-butyl phthalate results were qualified with the B flag because contamination was reported in the method blank at a concentration above the MDL of 5.0 µg / kg dw. The detected results for this compound were all less than 10x the blank concentration of 13.0 µg / kg dw. Consequently, these results were qualified by Windward as undetected (U) per EPA (1999) functional guidelines for organic data review. Benzo(a)pyrene results were flagged G because SRM and matrix spike recoveries were outside the QC limits; these results were assigned a qualifier of JL. Results for 4,4'-DDT (all undetected) were L-flagged for high SRM recoveries. High SRM recovery does not affect undetected results, so no validation qualifier was added. Results for phenanthrene, fluoranthene, pyrene, bis(2-ethyhexyl)phthalate, benzyl alcohol, and 2-methylnaphthalene were flagged X for very low matrix spike recoveries (<10%). Because the native concentration in the matrix spike sample was greater than the spike concentration for phenanthrene, fluoranthene, pyrene, and benzyl alcohol, and was greater than half the spike concentrations for 2-methylnaphthalene, Windward mapped these results to a J qualifier. The concentration of bis(2-ethyhexyl)phthalate was greater than five times the spike concentration so these results were not qualified.

These validation qualifiers were incorporated into the LDW project database. The sample-specific qualifier changes identified during Windward's review are shown in

Appendix B. Form 1s were included in the data report. The data from this event, except R-qualified results, should be usable for all purposes in Phase 2.

2.2.6 Boeing Developmental Center – 2005

To monitor the effectiveness of the sediment remediation offshore of the south storm drain outfall at the Boeing Developmental Center, three sediment samples and one field duplicate sample were collected from 0 to 2 cm using disposable plastic spoons by Calibre on November 1, 2005. Approximately 60 cubic yards of contaminated sediment were removed from this area in September 2003, and the excavated area was backfilled with clean sand. Samples were analyzed under PSDDA guidelines by ARI for PCB Aroclors (EPA Method 8082), TOC (Plumb 1981), and total solids (EPA 160.3). A data quality assessment was conducted by Calibre to ensure that the analytical data met QC acceptance criteria and complied with the requirements of the project sampling plan. The results of the QC review and the analytical reports (Form 1s and QC summary forms) were reviewed by Windward. One Aroclor 1260 result was P-qualified by the laboratory because the results from the dual-column analysis had an RPD above QC limits. This result was JK-qualified by Windward to indicate unknown bias. One other Aroclor 1248 result was Y-qualified by ARI to indicate an elevated RL because of chromatographic interferences; this Y-qualified result was mapped to U in the project database. Sample S1-05 had a total PCB concentration of 353 µg/kg dw; the associated field duplicate sample collected from the sample location was undetected for PCBs. The data were not qualified for the field duplicate result differences. However, these QC results suggest that there may have been small-scale heterogeneity at this sampling location. All other data were within QC limits, and no other data validation qualifiers were applied. The data from this event are usable for all purposes in Phase 2.

2.2.7 Boeing Developmental Center – 2004

To monitor the effectiveness of the sediment remediation offshore of the south storm drain outfall at the Boeing Developmental Center, three sediment samples and one field duplicate sample were collected from 0 to 2 cm using disposable plastic spoons by Calibre on September 13, 2004. Samples were analyzed under PSDDA guidelines by ARI for PCB Aroclors (EPA Method 8082), TOC (Plumb 1981), and total solids (EPA 160.3). A data quality assessment was conducted by Calibre to ensure that the analytical data met QC acceptance criteria and complied with the requirements of the project sampling plan. The results of the QA review and the analytical reports (Form 1s and QC summary forms) were reviewed by Windward. All data were within QC limits, and no data validation qualifiers were applied. The data from this event are considered usable for all purposes in the Phase 2 RI/FS.

2.2.8 Jorgensen – August 2004

From August 16 to August 27, 2004, 18 sediment samples (including two duplicate samples) were collected by Herrera Environmental Consultants (Herrera) using a van Veen sampler for surface sediments (<10 cm) and 50 samples were collected by vibracorer for subsurface sediments (1-6 ft). These samples were analyzed by ARI for TOC (EPA 9060), SVOC (EPA 8270), mercury (EPA 7471A), and grain size (PSEP 1986). EPA's Manchester Environmental Laboratory analyzed the samples for other metals (EPA 6010) and PCB Aroclors (EPA 8082). Sample splits were also analyzed by a US Navy facility for PCB Aroclors using EPA 4020. Per the project QAPP (USACE 2004), the sediment analytical data analyzed by the Manchester Environmental Laboratory were validated by EPA; the analytical data generated by ARI were validated by Herrera. Windward reviewed Herrera's validation reports for the SVOC, mercury, TOC, and grain size analyses, and the EPA QA memorandums for other metals and PCB Aroclors.

Fifteen detected SVOCs were J-qualified by the Herrera project chemist because the RPD between the sample (SD-314-0000) and its field duplicate sample (SD-325-0000) exceeded QC limits; these results were mapped to JK to indicate unknown bias. Windward JL-qualified 28 SVOC results (all non-detects) to indicate a potential low bias because of low recoveries in the associated CCVs (10 results for benzyl alcohol and 6 results each for 2,4-dinitrophenol, 4-nitrophenol, and 4-nitroaniline). One internal standard, d12-perylene, was outside of QC limits in the MS/MSD samples; this internal standard was within QC limits in the original un-spiked sample. Results for MS/MSD samples are not stored in the project database and the data for MS/MSD samples will never be aggregated (e.g. averaged) with any un-spiked sample results, so no additional qualification was added based on the low MS/MSD recoveries for d12-perylene. The percent recovery for pyrene in the MS was below acceptable limits (20%), but no data were qualified because the MSD recovery was deemed acceptable (42%) and all other QC requirements were met. This chemical is not associated with the internal standard that was outside of QC limits in the MS/MSD, but rather it is quantified using internal standard chrysene-d12.

Eighteen chromium results were J-qualified by EPA because the MS recovery was outside of QC limits (66%), although the associated MSD recovery was within QC limits (117%). Windward mapped these 18 chromium results (all detected) to JL to indicate a potential low bias. Twenty-one sediment samples were selected for mercury analysis and analyzed 11 to 22 days after the recommended holding time of 28 days. Twenty of these mercury results were detected concentrations and were J-qualified by the data validator; these results were JL qualified by Windward to indicate low bias. The other mercury result was non-detected and was rejected by the data validator, and was R-qualified by Windward. One sample was also J-qualified for mercury because of MS recovery above QC limits; this result was JK qualified by Windward. Five sediment samples were selected for grain size analysis after the completion of the sampling event when the samples were archived frozen. All grain size results for these five samples were J-qualified as estimated by the data validator and JK-qualified by Windward (unknown bias) because freezing may affect the particle size distribution.

One detected result for Aroclor 1254 was J-qualified by EPA because an associated CCV sample recovery was outside of QC limits, and this result was mapped to a JL-qualifier by Windward (low bias). Two additional detected Aroclor 1254 results were mapped to JL-qualifiers by Windward to indicate a potential low bias because the associated CCV sample immediately bracketing sample analysis was outside of QC limits. Nine detected Aroclor results in 6 samples were J-qualified by EPA because of high surrogate recoveries; these results were mapped to JH by Windward to indicate a potential high bias. One detected Aroclor 1254 result was J qualified by EPA because of high RPD between the results of the original and laboratory duplicate samples. This result was mapped to JK by Windward to indicate an estimated concentration with unknown bias. All detected Aroclor 1248 results and three detected Aroclor 1260 results were J-qualified by EPA to indicate potential interference from concentrations of Aroclor 1254 present in the samples; these results were mapped to JH by Windward to indicate that these results may be biased high.

The validation qualifiers were incorporated into the Windward project database. All data generated using standard EPA methods by ARI and the EPA Manchester Environmental Laboratory are considered acceptable for all uses as qualified. Rejected data shall not be used for any purpose. The field screening data for PCB Aroclors by EPA Method 4020 may be used for informational or screening purposes only.

2.2.9 Jorgensen – April 2004

From April 20 to April 23, 2004, 20 sediment cores (plus two duplicate cores) were collected by MudMole by MCS Environmental, Inc. (MCS) from sampling Area I, adjacent to the Jorgensen Forge property at approximately RM 3.6-3.7, 50 feet off the toe of the slope and westward to the LDW navigation channel. Samples were analyzed under Puget Sound Dredged Disposal Analysis (PSDDA) guidelines by ARI for selected metals (chromium, cadmium, copper, lead, silver, zinc and mercury), PCB Aroclors, TOC, total solids and grain size. Metals were analyzed using EPA 6010B and 7471A (mercury). PCBs were analyzed using EPA 8082. TOC and total solids were analyzed using ARI SOP 602S and EPA 160.3, respectively. In addition, the first two intervals (0-1 ft and 1-2 ft intervals) were analyzed for grain size using PSEP (1986). All sediment analytical data and laboratory QC procedures were evaluated and reviewed by Sayler Data Solutions, Inc. following QA1 guidelines (PTI 1989).

Chromium results for several samples were J-qualified by the validator because of low MS recovery and high laboratory-duplicate RPD. Windward mapped these results to a JL qualifier (estimated result, low bias). One copper result and fourteen mercury results were J-qualified by the data validator because of high laboratory-duplicate variability. Windward mapped these results to a JK validation qualifier (estimated concentration, unknown bias). Aroclor 1260 results for two samples were P-qualified by the laboratory and then J-qualified by the validator because RPDs between the dual-column concentrations exceeded QC criteria. The laboratory reported the result from the analytical column with the highest concentration. Therefore, Windward mapped these qualifiers to JH to indicate high bias.

The sample and field duplicate TOC and total solids results for sample SD-210-0000 had RPDs outside the QC criteria. Those results and the result for sample SD-210-0010 were J-qualified by the validator. Windward mapped these qualifiers to JK. Because a high proportion of grain size results for field duplicate samples had RPDs that exceeded the QC criteria, the validator J- or UJ-qualified all sample results. Windward mapped the J- and UJ-qualifiers to JK and UJK, respectively.

These validation qualifiers were incorporated into the LDW project database. The sample-specific qualifier changes identified during Windward's review are shown in Appendix B. Form 1s were included in the data report. The data from this event should be usable for all purposes in Phase 2.

2.2.10 Rhône-Poulenc – 2004

Fifty sediment samples (including 8 duplicate samples) were collected from 21 locations using a clam gun at the former Rhône-Poulenc facility from August 24 to 26, 2004 by EPA. Cores were divided into upper (0-10 cm) and lower (> 10 cm) samples and analyzed by Manchester Environmental Laboratory for SVOCs, metals, pesticides and PCB Aroclors. SVOCs were analyzed using EPA 8270. Metals were analyzed using EPA 6010/200.7. Mercury was analyzed using EPA 245.5. Analysis of pesticides and PCB Aroclors followed EPA 8081 and 8082, respectively. Porewater samples were collected from 16 locations and analyzed for metals by EPA method 6020/200.8, mercury by EPA 1631E, SVOCs by EPA 8270, and VOCs by EPA 8260. The sediment and porewater datasets were validated by EPA, and Windward mapped the validation qualifiers.

Two PCB results were J-qualified by the validator for exceeding the holding time by 13 days. Windward mapped these results to JK (estimated, unknown bias). Two PCB results and one delta-BHC result were J-qualified by the validator because of less than 50% surrogate recovery. Windward mapped these results to JL (estimated, low bias). Sodium results were J-qualified by the validator because of reference material recoveries above acceptable limits. Windward mapped these results to JH (estimated, high bias). Detected concentrations of pesticides in two samples were J-qualified by the validator because the samples contained PCB Aroclors which may have interfered with the quantification of other pesticides. Windward mapped these results to JN (estimated concentration, tentative identification).

Detected benzoic acid results for thirteen samples were J-qualified because continuing calibration results were above acceptable limits. Windward mapped these qualifiers to

JH. Detected benzoic acid results for thirteen other samples were J-qualified because continuing calibration results were below acceptable limits. Windward mapped these qualifiers to JL. All detected acidic SVOC results for sample Upper SB-03 were J-qualified by the validator because surrogate recoveries were above acceptable limits. Windward mapped these qualifiers to JH.

These validation qualifiers were incorporated into the LDW project database. The sample-specific qualifier changes identified during Windward's review are shown in Appendix B. Form 1s were included in the data report. The data from this event should be usable for all purposes in Phase 2.

2.2.11 Duwamish/Diagonal – June 2004

Eight surface sediment samples were collected by van Veen sampler on June 1, 2004 for the Duwamish / Diagonal Sediment Remediation Program. The samples were analyzed for conventional parameters (TOC by SM5310-B, total solids by SM2540-B, grain size distribution by ASTM D422), metals (EPA 3050A / 6010B, mercury by EPA 245.5), SVOCs (EPA 8270), and PCB Aroclors and organochlorine pesticides (EPA 8082 and 8081A, respectively). The King County Environmental Laboratory conducted all analyses of the surface sediment samples. All analytical data and laboratory QC procedures were evaluated and reviewed by King County following QA1 guidelines (PTI 1989).

No qualifiers were assigned to TOC, total solids, or grain size distribution and the data are acceptable as reported. Silver and aluminum results for samples in this dataset were qualified with an L because the reported SRM or matrix spike recoveries were greater than the applicable QC limits. Windward mapped these qualifiers to JH. Antimony and iron results for this dataset were qualified with a G flag because matrix spike recoveries were less than the 75% QC limit. Windward mapped these qualifiers to JL.

Results for naphthalene, phenanthrene, anthracene, pyrene, benzo(a)anthracene, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, 2-methyphenol and beta-BHC in this dataset were qualified G because of SRM or matrix spike recoveries less than QC limits. Windward mapped these laboratory qualifiers to JL. Benzo(k)fluoranthene, dibenzo(a,h)anthracene, 4,4'-DDT, alpha-chlordane and methyoxychlor were qualified as L because of SRM or matrix spike recoveries above the QC limits. Windward mapped these qualifiers to JH.

These validation qualifiers were incorporated into the LDW project database. The sample-specific qualifier changes identified during Windward's review are shown in Appendix B. Form 1s were included in the data report. The data from this event should be usable for all purposes in Phase 2.

2.2.12 Boeing Plant 2 (DSOAvertchar2)

Eighteen sediment cores, including two duplicate cores, were collected by MudMole by MCS from August 12 to 20, 2003 for vertical characterization within the Duwamish Sediment Other Area (DSOA). Samples were analyzed by ARI for PCB Aroclors (EPA 8082), TOC (ARI SOP 602S), and total solids (EPA 160.3). All sediment analytical data and laboratory QC procedures were evaluated and reviewed by Sayler Data Solutions, following EPA functional guidelines (EPA 1999).

The result for Aroclor 1260 for sample SD-DUW137-0020 was J-qualified by the validator because the RPD between the dual-column concentrations exceeded the QC criteria. The laboratory reported the result from the analytical column with the highest concentration, so Windward mapped this result to JH to indicate high bias. Results for Aroclors 1248, 1254, and 1260 for field duplicate SD-DUW146-0020 were J-qualified by the validator because the RPDs between the concentrations of the field duplicate and the original sample exceeded the QC criterion of 50%. Field duplicate SD-DUW146-0030 results for Aroclor 1254 and 1260 were J-qualified by the validator because the RPDs between the concentrations of the field duplicate and the original sample exceeded the QC criteria. TOC results for samples SD-DUW146-0020, SD-DUW146-0030, and SD-DUW146-0040 were J-qualified by the validator because the RPDs between the concentrations of the field duplicate samples and the original samples exceeded the QC criteria. Windward mapped these J-qualified results for the field duplicate samples to a JK qualifier to indicate unknown bias.

These validation qualifiers were incorporated into the LDW project database. The sample-specific qualifier changes identified during Windward's review are shown in Appendix B. The data from this event should be usable for all purposes in Phase 2.

2.2.13 Boeing Plant 2 (DSOAvertchar3)

Five sediment cores were collected by MudMole by MCS on April 22 and 23, 2004 for additional vertical characterization at four new locations within the DSOA; one core was collected from a previously sampled station (SD-DUW147) to confirm the depth of contamination. Samples were analyzed by ARI for PCB Aroclors (EPA 8082), TOC (ARI SOP 602S), and total solids (EPA 160.3). All sediment analytical data and laboratory QC procedures were evaluated and reviewed by Sayler Data Solutions, following EPA functional guidelines (EPA 1999).

All PCB, TOC and total solids results, as reported, were found acceptable for use and were not qualified by the validator. The data from this event should be usable for all purposes in Phase 2.

2.2.14 South Park Bridge – 2003

Two soil borings consisting of 11 samples were collected by rotary drill by Wilbur Consulting, Inc. as part of the Preliminary Site Investigation for the South Park Bridge

Project on July 22 and 23, 2003. Samples were analyzed by ARI for VOCs (EPA 8260), PAHs (EPA 8270), TPH (Northwest TPH method – diesel range), pesticides (EPA 8081), PCB Aroclors (EPA 8082), metals (EPA 6010B and 7471A), TOC (ARI SOP 602S), total solids (EPA 160.3), and grain size (PSEP 1986). All sediment analytical data and laboratory QC procedures were evaluated and reviewed by Wilbur Consulting, Inc. following QA1 guidelines (PTI 1989).

All results, as reported, were found acceptable for use and were not qualified by the validator. Form 1s were included in the data report. The data from this event should be usable for all purposes in Phase 2.

2.2.15 Glacier Northwest – 2002

Three sediment samples from nine composited sediment cores from three dredged material management units (DMMUs) were collected by vibracorer by Pacific International Engineering, LLC on January 15, 2002 and three sediment samples were recollected from eleven composited sediment cores from three DMMUs were collected April 22 and 23, 2002, to determine the suitability of dredged material for unconfined, open-water disposal (PIE 2002). Three archived samples were also collected from the composited sediment cores. Samples were analyzed under PSDDA guidelines by Columbia Analytical Services (CAS) for SVOCs (EPA 8270C), pesticides (EPA 8081A), PCB Aroclors (EPA 8082), metals (EPA 6010B and 7471A), TOC (Plumb 1981), total solids (EPA 160.3), and grain size (PSEP 1986). All sediment analytical data and laboratory QC procedures were evaluated and reviewed by Pacific International Engineering, PLLC (PIE), following EPA functional guidelines (EPA 1999).

Six pesticide results were P-qualified by the laboratory because the confirmation comparison criterion of 40% difference between the two columns was exceeded. The validator assigned a J qualifier to these results, which was mapped to a JK qualifier by Windward.

These validation qualifiers were incorporated into the LDW project database. The sample-specific qualifier changes identified during Windward's review are shown in Appendix B. The data from this event should be usable for all purposes in Phase 2.

3.0 References

Anchor. 2003. Data report: sediment characterization results for the Duwamish River navigational channel turning basin. Prepared for Dredged Material Management Office, US Army Corps of Engineers. Anchor Environmental L.L.C, Seattle, WA.

Battelle. 1996. Final report for the PCB Aroclor and congener analyses on fish tissue samples from the Elliott Bay / Duwamish River project. Pacific Northwest Division, Battelle Marine Research Laboratory, Sequim, WA.

CALIBRE. 2005. 2004 annual sampling report, south storm drain system, Boeing Developmental Center. Prepared for the Boeing Group. CALIBRE Systems, Alexandria, VA.

CALIBRE. 2006. 2005 annual sampling report, south storm drain system, Boeing Developmental Center. Prepared for the Boeing Group. CALIBRE Systems, Alexandria, VA.

Ecology. 2003. Norfolk combined sewer overflow (Duwamish River) sediment cap recontamination. Phase I investigation. Publ. no. 03-03-004. Environmental Assessment Program, Washington Department of Ecology, Olympia, WA.

EPA. 1995. EPA Region 10 SOP For the validation of Method 1668 toxic, dioxin-like, PCB data. Revision 1.0. Environmental Services Division, US Environmental Protection Agency, Region 10, Seattle, WA.

EPA. 1999. USEPA contract laboratory program national functional guidelines for organic data review. EPA-540/R-99/008. Office of Emergency and Remedial Response, US Environmental Protection Agency, Washington, DC.

EPA. 2001. USEPA contract laboratory program national functional guidelines for low concentration organic data review. EPA-540/R-00/006. Office of Emergency and Remedial Response, US Environmental Protection Agency, Washington, DC.

EPA. 2003. Review of the analytical data used for the scoping Phase 1 Remedial Investigation report for Lower Duwamish Waterway for use in the Phase 2 baseline risk assessments. Memorandum to the Lower Duwamish Waterway Group, February 10, 2003. US Environmental Protection Agency, Region 10, Seattle, WA.

EPA. 2004a. Memorandum: Peer review of the total metals analysis for Lower Duwamish Triad sampling event samples. November 22, 2004. US Environmental Protection Agency Region 10 Laboratory, Port Orchard, WA.

EPA. 2004b. USEPA contract laboratory program national functional guidelines for inorganic data review. EPA 540-R-04-004. Office of Emergency and Remedial Response, US Environmental Protection Agency, Washington, DC.

EPA. 2005a. Memorandum: Data review for the PCB Aroclor analysis of sediment and water samples from the Lower Duwamish Triad Project. January 12, 2005. US Environmental Protection Agency Region 10 Laboratory, Port Orchard, WA.

EPA. 2005b. Rhône-Poulenc (Rhodia) sediment & porewater investigation Aug/Sept 2004. Data report: volatile organic compounds, metals, and pesticides/PCBs detected in sediment and porewater. Draft. US Environmental Protection Agency Region 10, Seattle, WA.

ESG. 1999. Waterway sediment operable unit, Harbor Island Superfund site. Assessing human health risks from the consumption of seafood: human health risk assessment report. Prepared for Port of Seattle, Todd Shipyards, and Lockheed-Martin for submittal to US Environmental Protection Agency, Region 10, Seattle, WA. Environmental Solutions Group, Inc., Seattle, WA.

EVS. unpublished. Elliott Bay / Duwamish River fish tissue investigation, 1995. Fish collection field log. EVS Environment Consultants, Inc., Seattle, WA.

Exponent. 1998. Duwamish Waterway phase I site characterization report. Prepared for The Boeing Company. Exponent, Bellevue, WA.

Floyd Snider McCarthy. 2004. Boeing Plant 2, Seattle / Tukwila, Washington: Phase 1 transformer PCB investigation report. Floyd Snider McCarthy, Inc., Seattle, WA.

Frontier Geosciences. 1996. Mercury results in 18 fish samples for the Elliott Bay / Duwamish River project. Frontier Geosciences, Seattle, WA.

Hart Crowser. 1993. Results of sampling and analysis, sediment monitoring plan, Duwamish Shipyard, Inc., Seattle, Washington. Hart Crowser, Inc., Seattle, WA.

Hart Crowser. 1994a. Technical memorandum no. 9 - Duwamish Waterway seep and shellfish sampling, Great Western Chemical Company Remedial Investigation. Hart Crowser, Inc., Seattle, WA).

Hart Crowser. 1994b. Technical memorandum no. 10 - Second quarter Duwamish Waterway seep and shellfish sampling, Great Western Chemical Company Remedial Investigation. Hart Crowser, Inc., Seattle, WA (as cited in Terra Vac and Floyd Snyder 2000).

Hart Crowser. 1996. Technical memorandum No. 11- off-site GeoProbe study and baseline sampling and analysis results, Great Western Chemical Company facility, Seattle, Washington. Hart Crowser, Inc., Seattle, WA (as cited in Terra Vac and Floyd Snyder 2000).

Hart Crowser. 1997. Technical memorandum No. 13 - RI / FS annual monitoring, December 1996. Hart Crowser, Inc., Seattle, WA (as cited in Terra Vac and Floyd Snyder 2000).

Hart Crowser. 1998. Dredge material characterization, Hurlen Construction Company and Boyer Alaska Barge Lines Berthing Areas, Duwamish Waterway, Seattle, Washington. Prepared for Peratrovich, Nottingham & Drage. Hart Crowser, Inc., Seattle, WA.

Hart Crowser. 1999. Dredge material characterization, Duwamish Yacht Club, Duwamish Waterway, Seattle, Washington. Prepared for Peratrovich, Nottingham & Drage. Hart Crowser, Inc., Seattle, WA.

Hartman. 1992. Lone Star Northwest west terminal, Duwamish River PSDDA sampling and analysis results. Hartman Associates, Inc., Seattle, WA.

Hartman. 1995. Lone Star Northwest and James Hardie Gypsum, Kaiser Dock Upgrade, Duwamish Waterway PSDDA sampling and analysis results. Hartman Associates, Inc., Seattle, WA.

Herrera. 1997. Seaboard Lumber Site. Phase 2 site investigation. Draft. Prepared for Seattle Department of Parks and Recreation. Herrera Environmental Consultants, Inc., Seattle, WA.

Herrera. 2005. Memorandums to J. Wakeman, USACE, Seattle District, regarding grain size distribution, TCLP lead, mercury, SVOC, and total organic carbon data validation for Lower Duwamish Triad sampling event. January 21, 2005. Herrera Environmental Consultants, Inc., Seattle, WA.

Integral. 2004. Lower Duwamish Waterway slip 4 early action area: cruise and data report. Prepared for City of Seattle and King County. Integral Consulting, Inc., Mercer Island, WA.

King County. 1996. Norfolk CSO sediment cleanup study. Prepared for Elliott Bay / Duwamish Restoration Program. King County Department of Natural Resources, Seattle, WA.

King County. 1999a. King County combined sewer overflow water quality assessment for the Duwamish River and Elliott Bay. Vol 1: Overview and interpretation, plus appendices. King County Department of Natural Resources, Seattle, WA.

King County. 1999b. Norfolk CSO sediment remediation project five-year monitoring program: April 1999 monitoring report. Prepared for Elliott Bay / Duwamish Restoration Program. King County Department of Natural Resources, Seattle, WA.

King County. 2000a. Duwamish / Diagonal CSO / SD site assessment report. Draft. Prepared for Elliott Bay / Duwamish Restoration Program. King County Department of Natural Resources, Seattle, WA.

King County. 2000b. King County environmental laboratory quality assurance review for estuarine sediment analytical data. Norfolk CSO sediment remediation project five-year monitoring program. February 2000 sampling event. Environmental Laboratory, King County Department of Natural Resources, Seattle, WA.

King County. 2000c. Norfolk CSO sediment remediation project five-year monitoring program. Annual monitoring report-year one, April 2000. Prepared for Elliott Bay / Duwamish Restoration Program. King County Department of Natural Resources, Seattle, WA.

King County. 2000d. Norfolk CSO sediment remediation project five-year monitoring program. Six-month post-construction monitoring report, October 1999. Prepared for Elliott Bay / Duwamish Restoration Program. King County Department of Natural Resources, Seattle, WA.

King County. 2001a. Duwamish / Diagonal CSO / SD cleanup study report. Draft. Prepared for Elliott Bay / Duwamish Restoration Program panel. King County Department of Natural Resources, Seattle, WA.

King County. 2001b. Norfolk CSO sediment remediation project five-year monitoring program. Annual monitoring report-year two, April 2001. Prepared for Elliott Bay / Duwamish Restoration Program. King County Department of Natural Resources, Seattle, WA.

King County. 2002. Norfolk CSO sediment remediation project five-year monitoring program: Annual monitoring report - year 3, April 2002. Prepared for the Elliott Bay / Duwamish Restoration Panel. King County Department of Natural Resources and Parks, Seattle, WA.

King County. 2003. Norfolk CSO sediment remediation project five-year monitoring program: Annual monitoring report - year 4, April 2003 - unpublished data. Prepared for the Elliott Bay / Duwamish Restoration Panel. King County Department of Natural Resources and Parks, Seattle, WA.

King County. 2005a. Duwamish River, Elliott Bay, and Green River water column PCB congener survey: sampling and analysis plan. King County Department of Natural Resources and Parks, Seattle, WA.

King County. 2005b. Norfolk CSO sediment remediation project five-year monitoring program: Final monitoring report - year 5, April 2004. Prepared for the Elliott Bay / Duwamish Restoration Panel. King County Department of Natural Resources and Parks, Seattle, WA.

King County. 2005c. Quality assurance review for estuarine sediment analytical data, Duwamish / Diagonal sediment remediation project year zero, ENR cap sediment characterization, April 2005 monitoring event. King County Environmental Laboratory, Seattle, WA.

King County. 2005d. Quality assurance review for estuarine sediment analytical data, Duwamish / Diagonal sediment remediation project year zero, ENR cap sediment characterization, March 2005 monitoring event. King County Environmental Laboratory, Seattle, WA.

King County. 2005e. Quality assurance review for estuarine sediment analytical data, Duwamish / Diagonal sediment remediation project, perimeter sediment characterization, February 2005 monitoring event. King County Environmental Laboratory, Seattle, WA.

King County. 2005f. Quality assurance review for estuarine sediment analytical data, Duwamish / Diagonal sediment remediation project. Year zero, cap sediment characterization, June 2004 monitoring event. King County Environmental Laboratory, Seattle, WA.

King County. 2006a. Quality assurance review for estuarine sediment analytical data, Duwamish / Diagonal sediment remediation project, year one, ENR cap sediment characterization, March 2006 sampling event. King County Environmental Laboratory, Seattle, WA.

King County. 2006b. Quality assurance review for estuarine sediment analytical data, Duwamish / Diagonal sediment remediation project, year two, cap sediment characterization, March 2006 sampling event. King County Environmental Laboratory, Seattle, WA.

King County. 2007. Quality assurance review for estuarine sediment analytical data, Duwamish / Diagonal sediment remediation project, perimeter sediment characterization, March 2006 sampling event. King County Environmental Laboratory, Seattle, WA.

King County, Anchor, EcoChem. 2005. Duwamish / Diagonal CSO / SD sediment remediation project closure report. Prepared for the Elliott Bay Duwamish Restoration Program Panel. King County Department of Natural Resources, Anchor Environmental LLC, and EcoChem, Inc., Seattle, WA.

Krausmann JD. 2002. Preliminary exposure assessment of dioxin-like chlorobiphenyls in great blue herons of the lower Duwamish River in Seattle, Washington. US Fish and Wildlife Service, Lacey, WA.

MCS. 2004a. Additional vertical characterization, Duwamish sediment other area, Seattle, Washington. Data report, February 2004. Prepared for The Boeing Company. MCS Environmental, Inc., Mountlake Terrace, WA.

MCS. 2004b. Additional vertical characterization, Duwamish sediment other area, Seattle, Washington. Data report, October 2004. Prepared for The Boeing Company. MCS Environmental, Inc., Mountlake Terrace, WA.

MCS. 2004c. Boeing Plant 2 Duwamish sediment other area upriver (area 1) sediment characterization, Seattle, Washington. Prepared for The Boeing Company. MCS Environmental, Inc., Mountlake Terrace, WA.

MCS. 2004d. Puget Sound dredged disposal analysis for the Lehigh Northwest Duwamish Waterway Facility, Seattle, Washington. Full PSDDA characterization. Prepared for Lehigh Northwest, Inc. MCS Environmental, Inc., Mountlake Terrace, WA.

Mickelson S, Williston D. 2006. Technical memorandum: Duwamish River / Elliott Bay / Green River water column PCB congener survey: transmittal of data and quality assurance documentation. King County Department of Natural Resources, Seattle, WA.

NMFS. 2002. Unpublished data on PCB concentrations in juvenile chinook salmon captured in the Lower Duwamish Waterway during 1993 and 2000. Environmental Conservation Division, National Marine Fisheries Service, Seattle, WA.

NOAA. 1997. Duwamish River sediment study: sampling and analysis plan, quality assurance plan. Environmental Conservation Division, Northwest Fisheries Science Center, National Oceanic and Atmospheric Administration, Seattle, WA.

NOAA. 1998. Duwamish Waterway sediment characterization study report. Damage Assessment Center, National Oceanic and Atmospheric Administration, Seattle, WA.

NOAA, Ecology. 2000. Sediment quality in Puget Sound. Year 2 - central Puget Sound. Ecology publication no. 00-03-055. National Oceanic and Atmospheric Administration, Silver Spring, MD and Washington Department of Ecology, Olympia, WA.

Pentec. 2001. Data report, DSOA vertical characterization and Outfall 12 data collection. Duwamish sediment other area, Boeing Plant 2, Seattle/Tukwila, Washington. Pentec Environmental, Edmonds, WA.

PIE. 2002. Puget Sound Dredged Disposal Analysis (PSDDA) dredged sediment characterization report, Glacier Northwest Seattle Cement Terminal. Prepared for Glacier Northwest, Inc. Pacific International Engineering, PLLC, Edmonds, WA.

Plumb R, Jr. 1981. Procedures for handling and chemical analysis of sediment and water samples. Waterways Experiment Station, US Army Corps of Engineers, Vicksburg, MS.

PSEP. 1986. Recommended protocols for measuring conventional sediment variables in Puget Sound. Prepared for the Puget Sound Estuary Program. US Environmental Protection Agency, Region 10, Seattle, WA.

PTI. 1989. Data validation guidance manual for selected sediment variables. Prepared for Washington Department of Ecology. PTI Environmental Services, Inc, Bellevue, WA.

PTI. 1996. Proposed dredging of slip no. 4, Duwamish River, Seattle, Washington: data report. Prepared for Puget Sound Dredged Disposal Analysis Program. PTI Environmental Services, Bellevue, WA.

Rhône-Poulenc. 1995. RCRA facility investigation (RFI) report for the Marginal Way facility. Vol 1: RFI results and conclusions. Prepared for US Environmental Protection Agency, Region 10. Rhône-Poulenc, Tukwila, WA.

Rhône-Poulenc. 1996. RCRA facility investigation (RFI) report for the Marginal Way facility. Round 3 data and sewer sediment technical memorandum. Prepared for US Environmental Protection Agency, Region 10. Rhône-Poulenc, Tukwila, WA.

SEA. 1996. PSDDA chemical characterization of Duwamish Waterway and upper turning basin. FY97 operations and maintenance dredging. Prepared for US Army Corps of Engineers, Seattle District. Striplin Environmental Associates, Inc., Olympia, WA.

SEA. 1998. PSDDA sediment characterization of Duwamish River navigation channel: FY99 operations and maintenance dredging data report. Prepared for US Army Corps of Engineers, Seattle District. Striplin Environmental Associates, Inc., Olympia, WA.

SEA. 2000a. PCB congener analysis of three sediment samples collected from the Duwamish River navigation channel. Prepared for US Army Corps of Engineers, Seattle District. Striplin Environmental Associates, Inc., Olympia, WA.

SEA. 2000b. PSDDA sediment characterization of Duwamish River navigation channel: FY2000 operations and maintenance dredging data report. Prepared for US Army Corps of Engineers, Seattle District. Striplin Environmental Associates, Inc., Olympia, WA.

Spearman JW. 1991. Sediment sampling and analysis, South Park Marina, Duwamish Waterway, Seattle, Washington. Jay W. Spearman, Consulting Engineer, Kirkland, WA.

Spearman JW. 1999. Sediment sampling and analysis, James Hardie Gypsum Inc., Duwamish Waterway, Seattle, Washington. Jay W. Spearman, Consulting Engineer, Kirkland, WA.

Terra Vac, Floyd & Snider. 2000. Supplemental remedial investigation and feasibility study. Agency review draft. Volume 1. Prepared for GW International. Terra Vac, Edmonds, WA, and Floyd & Snider Inc., Seattle, WA.

USACE. 2004. Quality assurance project plan, Lower Duwamish triad sampling event. Prepared for US Environmental Protection Agency. US Army Corps of Engineers, Seattle District, Seattle, WA.

Varanasi U, Casillas E, Arkoosh MR, Hom T, Misitano D, Brown DW, Chan S-L, Collier TK, McCain BB, Stein JE. 1993. Contaminant exposure and associated biochemical effects in outmigrant juvenile chinook salmon (*Onchorynchus* *tschawytscha*) from urban and nonurban estuaries of Puget Sound, Washington. NOAA technical memorandum NMFS-FWFSC-8. Northwest Fisheries Science Center, National Marine Fisheries Service, Seattle, WA.

West JE, O'Neill SM, Lippert G, Quinnell S. 2001. Toxic contaminants in marine and anadromous fishes from Puget Sound, Washington. Results of the Puget Sound ambient monitoring program fish component 1989-1999. Washington Department of Fish and Wildlife, Olympia, WA.

Weston. 1993. Harbor Island remedial investigation report (part 2-sediment). Vol 1-report. Prepared for US Environmental Protection Agency, Region 10. Roy F. Weston, Inc., Seattle, WA.

Weston. 1998. Comprehensive RCRA facility investigation report, Boeing Plant 2, Seattle / Tukwila, Washington. Roy F. Weston, Inc., Seattle, WA.

Weston. 1999. Site inspection report, Lower Duwamish River (RK 2.5-11.5), Seattle, Washington. Vol 1-Report and appendices. Prepared for US Environmental Protection Agency, Region 10. Roy F. Weston, Inc., Seattle, WA.

Weston. 2000. Outfall and nearshore sediment sampling report, Duwamish facility. Prepared for James Hardie Gypsum, Seattle, Washington. Roy F. Weston, Inc., Seattle, WA.

Wilbur Consulting. 2004. Final preliminary site investigation report for the South Park Bridge project. Prepared for King County Department of Transportation. Wilbur Consulting, Inc., Seattle, WA.

Windward. 2001a. Lower Duwamish Waterway remedial investigation. Task 2: Site characterization - Technical memoranda: 1. Criteria for evaluating and accepting data sets, 2. List of reports for historical site characterization, 3. Conceptual design for database. Prepared for Lower Duwamish Waterway Group. Windward Environmental LLC, Seattle, WA.

Windward. 2001b. Lower Duwamish Waterway remedial investigation. Task 2: Site characterization - Technical memoranda: 4. Summary of data in the database, 5. GIS maps of station locations and chemistry. Prepared for Lower Duwamish Waterway Group. Windward Environmental LLC, Seattle, WA.

Windward. 2002. East Waterway, Harbor Island Superfund site: Technical memorandum: Tissue chemistry results for juvenile chinook salmon collected from Kellogg Island and East Waterway. Prepared for the Port of Seattle. Windward Environmental LLC, Seattle, WA.

Windward. 2003. Lower Duwamish Waterway remedial investigation. Phase 1 remedial investigation report. Prepared for Lower Duwamish Waterway Group. Windward Environmental LLC, Seattle, WA.

Windward. 2004. Lower Duwamish Waterway remedial investigation. Task 8: Phase 2 RI work plan. Prepared for Lower Duwamish Waterway Group. Windward Environmental LLC, Seattle, WA.

Windward. 2005a. Lower Duwamish Waterway remedial investigation. NOAA juvenile chinook salmon tissue data. Memorandum to EPA prepared on behalf of the Lower Duwamish Waterway Group. Windward Environmental LLC, Seattle, WA.

Windward. 2005b. Technical Memorandum: Summary of sediment and tissue chemistry datasets to be used in the Phase 2 RI/FS. Prepared for Lower Duwamish Waterway Group. Windward Environmental LLC, Seattle, WA.

Windward. 2005c. Technical Memorandum: Summary of sediment and tissue chemistry datasets to be used in the Phase 2 RI/FS: Addendum 1. Prepared for Lower Duwamish Waterway Group. Windward Environmental LLC, Seattle, WA.

Windward. 2006a. Lower Duwamish Waterway remedial investigation. Baseline ecological health risk assessment. Draft. Prepared for Lower Duwamish Waterway Group. Windward Environmental LLC, Seattle, WA.

Windward. 2006b. Lower Duwamish Waterway remedial investigation. Baseline human health risk assessment. Draft. Prepared for Lower Duwamish Waterway Group. Windward Environmental LLC, Seattle, WA.

Windward. 2006c. Lower Duwamish Waterway remedial investigation. Technical memorandum: Criteria for defining the baseline surface sediment dataset for use in the Lower Duwamish Waterway Phase 2 RI/FS. Prepared for Lower Duwamish Waterway Group. Windward Environmental LLC, Seattle, WA.

Windward, DOF, Onsite. 2004a. Lower Duwamish Waterway Superfund site, Terminal 117 early action area. Sediment field sampling, cruise and data report. Draft. Prepared for the Port of Seattle. Windward Environmental LLC, Dalton, Olmstead & Fuglevand, Inc., and Onsite Enterprises, Inc., Seattle, WA.

Windward, DOF, Onsite. 2004b. Lower Duwamish Waterway Superfund site, Terminal 117 early action area. T-117 sediment and soil supplemental data report. Draft. Prepared for the Port of Seattle. Windward Environmental LLC, Dalton, Olmstead & Fuglevand, Inc., and Onsite Enterprises, Inc., Seattle, WA.

WR Consulting. 2004. Final sediment characterization report, Boyer Towing, Inc. dock replacement, Seattle, Washington. WR Consulting, Inc., Seattle, WA.

Appendix A. Dataset Summaries

This appendix summarizes both the chemistry datasets to be used in the Phase 2 RI/FS (Table A-1) and the chemistry datasets that will not be used in the Phase 2 RI/FS (Table A-2). The tables are divided into subsections for sediment chemistry, tissue chemistry, and other chemistry (i.e., surface and seep water). These tables include all the datasets previous evaluated in Windward (2005b; 2005c). The datasets evaluated in this memorandum are shown in italics.

Table A-1. Chemistry datasets acceptable for all uses in the Phase 2 RI/FS

Sampling Event	Event Code	Year	Location	Chemicals	Sample Summary	Data Quality Review Actions/Conclusions [a]	Reference
Sediment chemistry							
Duwamish Diagonal March 2006 cap monitoring – year 2, perimeter sediment characterization, and ENR cap sediment characterization – year 1	*DuwDiagMarch 2006*	*2006*	*RM 0.4-0.6 east*	*Grain size, TOC, metals, SVOCs, PCB Aroclors, organochlorine pesticides*	*23 samples and 3 field duplicate samples; 8 grab samples collected with 6" coring device; 18 samples composited using equal aliquots of 3-10 grab samples collected using a van Veen grab sampler (0-10 cm)*	*QC consistent with previous King County events approved for all uses by EPA; validation qualifiers will be added to database*	*King County (2006a; 2006b; 2007)*
Boeing Developmental Center 2005 Annual Sampling of South Storm Drain System – Year 2	*Boeing Developmental Center-2005*	*2005*	*RM 4.9 east*	*PCB Aroclors, TOC, total solids*	*3 surface (0-2 cm) sediment grab samples (1 field duplicate sample) collected using disposable plastic spoons*	*QC consistent with EPA guidelines; no validation qualifiers needed*	*Calibre (2006)*
Duwamish Diagonal Jan-Feb 2005 post-dredge perimeter - before thin-layer cap placement	*DuwDiagJan 2005*	*2005*	*RM 0.4-0.6 east*	*Grain size, TOC, metals, SVOCs, PCB Aroclors, organochlorine pesticides*	*22 grab surface (0-10 cm) sediment samples (2 field replicates) using van Veen grab sampler*	*QC consistent with previous King County events approved for all uses by EPA; validation qualifiers added to database*	*King County (2005e)*
Duwamish Diagonal Mar 2005 post-dredge perimeter - after thin-layer cap placement	*DuwDiagMarch 2005*	*2005*	*RM 0.4-0.6 east*	*Grain size, TOC, metals, SVOCs, PCB Aroclors, organochlorine pesticides*	*8 surface sediment samples (1 replicate) using a diver-actuated coring device from the top 10 cm of sediment*	*QC consistent with previous King County events approved for all uses by EPA; validation qualifiers added to database*	*King County (2005d)*

Sampling Event	Event Code	Year	Location	Chemicals	Sample Summary	Data Quality Review Actions/Conclusions [a]	Reference
Duwamish Diagonal April 2005 baseline cap monitoring - year 1	*DuwDiagApril 2005*	*2005*	*RM 0.4-0.6 east*	*TOC, grain size, metals, SVOCs, PCB Aroclors, organochlorine pesticides*	*7 surface sediment grab samples (1 replicate) using van Veen grab samplers from the top 10 cm of sediment*	*QC consistent with previous King County events approved for all uses by EPA; validation qualifiers added to database*	*King County (2005c)*
Boeing Developmental Center 2004 Annual Sampling of South Storm Drain System – year 1	*Boeing Developmental Center-2004*	*2004*	*RM 4.9 east*	*PCB Aroclors, TOC, total solids*	*3 surface (0-2 cm) sediment grab samples (1 field duplicate sample) collected using disposable plastic spoons*	*QC consistent with EPA guidelines; no validation qualifiers needed*	Calibre (2005)
Triad approach (immunoassay as a real-time measure) to characterize PCB in a Washington riverine sediment site	*Jorgensen August2004*	*2004*	*RM 3.5-3.7 east*	*TOC, SVOCs, grain size, mercury, lead*	*18 surface sediment samples (2 duplicate samples) using the van Veen sampler (<10 cm) and 50 subsurface sediment samples from 17 locations collected by vibracorer (1-6 ft, samples generally at 1-ft intervals)*	*data validation consistent with EPA guidelines; validation qualifiers for all fixed laboratory analyses added to database; field screening data may be used for informational purposes only*	*Herrera (2005)* EPA (2005a; 2004a)
Upriver (Area 1) sediment characterization	*JorgensenApril 2004*	*2004*	*RM 3.6-3.7 east*	*metals, PCB Aroclors, TOC, grain size*	*75 subsurface sediment samples from 22 sediment cores (2 duplicate cores) from 20 locations using the MudMole (6.8 to 10.6-ft cores; samples generally at 1-ft intervals)*	*data validation consistent with EPA guidelines; validation qualifiers added to database*	*MCS (2004c)*
Rhône-Poulenc surface/subsurface sediment	*RhônePoulenc 2004*	*2004*	*RM 4.0-4.3 east*	*VOCs, metals, pesticides, PCB Aroclors*	*50 sediment samples (8 duplicate samples) from 21 locations using a clam gun; cores were divided into upper (0-10 cm) and lower (> 10 cm) samples*	*data validation consistent with EPA guidelines; laboratory Form 1s present in data report; validation qualifiers added to database*	*EPA (2005b)*
Duwamish Diagonal June 2004 baseline cap monitoring - year 0 (post-cap placement)	*DuwDiagJune 2004*	*2004*	*RM 0.4-0.6 east*	*TOC, grain size, metals, PCB Aroclors, SVOCs*	*8 surface sediment grab samples from the top 10 cm of sediment using the van Veen grab sampler*	*QC consistent with previous King County events approved for all uses by EPA; validation qualifiers added to database*	*King County (2005f)*
Boeing Plant 2 DSOA additional vertical characterization - Phase 2	*DSOAvertchar2*	*2004*	*RM 2.9-3.2 east*	*PCB Aroclors, TOC*	*28 subsurface samples from 15 sediment cores (2 duplicate samples) from 15 locations using the MudMole (3.7 to 10.6-ft cores; samples generally at 1-ft intervals)*	*data validation consistent with EPA guidelines; validation qualifiers added to database*	*MCS (2004a)*
Boeing Plant 2 DSOA additional vertical characterization - Phase 3	*DSOAvertchar3*	*2004*	*RM 3.0-3.4 east*	*PCB Aroclors, TOC*	*5 sediment cores from 4 new locations and one reoccupied location using the MudMole (5.4 to 9.9-ft cores; samples generally at 1-ft intervals)*	*data validation consistent with EPA guidelines; all data, as reported are acceptable for use*	*MCS (2004b)*

Sampling Event	Event Code	Year	Location	Chemicals	Sample Summary	Data Quality Review Actions/Conclusions [a]	Reference
Boyer Towing dock replacement	Boyer Towing	2004	RM 2.4 west	metals, SVOCs, PCB Aroclors, conventionals	4 surface (0-10 cm) and 4 subsurface (30-60 cm) sediment samples collected with push core	data validation consistent with EPA guidelines; laboratory Form 1s present in data report; validation qualifiers added to database	WR Consulting (2004)
PSDDA characterization at the Lehigh Northwest Duwamish Waterway Facility	Lehigh NW	2004	RM 1.1 east	metals, SVOCs, PCB Aroclors, organochlorine pesticides, conventionals	3 sediment core samples (2 from 0-120 cm, 1 from 120-150 cm) collected with impact corer	data validation consistent with EPA guidelines; laboratory Form 1s present in data report; validation qualifiers added to database	MCS (2004d)
Slip 4 early action area site characterization	Slip4-EarlyAction	2004	Slip 4 (RM 2.8-2.9 east)	PCB Aroclors, mercury	29 grab samples (van Veen) from 0-10 cm; 58 core samples (vibracorer) taken from 11 locations; 4-6 samples taken at each location to a depth of 360 cm	data validation and data quality review consistent with EPA guidelines; data collected under existing LDW RI AOC, so no data quality review is needed in this memorandum	Integral (2004)
Additional vertical characterization, Duwamish Sediment Other Area	DSOAvert char2	2004	RM 2.8-3.7 east	PCB Aroclors	28 core samples (vibracorer) taken from 15 locations; 1-3 samples from each location from 60-144 cm	data validation consistent with EPA guidelines; laboratory Form 1s present in data report; validation qualifiers added to database	MCS Environmental (2004a)
Norfolk CSO sediment remediation project five-year monitoring program: Annual monitoring report - year 5, April 2004.	Norfolk-monit7	2004	RM 4.9-5.0 east	metals, PCB Aroclors, SVOCs	Composites of 3 grab samples (van Veen) at each of 4 locations; 4 samples from 0-2 cm; 4 samples from 0-10 cm	QC consistent with previous King County events approved for all uses by EPA; validation qualifiers added to database	King County (2005b)
Duwamish/Diagonal pre- and post-cleanup monitoring data	DuwDiag-Dredge Monitoring	2003-2004	RM 0.4-0.6 east	metals, PCB Aroclors, organochlorine pesticides, SVOCs	24 composite samples from 10 grab samples (van Veen) from 0-10 cm at 12 locations, sampled both before dredging and after dredging	QC consistent with previous King County events approved for all uses by EPA; validation qualifiers added to database	King County et al. (2005)
Terminal 117 early action area site characterization	T117 Boundary Definition	2003-2004	RM 3.6-3.7 west	PCB Aroclors; metals, SVOCs on selected samples	46 grab samples (power grab or by hand from intertidal) from 0-10 cm; 101 core samples (vibracorer) from 18 locations, 3-6 samples collected at each core location to a depth of 300 cm [c]	data validation and data quality review consistent with EPA guidelines; data collected under existing LDW RI AOC, so no data quality review is needed in this memorandum	Windward (2004a; 2004b)

SAMPLING EVENT	EVENT CODE	YEAR	LOCATION	CHEMICALS	SAMPLE SUMMARY	DATA QUALITY REVIEW ACTIONS/CONCLUSIONS [a]	REFERENCE
Final preliminary site investigation report for the South Park Bridge project	*SouthPark Bridge*	*2003*	*RM 3.3-3.4*	*metals, TBT, VOCs, SVOCs, organochlorine pesticides, PCB Aroclors, TOC*	*11 subsurface sediment samples from 2 locations (rotary drill unit) from depths up to 100 ft (samples collected at 2.5 ft intervals in top 10 ft, and at several deeper 2.5 ft intervals to 100 ft)*	*data validation consistent with EPA guidelines; laboratory Form 1s present in data report; validation qualifiers as reported are acceptable for use*	*Wilbur Consulting (2004)*
Norfolk CSO sediment remediation project five-year monitoring program: Annual monitoring report - year 4, April 2003.	Norfolk-monit6	2003	RM 4.9-5.0 east	metals, PCB Aroclors, SVOCs	Composites of 3 grab samples (van Veen) at each of 4 locations; 4 samples from 0-2 cm; 4 samples from 0-10 cm	QC consistent with previous King County events approved for all uses by EPA; validation qualifiers added to database	King County (2003)
Sediment characterization results for the Duwamish River navigational channel turning basin	Turning-basin	2003	RM 4.2-4.7	metals, PCB Aroclors, organochlorine pesticides, SVOCs	5 core samples (vibracorer) taken down to depths of 144 to 390 cm	data validation consistent with EPA guidelines; laboratory Form 1s present in data report; validation qualifiers added to database	Anchor (2003)
Boeing Plant 2 transformer investigation – Phase 1	Plant 2-Transformer Phase1	2003	RM 3.6 east	PCB Aroclors	5 surface grab samples (by hand) taken from 0-5 cm; 46 core samples (vibracorer) taken from 13 locations; 3-5 samples at each location from 0-240 cm [b]	data validation consistent with EPA guidelines; laboratory Form 1s present in data report; validation qualifiers added to database	Floyd Snider McCarthy (2004)
PSDDA dredged sediment characterization for Glacier NW	*Glacier NW*	*2002*	*RM 1.5 west*	*metals, PCB Aroclors, organochlorine pesticides, SVOCs*	*4 composite sediment samples from eleven cores collected by vibracorer from 0-172 cm*	*data validation consistent with EPA guidelines; laboratory Form 1s present in data report; validation qualifiers added to database*	*PIE (2002)*
Norfolk combined sewer overflow (Duwamish River) sediment cap recontamination. Phase I investigation.	Ecology-Norfolk	2002	RM 4.9-5.0 east	PCB Aroclors	20 grab samples (van Veen) from 0-10 cm	data validation consistent with EPA guidelines; laboratory Form 1s present in data report; validation qualifiers added to database	Ecology (2003)
Norfolk CSO sediment remediation project five-year monitoring program: Annual monitoring report - year 3, April 2002.	Norfolk-monit5	2002	RM 4.9-5.0 east	metals, PCB Aroclors, SVOCs	Composites of 3 grab samples (van Veen) at each of 4 locations; 4 samples from 0-2 cm; 4 samples from 0-10 cm	QC consistent with previous King County events approved for all uses by EPA; validation qualifiers added to database	King County (2002)
Data report, DSOA vertical characterization and outfall 12 data collection. Duwamish sediment other area, Boeing Plant 2	DSOAvert char	2001	RM 2.8-3.7 east	PCB Aroclors	125 core samples (vibracorer) from 37 locations; 2-6 samples at each location, most locations starting at 60 cm down to depths of 150-280 cm	data validation consistent with EPA guidelines; laboratory Form 1s present in data report; validation qualifiers added to database	Pentec (2001)

Sampling Event	Event Code	Year	Location	Chemicals	Sample Summary	Data Quality Review Actions/Conclusions [a]	Reference
Norfolk CSO five-year monitoring program, Year Two, April 2001	Norfolk-monit4	2001	RM 4.9-5.0 east	metals, PCB Aroclors, SVOCs	Composites of 3 grab samples (van Veen) at each of 4 locations; 4 samples from 0-2 cm; 4 samples from 0-10 cm	validation qualifiers added to database	King County (2001b)
Norfolk CSO five-year monitoring program – Twelve-month post construction	Norfolk-monit3	2000	RM 4.9-5.0 east	metals, PCB Aroclors, SVOCs	Composites of 3 grab samples (van Veen) at each of 4 locations; 4 samples from 0-2 cm; 4 samples from 0-10 cm	validation qualifiers added to database	King County (2000c)
Norfolk CSO five-year monitoring program – Supplemental nearshore sampling	Norfolk-monit2b	2000	RM 4.9-5.0 east	PCB Aroclors	Composites of 3 grab samples (van Veen) at each of 3 locations; 3 samples from 0-2 cm; 3 samples from 0-10 cm	validation qualifiers added to database	King County (2000b)
Outfall and nearshore sediment sampling report, Duwamish Facility	James Hardie Outfall	2000	RM 1.5 east	metals, PCB Aroclors, SVOCs	9 grab samples (van Veen or by hand in intertidal) from 0-10 cm	data validation consistent with EPA guidelines; laboratory Form 1s present in data report; validation qualifiers added to database	Weston (2000)
PSDDA sediment characterization of Duwamish River navigation channel: FY2000 operations and maintenance dredging data report	PSDDA99	1999	RM 1.9-3.4	metals, PCB Aroclors, organochlorine pesticides, SVOCs	20 composite core samples (vibracorer) taken from 18 locations; three borings made at each location; 18 samples from 0 to 120 cm; 2 samples from 120 to 240 cm	data validation consistent with EPA guidelines; laboratory Form 1s present in data report; validation qualifiers added to database	Striplin (SEA 2000b, 2000a)
Norfolk CSO five-year monitoring program – Six-month post construction	Norfolk-monit2a	1999	RM 4.9-5.0 east	metals, PCB Aroclors, SVOCs	Composites of 3 grab samples (van Veen) at each of 4 locations; 4 samples from 0-2 cm; 4 samples from 0-10 cm	validation qualifiers added to database	King County (2000d)
Norfolk CSO five-year monitoring program – Post backfill	Norfolk-monit1	1999	RM 4.9-5.0 east	metals, PCB Aroclors, SVOCs	Composites of 3 grab samples (van Veen) at each of 4 locations; 4 samples from 0-10 cm	validation qualifiers added to database	King County (1999b)
PSDDA sediment characterization of Duwamish River navigation channel: FY99 operations and maintenance dredging data report.	PSDDA98	1998	RM 3.5-4.6	metals, PCB Aroclors, organochlorine pesticides, SVOCs	10 core samples (vibracorer) taken from 12 locations; 7 samples taken from 0 to 60-90 cm, each from single location; 3 samples taken from 2 or 3 locations (0-60 cm, 0-120 cm, and 120-360 cm)	data validation consistent with EPA guidelines; laboratory Form 1s present in data report; validation qualifiers added to database	Striplin (1998)

Sampling Event	Event Code	Year	Location	Chemicals	Sample Summary	Data Quality Review Actions/Conclusions [a]	Reference
EPA Site Inspection: Lower Duwamish River	EPA SI	1998	entire LDW study area	metals, organochlorine pesticides, PCB Aroclors & selected congeners, dioxins & furans, TBT, SVOCs, VOCs	300 grab samples from 0-10 cm (van Veen); 33 core samples (vibracorer) from 0-60 and 60-120 cm from 17 locations	data collected by EPA for Superfund program; acceptable for all uses	Weston (1999)
King County combined sewer overflow water quality assessment for the Duwamish River and Elliott Bay	KC WQA	1997	Duwamish/Diagonal (RM 0.5-0.6 east); Kellogg Island (RM 0.7 west); Brandon CSO (RM 1.1 east); 8th Ave CSO (RM 2.8 west); South Park (RM 3.3 east); Hamm Creek (RM 4.4 west)	metals, PCB Aroclors, SVOCs, TBT	0-10 cm grab samples (van Veen) from 14 locations; single samples from 5 Duwamish/Diagonal locations and 4 Kellogg Island locations; weekly samples from Kellogg Island (9 samples), Brandon (13 samples), 8th Ave (9 samples), South Park (4 samples), Hamm Creek (4 samples)	validation qualifiers added to database	King County (1999a)
Duwamish Waterway Phase 1 site characterization	Boeing SiteChar	1997	RM 1.8-2.0 west; Slip 4 (RM 2.8-2.9 east); RM 3.6-4.0; RM 4.2-5.0 east	metals, PCB Aroclors, SVOCs	88[b] grab samples (van Veen) from 0-10 cm	accepted by EPA for all uses	Exponent (1998)
Duwamish Waterway sediment characterization study	NOAA SiteChar	1997	entire LDW study area	total PCBs, selected PCB congeners, total PCTs	328 grab samples (van Veen) from 0-10 cm	validation qualifiers added to database; congener data not appropriate for use in Phase 2 risk assessments	NOAA (1997; 1998)
Seaboard Lumber site, Phase 2 site investigation	Seaboard-Ph2	1996	RM 0.4-0.7 west	metals, PCB Aroclors, SVOCs	20 grab samples (van Veen) from 0-10 cm	accepted by EPA for all uses	Herrera (1997)

Sampling Event	Event Code	Year	Location	Chemicals	Sample Summary	Data Quality Review Actions/Conclusions [a]	Reference
RCRA Facility Investigation Duwamish Waterway sediment investigation, Plant 2 – Phase 2b	Plant 2 RFI-2b	1996	RM 2.8-3.7 east	metals, PCB Aroclors, SVOCs	39 grab samples (van Veen) from 0-10 cm; 44 core samples (vibracorer) from 15 locations – 2 to 4 samples per core, up to 480 cm below mudline	validation qualifiers J+/J- changed to JH/JL; accepted by EPA for all uses	Weston (1998)
Duwamish/Diagonal cleanup Study – Phase 2	Duw/Diag-2	1996	RM 0.4-0.6 east	metals, PCB Aroclors, SVOCs, TPH	36 grab samples (van Veen) from 0-10 cm; 53 core samples (vibracorer) from 15 locations – 1 to 6 samples per core, up to 270 cm below mudline	validation qualifiers added to database	King County (2000a)
Duwamish/Diagonal cleanup Study – Phase 1.5	Duw/Diag-1.5	1995	RM 0.4-0.6 east	metals, PCB Aroclors, SVOCs, TBT	12 grab samples (van Veen) from 0-10 cm	validation qualifiers added to database	King County (2000a)
Norfolk CSO sediment cleanup study – Phase 3	Norfolk-cleanup3	1995	RM 4.9-5.0 east	PCB Aroclors	16 grab samples (van Veen) from 0-10 cm	validation qualifiers added to database	King County (1996)
Norfolk CSO sediment cleanup study – Phase 2	Norfolk-cleanup2	1995	RM 4.9-5.0 east	metals, organochlorine pesticides, PCB Aroclors and selected congeners, SVOCs, VOCs, TPH	12 grab samples (van Veen) from 0-10 cm; 27 core samples (vibracorer) from 3 locations at 30 or 60 cm intervals up to 180 cm below mudline	validation qualifiers added to database	King County (1996)
RCRA Facility Investigation Duwamish Waterway sediment investigation, Plant 2 – Phase 2a	Plant 2 RFI-2a	1995	RM 2.8-3.7 east	metals, PCB Aroclors SVOCs	54 grab samples (van Veen) from 0-10 cm	validation qualifiers J+/J- changed to JH/JL; accepted by EPA for all uses	Weston (1998)
RCRA Facility Investigation Duwamish Waterway sediment investigation, Plant 2 – Phase 1	Plant 2 RFI-1	1995	RM 2.8-3.7 east	metals, PCB Aroclors, TPH, SVOCs, VOCs	65 grab samples (van Veen) from 0-10 cm; 22 core samples (vibracorer) from 12 locations at 15-45 cm intervals down to 135 cm below mudline	validation qualifiers J+/J- changed to JH/JL; accepted by EPA for all uses	Weston (1998)
Duwamish/Diagonal cleanup Study – Phase 1	Duw/Diag-1	1994	RM 0.4-0.6 east	metals, organochlorine pesticides, PCB Aroclors, SVOCs, TBT	38 grab samples (van Veen) from 0-10 cm; 2 grab samples (van Veen) from 0-15 cm; 12 core samples (vibracorer) from 2 locations at 15-30 cm intervals down to 150 cm below mudline	validation qualifiers added to database	King County (2001a)
Norfolk CSO sediment cleanup study – Phase 1	Norfolk-cleanup1	1994	RM 2.8-3.7 east	metals, organochlorine pesticides, SVOCs, PCB Aroclors, VOCs	21 grab samples (van Veen) from 0-10 cm; 3 core samples from 1 location – 15-30, 30-45, and 45-60 cm	validation qualifiers added to database	King County (1996)

Sampling Event	Event Code	Year	Location	Chemicals	Sample Summary	Data Quality Review Actions/Conclusions [a]	Reference
Rhône-Poulenc RCRA Facility Investigation for the Marginal Way facility – Round 2	Rhône-Poulenc RFI-2	1994	Slip 6 (RM 4.2 east)	metals, SVOCs, PCB Aroclors 1254 and 1260, organochlorine pesticides	7 grab samples (van Veen) from 0-2 cm	accepted by EPA for all uses	Rhône-Poulenc (1995)
Results of sampling and analysis, sediment monitoring plan, Duwamish Shipyard, Inc.	Duwamish Shipyard	1993	RM 1.4-1.5 west	metals, SVOCs, TBT	5 grab samples (van Veen) from 0-10 cm	data validation consistent with EPA guidelines; laboratory Form 1s present in data report; validation qualifiers added to database	Hart Crowser (1993)
Harbor Island Remedial Investigation	Harbor Island RI	1991	RM 0.0-0.4	metals, organochlorine pesticides, PCB Aroclors, SVOCs, VOCs, TPH, TBT	34 grab samples (van Veen) from 0-10 cm	data collected by EPA for Superfund program; acceptable for all uses	Weston (1993)
Tissue chemistry							
East Waterway, Harbor Island Superfund site: Technical memorandum: Tissue chemistry results for juvenile chinook salmon collected from Kellogg Island and East Waterway.	EW-Salmon	2002	Kellogg Island (RM 0.8-0.9 west)	PCB Aroclors, mercury	12 composite samples of whole-body juvenile chinook salmon (6 from LDW, 6 from East Waterway) collected by beach seine; each sample consisted of 6-7 fish	data validation consistent with EPA guidelines; laboratory Form 1s present in data report; validation qualifiers added to database	Windward (2002)
NMFS Duwamish injury assessment project	NOAA-salmon2	2000	Kellogg Island (RM 0.8-0.9 west), Slip 4 (RM 2.8 east)	PCB congeners, organochlorine pesticides (salmon); PCB Aroclors (shiner perch)	29 samples of whole-body juvenile chinook salmon collected by beach seine (9 were composites of 3-10 fish, 20 were individual fish); 6 composite samples of chinook salmon stomach contents; 2 composite samples of whole-body shiner perch	neither EPA nor LDWG plan to conduct a review of the salmon portion of this dataset because LDWG's 2003 juvenile chinook salmon sampling results make the effort required for such a review unwarranted, as documented by Windward (2005a); therefore, these data will not be used in Phase 2; the shiner perch portion of the dataset has been previously approved for all uses by EPA (2003)	NMFS (2002)

Sampling Event	Event Code	Year	Location	Chemicals	Sample Summary	Data Quality Review Actions/Conclusions [a]	Reference
Waterway Sediment Operable Unit Harbor Island Superfund Site	WSOU	1998	RM 0.4-0.9 (crab), RM 2.0-4.4 (English sole), RM 0.0-0.2 (striped perch)	Hg, TBT, PCB Aroclors	3 English sole skinless fillet composite samples (5 fish/composite caught by trawl); 3 red rock crab edible meat composite samples (5 crab/composite caught by crab trap); 1 Dungeness crab edible meat sample (1 individual caught by crab trap); 3 striped perch skinless fillet samples (5 fish/composite for 2 samples, 1 individual fish for 1 sample; caught by diver)	collected under EPA oversight for a previously conducted Superfund risk assessment; previously approved for all uses by EPA (2003)	ESG (1999)
King County Combined Sewer Overflow Water Quality Assessment for the Duwamish River and Elliott Bay	KC WQA	1996-1997	RM 0.5-0.9	metals, TBT, SVOCs, PCB Aroclors	3 English sole skinless fillet composite samples (20 fish/composite caught by trawl); 3 English sole whole-body composite samples[d] (20 fish/composite caught by trawl); 2 Dungeness crab edible meat composite samples (3 crabs/sample caught by crab trap); 1 Dungeness crab hepatopancreas composite sample (3 crabs caught by crab trap); 4 amphipod composite samples (caught by benthic sledge); 3 shiner surfperch whole-body composite samples (10 fish/sample caught by trawl); 22 mussels edible meat composite samples (20 mussels/sample collected by hand) [e]	add validation qualifiers (Section 3.2.1); English sole whole-body composite samples not acceptable for all uses because they don't truly represent whole bodies	King County (1999a)
Puget Sound Ambient Monitoring Program – annual sampling	PSAMP-fish	1992	RM 0.4-1.3	SVOCs, organochlorine pesticides, PCB Aroclors, As, Cu, Pb, Hg	3 English sole skinless fillet (10-20 fish/sample collected by trawl)	acceptable for all uses	West et al. (2001)
		1995	RM 0.4-1.3	organochlorine pesticides, PCB Aroclors, As, Cu, Pb, Hg	3 English sole skinless fillet composite samples (10-20 fish/sample collected by trawl)	acceptable for all uses	
		1997	RM 0.4-1.3	Hg, organochlorine pesticides	3 English sole skinless fillet composite samples (10-20 fish/sample collected by trawl)	acceptable for all uses	

Sampling Event	Event Code	Year	Location	Chemicals	Sample Summary	Data Quality Review Actions/Conclusions [a]	Reference
Elliott Bay/Duwamish River Fish Tissue Investigation	EVS 95	1995	RM 1.1-1.4	PCB Aroclors, Hg, MeHg, TBT	3 English sole skinless fillet composite samples (6 fish/sample collected by trawl)	collected under EPA oversight for a previously conducted Superfund risk assessment; previously approved for all uses by EPA (2003)	Battelle (1996); EVS (unpublished); Frontier Geosciences (1996)
Contaminant exposure and associated biochemical effects in outmigrant juvenile chinook salmon from urban and non-urban estuaries of Puget Sound	NOAA-salmon	1989-1990	RM 0.7	organochlorine pesticides, PCB Aroclors, PAHs	14 composite samples of whole-body juvenile chinook salmon collected by beach seine (2-10 fish/sample); 6 composite samples of stomach contents (10 fish/sample) [f]	neither EPA nor LDWG plan to conduct a review of this dataset because LDWG's 2003 juvenile chinook salmon sampling results make the effort required for such a review unwarranted; therefore, these data will not be used in Phase 2	Varanasi et al. (1993)
Other chemistry							
Duwamish River/Elliott Bay/Green River Water Column PCB Congener Survey	*KC 2005 Water Sampling*	*2005*	*RM 0 and 3.3*	*PCB congeners, conventional parameters*	*28 water samples collected over 4 months at 4 locations; 2 locations in the Duwamish River were sampled at both surface and bottom depths of the water column; all samples analyzed for PCB congeners and conventional field parameters*	*QC consistent with previous King County events approved for all uses; validation qualifiers added to database; Windward evaluated field and laboratory replicate samples for method blank contamination*	Mickelson and Williston (2006)
Rhône-Poulenc porewater	*Rhô nePoulenc2004*	*2004*	*RM 4.0-4.3 east*	*VOCs, metals, pesticides, PCB Aroclors*	*16 porewater samples for chemistry parameters (1 duplicate sample, and 1 additional sample analyzed only for field parameters) collected using a piezometer or a seepage meter*	*data validation consistent with EPA guidelines; laboratory Form 1s present in data report; validation qualifiers added to database*	*EPA (2005b)*
RCRA Facility Investigation Duwamish Waterway sediment investigation, Plant 2 – Phase 1	Plant 2 RFI-1	1995	RM 2.8 – 3.7 east	metals, PCB Aroclors, TPH, SVOCs, VOCs	22 seep water	comprehensive data quality review not warranted because EPA has previously approved these data for all uses in the RCRA program	Weston (1998)
Rhône-Poulenc RCRA Facility Investigation for the Marginal Way facility – Round 3	Rhône-Poulenc RFI-3	1995	Slip 6 (RM 4.2 east)	VOCs	7 seep water	comprehensive data quality review not warranted because EPA has previously approved these data for all uses in the RCRA program	Rhône-Poulenc (1996)

SAMPLING EVENT	EVENT CODE	YEAR	LOCATION	CHEMICALS	SAMPLE SUMMARY	DATA QUALITY REVIEW ACTIONS/CONCLUSIONS [a]	REFERENCE
Supplemental remedial investigation and feasibility study. Great Western International	Great Western Apr-94	1994	RM 2.2 east	VOCs	6 seep water	comprehensive data quality review not warranted because Ecology has previously approved these data for all uses in the MTCA program	Hart Crowser (1994a)
	Great Western Jul-94	1994		VOCs	9 seep water	comprehensive data quality review not warranted because Ecology has previously approved these data for all uses in the MTCA program	Hart Crowser (1994b)
	Great Western Nov-94	1994		VOCs	7 seep water	comprehensive data quality review not warranted because Ecology has previously approved these data for all uses in the MTCA program	Hart Crowser (1996)
	Great Western May-95	1995		VOCs	7 seep water	comprehensive data quality review not warranted because Ecology has previously approved these data for all uses in the MTCA program	Hart Crowser (1996)
	Great Western-1995 Annual	1995		VOCs	7 seep water	comprehensive data quality review not warranted because Ecology has previously approved these data for all uses in the MTCA program	Hart Crowser (1996)
	Great Western-1996 Annual	1996		VOCs	5 seep water	comprehensive data quality review not warranted because Ecology has previously approved these data for all uses in the MTCA program	Hart Crowser (1997)
	Great Western-1997 Annual	1997		VOCs	4 seep water	comprehensive data quality review not warranted because Ecology has previously approved these data for all uses in the MTCA program	Terra Vac, Floyd & Snider (2000)
	Great Western-1998 Annual	1998		VOCs	9 seep water	comprehensive data quality review not warranted because Ecology has previously approved these data for all uses in the MTCA program	Terra Vac, Floyd & Snider (2000)

Sampling Event	Event Code	Year	Location	Chemicals	Sample Summary	Data Quality Review Actions/Conclusions [a]	Reference
	Great Western-Embayment Study	1998		VOCs	10 seep water	comprehensive data quality review not warranted because Ecology has previously approved these data for all uses in the MTCA program	Terra Vac, Floyd & Snider (2000)
	Great Western-1999 Annual	1999		VOCs, SVOCs	5 seep water	comprehensive data quality review not warranted because Ecology has previously approved these data for all uses in the MTCA program	Terra Vac, Floyd & Snider (2000)
King County combined sewer overflow water quality assessment for the Duwamish River and Elliott Bay [g]	KC WQA	1996-1997	Duwamish/Diagonal CSO (RM 0.5 east), Brandon CSO (RM 1.1 east), SW Michigan CSO (RM 2.0 east), Norfolk CSO (RM 4.9 east) [h]	metals, SVOCs, conventionals, PCB Aroclors	1,249 surface water samples collected using Niskin and van Dorn samplers. Samples were collected from multiple depths (near-surface and near-bottom) and up to 3 locations horizontally across the waterway. Samples were collected weekly and also during storm events. [h]	QC consistent with previous King County events approved for all uses by EPA; validation qualifiers added to database	King County (1999a)

Note: *New datasets discussed in this memorandum are shown in italics*

a All events listed on this table are: 1) considered acceptable for all uses in Phase 2, even if not specifically mentioned, 2) acceptable for some uses, but not others, as noted, or 3) undergoing additional review by EPA; acceptability determination is still pending

b Sample total does not include three reference samples that were collected upstream of the study area

c Does not include soil, groundwater, and seep data collected concurrently during this investigation

d Samples are of remnant tissues following the subsampling of fillet tissue. In addition, livers were removed from some fish in the composite samples.

e Sample counts do not include data from cooked crab and English sole samples or data from caged mussel deployments. These data will not be used in the Phase 2 RI

f Six composite samples of juvenile chinook salmon livers were also analyzed, but these data will not be used in the Phase 2 RI.

g Only water chemistry data. Sediment and tissue chemistry data from this sampling event were previously reviewed in Windward (2005b).

h Samples collected outside the LDW study area were also included in this sampling event

AOC – administrative order on consent

CSO – combined sewer overflow

MTCA – Model Toxics Control Act

NOAA – National Oceanic and Atmospheric Administration

PAH – polycyclic aromatic hydrocarbon

PCB – polychlorinated biphenyl

PCT – polychlorinated terphenyl

RCRA – Resource Conservation and Recovery Act

SVOC – semivolatile organic compound

TBT – tributyltin

TPH – total petroleum hydrocarbons

VOC – volatile organic compound

MeHg – methylmercury

Table A-2. Chemistry datasets not acceptable for all uses in the Phase 2 RI/FS

Sampling Event	Event Code	Year	Location	Chemicals	Sample Summary	Data Quality Review Action/ Conclusions	Reference
Sediment chemistry							
Dredge material characterization Duwamish Yacht Club	Duwam Yacht Club	1999	RM 4.1 west	metals, organochlorine pesticides, PCB Aroclors, SVOCs, VOCs, TBT	6 core samples (vibracorer), each made from 2 separate cores collected to 50-65 cm	not reviewed by Windward; sediment characterized has been dredged	Hart Crowser (1999)
Sediment sampling and analysis James Hardie Gypsum Inc. – Round 1	Hardie Gypsum-1	1999	RM 1.6-1.7 east	metals, organochlorine pesticides, PCB Aroclors, SVOCs, VOCs	5 core samples (vibracorer) made from single cores down to 120 cm	not reviewed by Windward; sediment characterized has been dredged	Spearman (1999)
Sediment sampling and analysis James Hardie Gypsum Inc. – Round 2	Hardie Gypsum-2	1999	RM 1.6-1.7 east	metals, organochlorine pesticides, PCB Aroclors, SVOCs, VOCs	9 core samples (vibracorer) made from single cores down to 90 cm	not reviewed by Windward; sediment characterized has been dredged	Spearman (1999)
Dredge material characterization Hurlen Construction Company & Boyer Alaska Barge Lines berthing areas	Hurlen-Boyer	1998	RM 2.4-2.7 west	metals, organochlorine pesticides, PCB Aroclors, SVOCs, TBT, TPH	6 core samples (vibracorer), 2 from Boyer, 4 from Hurlen, each made from 2 separate cores collected to 60-120 cm	not reviewed by Windward; sediment characterized has been dredged	Hart Crowser (1998)

Sampling Event	Event Code	Year	Location	Chemicals	Sample Summary	Data Quality Review Action/ Conclusions	Reference
Sediment quality in Puget Sound. Year 2 – Central Puget Sound	PSAMP/ NOAA98	1998	RM 0.5, 0.6, 1.8	metals, PCB Aroclors, organochlorine pesticides, SVOCs, TBT	3 grab samples (van Veen) collected from 0-2 cm	LDWG did not conduct a review of this dataset because the QA/QC information was not readily available. The effort that would have been required to obtain this QA/QC information was not justified for the purposes of the Phase 2 RI and risk assessments.	Ecology (2000)
RCRA facility investigation (RFI) report for the Marginal Way facility. Round 3 data and sewer sediment technical memorandum.	Rhône Poulenc RFI3	1996	RM 4.2 east	metals, phenols (4 samples)	16 grab samples collected by hand from 0-10 cm	data validation consistent with EPA guidelines, but laboratory Form 1s not present in data report; Phase 2 RI DQOs not met, so not acceptable for all uses	Rhône-Poulenc (1996)
Proposed dredging of Slip No. 4, Duwamish River, Seattle, WA	Slip4-Crowley	1996	RM 2.8 east	metals, organochlorine pesticides, PCB Aroclors, SVOCs, VOCs, TBT	4 core samples (vibracorer) composited from sediment at 9 locations collected to a depth of 70-130 cm	not reviewed by Windward; sediment characterized has been dredged	PTI (1996)
1996 USACE Duwamish O&M	PSDDA96	1996	RM 4.2-4.6	metals, organochlorine pesticides, PCB Aroclors, SVOCs, VOCs,	4 core samples (vibracorer) collected to a depth of 120 cm	not reviewed by Windward; sediment characterized has been dredged	Striplin (1996)
Lone Star Northwest and James Hardie Gypsum – Kaiser dock upgrade	Lone Star-Hardie Gypsum	1995	RM 1.6 east	metals, organochlorine pesticides, PCB Aroclors, SVOCs, VOCs	5 core samples (vibracorer); 4 collected to a depth of 120-150 cm, 1 at 120-360 cm	not reviewed by Windward; sediment characterized has been dredged	Hartman (1995)
Rhône-Poulenc RCRA Facility Investigation for the Marginal Way facility – Round 1	Rhône-Poulenc RFI-1	1994	RM 4.2 east	metals, SVOCs, PCB Aroclors, organochlorine pesticides	7 grab samples (van Veen) collected from 0-15 cm	data validation consistent with EPA guidelines, but laboratory Form 1s not present in data report; Phase 2 RI DQOs not met, so not acceptable for all uses	Rhône-Poulenc (1995)
Lone Star Northwest – West Terminal US ACOE – Seattle	Lone Star 92	1992	RM 1.5 east	metals, organochlorine pesticides, PCB Aroclors, SVOCs, VOCs	1 core sample (vibracorer), made from 2 separate cores collected to 120 cm	not reviewed by Windward; sediment characterized has been dredged	Hartman (1992)
Sediment sampling and analysis, South Park Marina, Duwamish Waterway, Seattle, Washington.	South Park Marina	1991	RM 3.5 west	metals, SVOCs, PCB Aroclors, organochlorine pesticides	2 core samples (vibracorer), each made from 2 separate cores collected to 120 cm	data not reviewed because of age of data; sediment characterized has been dredged	Spearman (1991)

Sampling Event	Event Code	Year	Location	Chemicals	Sample Summary	Data Quality Review Action/ Conclusions	Reference
Tissue chemistry							
Preliminary exposure assessment of dioxin-like chlorobiphenyls in great blue herons of the lower Duwamish River	Heron USFWS	1998	heron colony west of RM 0.5 west	PCB congeners	6 samples taken from 5 great blue heron eggs collected by hand from nest (5 egg samples, 1 egg yolk sample)	no formal data validation conducted, laboratory Form 1s not present in data report; EPA determined QA/QC data were not readily available	Krausmann (2002)
Puget Sound Ambient Monitoring Program – annual sampling	PSAMP-fish	1992	RM 0.7	SVOCs, organochlorine pesticides, PCB Aroclors, As, Cu, Pb, Hg	6 coho salmon and 6 chinook salmon composite fillet samples (5 fish/composite caught by gill net)	Adult salmon; data were summarized in the Phase 1 RI, but were not used in the risk assessments because almost all the chemicals in these fish are associated with exposure outside the LDW	West et al. (2001)
		1993 – 1996	RM 0.7	organochlorine pesticides, PCB Aroclors, As, Cu, Pb, Hg	1993: 5 coho salmon and 6 chinook salmon composite fillet samples (5 fish/composite caught by gill net); 1994: 5 coho salmon composite fillet samples and 6 chinook salmon filet samples (5 composite, 1 individual) (5 fish/composite caught by gill net); 1995: 7 coho salmon (6 composite, 1 individual) and 15 chinook salmon filet samples (13 composite, 2 individual) (5 fish/composite caught by gill net); 1996: 19 coho salmon (5 composite, 14 individual) and 49 chinook salmon fillet samples (all individual) (5 fish/composite caught by gill net)		
		1998	RM 0.7	Hg, organochlorine pesticides	13 coho salmon composite fillet samples (5 fish/composite caught by gill net)		

PCB – polychlorinated biphenyl
SVOC – semivolatile organic compound
TBT – tributyltin
TPH – total petroleum hydrocarbons
VOC – volatile organic compound

Appendix B. Sample-specific Data Qualifier Changes

This appendix lists the sample-specific data qualifier changes resulting from the data quality reviews conducted by Windward and summarized in this memorandum.

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
BoeingDC-2005	S1-05	Aroclor-1260	P		JK	J
DSOAvertchar2	DUW137-0020	Aroclor-1260	P	J	JK	J
DSOAvertchar2	DUW146-0020	Aroclor-1248		J	JK	J
DSOAvertchar2	DUW146-0020	Aroclor-1254		J	JK	J
DSOAvertchar2	DUW146-0020	Aroclor-1260		J	JK	J
DSOAvertchar2	DUW146-0020	Total Organic Carbon (TOC)		J	JK	J
DSOAvertchar2	DUW146-0030	Aroclor-1254		J	JK	J
DSOAvertchar2	DUW146-0030	Aroclor-1260		J	JK	J
DSOAvertchar2	DUW146-0030	Total Organic Carbon (TOC)		J	JK	J
DSOAvertchar2	DUW146-0040	Total Organic Carbon (TOC)		J	JK	J
DuwDiagApril2005	L35394-1	2-Methylnaphthalene	X		JL	J
DuwDiagApril2005	L35394-1	4,4'-DDT	UL			U
DuwDiagApril2005	L35394-1	Antimony	UGX		JL	UJ
DuwDiagApril2005	L35394-1	Benzo(a)pyrene	G		JL	J
DuwDiagApril2005	L35394-1	Benzyl alcohol	X		JL	J
DuwDiagApril2005	L35394-1	Bis(2-ethylhexyl)phthalate	X		JL	J
DuwDiagApril2005	L35394-1	Di-n-butyl phthalate	B		U	U
DuwDiagApril2005	L35394-1	Fluoranthene	XE	R	JL	J
DuwDiagApril2005	L35394-1	Phenanthrene	XE	R	JL	J
DuwDiagApril2005	L35394-1	Pyrene	X		JL	J
DuwDiagApril2005	L35394-2	2-Methylnaphthalene	UX		UJ	UJ
DuwDiagApril2005	L35394-2	4,4'-DDT	UL			U
DuwDiagApril2005	L35394-2	Antimony	UGX		JL	UJ
DuwDiagApril2005	L35394-2	Benzo(a)pyrene	G		JL	J
DuwDiagApril2005	L35394-2	Benzyl alcohol	X		JL	J
DuwDiagApril2005	L35394-2	Bis(2-ethylhexyl)phthalate	X		JL	J
DuwDiagApril2005	L35394-2	Di-n-butyl phthalate	B		U	U
DuwDiagApril2005	L35394-2	Fluoranthene	XE	R	JL	J
DuwDiagApril2005	L35394-2	Phenanthrene	XE	R	JL	J
DuwDiagApril2005	L35394-2	Pyrene	X		JL	J
DuwDiagApril2005	L35394-3	2-Methylnaphthalene	UX		UJ	UJ
DuwDiagApril2005	L35394-3	4,4'-DDT	UL			U
DuwDiagApril2005	L35394-3	Antimony	UGX		JL	UJ
DuwDiagApril2005	L35394-3	Benzo(a)pyrene	G		JL	J
DuwDiagApril2005	L35394-3	Benzyl alcohol	UX		UJ	UJ
DuwDiagApril2005	L35394-3	Bis(2-ethylhexyl)phthalate	X		JL	J
DuwDiagApril2005	L35394-3	Di-n-butyl phthalate	B		U	U
DuwDiagApril2005	L35394-3	Fluoranthene	XE	R	JL	J
DuwDiagApril2005	L35394-3	Phenanthrene	XE	R	JL	J
DuwDiagApril2005	L35394-3	Pyrene	X		JL	J
DuwDiagApril2005	L35394-4	2-Methylnaphthalene	UX		UJ	UJ
DuwDiagApril2005	L35394-4	4,4'-DDT	UL			U
DuwDiagApril2005	L35394-4	Antimony	UGX		JL	UJ
DuwDiagApril2005	L35394-4	Benzo(a)pyrene	G		JL	J
DuwDiagApril2005	L35394-4	Benzyl alcohol	UX		UJ	UJ
DuwDiagApril2005	L35394-4	Bis(2-ethylhexyl)phthalate	X		JL	J
DuwDiagApril2005	L35394-4	Di-n-butyl phthalate	B		U	U
DuwDiagApril2005	L35394-4	Fluoranthene	XE	R	JL	J
DuwDiagApril2005	L35394-4	Phenanthrene	XE	R	JL	J
DuwDiagApril2005	L35394-4	Pyrene	X		JL	J
DuwDiagApril2005	L35394-5	2-Methylnaphthalene	UX		UJ	UJ
DuwDiagApril2005	L35394-5	4,4'-DDT	UL			U
DuwDiagApril2005	L35394-5	Antimony	UGX		JL	UJ
DuwDiagApril2005	L35394-5	Benzo(a)pyrene	G		JL	J
DuwDiagApril2005	L35394-5	Benzyl alcohol	UX		UJ	UJ
DuwDiagApril2005	L35394-5	Bis(2-ethylhexyl)phthalate	X		JL	J
DuwDiagApril2005	L35394-5	Di-n-butyl phthalate	B		U	U
DuwDiagApril2005	L35394-5	Fluoranthene	XE	R	JL	J
DuwDiagApril2005	L35394-5	Phenanthrene	UXE	R	UJ	UJ
DuwDiagApril2005	L35394-5	Pyrene	X		JL	J
DuwDiagApril2005	L35394-6	2-Methylnaphthalene	UX		UJ	UJ
DuwDiagApril2005	L35394-6	4,4'-DDT	UL			U
DuwDiagApril2005	L35394-6	Antimony	UGX		JL	UJ

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
DuwDiagApril2005	L35394-6	Benzo(a)pyrene	G		JL	J
DuwDiagApril2005	L35394-6	Benzyl alcohol	UX		UJ	UJ
DuwDiagApril2005	L35394-6	Bis(2-ethylhexyl)phthalate	X		JL	J
DuwDiagApril2005	L35394-6	Di-n-butyl phthalate	B		U	U
DuwDiagApril2005	L35394-6	Fluoranthene	XE	R	JL	J
DuwDiagApril2005	L35394-6	Phenanthrene	XE	R	JL	J
DuwDiagApril2005	L35394-6	Pyrene	X		JL	J
DuwDiagApril2005	L35394-7	2-Methylnaphthalene	UX		UJ	UJ
DuwDiagApril2005	L35394-7	4,4'-DDT	UL			U
DuwDiagApril2005	L35394-7	Antimony	UGX		JL	UJ
DuwDiagApril2005	L35394-7	Benzo(a)pyrene	G		JL	J
DuwDiagApril2005	L35394-7	Benzyl alcohol	UX		UJ	UJ
DuwDiagApril2005	L35394-7	Bis(2-ethylhexyl)phthalate	X		JL	J
DuwDiagApril2005	L35394-7	Di-n-butyl phthalate	B		U	U
DuwDiagApril2005	L35394-7	Fluoranthene	XE	R	JL	J
DuwDiagApril2005	L35394-7	Phenanthrene	XE	R	JL	J
DuwDiagApril2005	L35394-7	Pyrene	X		JL	J
DuwDiagJan2005	L34524-1	Aniline	UX		R	R
DuwDiagJan2005	L34524-1	Antimony	UGX		R	R
DuwDiagJan2005	L34524-1	Aroclor-1248	E		JK	J
DuwDiagJan2005	L34524-1	Aroclor-1260	E		JK	J
DuwDiagJan2005	L34524-1	Benzoic acid	E		JK	J
DuwDiagJan2005	L34524-1	beta-BHC	UL			U
DuwDiagJan2005	L34524-1	Dibenzofuran	UE			U
DuwDiagJan2005	L34524-1	Di-n-butyl phthalate	B		U	U
DuwDiagJan2005	L34524-1	Fluorene	E		JK	J
DuwDiagJan2005	L34524-1	Phenanthrene	E		JK	J
DuwDiagJan2005	L34524-1	Phenol	E		JK	J
DuwDiagJan2005	L34524-1	Silver	L		JH	J
DuwDiagJan2005	L34524-10	Aniline	UX		R	R
DuwDiagJan2005	L34524-10	Antimony	UGX		R	R
DuwDiagJan2005	L34524-10	Aroclor-1248	E		JK	J
DuwDiagJan2005	L34524-10	Aroclor-1260	E		JK	J
DuwDiagJan2005	L34524-10	Benzoic acid	E		JK	J
DuwDiagJan2005	L34524-10	beta-BHC	UL			U
DuwDiagJan2005	L34524-10	Dibenzofuran	UE			U
DuwDiagJan2005	L34524-10	Di-n-butyl phthalate	B		U	U
DuwDiagJan2005	L34524-10	Fluorene	E		JK	J
DuwDiagJan2005	L34524-10	Phenanthrene	E		JK	J
DuwDiagJan2005	L34524-10	Phenol	E		JK	J
DuwDiagJan2005	L34524-10	Silver	L		JH	J
DuwDiagJan2005	L34524-11	Aniline	UX		R	R
DuwDiagJan2005	L34524-11	Antimony	UGX		R	R
DuwDiagJan2005	L34524-11	Aroclor-1248	E		JK	J
DuwDiagJan2005	L34524-11	Aroclor-1260	E		JK	J
DuwDiagJan2005	L34524-11	Benzoic acid	E		JK	J
DuwDiagJan2005	L34524-11	beta-BHC	UL			U
DuwDiagJan2005	L34524-11	Dibenzofuran	UE			U
DuwDiagJan2005	L34524-11	Fluorene	UE			U
DuwDiagJan2005	L34524-11	Phenanthrene	E		JK	J
DuwDiagJan2005	L34524-11	Phenol	UE			U
DuwDiagJan2005	L34524-11	Silver	L		JH	J
DuwDiagJan2005	L34524-12	Aniline	UX		R	R
DuwDiagJan2005	L34524-12	Antimony	UGX		R	R
DuwDiagJan2005	L34524-12	Aroclor-1248	E		JK	J
DuwDiagJan2005	L34524-12	Aroclor-1260	E		JK	J
DuwDiagJan2005	L34524-12	Benzoic acid	E		JK	J
DuwDiagJan2005	L34524-12	beta-BHC	UL			U
DuwDiagJan2005	L34524-12	Dibenzofuran	UE			U
DuwDiagJan2005	L34524-12	Di-n-butyl phthalate	B		U	U
DuwDiagJan2005	L34524-12	Fluorene	E		JK	J
DuwDiagJan2005	L34524-12	Phenanthrene	E		JK	J
DuwDiagJan2005	L34524-12	Phenol	UE			U

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
DuwDiagJan2005	L34524-12	Silver	L		JH	J
DuwDiagJan2005	L34524-13	Aniline	UX		R	R
DuwDiagJan2005	L34524-13	Antimony	UGX		UJL	UJ
DuwDiagJan2005	L34524-13	Aroclor-1248	E		JK	J
DuwDiagJan2005	L34524-13	Aroclor-1260	E		JK	J
DuwDiagJan2005	L34524-13	Benzoic acid	E		JK	J
DuwDiagJan2005	L34524-13	Beryllium	L		JH	J
DuwDiagJan2005	L34524-13	beta-BHC	UL			U
DuwDiagJan2005	L34524-13	Cadmium	UL			U
DuwDiagJan2005	L34524-13	Dibenzofuran	UE			U
DuwDiagJan2005	L34524-13	Di-n-butyl phthalate	B		U	U
DuwDiagJan2005	L34524-13	Fluorene	UE			U
DuwDiagJan2005	L34524-13	Phenanthrene	E		JK	J
DuwDiagJan2005	L34524-13	Phenol	UE			U
DuwDiagJan2005	L34524-13	Silver	L		JH	J
DuwDiagJan2005	L34524-14	Aniline	UX		R	R
DuwDiagJan2005	L34524-14	Antimony	UGX		UJL	UJ
DuwDiagJan2005	L34524-14	Aroclor-1248	E		JK	J
DuwDiagJan2005	L34524-14	Aroclor-1260	E		JK	J
DuwDiagJan2005	L34524-14	Benzoic acid	E		JK	J
DuwDiagJan2005	L34524-14	Beryllium	L		JH	J
DuwDiagJan2005	L34524-14	beta-BHC	UL			U
DuwDiagJan2005	L34524-14	Cadmium	L		JH	J
DuwDiagJan2005	L34524-14	Dibenzofuran	E		JK	J
DuwDiagJan2005	L34524-14	Di-n-butyl phthalate	B		U	U
DuwDiagJan2005	L34524-14	Fluorene	E		JK	J
DuwDiagJan2005	L34524-14	Phenanthrene	E		JK	J
DuwDiagJan2005	L34524-14	Phenol	UE			U
DuwDiagJan2005	L34524-14	Silver	L		JH	J
DuwDiagJan2005	L34524-15	Aniline	UX		R	R
DuwDiagJan2005	L34524-15	Antimony	UGX		UJL	UJ
DuwDiagJan2005	L34524-15	Aroclor-1248	E		JK	J
DuwDiagJan2005	L34524-15	Aroclor-1260	E		JK	J
DuwDiagJan2005	L34524-15	Benzoic acid	E		JK	J
DuwDiagJan2005	L34524-15	Beryllium	L		JH	J
DuwDiagJan2005	L34524-15	beta-BHC	UL			U
DuwDiagJan2005	L34524-15	Cadmium	L		JH	J
DuwDiagJan2005	L34524-15	Dibenzofuran	UE			U
DuwDiagJan2005	L34524-15	Di-n-butyl phthalate	B		U	U
DuwDiagJan2005	L34524-15	Fluorene	E		JK	J
DuwDiagJan2005	L34524-15	Phenanthrene	E		JK	J
DuwDiagJan2005	L34524-15	Phenol	E		JK	J
DuwDiagJan2005	L34524-15	Silver	L		JH	J
DuwDiagJan2005	L34524-16	Aniline	UX		R	R
DuwDiagJan2005	L34524-16	Antimony	UGX		UJL	UJ
DuwDiagJan2005	L34524-16	Aroclor-1248	E		JK	J
DuwDiagJan2005	L34524-16	Aroclor-1260	E		JK	J
DuwDiagJan2005	L34524-16	Benzoic acid	E		JK	J
DuwDiagJan2005	L34524-16	Beryllium	L		JH	J
DuwDiagJan2005	L34524-16	beta-BHC	UL			U
DuwDiagJan2005	L34524-16	Cadmium	L		JH	J
DuwDiagJan2005	L34524-16	Dibenzofuran	UE			U
DuwDiagJan2005	L34524-16	Di-n-butyl phthalate	B		U	U
DuwDiagJan2005	L34524-16	Fluorene	E		JK	J
DuwDiagJan2005	L34524-16	Phenanthrene	E		JK	J
DuwDiagJan2005	L34524-16	Phenol	UE			U
DuwDiagJan2005	L34524-16	Silver	L		JH	J
DuwDiagJan2005	L34524-17	Aniline	UX		R	R
DuwDiagJan2005	L34524-17	Antimony	UGX		UJL	UJ
DuwDiagJan2005	L34524-17	Aroclor-1248	E		JK	J
DuwDiagJan2005	L34524-17	Aroclor-1260	E		JK	J
DuwDiagJan2005	L34524-17	Benzoic acid	E		JK	J
DuwDiagJan2005	L34524-17	Beryllium	L		JH	J

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier- original	Validation Qualifier- revised	Interpreted Qualifier
DuwDiagJan2005	L34524-17	beta-BHC	UL			U
DuwDiagJan2005	L34524-17	Cadmium	L		JH	J
DuwDiagJan2005	L34524-17	Dibenzofuran	UE			U
DuwDiagJan2005	L34524-17	Di-n-butyl phthalate	B		U	U
DuwDiagJan2005	L34524-17	Fluorene	E		JK	J
DuwDiagJan2005	L34524-17	Phenanthrene	E		JK	J
DuwDiagJan2005	L34524-17	Phenol	E		JK	J
DuwDiagJan2005	L34524-17	Silver	L		JH	J
DuwDiagJan2005	L34524-18	Aniline	UX		R	R
DuwDiagJan2005	L34524-18	Antimony	UGX		UJL	UJ
DuwDiagJan2005	L34524-18	Aroclor-1248	E		JK	J
DuwDiagJan2005	L34524-18	Aroclor-1260	E		JK	J
DuwDiagJan2005	L34524-18	Benzoic acid	E		JK	J
DuwDiagJan2005	L34524-18	Beryllium	L		JH	J
DuwDiagJan2005	L34524-18	beta-BHC	UL			U
DuwDiagJan2005	L34524-18	Cadmium	L		JH	J
DuwDiagJan2005	L34524-18	Dibenzofuran	UE			U
DuwDiagJan2005	L34524-18	Di-n-butyl phthalate	B		U	U
DuwDiagJan2005	L34524-18	Fluorene	E		JK	J
DuwDiagJan2005	L34524-18	Phenanthrene	E		JK	J
DuwDiagJan2005	L34524-18	Phenol	E		JK	J
DuwDiagJan2005	L34524-18	Silver	L		JH	J
DuwDiagJan2005	L34524-19	Aniline	UX		R	R
DuwDiagJan2005	L34524-19	Antimony	UGX		UJL	UJ
DuwDiagJan2005	L34524-19	Aroclor-1248	EH		JK	J
DuwDiagJan2005	L34524-19	Aroclor-1260	EH		JK	J
DuwDiagJan2005	L34524-19	Benzoic acid	E		JK	J
DuwDiagJan2005	L34524-19	Beryllium	L		JH	J
DuwDiagJan2005	L34524-19	beta-BHC	UHL			U
DuwDiagJan2005	L34524-19	Cadmium	L		JH	J
DuwDiagJan2005	L34524-19	Dibenzofuran	UE			U
DuwDiagJan2005	L34524-19	Di-n-butyl phthalate	B		U	U
DuwDiagJan2005	L34524-19	Fluorene	E		JK	J
DuwDiagJan2005	L34524-19	Phenanthrene	E		JK	J
DuwDiagJan2005	L34524-19	Phenol	E		JK	J
DuwDiagJan2005	L34524-19	Silver	L		JH	J
DuwDiagJan2005	L34524-2	Aniline	UX		R	R
DuwDiagJan2005	L34524-2	Antimony	UGX		R	R
DuwDiagJan2005	L34524-2	Aroclor-1248	E		JK	J
DuwDiagJan2005	L34524-2	Aroclor-1260	E		JK	J
DuwDiagJan2005	L34524-2	Benzoic acid	E		JK	J
DuwDiagJan2005	L34524-2	beta-BHC	UL			U
DuwDiagJan2005	L34524-2	Dibenzofuran	E		JK	J
DuwDiagJan2005	L34524-2	Di-n-butyl phthalate	B		U	U
DuwDiagJan2005	L34524-2	Fluorene	E		JK	J
DuwDiagJan2005	L34524-2	Phenanthrene	E		JK	J
DuwDiagJan2005	L34524-2	Phenol	E		JK	J
DuwDiagJan2005	L34524-2	Silver	L		JH	J
DuwDiagJan2005	L34524-20	Aniline	UX		R	R
DuwDiagJan2005	L34524-20	Antimony	UGX		UJL	UJ
DuwDiagJan2005	L34524-20	Aroclor-1248	UE			U
DuwDiagJan2005	L34524-20	Aroclor-1260	E		JK	J
DuwDiagJan2005	L34524-20	Benzoic acid	E		JK	J
DuwDiagJan2005	L34524-20	Beryllium	L		JH	J
DuwDiagJan2005	L34524-20	beta-BHC	UL			U
DuwDiagJan2005	L34524-20	Cadmium	L		JH	J
DuwDiagJan2005	L34524-20	Dibenzofuran	UE			U
DuwDiagJan2005	L34524-20	Di-n-butyl phthalate	B		U	U
DuwDiagJan2005	L34524-20	Fluorene	E		JK	J
DuwDiagJan2005	L34524-20	Phenanthrene	E		JK	J
DuwDiagJan2005	L34524-20	Phenol	E		JK	J
DuwDiagJan2005	L34524-20	Silver	L		JH	J
DuwDiagJan2005	L34524-21	Aniline	UX		R	R

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
DuwDiagJan2005	L34524-21	Antimony	UGX		UJL	UJ
DuwDiagJan2005	L34524-21	Aroclor-1248	E		JK	J
DuwDiagJan2005	L34524-21	Aroclor-1260	E		JK	J
DuwDiagJan2005	L34524-21	Benzoic acid	E		JK	J
DuwDiagJan2005	L34524-21	Beryllium	L		JH	J
DuwDiagJan2005	L34524-21	beta-BHC	UL			U
DuwDiagJan2005	L34524-21	Cadmium	UL			U
DuwDiagJan2005	L34524-21	Dibenzofuran	UE			U
DuwDiagJan2005	L34524-21	Di-n-butyl phthalate	B		U	U
DuwDiagJan2005	L34524-21	Fluorene	UE			U
DuwDiagJan2005	L34524-21	Phenanthrene	E		JK	J
DuwDiagJan2005	L34524-21	Phenol	E		JK	J
DuwDiagJan2005	L34524-21	Silver	L		JH	J
DuwDiagJan2005	L34524-22	Aniline	UX		R	R
DuwDiagJan2005	L34524-22	Antimony	UGX		UJL	UJ
DuwDiagJan2005	L34524-22	Aroclor-1248	E		JK	J
DuwDiagJan2005	L34524-22	Aroclor-1260	E		JK	J
DuwDiagJan2005	L34524-22	Benzoic acid	E		JK	J
DuwDiagJan2005	L34524-22	Beryllium	L		JH	J
DuwDiagJan2005	L34524-22	beta-BHC	UL			U
DuwDiagJan2005	L34524-22	Cadmium	L		JH	J
DuwDiagJan2005	L34524-22	Dibenzofuran	UE			U
DuwDiagJan2005	L34524-22	Di-n-butyl phthalate	B		U	U
DuwDiagJan2005	L34524-22	Fluorene	UE			U
DuwDiagJan2005	L34524-22	Phenanthrene	E		JK	J
DuwDiagJan2005	L34524-22	Phenol	E		JK	J
DuwDiagJan2005	L34524-22	Silver	L		JH	J
DuwDiagJan2005	L34524-3	Aniline	UX		R	R
DuwDiagJan2005	L34524-3	Antimony	UGX		R	R
DuwDiagJan2005	L34524-3	Aroclor-1248	E		JK	J
DuwDiagJan2005	L34524-3	Aroclor-1260	E		JK	J
DuwDiagJan2005	L34524-3	Benzoic acid	E		JK	J
DuwDiagJan2005	L34524-3	beta-BHC	UL			U
DuwDiagJan2005	L34524-3	Dibenzofuran	UE			U
DuwDiagJan2005	L34524-3	Di-n-butyl phthalate	B		U	U
DuwDiagJan2005	L34524-3	Fluorene	UE			U
DuwDiagJan2005	L34524-3	Phenanthrene	E		JK	J
DuwDiagJan2005	L34524-3	Phenol	E		JK	J
DuwDiagJan2005	L34524-3	Silver	L		JH	J
DuwDiagJan2005	L34524-4	Aniline	UX		R	R
DuwDiagJan2005	L34524-4	Antimony	UGX		R	R
DuwDiagJan2005	L34524-4	Aroclor-1248	E		JK	J
DuwDiagJan2005	L34524-4	Aroclor-1260	E		JK	J
DuwDiagJan2005	L34524-4	Benzoic acid	E		JK	J
DuwDiagJan2005	L34524-4	beta-BHC	UL			U
DuwDiagJan2005	L34524-4	Dibenzofuran	UE			U
DuwDiagJan2005	L34524-4	Di-n-butyl phthalate	B		U	U
DuwDiagJan2005	L34524-4	Fluorene	UE			U
DuwDiagJan2005	L34524-4	Phenanthrene	E		JK	J
DuwDiagJan2005	L34524-4	Phenol	E		JK	J
DuwDiagJan2005	L34524-4	Silver	L		JH	J
DuwDiagJan2005	L34524-5	Aniline	UX		R	R
DuwDiagJan2005	L34524-5	Antimony	UGX		R	R
DuwDiagJan2005	L34524-5	Aroclor-1248	E		JK	J
DuwDiagJan2005	L34524-5	Aroclor-1260	E		JK	J
DuwDiagJan2005	L34524-5	Benzoic acid	E		JK	J
DuwDiagJan2005	L34524-5	beta-BHC	UL			U
DuwDiagJan2005	L34524-5	Dibenzofuran	UE			U
DuwDiagJan2005	L34524-5	Di-n-butyl phthalate	B		U	U
DuwDiagJan2005	L34524-5	Fluorene	UE			U
DuwDiagJan2005	L34524-5	Phenanthrene	E		JK	J
DuwDiagJan2005	L34524-5	Phenol	E		JK	J
DuwDiagJan2005	L34524-5	Silver	L		JH	J

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
DuwDiagJan2005	L34524-6	Aniline	UX		R	R
DuwDiagJan2005	L34524-6	Antimony	UGX		R	R
DuwDiagJan2005	L34524-6	Aroclor-1248	E		JK	J
DuwDiagJan2005	L34524-6	Aroclor-1260	E		JK	J
DuwDiagJan2005	L34524-6	Benzoic acid	E		JK	J
DuwDiagJan2005	L34524-6	beta-BHC	UL			U
DuwDiagJan2005	L34524-6	Dibenzofuran	UE			U
DuwDiagJan2005	L34524-6	Di-n-butyl phthalate	B		U	U
DuwDiagJan2005	L34524-6	Fluorene	E		JK	J
DuwDiagJan2005	L34524-6	Phenanthrene	E		JK	J
DuwDiagJan2005	L34524-6	Phenol	E		JK	J
DuwDiagJan2005	L34524-6	Silver	L		JH	J
DuwDiagJan2005	L34524-7	Aniline	UX		R	R
DuwDiagJan2005	L34524-7	Antimony	UGX		R	R
DuwDiagJan2005	L34524-7	Aroclor-1248	E		JK	J
DuwDiagJan2005	L34524-7	Aroclor-1260	E		JK	J
DuwDiagJan2005	L34524-7	Benzoic acid	E		JK	J
DuwDiagJan2005	L34524-7	beta-BHC	UL			U
DuwDiagJan2005	L34524-7	Dibenzofuran	UE			U
DuwDiagJan2005	L34524-7	Di-n-butyl phthalate	B		U	U
DuwDiagJan2005	L34524-7	Fluorene	E		JK	J
DuwDiagJan2005	L34524-7	Phenanthrene	E		JK	J
DuwDiagJan2005	L34524-7	Phenol	E		JK	J
DuwDiagJan2005	L34524-7	Silver	L		JH	J
DuwDiagJan2005	L34524-8	Aniline	UX		R	R
DuwDiagJan2005	L34524-8	Antimony	UGX		R	R
DuwDiagJan2005	L34524-8	Aroclor-1248	E		JK	J
DuwDiagJan2005	L34524-8	Aroclor-1260	E		JK	J
DuwDiagJan2005	L34524-8	Benzoic acid	E		JK	J
DuwDiagJan2005	L34524-8	beta-BHC	UL			U
DuwDiagJan2005	L34524-8	Dibenzofuran	UE			U
DuwDiagJan2005	L34524-8	Di-n-butyl phthalate	B		U	U
DuwDiagJan2005	L34524-8	Fluorene	E		JK	J
DuwDiagJan2005	L34524-8	Phenanthrene	E		JK	J
DuwDiagJan2005	L34524-8	Phenol	E		JK	J
DuwDiagJan2005	L34524-8	Silver	L		JH	J
DuwDiagJan2005	L34524-9	Aniline	UX		R	R
DuwDiagJan2005	L34524-9	Antimony	UGX		R	R
DuwDiagJan2005	L34524-9	Aroclor-1248	E		JK	J
DuwDiagJan2005	L34524-9	Aroclor-1260	E		JK	J
DuwDiagJan2005	L34524-9	Benzoic acid	E		JK	J
DuwDiagJan2005	L34524-9	beta-BHC	UL			U
DuwDiagJan2005	L34524-9	Dibenzofuran	UE			U
DuwDiagJan2005	L34524-9	Di-n-butyl phthalate	B		U	U
DuwDiagJan2005	L34524-9	Fluorene	E		JK	J
DuwDiagJan2005	L34524-9	Phenanthrene	E		JK	J
DuwDiagJan2005	L34524-9	Phenol	UE			U
DuwDiagJan2005	L34524-9	Silver	L		JH	J
DuwDiagJune2004	L32085-1	2-Methylphenol	UG		JL	UJ
DuwDiagJune2004	L32085-1	4,4'-DDT	UL			U
DuwDiagJune2004	L32085-1	alpha-Chlordane	UL			U
DuwDiagJune2004	L32085-1	Aluminum	L		JH	J
DuwDiagJune2004	L32085-1	Anthracene	UG		JL	UJ
DuwDiagJune2004	L32085-1	Antimony	UG		JL	UJ
DuwDiagJune2004	L32085-1	Benzo(a)anthracene	G		JL	J
DuwDiagJune2004	L32085-1	Benzo(a)pyrene	G		JL	J
DuwDiagJune2004	L32085-1	Benzo(k)fluoranthene	L		JH	J
DuwDiagJune2004	L32085-1	beta-BHC	UG		JL	UJ
DuwDiagJune2004	L32085-1	Dibenzo(a,h)anthracene	UL			U
DuwDiagJune2004	L32085-1	Indeno(1,2,3-cd)pyrene	UG		JL	UJ
DuwDiagJune2004	L32085-1	Iron	G		JL	J
DuwDiagJune2004	L32085-1	Methoxychlor	UL			U
DuwDiagJune2004	L32085-1	Naphthalene	UG		JL	UJ

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
DuwDiagJune2004	L32085-1	Phenanthrene	G		JL	J
DuwDiagJune2004	L32085-1	Pyrene	G		JL	J
DuwDiagJune2004	L32085-1	Silver	L		JH	J
DuwDiagJune2004	L32085-2	2-Methylphenol	UG		JL	UJ
DuwDiagJune2004	L32085-2	4,4'-DDT	UL			U
DuwDiagJune2004	L32085-2	alpha-Chlordane	UL			U
DuwDiagJune2004	L32085-2	Aluminum	L		JH	J
DuwDiagJune2004	L32085-2	Anthracene	UG		JL	UJ
DuwDiagJune2004	L32085-2	Antimony	UG		JL	UJ
DuwDiagJune2004	L32085-2	Benzo(a)anthracene	G		JL	J
DuwDiagJune2004	L32085-2	Benzo(a)pyrene	G		JL	J
DuwDiagJune2004	L32085-2	Benzo(k)fluoranthene	L		JH	J
DuwDiagJune2004	L32085-2	beta-BHC	UG		JL	UJ
DuwDiagJune2004	L32085-2	Dibenzo(a,h)anthracene	UL			U
DuwDiagJune2004	L32085-2	Indeno(1,2,3-cd)pyrene	UG		JL	UJ
DuwDiagJune2004	L32085-2	Iron	G		JL	J
DuwDiagJune2004	L32085-2	Methoxychlor	UL			U
DuwDiagJune2004	L32085-2	Naphthalene	UG		JL	UJ
DuwDiagJune2004	L32085-2	Phenanthrene	G		JL	J
DuwDiagJune2004	L32085-2	Pyrene	G		JL	J
DuwDiagJune2004	L32085-2	Silver	L		JH	J
DuwDiagJune2004	L32085-4	2-Methylphenol	UG		JL	UJ
DuwDiagJune2004	L32085-4	4,4'-DDT	UL			U
DuwDiagJune2004	L32085-4	alpha-Chlordane	UL			U
DuwDiagJune2004	L32085-4	Aluminum	L		JH	J
DuwDiagJune2004	L32085-4	Anthracene	UG		JL	UJ
DuwDiagJune2004	L32085-4	Antimony	UG		JL	UJ
DuwDiagJune2004	L32085-4	Benzo(a)anthracene	G		JL	J
DuwDiagJune2004	L32085-4	Benzo(a)pyrene	G		JL	J
DuwDiagJune2004	L32085-4	Benzo(k)fluoranthene	L		JH	J
DuwDiagJune2004	L32085-4	beta-BHC	UG		JL	UJ
DuwDiagJune2004	L32085-4	Dibenzo(a,h)anthracene	UL			U
DuwDiagJune2004	L32085-4	Indeno(1,2,3-cd)pyrene	UG		JL	UJ
DuwDiagJune2004	L32085-4	Iron	G		JL	J
DuwDiagJune2004	L32085-4	Methoxychlor	UL			U
DuwDiagJune2004	L32085-4	Naphthalene	UG		JL	UJ
DuwDiagJune2004	L32085-4	Phenanthrene	G		JL	J
DuwDiagJune2004	L32085-4	Pyrene	G		JL	J
DuwDiagJune2004	L32085-4	Silver	L		JH	J
DuwDiagJune2004	L32085-5	2-Methylphenol	UG		JL	UJ
DuwDiagJune2004	L32085-5	4,4'-DDT	UL			U
DuwDiagJune2004	L32085-5	alpha-Chlordane	UL			U
DuwDiagJune2004	L32085-5	Aluminum	L		JH	J
DuwDiagJune2004	L32085-5	Anthracene	UG		JL	UJ
DuwDiagJune2004	L32085-5	Antimony	UG		JL	UJ
DuwDiagJune2004	L32085-5	Benzo(a)anthracene	G		JL	J
DuwDiagJune2004	L32085-5	Benzo(a)pyrene	UG		JL	UJ
DuwDiagJune2004	L32085-5	Benzo(k)fluoranthene	UL			U
DuwDiagJune2004	L32085-5	beta-BHC	UG		JL	UJ
DuwDiagJune2004	L32085-5	Dibenzo(a,h)anthracene	UL			U
DuwDiagJune2004	L32085-5	Indeno(1,2,3-cd)pyrene	UG		JL	UJ
DuwDiagJune2004	L32085-5	Iron	G		JL	J
DuwDiagJune2004	L32085-5	Methoxychlor	UL			U
DuwDiagJune2004	L32085-5	Naphthalene	UG		JL	UJ
DuwDiagJune2004	L32085-5	Phenanthrene	UG		JL	UJ
DuwDiagJune2004	L32085-5	Pyrene	UG		JL	UJ
DuwDiagJune2004	L32085-5	Silver	L		JH	J
DuwDiagJune2004	L32085-6	2-Methylphenol	UG		JL	UJ
DuwDiagJune2004	L32085-6	4,4'-DDT	UL			U
DuwDiagJune2004	L32085-6	alpha-Chlordane	UL			U
DuwDiagJune2004	L32085-6	Aluminum	L		JH	J
DuwDiagJune2004	L32085-6	Anthracene	UG		JL	UJ
DuwDiagJune2004	L32085-6	Antimony	UG		JL	UJ

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
DuwDiagJune2004	L32085-6	Benzo(a)anthracene	UG		JL	UJ
DuwDiagJune2004	L32085-6	Benzo(a)pyrene	UG		JL	UJ
DuwDiagJune2004	L32085-6	Benzo(k)fluoranthene	UL			U
DuwDiagJune2004	L32085-6	beta-BHC	UG		JL	UJ
DuwDiagJune2004	L32085-6	Dibenzo(a,h)anthracene	UL			U
DuwDiagJune2004	L32085-6	Indeno(1,2,3-cd)pyrene	UG		JL	UJ
DuwDiagJune2004	L32085-6	Iron	G		JL	J
DuwDiagJune2004	L32085-6	Methoxychlor	UL			U
DuwDiagJune2004	L32085-6	Naphthalene	UG		JL	UJ
DuwDiagJune2004	L32085-6	Phenanthrene	UG		JL	UJ
DuwDiagJune2004	L32085-6	Pyrene	UG		JL	UJ
DuwDiagJune2004	L32085-6	Silver	L		JH	J
DuwDiagJune2004	L32085-7	2-Methylphenol	UG		JL	UJ
DuwDiagJune2004	L32085-7	4,4'-DDT	UL			U
DuwDiagJune2004	L32085-7	alpha-Chlordane	UL			U
DuwDiagJune2004	L32085-7	Aluminum	L		JH	J
DuwDiagJune2004	L32085-7	Anthracene	UG		JL	UJ
DuwDiagJune2004	L32085-7	Antimony	UG		JL	UJ
DuwDiagJune2004	L32085-7	Benzo(a)anthracene	G		JL	J
DuwDiagJune2004	L32085-7	Benzo(a)pyrene	G		JL	J
DuwDiagJune2004	L32085-7	Benzo(k)fluoranthene	L		JH	J
DuwDiagJune2004	L32085-7	beta-BHC	UG		JL	UJ
DuwDiagJune2004	L32085-7	Dibenzo(a,h)anthracene	UL			U
DuwDiagJune2004	L32085-7	Indeno(1,2,3-cd)pyrene	UG		JL	UJ
DuwDiagJune2004	L32085-7	Iron	G		JL	J
DuwDiagJune2004	L32085-7	Methoxychlor	UL			U
DuwDiagJune2004	L32085-7	Naphthalene	UG		JL	UJ
DuwDiagJune2004	L32085-7	Phenanthrene	G		JL	J
DuwDiagJune2004	L32085-7	Pyrene	G		JL	J
DuwDiagJune2004	L32085-7	Silver	L		JH	J
DuwDiagJune2004	L32085-8	2-Methylphenol	UG		JL	UJ
DuwDiagJune2004	L32085-8	4,4'-DDT	UL			U
DuwDiagJune2004	L32085-8	alpha-Chlordane	UL			U
DuwDiagJune2004	L32085-8	Aluminum	L		JH	J
DuwDiagJune2004	L32085-8	Anthracene	UG		JL	UJ
DuwDiagJune2004	L32085-8	Antimony	UG		JL	UJ
DuwDiagJune2004	L32085-8	Benzo(a)anthracene	G		JL	J
DuwDiagJune2004	L32085-8	Benzo(a)pyrene	G		JL	J
DuwDiagJune2004	L32085-8	Benzo(k)fluoranthene	L		JH	J
DuwDiagJune2004	L32085-8	beta-BHC	UG		JL	UJ
DuwDiagJune2004	L32085-8	Dibenzo(a,h)anthracene	UL			U
DuwDiagJune2004	L32085-8	Indeno(1,2,3-cd)pyrene	UG		JL	UJ
DuwDiagJune2004	L32085-8	Iron	G		JL	J
DuwDiagJune2004	L32085-8	Methoxychlor	UL			U
DuwDiagJune2004	L32085-8	Naphthalene	UG		JL	UJ
DuwDiagJune2004	L32085-8	Phenanthrene	G		JL	J
DuwDiagJune2004	L32085-8	Pyrene	G		JL	J
DuwDiagJune2004	L32085-8	Silver	L		JH	J
DuwDiagJune2004	L32085-9	2-Methylphenol	UG		JL	UJ
DuwDiagJune2004	L32085-9	4,4'-DDT	UL			U
DuwDiagJune2004	L32085-9	alpha-Chlordane	UL			U
DuwDiagJune2004	L32085-9	Aluminum	L		JH	J
DuwDiagJune2004	L32085-9	Anthracene	UG		JL	UJ
DuwDiagJune2004	L32085-9	Antimony	UG		JL	UJ
DuwDiagJune2004	L32085-9	Benzo(a)anthracene	G		JL	J
DuwDiagJune2004	L32085-9	Benzo(a)pyrene	G		JL	J
DuwDiagJune2004	L32085-9	Benzo(k)fluoranthene	L		JH	J
DuwDiagJune2004	L32085-9	beta-BHC	UG		JL	UJ
DuwDiagJune2004	L32085-9	Dibenzo(a,h)anthracene	UL			U
DuwDiagJune2004	L32085-9	Indeno(1,2,3-cd)pyrene	UG		JL	UJ
DuwDiagJune2004	L32085-9	Iron	G		JL	J
DuwDiagJune2004	L32085-9	Methoxychlor	UL			U
DuwDiagJune2004	L32085-9	Naphthalene	UG		JL	UJ

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
DuwDiagJune2004	L32085-9	Phenanthrene	UG		JL	UJ
DuwDiagJune2004	L32085-9	Pyrene	G		JL	J
DuwDiagJune2004	L32085-9	Silver	L		JH	J
DuwDiagMarch2005	L34971-16	2,4-Dimethylphenol	UX		R	R
DuwDiagMarch2005	L34971-16	4,4'-DDT	UL			U
DuwDiagMarch2005	L34971-16	Aniline	UX		R	R
DuwDiagMarch2005	L34971-16	Antimony	UGX		UJ	UJ
DuwDiagMarch2005	L34971-16	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2005	L34971-16	N-Nitrosodiphenylamine	UX		R	R
DuwDiagMarch2005	L34971-16	Pyridine	UX		R	R
DuwDiagMarch2005	L34971-17	2,4-Dimethylphenol	UX		R	R
DuwDiagMarch2005	L34971-17	4,4'-DDT	UL			U
DuwDiagMarch2005	L34971-17	Aniline	UX		R	R
DuwDiagMarch2005	L34971-17	Antimony	UGX		UJ	UJ
DuwDiagMarch2005	L34971-17	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2005	L34971-17	N-Nitrosodiphenylamine	UX		R	R
DuwDiagMarch2005	L34971-17	Pyridine	UX		R	R
DuwDiagMarch2005	L34971-3	2,4-Dimethylphenol	UX		R	R
DuwDiagMarch2005	L34971-3	4,4'-DDT	UL			U
DuwDiagMarch2005	L34971-3	Aniline	UX		R	R
DuwDiagMarch2005	L34971-3	Antimony	UGX		UJ	UJ
DuwDiagMarch2005	L34971-3	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2005	L34971-3	N-Nitrosodiphenylamine	UX		R	R
DuwDiagMarch2005	L34971-3	Pyridine	X		J	J
DuwDiagMarch2005	L34971-4	2,4-Dimethylphenol	UX		R	R
DuwDiagMarch2005	L34971-4	4,4'-DDT	UL			U
DuwDiagMarch2005	L34971-4	Aniline	UX		R	R
DuwDiagMarch2005	L34971-4	Antimony	UGX		UJ	UJ
DuwDiagMarch2005	L34971-4	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2005	L34971-4	N-Nitrosodiphenylamine	UX		R	R
DuwDiagMarch2005	L34971-4	Pyridine	UX		R	R
DuwDiagMarch2005	L34971-5	2,4-Dimethylphenol	UX		R	R
DuwDiagMarch2005	L34971-5	4,4'-DDT	UL			U
DuwDiagMarch2005	L34971-5	Aniline	UX		R	R
DuwDiagMarch2005	L34971-5	Antimony	UGX		UJ	UJ
DuwDiagMarch2005	L34971-5	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2005	L34971-5	N-Nitrosodiphenylamine	UX		R	R
DuwDiagMarch2005	L34971-5	Pyridine	UX		R	R
DuwDiagMarch2005	L34971-6	2,4-Dimethylphenol	UX		R	R
DuwDiagMarch2005	L34971-6	4,4'-DDT	UL			U
DuwDiagMarch2005	L34971-6	Aniline	UX		R	R
DuwDiagMarch2005	L34971-6	Antimony	UGX		UJ	UJ
DuwDiagMarch2005	L34971-6	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2005	L34971-6	N-Nitrosodiphenylamine	UX		R	R
DuwDiagMarch2005	L34971-6	Pyridine	UX		R	R
DuwDiagMarch2005	L34971-7	2,4-Dimethylphenol	UX		R	R
DuwDiagMarch2005	L34971-7	4,4'-DDT	UL			U
DuwDiagMarch2005	L34971-7	Aniline	UX		R	R
DuwDiagMarch2005	L34971-7	Antimony	UGX		UJ	UJ
DuwDiagMarch2005	L34971-7	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2005	L34971-7	N-Nitrosodiphenylamine	UX		R	R
DuwDiagMarch2005	L34971-7	Pyridine	UX		R	R
DuwDiagMarch2005	L34971-8	2,4-Dimethylphenol	UX		R	R
DuwDiagMarch2005	L34971-8	4,4'-DDT	UL			U
DuwDiagMarch2005	L34971-8	Aniline	UX		R	R
DuwDiagMarch2005	L34971-8	Antimony	UGX		UJ	UJ
DuwDiagMarch2005	L34971-8	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2005	L34971-8	N-Nitrosodiphenylamine	UX		R	R
DuwDiagMarch2005	L34971-8	Pyridine	UX		R	R
DuwDiagMarch2006	L38325-1	2,4-Dimethylphenol	UX		R	R
DuwDiagMarch2006	L38325-1	4,4'-DDT	UL		JH	U
DuwDiagMarch2006	L38325-1	Antimony	UG		JL	UJ
DuwDiagMarch2006	L38325-1	Aroclor 1260	L		JH	J

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
DuwDiagMarch2006	L38325-1	Bis(2-ethylhexyl)phthalate	B			
DuwDiagMarch2006	L38325-1	Butyl Benzyl Phthalate	B			
DuwDiagMarch2006	L38325-1	Clay	E		JK	J
DuwDiagMarch2006	L38325-1	Di-n-butyl phthalate	UB		U	U
DuwDiagMarch2006	L38325-2	2,4-Dimethylphenol	UX		R	R
DuwDiagMarch2006	L38325-2	4,4'-DDT	ULE		JK	UJ
DuwDiagMarch2006	L38325-2	Antimony	UG		JL	UJ
DuwDiagMarch2006	L38325-2	Aroclor 1260	L		JH	J
DuwDiagMarch2006	L38325-2	Bis(2-ethylhexyl)phthalate	B			
DuwDiagMarch2006	L38325-2	Butyl Benzyl Phthalate	B			
DuwDiagMarch2006	L38325-2	Clay	E		JK	J
DuwDiagMarch2006	L38325-2	Di-n-butyl phthalate	B			
DuwDiagMarch2006	L38325-2	Methoxychlor	UE		JL	UJ
DuwDiagMarch2006	L38325-3	2,4-Dimethylphenol	UX		R	R
DuwDiagMarch2006	L38325-3	4,4'-DDT	ULE		JK	UJ
DuwDiagMarch2006	L38325-3	Antimony	UG		JL	UJ
DuwDiagMarch2006	L38325-3	Aroclor 1260	L		JH	J
DuwDiagMarch2006	L38325-3	Bis(2-ethylhexyl)phthalate	B			
DuwDiagMarch2006	L38325-3	Butyl Benzyl Phthalate	B			
DuwDiagMarch2006	L38325-3	Clay	E		JK	J
DuwDiagMarch2006	L38325-3	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2006	L38325-3	Methoxychlor	UE		JL	UJ
DuwDiagMarch2006	L38325-4	2,4-Dimethylphenol	UX		R	R
DuwDiagMarch2006	L38325-4	4,4'-DDT	ULE		JK	UJ
DuwDiagMarch2006	L38325-4	Antimony	UG		JL	UJ
DuwDiagMarch2006	L38325-4	Aroclor 1260	L		JH	J
DuwDiagMarch2006	L38325-4	Bis(2-ethylhexyl)phthalate	B			
DuwDiagMarch2006	L38325-4	Butyl Benzyl Phthalate	B		U	U
DuwDiagMarch2006	L38325-4	Clay	E		JK	J
DuwDiagMarch2006	L38325-4	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2006	L38325-4	Methoxychlor	UE		JL	UJ
DuwDiagMarch2006	L38325-5	2,4-Dimethylphenol	UX		R	R
DuwDiagMarch2006	L38325-5	4,4'-DDT	ULE		JK	UJ
DuwDiagMarch2006	L38325-5	Antimony	UG		JL	UJ
DuwDiagMarch2006	L38325-5	Aroclor 1260	UL		JH	U
DuwDiagMarch2006	L38325-5	Bis(2-ethylhexyl)phthalate	B		U	U
DuwDiagMarch2006	L38325-5	Butyl Benzyl Phthalate	B		U	U
DuwDiagMarch2006	L38325-5	Clay	E		JK	J
DuwDiagMarch2006	L38325-5	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2006	L38325-5	Methoxychlor	UE		JL	UJ
DuwDiagMarch2006	L38325-6	2,4-Dimethylphenol	UX		R	R
DuwDiagMarch2006	L38325-6	4,4'-DDT	ULE		JK	UJ
DuwDiagMarch2006	L38325-6	Antimony	UG		JL	UJ
DuwDiagMarch2006	L38325-6	Aroclor 1260	L		JH	J
DuwDiagMarch2006	L38325-6	Bis(2-ethylhexyl)phthalate	B		U	U
DuwDiagMarch2006	L38325-6	Butyl Benzyl Phthalate	B		U	U
DuwDiagMarch2006	L38325-6	Clay	E		JK	J
DuwDiagMarch2006	L38325-6	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2006	L38325-6	Methoxychlor	UE		JL	UJ
DuwDiagMarch2006	L38325-7	2,4-Dimethylphenol	UX		R	R
DuwDiagMarch2006	L38325-7	4,4'-DDT	ULE		JK	UJ
DuwDiagMarch2006	L38325-7	Antimony	UG		JL	UJ
DuwDiagMarch2006	L38325-7	Aroclor 1260	L		JH	J
DuwDiagMarch2006	L38325-7	Bis(2-ethylhexyl)phthalate	B			
DuwDiagMarch2006	L38325-7	Butyl Benzyl Phthalate	B		U	U
DuwDiagMarch2006	L38325-7	Clay	E		JK	J
DuwDiagMarch2006	L38325-7	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2006	L38325-7	Methoxychlor	UE		JL	UJ
DuwDiagMarch2006	L38325-8	2,4-Dimethylphenol	UX		R	R
DuwDiagMarch2006	L38325-8	4,4'-DDT	ULE		JK	UJ
DuwDiagMarch2006	L38325-8	Antimony	UG		JL	UJ
DuwDiagMarch2006	L38325-8	Aroclor 1260	L		JH	J
DuwDiagMarch2006	L38325-8	Bis(2-ethylhexyl)phthalate	B			

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
DuwDiagMarch2006	L38325-8	Butyl Benzyl Phthalate	B		U	U
DuwDiagMarch2006	L38325-8	Clay	E		JK	J
DuwDiagMarch2006	L38325-8	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2006	L38325-8	Methoxychlor	UE		JL	UJ
DuwDiagMarch2006	L38325-9	2,4-Dimethylphenol	UX		R	R
DuwDiagMarch2006	L38325-9	4,4'-DDD	UH		JK	UJ
DuwDiagMarch2006	L38325-9	4,4'-DDE	UH		JK	UJ
DuwDiagMarch2006	L38325-9	4,4'-DDT	ULHE		JK	UJ
DuwDiagMarch2006	L38325-9	Aldrin	UH		JK	UJ
DuwDiagMarch2006	L38325-9	alpha-BHC	UH		JK	UJ
DuwDiagMarch2006	L38325-9	alpha-Chlordane	UH		JK	UJ
DuwDiagMarch2006	L38325-9	alpha-Endosulfan	UH		JK	UJ
DuwDiagMarch2006	L38325-9	Antimony	UG		JL	UJ
DuwDiagMarch2006	L38325-9	Aroclor-1016	UH,TA		JK	UJ
DuwDiagMarch2006	L38325-9	Aroclor-1221	UH		JK	UJ
DuwDiagMarch2006	L38325-9	Aroclor-1232	UH,TA		JK	UJ
DuwDiagMarch2006	L38325-9	Aroclor-1242	UH,TA		JK	UJ
DuwDiagMarch2006	L38325-9	Aroclor-1248	H		JK	J
DuwDiagMarch2006	L38325-9	Aroclor-1254	H		JK	J
DuwDiagMarch2006	L38325-9	Aroclor-1260	L,H		JH,JK	J
DuwDiagMarch2006	L38325-9	beta-BHC	UH		JK	UJ
DuwDiagMarch2006	L38325-9	beta-Endosulfan	UH		JK	UJ
DuwDiagMarch2006	L38325-9	Bis(2-ethylhexyl)phthalate	B			
DuwDiagMarch2006	L38325-9	Butyl Benzyl Phthalate	B		U	U
DuwDiagMarch2006	L38325-9	Clay	E		JK	J
DuwDiagMarch2006	L38325-9	delta-BHC	UH		JK	UJ
DuwDiagMarch2006	L38325-9	Dieldrin	UH		JK	UJ
DuwDiagMarch2006	L38325-9	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2006	L38325-9	Endosulfan sulfate	UH		JK	UJ
DuwDiagMarch2006	L38325-9	Endrin	UH		JK	UJ
DuwDiagMarch2006	L38325-9	Endrin aldehyde	UH		JK	UJ
DuwDiagMarch2006	L38325-9	gamma-BHC	UH		JK	UJ
DuwDiagMarch2006	L38325-9	gamma-Chlordane	UH		JK	UJ
DuwDiagMarch2006	L38325-9	Heptachlor	UH		JK	UJ
DuwDiagMarch2006	L38325-9	Heptachlor epoxide	UH		JK	UJ
DuwDiagMarch2006	L38325-9	Methoxychlor	UHE		JL, JK	UJ
DuwDiagMarch2006	L38325-9	Toxaphene	UH		JK	UJ
DuwDiagMarch2006	L38326-1	4,4'-DDT	ULE		JK	UJ
DuwDiagMarch2006	L38326-1	Antimony	UG		JL	UJ
DuwDiagMarch2006	L38326-1	Clay	E		JK	J
DuwDiagMarch2006	L38326-1	Di-n-butyl phthalate	UB		U	U
DuwDiagMarch2006	L38326-1	Methoxychlor	UE		JL	UJ
DuwDiagMarch2006	L38326-1	Silver	E		JK	J
DuwDiagMarch2006	L38326-10	4,4'-DDT	ULE		JK	UJ
DuwDiagMarch2006	L38326-10	Antimony	UG		JL	UJ
DuwDiagMarch2006	L38326-10	Clay	E		JK	J
DuwDiagMarch2006	L38326-10	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2006	L38326-10	Methoxychlor	UE		JL	UJ
DuwDiagMarch2006	L38326-10	Silver	E		JK	J
DuwDiagMarch2006	L38326-11	4,4'-DDT	UL		JH	U
DuwDiagMarch2006	L38326-11	Antimony	UG		JL	UJ
DuwDiagMarch2006	L38326-11	Clay	E		JK	J
DuwDiagMarch2006	L38326-11	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2006	L38326-11	Silver	E		JK	J
DuwDiagMarch2006	L38326-12	4,4'-DDT	UL		JH	U
DuwDiagMarch2006	L38326-12	Antimony	UG		JL	UJ
DuwDiagMarch2006	L38326-12	Clay	E		JK	J
DuwDiagMarch2006	L38326-12	Di-n-butyl phthalate	B			
DuwDiagMarch2006	L38326-12	Silver	E		JK	J
DuwDiagMarch2006	L38326-13	4,4'-DDT	UL		JH	U
DuwDiagMarch2006	L38326-13	Antimony	UG		JL	UJ
DuwDiagMarch2006	L38326-13	Clay	E		JK	J
DuwDiagMarch2006	L38326-13	Di-n-butyl phthalate	B		U	U

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
DuwDiagMarch2006	L38326-13	Silver	E		JK	J
DuwDiagMarch2006	L38326-14	4,4'-DDT	UL		JH	U
DuwDiagMarch2006	L38326-14	Antimony	UG		JL	UJ
DuwDiagMarch2006	L38326-14	Clay	E		JK	J
DuwDiagMarch2006	L38326-14	Di-n-butyl phthalate	B			
DuwDiagMarch2006	L38326-14	Silver	E		JK	J
DuwDiagMarch2006	L38326-15	4,4'-DDT	UL		JH	U
DuwDiagMarch2006	L38326-15	Antimony	UG		JL	UJ
DuwDiagMarch2006	L38326-15	Clay	E		JK	J
DuwDiagMarch2006	L38326-15	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2006	L38326-15	Silver	E		JK	J
DuwDiagMarch2006	L38326-2	4,4'-DDT	ULE		JK	UJ
DuwDiagMarch2006	L38326-2	Antimony	UG		JL	UJ
DuwDiagMarch2006	L38326-2	Clay	E		JK	J
DuwDiagMarch2006	L38326-2	Methoxychlor	UE		JL	UJ
DuwDiagMarch2006	L38326-2	Silver	E		JK	J
DuwDiagMarch2006	L38326-9	4,4'-DDT	ULE		JK	UJ
DuwDiagMarch2006	L38326-9	Antimony	UG		JL	UJ
DuwDiagMarch2006	L38326-9	Clay	E		JK	J
DuwDiagMarch2006	L38326-9	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2006	L38326-9	Methoxychlor	UE		JL	UJ
DuwDiagMarch2006	L38326-9	Silver	E		JK	J
DuwDiagMarch2006	L38327-1	4,4'-DDT	UL		JH	U
DuwDiagMarch2006	L38327-1	Antimony	UG		JL	UJ
DuwDiagMarch2006	L38327-1	Clay	E		JK	J
DuwDiagMarch2006	L38327-1	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2006	L38327-1	Silver	E		JK	J
DuwDiagMarch2006	L38327-2	4,4'-DDT	UL		JH	U
DuwDiagMarch2006	L38327-2	Antimony	UG		JL	UJ
DuwDiagMarch2006	L38327-2	Clay	E		JK	J
DuwDiagMarch2006	L38327-2	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2006	L38327-2	Silver	UE		JK	UJ
DuwDiagMarch2006	L38327-3	4,4'-DDT	UL		JH	U
DuwDiagMarch2006	L38327-3	Antimony	UG		JL	UJ
DuwDiagMarch2006	L38327-3	Clay	E		JK	J
DuwDiagMarch2006	L38327-3	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2006	L38327-3	Silver	UE		JK	UJ
DuwDiagMarch2006	L38327-4	4,4'-DDT	UL		JH	U
DuwDiagMarch2006	L38327-4	Antimony	UG		JL	UJ
DuwDiagMarch2006	L38327-4	Clay	E		JK	J
DuwDiagMarch2006	L38327-4	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2006	L38327-4	Silver	E		JK	J
DuwDiagMarch2006	L38327-5	4,4'-DDT	UL		JH	U
DuwDiagMarch2006	L38327-5	Antimony	UG		JL	UJ
DuwDiagMarch2006	L38327-5	Clay	E		JK	J
DuwDiagMarch2006	L38327-5	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2006	L38327-5	Silver	E		JK	J
DuwDiagMarch2006	L38327-6	4,4'-DDT	UL		JH	U
DuwDiagMarch2006	L38327-6	Antimony	UG		JL	UJ
DuwDiagMarch2006	L38327-6	Clay	E		JK	J
DuwDiagMarch2006	L38327-6	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2006	L38327-6	Silver	E		JK	J
DuwDiagMarch2006	L38327-7	4,4'-DDT	UL		JH	U
DuwDiagMarch2006	L38327-7	Antimony	UG		JL	UJ
DuwDiagMarch2006	L38327-7	Clay	UE		JK	UJ
DuwDiagMarch2006	L38327-7	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2006	L38327-7	Silver	E		JK	J
DuwDiagMarch2006	L38327-8	4,4'-DDT	L		JH	J
DuwDiagMarch2006	L38327-8	Antimony	UG		JL	UJ
DuwDiagMarch2006	L38327-8	Clay	E		JK	J
DuwDiagMarch2006	L38327-8	Di-n-butyl phthalate	B		U	U
DuwDiagMarch2006	L38327-8	Silver	E		JK	J
Glacier NW	SCDMMU1	alpha-BHC	JP	J	JK	J

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
Glacier NW	SCDMMU1	Endrin	P	J	JK	J
Glacier NW	SCDMMU2	4,4'-DDD	JP	J	JK	J
Glacier NW	SCDMMU2	4,4'-DDE	JP	J	JK	J
Glacier NW	SCDMMU2	Endrin	P	J	JK	J
Glacier NW	SCDMMU3	4,4'-DDE	P	J	JK	J
JorgensenApril2004	SD-201-0000	Fractional % phi >-1 (>2000 µm)		J	JK	J
JorgensenApril2004	SD-201-0000	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-201-0010	Fractional % phi >-1 (>2000 µm)		J	JK	J
JorgensenApril2004	SD-201-0010	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-202-0000	Chromium		J	JL	J
JorgensenApril2004	SD-202-0000	Fractional % phi >-1 (>2000 µm)	U	J	UJK	UJ
JorgensenApril2004	SD-202-0000	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-202-0010	Chromium		J	JL	J
JorgensenApril2004	SD-202-0010	Fractional % phi >-1 (>2000 µm)	U	J	UJK	UJ
JorgensenApril2004	SD-202-0010	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-203-0000	Aroclor-1260	P	J	JK	J
JorgensenApril2004	SD-203-0000	Chromium		J	JL	J
JorgensenApril2004	SD-203-0000	Fractional % phi >-1 (>2000 µm)		J	JK	J
JorgensenApril2004	SD-203-0000	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-203-0010	Chromium		J	JL	J
JorgensenApril2004	SD-203-0010	Fractional % phi >-1 (>2000 µm)		J	JK	J
JorgensenApril2004	SD-203-0010	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-203-0020	Chromium		J	JL	J
JorgensenApril2004	SD-203-0020	Copper		J	JK	J
JorgensenApril2004	SD-204-0000	Chromium		J	JL	J
JorgensenApril2004	SD-204-0000	Fractional % phi >-1 (>2000 µm)	U	J	UJK	UJ
JorgensenApril2004	SD-204-0000	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-204-0010	Chromium		J	JL	J
JorgensenApril2004	SD-204-0010	Fractional % phi >-1 (>2000 µm)	U	J	UJK	UJ
JorgensenApril2004	SD-204-0010	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-205-0000	Chromium		J	JL	J
JorgensenApril2004	SD-205-0000	Fractional % phi >-1 (>2000 µm)		J	JK	J
JorgensenApril2004	SD-205-0000	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-205-0010	Chromium		J	JL	J
JorgensenApril2004	SD-205-0010	Fractional % phi >-1 (>2000 µm)		J	JK	J
JorgensenApril2004	SD-205-0010	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-205D-0000	Fractional % phi >-1 (>2000 µm)	U	J	UJK	UJ
JorgensenApril2004	SD-205D-0000	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-205D-0010	Fractional % phi >-1 (>2000 µm)	U	J	UJK	UJ
JorgensenApril2004	SD-205D-0010	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-206-0000	Fractional % phi >-1 (>2000 µm)	U	J	UJK	UJ
JorgensenApril2004	SD-206-0000	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-206-0000	Mercury		J	JK	J
JorgensenApril2004	SD-206-0010	Fractional % phi >-1 (>2000 µm)		J	JK	J
JorgensenApril2004	SD-206-0010	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-206-0010	Mercury		J	JK	J
JorgensenApril2004	SD-207-0000	Fractional % phi >-1 (>2000 µm)	U	J	UJK	UJ
JorgensenApril2004	SD-207-0000	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-207-0000	Mercury		J	JK	J
JorgensenApril2004	SD-207-0010	Fractional % phi >-1 (>2000 µm)		J	JK	J
JorgensenApril2004	SD-207-0010	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-207-0010	Mercury		J	JK	J
JorgensenApril2004	SD-208-0000	Fractional % phi >-1 (>2000 µm)		J	JK	J
JorgensenApril2004	SD-208-0000	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-208-0000	Mercury		J	JK	J
JorgensenApril2004	SD-208-0010	Fractional % phi >-1 (>2000 µm)		J	JK	J
JorgensenApril2004	SD-208-0010	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-208-0010	Mercury		J	JK	J
JorgensenApril2004	SD-209-0000	Fractional % phi >-1 (>2000 µm)	U	J	UJK	UJ
JorgensenApril2004	SD-209-0000	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-209-0000	Mercury		J	JK	J
JorgensenApril2004	SD-209-0010	Fractional % phi >-1 (>2000 µm)		J	JK	J
JorgensenApril2004	SD-209-0010	Fractional % phi 0-1 (500-1000 µm)		J	JK	J

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
JorgensenApril2004	SD-209-0010	Mercury		J	JK	J
JorgensenApril2004	SD-210-0000	Fractional % phi >-1 (>2000 µm)		J	JK	J
JorgensenApril2004	SD-210-0000	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-210-0000	Mercury		J	JK	J
JorgensenApril2004	SD-210-0000	Total Organic Carbon (TOC)		J	JK	J
JorgensenApril2004	SD-210-0000	Total solids		J	JK	J
JorgensenApril2004	SD-210-0010	Fractional % phi >-1 (>2000 µm)		J	JK	J
JorgensenApril2004	SD-210-0010	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-210-0010	Mercury		J	JK	J
JorgensenApril2004	SD-210-0010	Total Organic Carbon (TOC)		J	JK	J
JorgensenApril2004	SD-210-0010	Total solids		J	JK	J
JorgensenApril2004	SD-210D-0000	Fractional % phi >-1 (>2000 µm)	U	J	UJK	UJ
JorgensenApril2004	SD-210D-0000	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-210D-0000	Total Organic Carbon (TOC)		J	JK	J
JorgensenApril2004	SD-210D-0000	Total solids		J	JK	J
JorgensenApril2004	SD-211-0000	Aroclor-1260	P	J	JK	J
JorgensenApril2004	SD-211-0000	Fractional % phi >-1 (>2000 µm)		J	JK	J
JorgensenApril2004	SD-211-0000	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-211-0010	Fractional % phi >-1 (>2000 µm)	U	J	UJK	UJ
JorgensenApril2004	SD-211-0010	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-212-0000	Fractional % phi >-1 (>2000 µm)	U	J	UJK	UJ
JorgensenApril2004	SD-212-0000	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-212-0010	Fractional % phi >-1 (>2000 µm)		J	JK	J
JorgensenApril2004	SD-212-0010	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-213-0000	Fractional % phi >-1 (>2000 µm)		J	JK	J
JorgensenApril2004	SD-213-0000	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-213-0000	Mercury		J	JK	J
JorgensenApril2004	SD-213-0010	Fractional % phi >-1 (>2000 µm)		J	JK	J
JorgensenApril2004	SD-213-0010	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-213-0010	Mercury		J	JK	J
JorgensenApril2004	SD-214-0000	Fractional % phi >-1 (>2000 µm)	U	J	UJK	UJ
JorgensenApril2004	SD-214-0000	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-214-0010	Fractional % phi >-1 (>2000 µm)	U	J	UJK	UJ
JorgensenApril2004	SD-214-0010	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-215-0000	Fractional % phi >-1 (>2000 µm)		J	JK	J
JorgensenApril2004	SD-215-0000	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-215-0000	Mercury		J	JK	J
JorgensenApril2004	SD-215-0010	Fractional % phi >-1 (>2000 µm)		J	JK	J
JorgensenApril2004	SD-215-0010	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-215-0010	Mercury		J	JK	J
JorgensenApril2004	SD-216-0000	Fractional % phi >-1 (>2000 µm)		J	JK	J
JorgensenApril2004	SD-216-0000	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-216-0010	Fractional % phi >-1 (>2000 µm)		J	JK	J
JorgensenApril2004	SD-216-0010	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-217-0000	Chromium		J	JL	J
JorgensenApril2004	SD-217-0000	Fractional % phi >-1 (>2000 µm)		J	JK	J
JorgensenApril2004	SD-217-0000	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-217-0010	Chromium		J	JL	J
JorgensenApril2004	SD-217-0010	Fractional % phi >-1 (>2000 µm)		J	JK	J
JorgensenApril2004	SD-217-0010	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-301-0000	Fractional % phi >-1 (>2000 µm)		J	JK	J
JorgensenApril2004	SD-301-0000	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-301-0010	Fractional % phi >-1 (>2000 µm)	U	J	UJK	UJ
JorgensenApril2004	SD-301-0010	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-302-0000	Fractional % phi >-1 (>2000 µm)	U	J	UJK	UJ
JorgensenApril2004	SD-302-0000	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-302-0010	Fractional % phi >-1 (>2000 µm)	U	J	UJK	UJ
JorgensenApril2004	SD-302-0010	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-303-0000	Chromium		J	JL	J
JorgensenApril2004	SD-303-0000	Fractional % phi >-1 (>2000 µm)	U	J	UJK	UJ
JorgensenApril2004	SD-303-0000	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenApril2004	SD-303-0010	Chromium		J	JL	J
JorgensenApril2004	SD-303-0010	Fractional % phi >-1 (>2000 µm)	U	J	UJK	UJ

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
JorgensenApril2004	SD-303-0010	Fractional % phi 0-1 (500-1000 µm)		J	JK	J
JorgensenAugust2004	SD-213-0000	Aroclor-1248		J	JH	J
JorgensenAugust2004	SD-216-0000	Aroclor-1248		J	JH	J
JorgensenAugust2004	SD-216-0000	Aroclor-1254		J	JH	J
JorgensenAugust2004	SD-217-0000	Aroclor-1248		J	JH	J
JorgensenAugust2004	SD-307-0000	2,4-Dinitrophenol	U		JL	UJ
JorgensenAugust2004	SD-307-0000	4-Nitroaniline	U		JL	UJ
JorgensenAugust2004	SD-307-0000	4-Nitrophenol	U		JL	UJ
JorgensenAugust2004	SD-307-0000	Benzyl alcohol	U		JL	UJ
JorgensenAugust2004	SD-307-0000	Mercury		J	JL	J
JorgensenAugust2004	SD-309-0000	2,4-Dinitrophenol	U		JL	UJ
JorgensenAugust2004	SD-309-0000	4-Nitroaniline	U		JL	UJ
JorgensenAugust2004	SD-309-0000	4-Nitrophenol	U		JL	UJ
JorgensenAugust2004	SD-309-0000	Benzyl alcohol	U		JL	UJ
JorgensenAugust2004	SD-309-0000	Mercury		J	JL	J
JorgensenAugust2004	SD-310-0000	2,4-Dinitrophenol	U		JL	UJ
JorgensenAugust2004	SD-310-0000	4-Nitroaniline	U		JL	UJ
JorgensenAugust2004	SD-310-0000	4-Nitrophenol	U		JL	UJ
JorgensenAugust2004	SD-310-0000	Benzyl alcohol	U		JL	UJ
JorgensenAugust2004	SD-310-0000	Mercury		J	JL	J
JorgensenAugust2004	SD-311-0000	2,4-Dinitrophenol	U		JL	UJ
JorgensenAugust2004	SD-311-0000	4-Nitroaniline	U		JL	UJ
JorgensenAugust2004	SD-311-0000	4-Nitrophenol	U		JL	UJ
JorgensenAugust2004	SD-311-0000	Aroclor-1254		J	JH, JL	J
JorgensenAugust2004	SD-311-0000	Benzyl alcohol	U		JL	UJ
JorgensenAugust2004	SD-311-0000	Mercury		J	JL	J
JorgensenAugust2004	SD-311-0002	Fractional % phi >-1 (>2000µm)		J	JK	J
JorgensenAugust2004	SD-311-0002	Fractional % phi 0-1 (500-1000µm)		J	JK	J
JorgensenAugust2004	SD-311-0002	Fractional % phi -1-0 (1000-2000µm)		J	JK	J
JorgensenAugust2004	SD-311-0002	Fractional % phi 10+ (<0.98µm)		J	JK	J
JorgensenAugust2004	SD-311-0002	Fractional % phi 1-2 (250-500µm)		J	JK	J
JorgensenAugust2004	SD-311-0002	Fractional % phi 2-3 (125-250µm)		J	JK	J
JorgensenAugust2004	SD-311-0002	Fractional % phi 3-4 (62.5-125µm)		J	JK	J
JorgensenAugust2004	SD-311-0002	Fractional % phi 4-5 (31.2-62.5µm)		J	JK	J
JorgensenAugust2004	SD-311-0002	Fractional % phi 5-6 (15.6-31.2µm)		J	JK	J
JorgensenAugust2004	SD-311-0002	Fractional % phi 6-7 (7.8-15.6µm)		J	JK	J
JorgensenAugust2004	SD-311-0002	Fractional % phi 7-8 (3.9-7.8µm)		J	JK	J
JorgensenAugust2004	SD-311-0002	Fractional % phi 8-9 (1.95-3.9µm)		J	JK	J
JorgensenAugust2004	SD-311-0002	Fractional % phi 9-10 (0.98-1.95µm)		J	JK	J
JorgensenAugust2004	SD-311-0003	Fractional % phi >-1 (>2000µm)		J	JK	J
JorgensenAugust2004	SD-311-0003	Fractional % phi 0-1 (500-1000µm)		J	JK	J
JorgensenAugust2004	SD-311-0003	Fractional % phi -1-0 (1000-2000µm)		J	JK	J
JorgensenAugust2004	SD-311-0003	Fractional % phi 10+ (<0.98µm)		J	JK	J
JorgensenAugust2004	SD-311-0003	Fractional % phi 1-2 (250-500µm)		J	JK	J
JorgensenAugust2004	SD-311-0003	Fractional % phi 2-3 (125-250µm)		J	JK	J
JorgensenAugust2004	SD-311-0003	Fractional % phi 3-4 (62.5-125µm)		J	JK	J
JorgensenAugust2004	SD-311-0003	Fractional % phi 4-5 (31.2-62.5µm)		J	JK	J
JorgensenAugust2004	SD-311-0003	Fractional % phi 5-6 (15.6-31.2µm)		J	JK	J
JorgensenAugust2004	SD-311-0003	Fractional % phi 6-7 (7.8-15.6µm)		J	JK	J
JorgensenAugust2004	SD-311-0003	Fractional % phi 7-8 (3.9-7.8µm)		J	JK	J
JorgensenAugust2004	SD-311-0003	Fractional % phi 8-9 (1.95-3.9µm)		J	JK	J
JorgensenAugust2004	SD-311-0003	Fractional % phi 9-10 (0.98-1.95µm)		J	JK	J
JorgensenAugust2004	SD-312-0000	2,4-Dinitrophenol	U		JL	UJ
JorgensenAugust2004	SD-312-0000	4-Nitroaniline	U		JL	UJ
JorgensenAugust2004	SD-312-0000	4-Nitrophenol	U		JL	UJ
JorgensenAugust2004	SD-312-0000	Benzyl alcohol	U		JL	UJ
JorgensenAugust2004	SD-312-0000	Mercury		J	JL	J
JorgensenAugust2004	SD-313-0000	2,4-Dinitrophenol	U		JL	UJ
JorgensenAugust2004	SD-313-0000	4-Nitroaniline	U		JL	UJ
JorgensenAugust2004	SD-313-0000	4-Nitrophenol	U		JL	UJ
JorgensenAugust2004	SD-313-0000	Aroclor-1260		J	JH	J
JorgensenAugust2004	SD-313-0000	Benzyl alcohol	U		JL	UJ
JorgensenAugust2004	SD-313-0000	Mercury		J	JL	J

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
JorgensenAugust2004	SD-313-0001	Benzyl alcohol	U		JL	UJ
JorgensenAugust2004	SD-313-0001	Mercury		J	JL	J
JorgensenAugust2004	SD-314-0000	2-Methylnaphthalene		J	JK	J
JorgensenAugust2004	SD-314-0000	Acenaphthene		J	JK	J
JorgensenAugust2004	SD-314-0000	Anthracene		J	JK	J
JorgensenAugust2004	SD-314-0000	Benzo (a) anthracene		J	JK	J
JorgensenAugust2004	SD-314-0000	Benzo (a) pyrene		J	JK	J
JorgensenAugust2004	SD-314-0000	Benzo (g,h,i) perylene		J	JK	J
JorgensenAugust2004	SD-314-0000	Benzo (k) fluoranthene		J	JK	J
JorgensenAugust2004	SD-314-0000	Chrysene		J	JK	J
JorgensenAugust2004	SD-314-0000	Fluoranthene		J	JK	J
JorgensenAugust2004	SD-314-0000	Fluorene		J	JK	J
JorgensenAugust2004	SD-314-0000	Indeno (1,2,3-cd) pyrene		J	JK	J
JorgensenAugust2004	SD-314-0000	Mercury		J	JL	J
JorgensenAugust2004	SD-314-0000	Naphthalene		J	JK	J
JorgensenAugust2004	SD-314-0000	Phenanthrene		J	JK	J
JorgensenAugust2004	SD-314-0000	Phenol		J	JK	J
JorgensenAugust2004	SD-314-0000	Pyrene		J	JK	J
JorgensenAugust2004	SD-314-0003	Aroclor-1260		J	JH	J
JorgensenAugust2004	SD-315-0000	Aroclor-1260		J	JH	J
JorgensenAugust2004	SD-315-0000	Mercury		J	JL	J
JorgensenAugust2004	SD-316-0000	Mercury		J	JL	J
JorgensenAugust2004	SD-317-0000	Mercury		J	JL	J
JorgensenAugust2004	SD-317-0002	Fractional % phi >-1 (>2000µm)		J	JK	J
JorgensenAugust2004	SD-317-0002	Fractional % phi 0-1 (500-1000µm)		J	JK	J
JorgensenAugust2004	SD-317-0002	Fractional % phi -1-0 (1000-2000µm)		J	JK	J
JorgensenAugust2004	SD-317-0002	Fractional % phi 10+ (<0.98µm)		J	JK	J
JorgensenAugust2004	SD-317-0002	Fractional % phi 1-2 (250-500µm)		J	JK	J
JorgensenAugust2004	SD-317-0002	Fractional % phi 2-3 (125-250µm)		J	JK	J
JorgensenAugust2004	SD-317-0002	Fractional % phi 3-4 (62.5-125µm)		J	JK	J
JorgensenAugust2004	SD-317-0002	Fractional % phi 4-5 (31.2-62.5µm)		J	JK	J
JorgensenAugust2004	SD-317-0002	Fractional % phi 5-6 (15.6-31.2µm)		J	JK	J
JorgensenAugust2004	SD-317-0002	Fractional % phi 6-7 (7.8-15.6µm)		J	JK	J
JorgensenAugust2004	SD-317-0002	Fractional % phi 7-8 (3.9-7.8µm)		J	JK	J
JorgensenAugust2004	SD-317-0002	Fractional % phi 8-9 (1.95-3.9µm)		J	JK	J
JorgensenAugust2004	SD-317-0002	Fractional % phi 9-10 (0.98-1.95µm)		J	JK	J
JorgensenAugust2004	SD-317-0003	Fractional % phi >-1 (>2000µm)		J	JK	J
JorgensenAugust2004	SD-317-0003	Fractional % phi 0-1 (500-1000µm)		J	JK	J
JorgensenAugust2004	SD-317-0003	Fractional % phi -1-0 (1000-2000µm)		J	JK	J
JorgensenAugust2004	SD-317-0003	Fractional % phi 10+ (<0.98µm)		J	JK	J
JorgensenAugust2004	SD-317-0003	Fractional % phi 1-2 (250-500µm)		J	JK	J
JorgensenAugust2004	SD-317-0003	Fractional % phi 2-3 (125-250µm)		J	JK	J
JorgensenAugust2004	SD-317-0003	Fractional % phi 3-4 (62.5-125µm)		J	JK	J
JorgensenAugust2004	SD-317-0003	Fractional % phi 4-5 (31.2-62.5µm)		J	JK	J
JorgensenAugust2004	SD-317-0003	Fractional % phi 5-6 (15.6-31.2µm)		J	JK	J
JorgensenAugust2004	SD-317-0003	Fractional % phi 6-7 (7.8-15.6µm)		J	JK	J
JorgensenAugust2004	SD-317-0003	Fractional % phi 7-8 (3.9-7.8µm)		J	JK	J
JorgensenAugust2004	SD-317-0003	Fractional % phi 8-9 (1.95-3.9µm)		J	JK	J
JorgensenAugust2004	SD-317-0003	Fractional % phi 9-10 (0.98-1.95µm)		J	JK	J
JorgensenAugust2004	SD-318-0000	Aroclor-1248		J	JH	J
JorgensenAugust2004	SD-318-0000	Benzyl alcohol	U		JL	UJ
JorgensenAugust2004	SD-318-0000	Chromium		J	JL	J
JorgensenAugust2004	SD-318-0000	Mercury		J	JL	J
JorgensenAugust2004	SD-318-0001	Chromium		J	JL	J
JorgensenAugust2004	SD-319-0000	Chromium		J	JL	J
JorgensenAugust2004	SD-319-0000	Mercury		J	JL	J
JorgensenAugust2004	SD-319-0001	Chromium		J	JL	J
JorgensenAugust2004	SD-320-0000	Aroclor-1254			JL	J
JorgensenAugust2004	SD-320-0000	Benzyl alcohol	U		JL	UJ
JorgensenAugust2004	SD-320-0000	Chromium		J	JL	J
JorgensenAugust2004	SD-320-0000	Mercury		J	JL	J
JorgensenAugust2004	SD-320-0001	Chromium		J	JL	J
JorgensenAugust2004	SD-321-0000	Aroclor-1248		J	JH	J

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
JorgensenAugust2004	SD-321-0000	Chromium		J	JL	J
JorgensenAugust2004	SD-321-0000	Mercury		J	JL	J
JorgensenAugust2004	SD-321-0001	Chromium		J	JL	J
JorgensenAugust2004	SD-322-0000	Benzyl alcohol	U		JL	UJ
JorgensenAugust2004	SD-322-0000	Chromium		J	JL	J
JorgensenAugust2004	SD-322-0000	Mercury		J	JL	J
JorgensenAugust2004	SD-322-0001	Chromium		J	JL	J
JorgensenAugust2004	SD-322-0002	Fractional % phi 0-1 (500-1000µm)		J	JK	J
JorgensenAugust2004	SD-322-0002	Fractional % phi -1-0 (1000-2000µm)		J	JK	J
JorgensenAugust2004	SD-322-0002	Fractional % phi 10+ (<0.98µm)		J	JK	J
JorgensenAugust2004	SD-322-0002	Fractional % phi 1-2 (250-500µm)		J	JK	J
JorgensenAugust2004	SD-322-0002	Fractional % phi 2-3 (125-250µm)		J	JK	J
JorgensenAugust2004	SD-322-0002	Fractional % phi 3-4 (62.5-125µm)		J	JK	J
JorgensenAugust2004	SD-322-0002	Fractional % phi 4-5 (31.2-62.5µm)		J	JK	J
JorgensenAugust2004	SD-322-0002	Fractional % phi 5-6 (15.6-31.2µm)		J	JK	J
JorgensenAugust2004	SD-322-0002	Fractional % phi 6-7 (7.8-15.6µm)		J	JK	J
JorgensenAugust2004	SD-322-0002	Fractional % phi 7-8 (3.9-7.8µm)		J	JK	J
JorgensenAugust2004	SD-322-0002	Fractional % phi 8-9 (1.95-3.9µm)		J	JK	J
JorgensenAugust2004	SD-322-0002	Fractional % phi 9-10 (0.98-1.95µm)		J	JK	J
JorgensenAugust2004	SD-323-0000	Aroclor-1254		J	JH, JL	J
JorgensenAugust2004	SD-323-0000	Chromium		J	JL	J
JorgensenAugust2004	SD-323-0000	Mercury		J	JL	J
JorgensenAugust2004	SD-323-0001	Chromium		J	JL	J
JorgensenAugust2004	SD-324-0000	Aroclor-1248		J	JH	J
JorgensenAugust2004	SD-324-0000	Aroclor-1254		J	JH	J
JorgensenAugust2004	SD-324-0000	Chromium		J	JL	J
JorgensenAugust2004	SD-324-0000	Mercury		J	JL	J
JorgensenAugust2004	SD-325-0000	2-Methylnaphthalene		J	JK	J
JorgensenAugust2004	SD-325-0000	Acenaphthene		J	JK	J
JorgensenAugust2004	SD-325-0000	Anthracene		J	JK	J
JorgensenAugust2004	SD-325-0000	Benzo (a) anthracene		J	JK	J
JorgensenAugust2004	SD-325-0000	Benzo (a) pyrene		J	JK	J
JorgensenAugust2004	SD-325-0000	Benzo (g,h,i) perylene		J	JK	J
JorgensenAugust2004	SD-325-0000	Benzo (k) fluoranthene		J	JK	J
JorgensenAugust2004	SD-325-0000	Chromium		J	JL	J
JorgensenAugust2004	SD-325-0000	Chrysene		J	JK	J
JorgensenAugust2004	SD-325-0000	Fluoranthene		J	JK	J
JorgensenAugust2004	SD-325-0000	Fluorene		J	JK	J
JorgensenAugust2004	SD-325-0000	Indeno (1,2,3-cd) pyrene		J	JK	J
JorgensenAugust2004	SD-325-0000	Mercury		J	JL	J
JorgensenAugust2004	SD-325-0000	Naphthalene		J	JK	J
JorgensenAugust2004	SD-325-0000	Phenanthrene		J	JK	J
JorgensenAugust2004	SD-325-0000	Phenol		J	JK	J
JorgensenAugust2004	SD-325-0000	Pyrene		J	JK	J
JorgensenAugust2004	SD-333-0000	Chromium		J	JL	J
JorgensenAugust2004	SD-333-0000	Mercury		J	JK	J
JorgensenAugust2004	SD-336-0000	Aroclor-1254		J	JH	J
JorgensenAugust2004	SD-336-0000	Aroclor-1260		J	JH	J
JorgensenAugust2004	SD-337-0000	Aroclor-1248		J	JH	J
JorgensenAugust2004	SD-337-0000	Chromium		J	JL	J
JorgensenAugust2004	SD-340-0000	Aroclor-1254		J	JH	J
JorgensenAugust2004	SD-341-0000	Mercury	U	R		R
JorgensenAugust2004	SD-342-0000	Aroclor-1248		J	JH	J
JorgensenAugust2004	SD-342-0000	Chromium		J	JL	J
JorgensenAugust2004	SD-343-0000	Aroclor-1254		J	JK	J
JorgensenAugust2004	SD-431	Chromium		J	JL	J
KC 2005 Water Sampling	L36119-1	PCB-004	K	B		U
KC 2005 Water Sampling	L36119-1	PCB-011		B		
KC 2005 Water Sampling	L36119-1	PCB-018	C	B		C
KC 2005 Water Sampling	L36119-1	PCB-020	C	B		C
KC 2005 Water Sampling	L36119-1	PCB-037	K	B		U
KC 2005 Water Sampling	L36119-1	PCB-040	C	B		C
KC 2005 Water Sampling	L36119-1	PCB-044	C	B		C

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
KC 2005 Water Sampling	L36119-1	PCB-052		B		
KC 2005 Water Sampling	L36119-1	PCB-061	CK	B		CU
KC 2005 Water Sampling	L36119-1	PCB-064	K	B		U
KC 2005 Water Sampling	L36119-1	PCB-066	K	B		U
KC 2005 Water Sampling	L36119-1	PCB-086	CK	B		CU
KC 2005 Water Sampling	L36119-1	PCB-129	CK	B		CU
KC 2005 Water Sampling	L36119-1	PCB-135	C	B		C
KC 2005 Water Sampling	L36119-1	PCB-147	C	B		C
KC 2005 Water Sampling	L36119-1	PCB-174		B		
KC 2005 Water Sampling	L36119-1	PCB-177	K	B		U
KC 2005 Water Sampling	L36119-1	PCB-187		B		
KC 2005 Water Sampling	L36119-1	PCB-209	K	B		U
KC 2005 Water Sampling	L36119-2	PCB-003	K	B		U
KC 2005 Water Sampling	L36119-2	PCB-004		B		
KC 2005 Water Sampling	L36119-2	PCB-006	K	B		U
KC 2005 Water Sampling	L36119-2	PCB-008		B		
KC 2005 Water Sampling	L36119-2	PCB-011	K	B		U
KC 2005 Water Sampling	L36119-2	PCB-015		B		
KC 2005 Water Sampling	L36119-2	PCB-021	C	B		C
KC 2005 Water Sampling	L36119-2	PCB-156	C	B		C
KC 2005 Water Sampling	L36119-2	PCB-209	K	B		U
KC 2005 Water Sampling	L36119-3	PCB-003	K	B		U
KC 2005 Water Sampling	L36119-3	PCB-004		B		
KC 2005 Water Sampling	L36119-3	PCB-008		B		
KC 2005 Water Sampling	L36119-3	PCB-011	K	B		U
KC 2005 Water Sampling	L36119-3	PCB-015	K	B		U
KC 2005 Water Sampling	L36119-3	PCB-016		B		
KC 2005 Water Sampling	L36119-3	PCB-209	K	B		U
KC 2005 Water Sampling	L36119-4	PCB-003		B		
KC 2005 Water Sampling	L36119-4	PCB-004		B		
KC 2005 Water Sampling	L36119-4	PCB-007	K	B		U
KC 2005 Water Sampling	L36119-4	PCB-008		B		
KC 2005 Water Sampling	L36119-4	PCB-011	K	B		U
KC 2005 Water Sampling	L36119-4	PCB-015		B		
KC 2005 Water Sampling	L36119-4	PCB-016		B		
KC 2005 Water Sampling	L36119-4	PCB-021	C	B		C
KC 2005 Water Sampling	L36119-4	PCB-022		B		
KC 2005 Water Sampling	L36119-4	PCB-037		B		
KC 2005 Water Sampling	L36119-4	PCB-055			J	J
KC 2005 Water Sampling	L36119-4	PCB-068			J	J
KC 2005 Water Sampling	L36119-4	PCB-156	CK	B		CU
KC 2005 Water Sampling	L36119-4	PCB-209		B		
KC 2005 Water Sampling	L36119-5	PCB-003	K	B		U
KC 2005 Water Sampling	L36119-5	PCB-004		B		
KC 2005 Water Sampling	L36119-5	PCB-007		B		
KC 2005 Water Sampling	L36119-5	PCB-008	K	B		U
KC 2005 Water Sampling	L36119-5	PCB-011	K	B		U
KC 2005 Water Sampling	L36119-5	PCB-015	K	B		U
KC 2005 Water Sampling	L36119-5	PCB-016		B		
KC 2005 Water Sampling	L36119-5	PCB-021	C	B		C
KC 2005 Water Sampling	L36119-5	PCB-055			J	J
KC 2005 Water Sampling	L36119-5	PCB-068			J	J
KC 2005 Water Sampling	L36119-5	PCB-156	C	B		C
KC 2005 Water Sampling	L36119-5	PCB-209	K	B		U
KC 2005 Water Sampling	L36119-6	PCB-003		B		
KC 2005 Water Sampling	L36119-6	PCB-004	K	B		U
KC 2005 Water Sampling	L36119-6	PCB-006	K	B		U

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
KC 2005 Water Sampling	L36119-6	PCB-007	K	B		U
KC 2005 Water Sampling	L36119-6	PCB-008		B		
KC 2005 Water Sampling	L36119-6	PCB-011		B		
KC 2005 Water Sampling	L36119-6	PCB-015		B		
KC 2005 Water Sampling	L36119-6	PCB-209	K	B		U
KC 2005 Water Sampling	L36119-7	PCB-003	K	B		U
KC 2005 Water Sampling	L36119-7	PCB-007	K	B		U
KC 2005 Water Sampling	L36119-7	PCB-008	K	B		U
KC 2005 Water Sampling	L36119-7	PCB-011		B		
KC 2005 Water Sampling	L36119-7	PCB-018	C	B		C
KC 2005 Water Sampling	L36119-7	PCB-020	C	B		C
KC 2005 Water Sampling	L36119-7	PCB-037		B		
KC 2005 Water Sampling	L36119-7	PCB-040	C	B		C
KC 2005 Water Sampling	L36119-7	PCB-044	CK	B		CU
KC 2005 Water Sampling	L36119-7	PCB-052		B		
KC 2005 Water Sampling	L36119-7	PCB-056		B		
KC 2005 Water Sampling	L36119-7	PCB-061	C	B		C
KC 2005 Water Sampling	L36119-7	PCB-064		B		
KC 2005 Water Sampling	L36119-7	PCB-066		B		
KC 2005 Water Sampling	L36119-7	PCB-086	CK	B		CU
KC 2005 Water Sampling	L36119-7	PCB-110	C	B		C
KC 2005 Water Sampling	L36119-7	PCB-129	C	B		C
KC 2005 Water Sampling	L36119-7	PCB-135	CK	B		CU
KC 2005 Water Sampling	L36119-7	PCB-147	C	B		C
KC 2005 Water Sampling	L36119-7	PCB-156	C	B		C
KC 2005 Water Sampling	L36119-7	PCB-170		B		
KC 2005 Water Sampling	L36119-7	PCB-174		B		
KC 2005 Water Sampling	L36119-7	PCB-177		B		
KC 2005 Water Sampling	L36119-7	PCB-187	K	B		U
KC 2005 Water Sampling	L36119-7	PCB-209		B		
KC 2005 Water Sampling	L36893-1	PCB-008		B		
KC 2005 Water Sampling	L36893-1	PCB-016		B		
KC 2005 Water Sampling	L36893-1	PCB-018	C	B		C
KC 2005 Water Sampling	L36893-1	PCB-020	C	B		C
KC 2005 Water Sampling	L36893-1	PCB-032		B		
KC 2005 Water Sampling	L36893-1	PCB-042		B		
KC 2005 Water Sampling	L36893-1	PCB-049	C	B		C
KC 2005 Water Sampling	L36893-1	PCB-050	C	B		C
KC 2005 Water Sampling	L36893-1	PCB-086	C	B		C
KC 2005 Water Sampling	L36893-1	PCB-092		B		
KC 2005 Water Sampling	L36893-1	PCB-105	K	B		U
KC 2005 Water Sampling	L36893-1	PCB-129	C	B		C
KC 2005 Water Sampling	L36893-1	PCB-132		B		
KC 2005 Water Sampling	L36893-1	PCB-141	K	B		U
KC 2005 Water Sampling	L36893-1	PCB-147	C	B		C
KC 2005 Water Sampling	L36893-1	PCB-156	C	B		C
KC 2005 Water Sampling	L36893-1	PCB-174		B		
KC 2005 Water Sampling	L36893-1	PCB-180	C	B		C
KC 2005 Water Sampling	L36893-1	PCB-187		B		
KC 2005 Water Sampling	L36893-1	PCB-198	CK	B		CU
KC 2005 Water Sampling	L36893-1	PCB-206		B		
KC 2005 Water Sampling	L36893-2	PCB-008		B		
KC 2005 Water Sampling	L36893-2	PCB-016		B		
KC 2005 Water Sampling	L36893-2	PCB-017		B		
KC 2005 Water Sampling	L36893-2	PCB-018	C	B		C

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
KC 2005 Water Sampling	L36893-2	PCB-020	C	B		C
KC 2005 Water Sampling	L36893-2	PCB-032		B		
KC 2005 Water Sampling	L36893-2	PCB-040	C	B		C
KC 2005 Water Sampling	L36893-2	PCB-044	C	B		C
KC 2005 Water Sampling	L36893-2	PCB-045	C	B		C
KC 2005 Water Sampling	L36893-2	PCB-049	C	B		C
KC 2005 Water Sampling	L36893-2	PCB-052		B		
KC 2005 Water Sampling	L36893-2	PCB-056		B		
KC 2005 Water Sampling	L36893-2	PCB-061	C	B		C
KC 2005 Water Sampling	L36893-2	PCB-064		B		
KC 2005 Water Sampling	L36893-2	PCB-105		B		
KC 2005 Water Sampling	L36893-2	PCB-114	K	B		U
KC 2005 Water Sampling	L36893-2	PCB-156	C	B		C
KC 2005 Water Sampling	L36893-2	PCB-206		B		
KC 2005 Water Sampling	L36893-3	PCB-001		B		
KC 2005 Water Sampling	L36893-3	PCB-008		B		
KC 2005 Water Sampling	L36893-3	PCB-011		B		
KC 2005 Water Sampling	L36893-3	PCB-016		B		
KC 2005 Water Sampling	L36893-3	PCB-019	K	B		U
KC 2005 Water Sampling	L36893-3	PCB-025		B		
KC 2005 Water Sampling	L36893-3	PCB-027	K	B		U
KC 2005 Water Sampling	L36893-3	PCB-032		B		
KC 2005 Water Sampling	L36893-3	PCB-035	K	B		U
KC 2005 Water Sampling	L36893-3	PCB-042		B		
KC 2005 Water Sampling	L36893-3	PCB-046	K	B		U
KC 2005 Water Sampling	L36893-3	PCB-048		B		
KC 2005 Water Sampling	L36893-3	PCB-050	C	B		C
KC 2005 Water Sampling	L36893-3	PCB-052		B		
KC 2005 Water Sampling	L36893-3	PCB-059	C	B		C
KC 2005 Water Sampling	L36893-3	PCB-060		B		
KC 2005 Water Sampling	L36893-3	PCB-077	K	B		U
KC 2005 Water Sampling	L36893-3	PCB-082		BR		
KC 2005 Water Sampling	L36893-3	PCB-083	C	BR		C
KC 2005 Water Sampling	L36893-3	PCB-084		BR		
KC 2005 Water Sampling	L36893-3	PCB-085	C	BR		C
KC 2005 Water Sampling	L36893-3	PCB-086	C	BR	B	CU
KC 2005 Water Sampling	L36893-3	PCB-087	C86	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-088	CK	BR	UJK	UJ
KC 2005 Water Sampling	L36893-3	PCB-089		BR		
KC 2005 Water Sampling	L36893-3	PCB-090	C	BR		C
KC 2005 Water Sampling	L36893-3	PCB-091	C88	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-092	K	BR	UJK	UJ
KC 2005 Water Sampling	L36893-3	PCB-093	C	BR	B	CU
KC 2005 Water Sampling	L36893-3	PCB-094	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-095	C93	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-096	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-097	C86	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-098	C93	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-099	C83	R		
KC 2005 Water Sampling	L36893-3	PCB-100	C93	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-101	C90	R		
KC 2005 Water Sampling	L36893-3	PCB-102	C93	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-103	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-104	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-105	K	BR	UJK	UJ

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
KC 2005 Water Sampling	L36893-3	PCB-106	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-107	C	BR		C
KC 2005 Water Sampling	L36893-3	PCB-108	C86	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-109	K	R	UJK	UJ
KC 2005 Water Sampling	L36893-3	PCB-110	C	BR	B	CU
KC 2005 Water Sampling	L36893-3	PCB-111	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-112	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-113	C90	R		
KC 2005 Water Sampling	L36893-3	PCB-114	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-115	C110	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-116	C85	R		
KC 2005 Water Sampling	L36893-3	PCB-117	C85	R		
KC 2005 Water Sampling	L36893-3	PCB-118		BR		
KC 2005 Water Sampling	L36893-3	PCB-119	C86	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-120	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-121	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-122	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-123	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-124	C107	R		
KC 2005 Water Sampling	L36893-3	PCB-125	C86	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-126	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-127	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-128	C	R		C
KC 2005 Water Sampling	L36893-3	PCB-129	C	BR		C
KC 2005 Water Sampling	L36893-3	PCB-130	K	R	UJK	UJ
KC 2005 Water Sampling	L36893-3	PCB-131	K	R	UJK	UJ
KC 2005 Water Sampling	L36893-3	PCB-132	K	BR	UJK	UJ
KC 2005 Water Sampling	L36893-3	PCB-133	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-134	C	R		C
KC 2005 Water Sampling	L36893-3	PCB-135	C	R		C
KC 2005 Water Sampling	L36893-3	PCB-136		BR		
KC 2005 Water Sampling	L36893-3	PCB-137	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-138	C129	R		
KC 2005 Water Sampling	L36893-3	PCB-139	CK	R	UJK	UJ
KC 2005 Water Sampling	L36893-3	PCB-140	C139	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-141	K	BR	UJK	UJ
KC 2005 Water Sampling	L36893-3	PCB-142	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-143	C134	R		
KC 2005 Water Sampling	L36893-3	PCB-144		R		
KC 2005 Water Sampling	L36893-3	PCB-145	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-146		R		
KC 2005 Water Sampling	L36893-3	PCB-147	C	BR		C
KC 2005 Water Sampling	L36893-3	PCB-148	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-149	C147	R		
KC 2005 Water Sampling	L36893-3	PCB-150	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-151	C135	R		
KC 2005 Water Sampling	L36893-3	PCB-152	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-153	CK	BR	UJK	UJ
KC 2005 Water Sampling	L36893-3	PCB-154	C135	R		
KC 2005 Water Sampling	L36893-3	PCB-155	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-156	C	BR		C
KC 2005 Water Sampling	L36893-3	PCB-157	C156	R		
KC 2005 Water Sampling	L36893-3	PCB-158		R		
KC 2005 Water Sampling	L36893-3	PCB-159	K	R	UJK	UJ
KC 2005 Water Sampling	L36893-3	PCB-160	C129	R		

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier- original	Validation Qualifier- revised	Interpreted Qualifier
KC 2005 Water Sampling	L36893-3	PCB-161	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-162	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-163	C129	R		
KC 2005 Water Sampling	L36893-3	PCB-164	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-165	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-166	C128	R		
KC 2005 Water Sampling	L36893-3	PCB-167	K	BR	BUJK	UJ
KC 2005 Water Sampling	L36893-3	PCB-168	C153	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-169	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-170		R		
KC 2005 Water Sampling	L36893-3	PCB-171	CK	R	UJK	UJ
KC 2005 Water Sampling	L36893-3	PCB-172	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-173	C171	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-174		R		
KC 2005 Water Sampling	L36893-3	PCB-175	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-176		R		
KC 2005 Water Sampling	L36893-3	PCB-177	K	R	UJK	UJ
KC 2005 Water Sampling	L36893-3	PCB-178		R		
KC 2005 Water Sampling	L36893-3	PCB-179		R		
KC 2005 Water Sampling	L36893-3	PCB-180	C	R		C
KC 2005 Water Sampling	L36893-3	PCB-181	K	R	UJK	UJ
KC 2005 Water Sampling	L36893-3	PCB-182	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-183	C	R		C
KC 2005 Water Sampling	L36893-3	PCB-184	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-185	C183	R		
KC 2005 Water Sampling	L36893-3	PCB-186	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-187		R		
KC 2005 Water Sampling	L36893-3	PCB-188	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-189	K	R	UJK	UJ
KC 2005 Water Sampling	L36893-3	PCB-190	K	R	UJK	UJ
KC 2005 Water Sampling	L36893-3	PCB-191	K	BR	UJK	UJ
KC 2005 Water Sampling	L36893-3	PCB-192	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-193	C180	R		
KC 2005 Water Sampling	L36893-3	PCB-194		B		
KC 2005 Water Sampling	L36893-3	PCB-196	K	B		U
KC 2005 Water Sampling	L36893-3	PCB-198	C	B		C
KC 2005 Water Sampling	L36893-3	PCB-202		B		
KC 2005 Water Sampling	L36893-3	PCB-206	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-207	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-208	<	R	R	R
KC 2005 Water Sampling	L36893-3	PCB-209	<	R	R	R
KC 2005 Water Sampling	L36893-4	PCB-004			J	J
KC 2005 Water Sampling	L36893-4	PCB-008		B		
KC 2005 Water Sampling	L36893-4	PCB-016		B	J	J
KC 2005 Water Sampling	L36893-4	PCB-018	C	B	J	CJ
KC 2005 Water Sampling	L36893-4	PCB-020	C	B		C
KC 2005 Water Sampling	L36893-4	PCB-025			J	J
KC 2005 Water Sampling	L36893-4	PCB-032		B	J	J
KC 2005 Water Sampling	L36893-4	PCB-040	C	B		C
KC 2005 Water Sampling	L36893-4	PCB-042			J	J
KC 2005 Water Sampling	L36893-4	PCB-044	C	B		C
KC 2005 Water Sampling	L36893-4	PCB-049	C	B	J	CJ
KC 2005 Water Sampling	L36893-4	PCB-059	C		J	CJ
KC 2005 Water Sampling	L36893-4	PCB-066			J	J
KC 2005 Water Sampling	L36893-4	PCB-077		B		

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
KC 2005 Water Sampling	L36893-4	PCB-082			J	J
KC 2005 Water Sampling	L36893-4	PCB-085	C		J	CJ
KC 2005 Water Sampling	L36893-4	PCB-086	C		J	CJ
KC 2005 Water Sampling	L36893-4	PCB-090	C		J	CJ
KC 2005 Water Sampling	L36893-4	PCB-105		B	J	J
KC 2005 Water Sampling	L36893-4	PCB-110	C		J	CJ
KC 2005 Water Sampling	L36893-4	PCB-132			J	J
KC 2005 Water Sampling	L36893-4	PCB-136			J	J
KC 2005 Water Sampling	L36893-4	PCB-146			J	J
KC 2005 Water Sampling	L36893-4	PCB-156	C	B		C
KC 2005 Water Sampling	L36893-4	PCB-177			J	J
KC 2005 Water Sampling	L36893-4	PCB-179			J	J
KC 2005 Water Sampling	L36893-4	PCB-190			J	J
KC 2005 Water Sampling	L36893-4	PCB-201			J	J
KC 2005 Water Sampling	L36893-4	PCB-206		B		
KC 2005 Water Sampling	L36893-5	PCB-001	K	B		U
KC 2005 Water Sampling	L36893-5	PCB-004			J	J
KC 2005 Water Sampling	L36893-5	PCB-008		B		
KC 2005 Water Sampling	L36893-5	PCB-011		B		
KC 2005 Water Sampling	L36893-5	PCB-016		B	J	J
KC 2005 Water Sampling	L36893-5	PCB-017		B		
KC 2005 Water Sampling	L36893-5	PCB-018	C	B	J	CJ
KC 2005 Water Sampling	L36893-5	PCB-019		B		
KC 2005 Water Sampling	L36893-5	PCB-025		B	J	J
KC 2005 Water Sampling	L36893-5	PCB-026	C	B		C
KC 2005 Water Sampling	L36893-5	PCB-032		B	J	J
KC 2005 Water Sampling	L36893-5	PCB-042		B	J	J
KC 2005 Water Sampling	L36893-5	PCB-045	C	B		C
KC 2005 Water Sampling	L36893-5	PCB-046		B		
KC 2005 Water Sampling	L36893-5	PCB-048		B		
KC 2005 Water Sampling	L36893-5	PCB-049	C	B	J	CJ
KC 2005 Water Sampling	L36893-5	PCB-052		B		
KC 2005 Water Sampling	L36893-5	PCB-059	C	B	J	CJ
KC 2005 Water Sampling	L36893-5	PCB-060		B		
KC 2005 Water Sampling	L36893-5	PCB-066		B	J	J
KC 2005 Water Sampling	L36893-5	PCB-077		B		
KC 2005 Water Sampling	L36893-5	PCB-082		BR	J	J
KC 2005 Water Sampling	L36893-5	PCB-083	C	R		C
KC 2005 Water Sampling	L36893-5	PCB-084		BR		
KC 2005 Water Sampling	L36893-5	PCB-085	C	BR	J	CJ
KC 2005 Water Sampling	L36893-5	PCB-086	C	BR	J	CJ
KC 2005 Water Sampling	L36893-5	PCB-087	C86	R		
KC 2005 Water Sampling	L36893-5	PCB-088	C	R		C
KC 2005 Water Sampling	L36893-5	PCB-089		BR		
KC 2005 Water Sampling	L36893-5	PCB-090	C	BR	J	CJ
KC 2005 Water Sampling	L36893-5	PCB-091	C88	R		
KC 2005 Water Sampling	L36893-5	PCB-092		R		
KC 2005 Water Sampling	L36893-5	PCB-093	C	R		C
KC 2005 Water Sampling	L36893-5	PCB-094	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-095	C93	R		
KC 2005 Water Sampling	L36893-5	PCB-096		BR		
KC 2005 Water Sampling	L36893-5	PCB-097	C86	R		
KC 2005 Water Sampling	L36893-5	PCB-098	C93	R		
KC 2005 Water Sampling	L36893-5	PCB-099	C83	R		
KC 2005 Water Sampling	L36893-5	PCB-100	C93	R		

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
KC 2005 Water Sampling	L36893-5	PCB-101	C90	R		
KC 2005 Water Sampling	L36893-5	PCB-102	C93	R		
KC 2005 Water Sampling	L36893-5	PCB-103	K	R	UJK	UJ
KC 2005 Water Sampling	L36893-5	PCB-104	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-105		R	J	J
KC 2005 Water Sampling	L36893-5	PCB-106	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-107	CK	BR	UJK	UJ
KC 2005 Water Sampling	L36893-5	PCB-108	C86	R		
KC 2005 Water Sampling	L36893-5	PCB-109	K	R	UJK	UJ
KC 2005 Water Sampling	L36893-5	PCB-110	C	R	J	CJ
KC 2005 Water Sampling	L36893-5	PCB-111	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-112	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-113	C90	R		
KC 2005 Water Sampling	L36893-5	PCB-114	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-115	C110	R		
KC 2005 Water Sampling	L36893-5	PCB-116	C85	R		
KC 2005 Water Sampling	L36893-5	PCB-117	C85	R		
KC 2005 Water Sampling	L36893-5	PCB-118		R		
KC 2005 Water Sampling	L36893-5	PCB-119	C86	R		
KC 2005 Water Sampling	L36893-5	PCB-120	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-121	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-122	K	BR	UJK	UJ
KC 2005 Water Sampling	L36893-5	PCB-123	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-124	C107	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-125	C86	R		
KC 2005 Water Sampling	L36893-5	PCB-126	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-127	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-128	C	R		C
KC 2005 Water Sampling	L36893-5	PCB-129	C	R		C
KC 2005 Water Sampling	L36893-5	PCB-130		R		
KC 2005 Water Sampling	L36893-5	PCB-131	K	R	UJK	UJ
KC 2005 Water Sampling	L36893-5	PCB-132		R	J	J
KC 2005 Water Sampling	L36893-5	PCB-133	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-134	C	R		C
KC 2005 Water Sampling	L36893-5	PCB-135	C	R		C
KC 2005 Water Sampling	L36893-5	PCB-136		R	J	J
KC 2005 Water Sampling	L36893-5	PCB-137	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-138	C129	R		
KC 2005 Water Sampling	L36893-5	PCB-139	UC	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-140	C139	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-141	K	R	UJK	UJ
KC 2005 Water Sampling	L36893-5	PCB-142	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-143	C134	R		
KC 2005 Water Sampling	L36893-5	PCB-144		R		
KC 2005 Water Sampling	L36893-5	PCB-145	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-146		R	J	J
KC 2005 Water Sampling	L36893-5	PCB-147	C	R		C
KC 2005 Water Sampling	L36893-5	PCB-148	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-149	C147	R		
KC 2005 Water Sampling	L36893-5	PCB-150	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-151	C135	R		
KC 2005 Water Sampling	L36893-5	PCB-152	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-153	C	R		C
KC 2005 Water Sampling	L36893-5	PCB-154	C135	R		
KC 2005 Water Sampling	L36893-5	PCB-155	<	R	R	R

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
KC 2005 Water Sampling	L36893-5	PCB-156	C	BR		C
KC 2005 Water Sampling	L36893-5	PCB-157	C156	R		
KC 2005 Water Sampling	L36893-5	PCB-158	K	R	UJK	UJ
KC 2005 Water Sampling	L36893-5	PCB-159	K	R	UJK	UJ
KC 2005 Water Sampling	L36893-5	PCB-160	C129	R		
KC 2005 Water Sampling	L36893-5	PCB-161	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-162	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-163	C129	R		
KC 2005 Water Sampling	L36893-5	PCB-164		R		
KC 2005 Water Sampling	L36893-5	PCB-165	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-166	C128	R		
KC 2005 Water Sampling	L36893-5	PCB-167	K	BR	BUJK	UJ
KC 2005 Water Sampling	L36893-5	PCB-168	C153	R		
KC 2005 Water Sampling	L36893-5	PCB-169	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-170	K	R	UJK	UJ
KC 2005 Water Sampling	L36893-5	PCB-171	CK	R	UJK	UJ
KC 2005 Water Sampling	L36893-5	PCB-172		R		
KC 2005 Water Sampling	L36893-5	PCB-173	C171	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-174	K	R	UJK	UJ
KC 2005 Water Sampling	L36893-5	PCB-175	K	R	UJK	UJ
KC 2005 Water Sampling	L36893-5	PCB-176		R		
KC 2005 Water Sampling	L36893-5	PCB-177		R	J	J
KC 2005 Water Sampling	L36893-5	PCB-178		R		
KC 2005 Water Sampling	L36893-5	PCB-179		R	J	J
KC 2005 Water Sampling	L36893-5	PCB-180	C	R		C
KC 2005 Water Sampling	L36893-5	PCB-181	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-182	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-183	CK	R	UJK	UJ
KC 2005 Water Sampling	L36893-5	PCB-184	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-185	C183	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-186	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-187		R		
KC 2005 Water Sampling	L36893-5	PCB-188	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-189	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-190		R	J	J
KC 2005 Water Sampling	L36893-5	PCB-191	K	BR	UJK	UJ
KC 2005 Water Sampling	L36893-5	PCB-192	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-193	C180	R		
KC 2005 Water Sampling	L36893-5	PCB-194	K	B		U
KC 2005 Water Sampling	L36893-5	PCB-196	K	B		U
KC 2005 Water Sampling	L36893-5	PCB-201			J	J
KC 2005 Water Sampling	L36893-5	PCB-202		B		
KC 2005 Water Sampling	L36893-5	PCB-206	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-207	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-208	<	R	R	R
KC 2005 Water Sampling	L36893-5	PCB-209	<	R	R	R
KC 2005 Water Sampling	L36893-6	PCB-015		B		
KC 2005 Water Sampling	L36893-6	PCB-026	C	B		C
KC 2005 Water Sampling	L36893-6	PCB-037		B		
KC 2005 Water Sampling	L36893-6	PCB-044	C		J	CJ
KC 2005 Water Sampling	L36893-6	PCB-048			J	J
KC 2005 Water Sampling	L36893-6	PCB-049	C		J	CJ
KC 2005 Water Sampling	L36893-6	PCB-052			J	J
KC 2005 Water Sampling	L36893-6	PCB-056			J	J
KC 2005 Water Sampling	L36893-6	PCB-064			J	J

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
KC 2005 Water Sampling	L36893-6	PCB-077		B		
KC 2005 Water Sampling	L36893-6	PCB-114		B		
KC 2005 Water Sampling	L36893-6	PCB-206		B		
KC 2005 Water Sampling	L36893-6 (lab duplicate)	PCB-001			B	U
KC 2005 Water Sampling	L36893-6 (lab duplicate)	PCB-002			B	U
KC 2005 Water Sampling	L36893-6 (lab duplicate)	PCB-003			B	U
KC 2005 Water Sampling	L36893-6 (lab duplicate)	PCB-008	K		B	U
KC 2005 Water Sampling	L36893-6 (lab duplicate)	PCB-017			B	U
KC 2005 Water Sampling	L36893-6 (lab duplicate)	PCB-018	C		B	CU
KC 2005 Water Sampling	L36893-6 (lab duplicate)	PCB-021	C		B	CU
KC 2005 Water Sampling	L36893-6 (lab duplicate)	PCB-022			B	U
KC 2005 Water Sampling	L36893-6 (lab duplicate)	PCB-031			B	U
KC 2005 Water Sampling	L36893-6 (lab duplicate)	PCB-044	C		J	CJ
KC 2005 Water Sampling	L36893-6 (lab duplicate)	PCB-048			J	J
KC 2005 Water Sampling	L36893-6 (lab duplicate)	PCB-049	C		J	CJ
KC 2005 Water Sampling	L36893-6 (lab duplicate)	PCB-052			J	J
KC 2005 Water Sampling	L36893-6 (lab duplicate)	PCB-056			J	J
KC 2005 Water Sampling	L36893-6 (lab duplicate)	PCB-064			J	J
KC 2005 Water Sampling	L36893-7	PCB-008	K	B		U
KC 2005 Water Sampling	L36893-7	PCB-016		B		
KC 2005 Water Sampling	L36893-7	PCB-018	C	B		C
KC 2005 Water Sampling	L36893-7	PCB-020	C	B		C
KC 2005 Water Sampling	L36893-7	PCB-032		B		
KC 2005 Water Sampling	L36893-7	PCB-042		B		
KC 2005 Water Sampling	L36893-7	PCB-044	C	B		C
KC 2005 Water Sampling	L36893-7	PCB-049	C	B		C
KC 2005 Water Sampling	L36893-7	PCB-050	C	B		C
KC 2005 Water Sampling	L36893-7	PCB-052		B		
KC 2005 Water Sampling	L36893-7	PCB-061	C	B		C
KC 2005 Water Sampling	L36893-7	PCB-064		B		
KC 2005 Water Sampling	L36893-7	PCB-066		B		
KC 2005 Water Sampling	L36893-7	PCB-114		B		
KC 2005 Water Sampling	L36893-7	PCB-198	CK	B		CU
KC 2005 Water Sampling	L36893-7	PCB-206		B		
KC 2005 Water Sampling	L37576-1	PCB-002		B		
KC 2005 Water Sampling	L37576-1	PCB-015	K	B		U
KC 2005 Water Sampling	L37576-1	PCB-016	K	B		U
KC 2005 Water Sampling	L37576-1	PCB-017	K	B		U
KC 2005 Water Sampling	L37576-1	PCB-020	CK	B		CU
KC 2005 Water Sampling	L37576-1	PCB-021	C	B		C
KC 2005 Water Sampling	L37576-1	PCB-022		B		
KC 2005 Water Sampling	L37576-1	PCB-032		B		
KC 2005 Water Sampling	L37576-1	PCB-049	C	B		C
KC 2005 Water Sampling	L37576-1	PCB-050	C	B		C
KC 2005 Water Sampling	L37576-1	PCB-056		B		
KC 2005 Water Sampling	L37576-1	PCB-077		B		
KC 2005 Water Sampling	L37576-1	PCB-085	C	B		C
KC 2005 Water Sampling	L37576-1	PCB-090	C	B		C
KC 2005 Water Sampling	L37576-1	PCB-093	CK	B		CU
KC 2005 Water Sampling	L37576-1	PCB-110	C	B		C
KC 2005 Water Sampling	L37576-1	PCB-118		B		
KC 2005 Water Sampling	L37576-1	PCB-129	C	B		C
KC 2005 Water Sampling	L37576-1	PCB-135	CK	B		CU
KC 2005 Water Sampling	L37576-1	PCB-147	C	B		C
KC 2005 Water Sampling	L37576-1	PCB-156	CK	B		CU

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
KC 2005 Water Sampling	L37576-1	PCB-167	K	B		U
KC 2005 Water Sampling	L37576-1	PCB-170	K	B		U
KC 2005 Water Sampling	L37576-1	PCB-198	C	B		C
KC 2005 Water Sampling	L37576-1	PCB-206		B		
KC 2005 Water Sampling	L37576-1	PCB-208	K	B		U
KC 2005 Water Sampling	L37576-1	PCB-209	K	B		U
KC 2005 Water Sampling	L37576-2	PCB-002	K	B		U
KC 2005 Water Sampling	L37576-2	PCB-015	K	B		U
KC 2005 Water Sampling	L37576-2	PCB-016		B		
KC 2005 Water Sampling	L37576-2	PCB-017		B		
KC 2005 Water Sampling	L37576-2	PCB-018	C	B		C
KC 2005 Water Sampling	L37576-2	PCB-020	C	B		C
KC 2005 Water Sampling	L37576-2	PCB-021	C	B		C
KC 2005 Water Sampling	L37576-2	PCB-022		B		
KC 2005 Water Sampling	L37576-2	PCB-032		B		
KC 2005 Water Sampling	L37576-2	PCB-044	C	B		C
KC 2005 Water Sampling	L37576-2	PCB-050	CK	B		CU
KC 2005 Water Sampling	L37576-2	PCB-052		B		
KC 2005 Water Sampling	L37576-2	PCB-056		B		
KC 2005 Water Sampling	L37576-2	PCB-061	C	B		C
KC 2005 Water Sampling	L37576-2	PCB-064		B		
KC 2005 Water Sampling	L37576-2	PCB-066		B		
KC 2005 Water Sampling	L37576-2	PCB-077	K	B		U
KC 2005 Water Sampling	L37576-2	PCB-081	K	B		U
KC 2005 Water Sampling	L37576-2	PCB-085	CK	B		CU
KC 2005 Water Sampling	L37576-2	PCB-086	C	B		C
KC 2005 Water Sampling	L37576-2	PCB-105		B		
KC 2005 Water Sampling	L37576-2	PCB-156	C	B		C
KC 2005 Water Sampling	L37576-2	PCB-167		B		
KC 2005 Water Sampling	L37576-2	PCB-170		B		
KC 2005 Water Sampling	L37576-2	PCB-198	C	B		C
KC 2005 Water Sampling	L37576-2	PCB-206	K	B		U
KC 2005 Water Sampling	L37576-2	PCB-208	K	B		U
KC 2005 Water Sampling	L37576-2	PCB-209	K	B		U
KC 2005 Water Sampling	L37576-3	PCB-002		B		
KC 2005 Water Sampling	L37576-3	PCB-016		B		
KC 2005 Water Sampling	L37576-3	PCB-017	K	B		U
KC 2005 Water Sampling	L37576-3	PCB-020	C	B		C
KC 2005 Water Sampling	L37576-3	PCB-021	CK	B		CU
KC 2005 Water Sampling	L37576-3	PCB-022	K	B		U
KC 2005 Water Sampling	L37576-3	PCB-032	K	B		U
KC 2005 Water Sampling	L37576-3	PCB-049	C	B		C
KC 2005 Water Sampling	L37576-3	PCB-050	CK	B		CU
KC 2005 Water Sampling	L37576-3	PCB-056	K	B		U
KC 2005 Water Sampling	L37576-3	PCB-077	K	B		U
KC 2005 Water Sampling	L37576-3	PCB-085	C	B		C
KC 2005 Water Sampling	L37576-3	PCB-086	CK	B		CU
KC 2005 Water Sampling	L37576-3	PCB-090	C	B		C
KC 2005 Water Sampling	L37576-3	PCB-110	C	B		C
KC 2005 Water Sampling	L37576-3	PCB-118		B		
KC 2005 Water Sampling	L37576-3	PCB-156	C	B		C
KC 2005 Water Sampling	L37576-3	PCB-167		B		
KC 2005 Water Sampling	L37576-3	PCB-170		B		
KC 2005 Water Sampling	L37576-3	PCB-198	CK	B		CU
KC 2005 Water Sampling	L37576-3	PCB-206	K	B		U

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
KC 2005 Water Sampling	L37576-3	PCB-208	K	B		U
KC 2005 Water Sampling	L37576-3	PCB-209	K	B		U
KC 2005 Water Sampling	L37576-3 (Lab duplicate)	PCB-001			B	U
KC 2005 Water Sampling	L37576-3 (Lab duplicate)	PCB-003			B	U
KC 2005 Water Sampling	L37576-3 (Lab duplicate)	PCB-007	K		B	U
KC 2005 Water Sampling	L37576-3 (Lab duplicate)	PCB-008	K		B	U
KC 2005 Water Sampling	L37576-3 (Lab duplicate)	PCB-011			B	U
KC 2005 Water Sampling	L37576-3 (Lab duplicate)	PCB-018	C		B	CU
KC 2005 Water Sampling	L37576-3 (Lab duplicate)	PCB-031			B	U
KC 2005 Water Sampling	L37576-3 (Lab duplicate)	PCB-037	K		B	U
KC 2005 Water Sampling	L37576-3 (Lab duplicate)	PCB-044	C		B	CU
KC 2005 Water Sampling	L37576-3 (Lab duplicate)	PCB-045	C		B	CU
KC 2005 Water Sampling	L37576-3 (Lab duplicate)	PCB-052			B	U
KC 2005 Water Sampling	L37576-3 (Lab duplicate)	PCB-061	CK		B	CU
KC 2005 Water Sampling	L37576-3 (Lab duplicate)	PCB-064	K		B	U
KC 2005 Water Sampling	L37576-3 (Lab duplicate)	PCB-066			B	U
KC 2005 Water Sampling	L37576-3 (Lab duplicate)	PCB-105	K		B	U
KC 2005 Water Sampling	L37576-4	PCB-002	K	B		U
KC 2005 Water Sampling	L37576-4	PCB-015		B		
KC 2005 Water Sampling	L37576-4	PCB-016		B		
KC 2005 Water Sampling	L37576-4	PCB-017	K	B		U
KC 2005 Water Sampling	L37576-4	PCB-020	C	B		C
KC 2005 Water Sampling	L37576-4	PCB-021	C	B		C
KC 2005 Water Sampling	L37576-4	PCB-022		B		
KC 2005 Water Sampling	L37576-4	PCB-032	K	B		U
KC 2005 Water Sampling	L37576-4	PCB-044	C	B		C
KC 2005 Water Sampling	L37576-4	PCB-049	C	B		C
KC 2005 Water Sampling	L37576-4	PCB-050	CK	B		CU
KC 2005 Water Sampling	L37576-4	PCB-056		B		
KC 2005 Water Sampling	L37576-4	PCB-061	C	B		C
KC 2005 Water Sampling	L37576-4	PCB-064		B		
KC 2005 Water Sampling	L37576-4	PCB-066		B		
KC 2005 Water Sampling	L37576-4	PCB-077	K	B		U
KC 2005 Water Sampling	L37576-4	PCB-085	C	B		C
KC 2005 Water Sampling	L37576-4	PCB-086	C	B		C
KC 2005 Water Sampling	L37576-4	PCB-105		B		
KC 2005 Water Sampling	L37576-4	PCB-156	C	B		C
KC 2005 Water Sampling	L37576-4	PCB-167		B		
KC 2005 Water Sampling	L37576-4	PCB-170	K	B		U
KC 2005 Water Sampling	L37576-4	PCB-198	CK	B		CU
KC 2005 Water Sampling	L37576-4	PCB-206		B		
KC 2005 Water Sampling	L37576-4	PCB-208		B		
KC 2005 Water Sampling	L37576-4	PCB-209	K	B		U
KC 2005 Water Sampling	L37576-5	PCB-002		B		
KC 2005 Water Sampling	L37576-5	PCB-016	K	B		U
KC 2005 Water Sampling	L37576-5	PCB-017		B		
KC 2005 Water Sampling	L37576-5	PCB-020	CK	B		CU
KC 2005 Water Sampling	L37576-5	PCB-021	CK	B		CU
KC 2005 Water Sampling	L37576-5	PCB-022	K	B		U
KC 2005 Water Sampling	L37576-5	PCB-032	K	B		U
KC 2005 Water Sampling	L37576-5	PCB-049	C	B		C
KC 2005 Water Sampling	L37576-5	PCB-050	CK	B		CU
KC 2005 Water Sampling	L37576-5	PCB-056	K	B		U
KC 2005 Water Sampling	L37576-5	PCB-077	K	B		U
KC 2005 Water Sampling	L37576-5	PCB-085	CK	B		CU

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
KC 2005 Water Sampling	L37576-5	PCB-086	C	B		C
KC 2005 Water Sampling	L37576-5	PCB-090	C	B		C
KC 2005 Water Sampling	L37576-5	PCB-093	C	B		C
KC 2005 Water Sampling	L37576-5	PCB-110	C	B		C
KC 2005 Water Sampling	L37576-5	PCB-118		B		
KC 2005 Water Sampling	L37576-5	PCB-135	CK	B		CU
KC 2005 Water Sampling	L37576-5	PCB-156	CK	B		CU
KC 2005 Water Sampling	L37576-5	PCB-167	K	B		U
KC 2005 Water Sampling	L37576-5	PCB-170		B		
KC 2005 Water Sampling	L37576-5	PCB-198	CK	B		CU
KC 2005 Water Sampling	L37576-5	PCB-206		B		
KC 2005 Water Sampling	L37576-5	PCB-209	K	B		U
KC 2005 Water Sampling	L37576-6	PCB-002		B		
KC 2005 Water Sampling	L37576-6	PCB-015		B		
KC 2005 Water Sampling	L37576-6	PCB-016		B		
KC 2005 Water Sampling	L37576-6	PCB-017		B		
KC 2005 Water Sampling	L37576-6	PCB-018	C	B		C
KC 2005 Water Sampling	L37576-6	PCB-020	C	B		C
KC 2005 Water Sampling	L37576-6	PCB-021	C	B		C
KC 2005 Water Sampling	L37576-6	PCB-022		B	J	J
KC 2005 Water Sampling	L37576-6	PCB-031		B		
KC 2005 Water Sampling	L37576-6	PCB-032		B		
KC 2005 Water Sampling	L37576-6	PCB-045	C	B		C
KC 2005 Water Sampling	L37576-6	PCB-049	C		J	CJ
KC 2005 Water Sampling	L37576-6	PCB-050	C	B	J	CJ
KC 2005 Water Sampling	L37576-6	PCB-052		B		
KC 2005 Water Sampling	L37576-6	PCB-056			J	J
KC 2005 Water Sampling	L37576-6	PCB-077		B		
KC 2005 Water Sampling	L37576-6	PCB-083	C		J	CJ
KC 2005 Water Sampling	L37576-6	PCB-084			J	J
KC 2005 Water Sampling	L37576-6	PCB-085	C	B	J	CJ
KC 2005 Water Sampling	L37576-6	PCB-088	C		J	CJ
KC 2005 Water Sampling	L37576-6	PCB-090	C		J	CJ
KC 2005 Water Sampling	L37576-6	PCB-093	C		J	CJ
KC 2005 Water Sampling	L37576-6	PCB-110	C		J	CJ
KC 2005 Water Sampling	L37576-6	PCB-129	C		J	CJ
KC 2005 Water Sampling	L37576-6	PCB-136			J	J
KC 2005 Water Sampling	L37576-6	PCB-147	C		J	CJ
KC 2005 Water Sampling	L37576-6	PCB-153	C		J	CJ
KC 2005 Water Sampling	L37576-6	PCB-156	C	B		C
KC 2005 Water Sampling	L37576-6	PCB-167	K	B		U
KC 2005 Water Sampling	L37576-6	PCB-174			J	J
KC 2005 Water Sampling	L37576-6	PCB-177			J	J
KC 2005 Water Sampling	L37576-6	PCB-180	C		J	CJ
KC 2005 Water Sampling	L37576-6	PCB-198	C	B		C
KC 2005 Water Sampling	L37576-6	PCB-206		B	J	J
KC 2005 Water Sampling	L37576-6	PCB-208	K	B		U
KC 2005 Water Sampling	L37576-6	PCB-209		B		
KC 2005 Water Sampling	L37576-7	PCB-002	K	B		U
KC 2005 Water Sampling	L37576-7	PCB-015	K	B		U
KC 2005 Water Sampling	L37576-7	PCB-016	K	B		U
KC 2005 Water Sampling	L37576-7	PCB-017	K	B		U
KC 2005 Water Sampling	L37576-7	PCB-020	CK	B		CU
KC 2005 Water Sampling	L37576-7	PCB-021	CK	B		CU
KC 2005 Water Sampling	L37576-7	PCB-022		B	J	J

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
KC 2005 Water Sampling	L37576-7	PCB-032	K	B		U
KC 2005 Water Sampling	L37576-7	PCB-049	C	B	J	CJ
KC 2005 Water Sampling	L37576-7	PCB-050	C	B	J	CJ
KC 2005 Water Sampling	L37576-7	PCB-056		B	J	J
KC 2005 Water Sampling	L37576-7	PCB-077	K	B		U
KC 2005 Water Sampling	L37576-7	PCB-081		B		
KC 2005 Water Sampling	L37576-7	PCB-083	C		J	CJ
KC 2005 Water Sampling	L37576-7	PCB-084			J	J
KC 2005 Water Sampling	L37576-7	PCB-085	C	B	J	CJ
KC 2005 Water Sampling	L37576-7	PCB-088	C		J	CJ
KC 2005 Water Sampling	L37576-7	PCB-090	C	B	J	CJ
KC 2005 Water Sampling	L37576-7	PCB-093	C	B	J	CJ
KC 2005 Water Sampling	L37576-7	PCB-110	C	B	J	CJ
KC 2005 Water Sampling	L37576-7	PCB-129	C	B	J	CJ
KC 2005 Water Sampling	L37576-7	PCB-136			J	J
KC 2005 Water Sampling	L37576-7	PCB-147	C	B	J	CJ
KC 2005 Water Sampling	L37576-7	PCB-153	C	B	J	CJ
KC 2005 Water Sampling	L37576-7	PCB-156	CK	B		CU
KC 2005 Water Sampling	L37576-7	PCB-167		B		
KC 2005 Water Sampling	L37576-7	PCB-170	K	B		U
KC 2005 Water Sampling	L37576-7	PCB-174			J	J
KC 2005 Water Sampling	L37576-7	PCB-177			J	J
KC 2005 Water Sampling	L37576-7	PCB-180	C		J	CJ
KC 2005 Water Sampling	L37576-7	PCB-198	CK	B		CU
KC 2005 Water Sampling	L37576-7	PCB-206		B	J	J
KC 2005 Water Sampling	L37576-7	PCB-208	K	B		U
KC 2005 Water Sampling	L37576-7	PCB-209		B		
KC 2005 Water Sampling	L37771-1	PCB-001	K	B		U
KC 2005 Water Sampling	L37771-1	PCB-021	CK	B		CU
KC 2005 Water Sampling	L37771-1	PCB-040	CK	B		CU
KC 2005 Water Sampling	L37771-1	PCB-044	C	B		C
KC 2005 Water Sampling	L37771-1	PCB-049	C	B		C
KC 2005 Water Sampling	L37771-1	PCB-050	CK	B		CU
KC 2005 Water Sampling	L37771-1	PCB-061	C	B		C
KC 2005 Water Sampling	L37771-1	PCB-066		B		
KC 2005 Water Sampling	L37771-1	PCB-085	C	B		C
KC 2005 Water Sampling	L37771-1	PCB-090	C	B		C
KC 2005 Water Sampling	L37771-1	PCB-093	CK	B		CU
KC 2005 Water Sampling	L37771-1	PCB-129	C	B		C
KC 2005 Water Sampling	L37771-1	PCB-132		B		
KC 2005 Water Sampling	L37771-1	PCB-135	C	B		C
KC 2005 Water Sampling	L37771-1	PCB-147	C	B		C
KC 2005 Water Sampling	L37771-1	PCB-153	C	B		C
KC 2005 Water Sampling	L37771-1	PCB-156	CK	B		CU
KC 2005 Water Sampling	L37771-1	PCB-187	K	B		U
KC 2005 Water Sampling	L37771-1	PCB-202	K	B		U
KC 2005 Water Sampling	L37771-2	PCB-001	K	B		U
KC 2005 Water Sampling	L37771-2	PCB-002	K		B	U
KC 2005 Water Sampling	L37771-2	PCB-003			B	U
KC 2005 Water Sampling	L37771-2	PCB-007			B	U
KC 2005 Water Sampling	L37771-2	PCB-008			J	J
KC 2005 Water Sampling	L37771-2	PCB-008			J	J
KC 2005 Water Sampling	L37771-2	PCB-011			J	J
KC 2005 Water Sampling	L37771-2	PCB-011			J	J
KC 2005 Water Sampling	L37771-2	PCB-017			J	J

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
KC 2005 Water Sampling	L37771-2	PCB-017			J	J
KC 2005 Water Sampling	L37771-2	PCB-018	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-018	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-020	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-020	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-021	C	B		C
KC 2005 Water Sampling	L37771-2	PCB-022			B	U
KC 2005 Water Sampling	L37771-2	PCB-031			J	J
KC 2005 Water Sampling	L37771-2	PCB-031			J	J
KC 2005 Water Sampling	L37771-2	PCB-037			J	J
KC 2005 Water Sampling	L37771-2	PCB-037			J	J
KC 2005 Water Sampling	L37771-2	PCB-040	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-040	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-044	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-044	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-045	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-045	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-046			J	J
KC 2005 Water Sampling	L37771-2	PCB-046			J	J
KC 2005 Water Sampling	L37771-2	PCB-049	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-049	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-050	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-050	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-059	C	B		C
KC 2005 Water Sampling	L37771-2	PCB-060			J	J
KC 2005 Water Sampling	L37771-2	PCB-060			J	J
KC 2005 Water Sampling	L37771-2	PCB-061	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-061	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-064			J	J
KC 2005 Water Sampling	L37771-2	PCB-064			J	J
KC 2005 Water Sampling	L37771-2	PCB-066			J	J
KC 2005 Water Sampling	L37771-2	PCB-066			J	J
KC 2005 Water Sampling	L37771-2	PCB-077			J	J
KC 2005 Water Sampling	L37771-2	PCB-077			J	J
KC 2005 Water Sampling	L37771-2	PCB-084			J	J
KC 2005 Water Sampling	L37771-2	PCB-084			J	J
KC 2005 Water Sampling	L37771-2	PCB-085	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-085	C	B	J	CJ
KC 2005 Water Sampling	L37771-2	PCB-086	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-086	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-088	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-088	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-090	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-090	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-092			J	J
KC 2005 Water Sampling	L37771-2	PCB-092			J	J
KC 2005 Water Sampling	L37771-2	PCB-093	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-093	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-105			J	J
KC 2005 Water Sampling	L37771-2	PCB-105			J	J
KC 2005 Water Sampling	L37771-2	PCB-110	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-110	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-118			J	J
KC 2005 Water Sampling	L37771-2	PCB-118			J	J
KC 2005 Water Sampling	L37771-2	PCB-170			J	J

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
KC 2005 Water Sampling	L37771-2	PCB-170			J	J
KC 2005 Water Sampling	L37771-2	PCB-171	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-171	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-172			J	J
KC 2005 Water Sampling	L37771-2	PCB-172			J	J
KC 2005 Water Sampling	L37771-2	PCB-174			J	J
KC 2005 Water Sampling	L37771-2	PCB-174			J	J
KC 2005 Water Sampling	L37771-2	PCB-177			J	J
KC 2005 Water Sampling	L37771-2	PCB-177			J	J
KC 2005 Water Sampling	L37771-2	PCB-179			J	J
KC 2005 Water Sampling	L37771-2	PCB-179			J	J
KC 2005 Water Sampling	L37771-2	PCB-180	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-180	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-183	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-183	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-187			J	J
KC 2005 Water Sampling	L37771-2	PCB-187			J	J
KC 2005 Water Sampling	L37771-2	PCB-189			B	U
KC 2005 Water Sampling	L37771-2	PCB-190			J	J
KC 2005 Water Sampling	L37771-2	PCB-190			J	J
KC 2005 Water Sampling	L37771-2	PCB-194			J	J
KC 2005 Water Sampling	L37771-2	PCB-194			J	J
KC 2005 Water Sampling	L37771-2	PCB-197	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-197	C	B	J	CJ
KC 2005 Water Sampling	L37771-2	PCB-198	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-198	C		J	CJ
KC 2005 Water Sampling	L37771-2	PCB-202	K	B		U
KC 2005 Water Sampling	L37771-3	PCB-001	K	B		U
KC 2005 Water Sampling	L37771-3	PCB-002		B		
KC 2005 Water Sampling	L37771-3	PCB-003		B		
KC 2005 Water Sampling	L37771-3	PCB-021	C	B		C
KC 2005 Water Sampling	L37771-3	PCB-022		B		
KC 2005 Water Sampling	L37771-3	PCB-032		B		
KC 2005 Water Sampling	L37771-3	PCB-040	C	B		C
KC 2005 Water Sampling	L37771-3	PCB-044	C	B		C
KC 2005 Water Sampling	L37771-3	PCB-049	C	B		C
KC 2005 Water Sampling	L37771-3	PCB-050	C	B		C
KC 2005 Water Sampling	L37771-3	PCB-061	C	B		C
KC 2005 Water Sampling	L37771-3	PCB-064		B		
KC 2005 Water Sampling	L37771-3	PCB-085	CK	B		CU
KC 2005 Water Sampling	L37771-3	PCB-156	C	B		C
KC 2005 Water Sampling	L37771-3	PCB-189		B		
KC 2005 Water Sampling	L37771-3	PCB-198	CK	B		CU
KC 2005 Water Sampling	L37771-3	PCB-202		B		
KC 2005 Water Sampling	L37771-3	PCB-209	K	B		U
KC 2005 Water Sampling	L37771-4	PCB-001		B		
KC 2005 Water Sampling	L37771-4	PCB-002	K	B		U
KC 2005 Water Sampling	L37771-4	PCB-003	K	B		U
KC 2005 Water Sampling	L37771-4	PCB-021	C	B		C
KC 2005 Water Sampling	L37771-4	PCB-022		B		
KC 2005 Water Sampling	L37771-4	PCB-032	K	B		U
KC 2005 Water Sampling	L37771-4	PCB-040	C	B		C
KC 2005 Water Sampling	L37771-4	PCB-049	C	B		C
KC 2005 Water Sampling	L37771-4	PCB-050	C	B		C
KC 2005 Water Sampling	L37771-4	PCB-061	C	B		C

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
KC 2005 Water Sampling	L37771-4	PCB-064		B		
KC 2005 Water Sampling	L37771-4	PCB-084	K	B		U
KC 2005 Water Sampling	L37771-4	PCB-085	CK	B		CU
KC 2005 Water Sampling	L37771-4	PCB-105		B		
KC 2005 Water Sampling	L37771-4	PCB-123	K	B		U
KC 2005 Water Sampling	L37771-4	PCB-156	CK	B		CU
KC 2005 Water Sampling	L37771-4	PCB-198	CK	B		CU
KC 2005 Water Sampling	L37771-4	PCB-202	K	B		U
KC 2005 Water Sampling	L37771-4	PCB-209	K	B		U
KC 2005 Water Sampling	L37771-5	PCB-001		B		
KC 2005 Water Sampling	L37771-5	PCB-002		B		
KC 2005 Water Sampling	L37771-5	PCB-003		B		
KC 2005 Water Sampling	L37771-5	PCB-021	C	B		C
KC 2005 Water Sampling	L37771-5	PCB-022		B		
KC 2005 Water Sampling	L37771-5	PCB-050	C	B		C
KC 2005 Water Sampling	L37771-5	PCB-059	CK	B		CU
KC 2005 Water Sampling	L37771-5	PCB-085	C	B		C
KC 2005 Water Sampling	L37771-5	PCB-105		B		
KC 2005 Water Sampling	L37771-5	PCB-126	K	B		U
KC 2005 Water Sampling	L37771-5	PCB-156	C	B		C
KC 2005 Water Sampling	L37771-5	PCB-159		B		
KC 2005 Water Sampling	L37771-5	PCB-189	K	B		U
KC 2005 Water Sampling	L37771-5	PCB-202	K	B		U
KC 2005 Water Sampling	L37771-5	PCB-209		B		
KC 2005 Water Sampling	L37771-6	PCB-001	K	B		U
KC 2005 Water Sampling	L37771-6	PCB-002	K	B		U
KC 2005 Water Sampling	L37771-6	PCB-003	K	B		U
KC 2005 Water Sampling	L37771-6	PCB-021	C	B		C
KC 2005 Water Sampling	L37771-6	PCB-022		B		
KC 2005 Water Sampling	L37771-6	PCB-037		B		
KC 2005 Water Sampling	L37771-6	PCB-050	C	B		C
KC 2005 Water Sampling	L37771-6	PCB-059	CK	B		CU
KC 2005 Water Sampling	L37771-6	PCB-123	K	B		U
KC 2005 Water Sampling	L37771-6	PCB-156	C	B		C
KC 2005 Water Sampling	L37771-6	PCB-159	K	B		U
KC 2005 Water Sampling	L37771-6	PCB-189		B		
KC 2005 Water Sampling	L37771-6	PCB-202		B		
KC 2005 Water Sampling	L37771-6	PCB-209		B		
KC 2005 Water Sampling	L37771-7	PCB-001	K	B		U
KC 2005 Water Sampling	L37771-7	PCB-002		B		
KC 2005 Water Sampling	L37771-7	PCB-003		B		
KC 2005 Water Sampling	L37771-7	PCB-021	CK	B		CU
KC 2005 Water Sampling	L37771-7	PCB-022	K	B		U
KC 2005 Water Sampling	L37771-7	PCB-032	K	B		U
KC 2005 Water Sampling	L37771-7	PCB-040	CK	B		CU
KC 2005 Water Sampling	L37771-7	PCB-049	C	B		C
KC 2005 Water Sampling	L37771-7	PCB-050	CK	B		CU
KC 2005 Water Sampling	L37771-7	PCB-064	K	B		U
KC 2005 Water Sampling	L37771-7	PCB-085	CK	B		CU
KC 2005 Water Sampling	L37771-7	PCB-118		B		
KC 2005 Water Sampling	L37771-7	PCB-135	C	B		C
KC 2005 Water Sampling	L37771-7	PCB-147	C	B		C
KC 2005 Water Sampling	L37771-7	PCB-156	C	B		C
KC 2005 Water Sampling	L37771-7	PCB-170		B		
KC 2005 Water Sampling	L37771-7	PCB-174		B		

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
KC 2005 Water Sampling	L37771-7	PCB-177		B		
KC 2005 Water Sampling	L37771-7	PCB-209	K	B		U
RhonePoulenc2004	Lower SB-01	4-Chloroaniline		R		R
RhonePoulenc2004	Lower SB-01	Aniline		R		R
RhonePoulenc2004	Lower SB-01	Sodium		J	JH	J
RhonePoulenc2004	Lower SB-02	4-Chloroaniline		R		R
RhonePoulenc2004	Lower SB-02	Aniline		R		R
RhonePoulenc2004	Lower SB-02	Sodium		J	JH	J
RhonePoulenc2004	Lower SB-03	4-Chloroaniline		R		R
RhonePoulenc2004	Lower SB-03	Aniline		R		R
RhonePoulenc2004	Lower SB-03	Benzoic acid		J	JL	J
RhonePoulenc2004	Lower SB-03	Hexachlorocyclopentadiene		R		R
RhonePoulenc2004	Lower SB-03	Sodium		J	JH	J
RhonePoulenc2004	Lower SB-04	4-Chloroaniline		R		R
RhonePoulenc2004	Lower SB-04	Aniline		R		R
RhonePoulenc2004	Lower SB-04	Sodium		J	JH	J
RhonePoulenc2004	Lower SB-05	4-Chloroaniline		R		R
RhonePoulenc2004	Lower SB-05	Aniline		R		R
RhonePoulenc2004	Lower SB-05	Benzoic acid		J	JL	J
RhonePoulenc2004	Lower SB-05	Sodium		J	JH	J
RhonePoulenc2004	Lower SB-06	4-Chloroaniline		R		R
RhonePoulenc2004	Lower SB-06	Aniline		R		R
RhonePoulenc2004	Lower SB-06	Benzoic acid		J	JL	J
RhonePoulenc2004	Lower SB-06	Sodium		J	JH	J
RhonePoulenc2004	Lower SB-07	4-Chloroaniline		R		R
RhonePoulenc2004	Lower SB-07	Aniline		R		R
RhonePoulenc2004	Lower SB-07	Benzoic acid		J	JL	J
RhonePoulenc2004	Lower SB-07	Sodium		J	JH	J
RhonePoulenc2004	Lower SB-08	4-Chloroaniline		R		R
RhonePoulenc2004	Lower SB-08	Aniline		R		R
RhonePoulenc2004	Lower SB-08	Benzoic acid		J	JH	J
RhonePoulenc2004	Lower SB-08	Sodium		J	JH	J
RhonePoulenc2004	Lower SB-11	4-Chloroaniline		R		R
RhonePoulenc2004	Lower SB-11	Aniline		R		R
RhonePoulenc2004	Lower SB-11	Benzoic acid		J	JH	J
RhonePoulenc2004	Lower SB-12	4-Chloroaniline		R		R
RhonePoulenc2004	Lower SB-12	Aniline		R		R
RhonePoulenc2004	Lower SB-12	Benzoic acid		J	JH	J
RhonePoulenc2004	Lower SB-13	4-Chloroaniline		R		R
RhonePoulenc2004	Lower SB-13	Aniline		R		R
RhonePoulenc2004	Lower SB-15	4-Chloroaniline		R		R
RhonePoulenc2004	Lower SB-15	Aniline		R		R
RhonePoulenc2004	Lower SB-15	Sodium		J	JH	J
RhonePoulenc2004	Lower SB-16	4-Chloroaniline		R		R
RhonePoulenc2004	Lower SB-16	Aniline		R		R
RhonePoulenc2004	Lower SB-16	Benzoic acid		J	JH	J
RhonePoulenc2004	Lower SB-17	4-Chloroaniline		R		R
RhonePoulenc2004	Lower SB-17	Aniline		R		R
RhonePoulenc2004	Lower SB-17	Benzoic acid		J	JH	J
RhonePoulenc2004	Lower SB-17	Sodium		J	JH	J
RhonePoulenc2004	Lower SH-01	Sodium		J	JH	J
RhonePoulenc2004	Lower SH-03	Sodium		J	JH	J
RhonePoulenc2004	Lower SH-04	Sodium		J	JH	J
RhonePoulenc2004	Lower SH-05	Sodium		J	JH	J
RhonePoulenc2004	Lower SH-06	Sodium		J	JH	J

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
RhonePoulenc2004	Lower SH-07	Sodium		J	JH	J
RhonePoulenc2004	Lower SH-08	Sodium		J	JH	J
RhonePoulenc2004	Lower SH-09	Aroclor-1242		J	JK	J
RhonePoulenc2004	Lower SH-09	Aroclor-1254/1260		J	JK	J
RhonePoulenc2004	Lower SH-09	Sodium		J	JH	J
RhonePoulenc2004	Lower SH-13	Sodium		J	JH	J
RhonePoulenc2004	Upper SB-01	4-Chloroaniline		R		R
RhonePoulenc2004	Upper SB-01	Aniline		R		R
RhonePoulenc2004	Upper SB-01	Sodium		J	JH	J
RhonePoulenc2004	Upper SB-02	Sodium		J	JH	J
RhonePoulenc2004	Upper SB-03	4-Chloroaniline		R		R
RhonePoulenc2004	Upper SB-03	4-Methylphenol		J	JH	J
RhonePoulenc2004	Upper SB-03	Aniline		R		R
RhonePoulenc2004	Upper SB-03	Anthracene		J	JH	J
RhonePoulenc2004	Upper SB-03	Benzaldehyde		J	JH	J
RhonePoulenc2004	Upper SB-03	Carbazole		J	JH	J
RhonePoulenc2004	Upper SB-03	Dibenzo(a,h)anthracene		J	JH	J
RhonePoulenc2004	Upper SB-03	Phenol		J	JH	J
RhonePoulenc2004	Upper SB-03	Retene		J	JH	J
RhonePoulenc2004	Upper SB-03	Sodium		J	JH	J
RhonePoulenc2004	Upper SB-04	4-Chloroaniline		R		R
RhonePoulenc2004	Upper SB-04	Aniline		R		R
RhonePoulenc2004	Upper SB-04	Sodium		J	JH	J
RhonePoulenc2004	Upper SB-05	4-Chloroaniline		R		R
RhonePoulenc2004	Upper SB-05	Aniline		R		R
RhonePoulenc2004	Upper SB-05	Sodium		J	JH	J
RhonePoulenc2004	Upper SB-06	Sodium		J	JH	J
RhonePoulenc2004	Upper SB-07	Sodium		J	JH	J
RhonePoulenc2004	Upper SB-08	4-Chloroaniline		R		R
RhonePoulenc2004	Upper SB-08	Aniline		R		R
RhonePoulenc2004	Upper SB-08	Aroclor-1242		J	JL	J
RhonePoulenc2004	Upper SB-08	Aroclor-1254/1260		J	JL	J
RhonePoulenc2004	Upper SB-08	Benzoic acid		J	JL	J
RhonePoulenc2004	Upper SB-08	Sodium		J	JH	J
RhonePoulenc2004	Upper SB-12	4-Chloroaniline		R		R
RhonePoulenc2004	Upper SB-12	Aniline		R		R
RhonePoulenc2004	Upper SB-15	Sodium		J	JH	J
RhonePoulenc2004	Upper SB-17	Sodium		J	JH	J
RhonePoulenc2004	Upper SH-01	Sodium		J	JH	J
RhonePoulenc2004	Upper SH-02	Sodium		J	JH	J
RhonePoulenc2004	Upper SH-03	Benzoic acid		J	JH	J
RhonePoulenc2004	Upper SH-03	Sodium		J	JH	J
RhonePoulenc2004	Upper SH-04	Sodium		J	JH	J
RhonePoulenc2004	Upper SH-05	Sodium		J	JH	J
RhonePoulenc2004	Upper SH-06	4,4'-DDT		J	JN	JN
RhonePoulenc2004	Upper SH-06	Aniline		R		R
RhonePoulenc2004	Upper SH-06	Hexachlorocyclopentadiene		R		R
RhonePoulenc2004	Upper SH-06	Sodium		J	JH	J
RhonePoulenc2004	Upper SH-07	Sodium		J	JH	J
RhonePoulenc2004	Upper SH-08	Sodium		J	JH	J
RhonePoulenc2004	Upper SH-09	Sodium		J	JH	J
RhonePoulenc2004	Upper SH-16	Aldrin		J	JN	JN
RhonePoulenc2004	Upper SH-16	alpha-BHC		J	JN	JN
RhonePoulenc2004	Upper SH-16	alpha-Chlordane		J	JN	JN
RhonePoulenc2004	Upper SH-16	beta-BHC		J	JN	JN

Appendix B - Results requalified by Windward

Sampling Event	Sample ID	Analyte	Laboratory Qualifier	Validation Qualifier-original	Validation Qualifier-revised	Interpreted Qualifier
RhonePoulenc2004	Upper SH-16	beta-Endosulfan		J	JN	JN
RhonePoulenc2004	Upper SH-16	delta-BHC		J	JN	JN
RhonePoulenc2004	Upper SH-16	Dieldrin		J	JN	JN
RhonePoulenc2004	Upper SH-16	Endosulfan		J	JN	JN
RhonePoulenc2004	Upper SH-16	gamma-BHC		J	JN	JN
RhonePoulenc2004	Upper SH-16	Heptachlor		J	JN	JN
South Park Bridge	SB4-SED-5	Bis(2-ethylhexyl)phthalate	B			
South Park Bridge	SB4-SED-50	Di-n-octyl phthalate	B			
South Park Bridge	SB5-SED-75	Bis(2-ethylhexyl)phthalate	B			
South Park Bridge	SB5-SED-75	Di-n-octyl phthalate	B			