
ONONDAGA LAKE BASELINE MONITORING REPORT FOR 2009

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LIST OF ACRONYMS

DDT	dichloro diphenyl trichloroethane
DO	dissolved oxygen
DUSR	Data Usability and Summary Report
ISUS	<i>in situ</i> ultraviolet spectrophotometer
mg/kg	milligrams per kilogram (or parts per million)
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PAHs	polyaromatic hydrocarbons
PCBs	polychlorinated biphenyls
QA/QC	quality assurance / quality control
RI	remedial investigation
ROD	Record of Decision
SMU	sediment management unit
SUNY-ESF	State University of New York College of Environmental Science and Forestry
TAL	Test America Laboratories
TCL	target compound list
TEFs	toxic equivalency factors
TEQs	toxicity equivalent quotients
TOC	total organic carbon
TSS	total suspended solids
UFI	Upstate Freshwater Institute
USEPA	United States Environmental Protection Agency
VOCs	volatile organic compounds
YOY	young-of-year

DEFINITIONS

Benthic	Bottom dwelling (<i>i.e.</i> , in sediment)
Ebullition	Release of gas bubbles of elements or compounds from sediment to the overlying water column
Epilimnion	Waters within SMU 8 (the profundal zone of Onondaga Lake) that are above the thermocline
Hypolimnion	Waters within SMU 8 (the profundal zone of Onondaga Lake) that are below the thermocline
Invertebrates	Animals without a backbone.
Littoral	Zone within a body of water adjacent to shore where waters do not thermally stratify. In Onondaga Lake, the outer extent of the littoral zone corresponds to a water depth of 30 feet (9 meters).
ng/L	Nanogram per liter or part per trillion in water.
Profundal	Zone within a body of water adjacent to shore where waters do thermally stratify. In Onondaga Lake, the profundal zone is the deeper portion where water depths are 30 feet (9 meters) or more.
Thermocline	The transition between the epilimnion and hypolimnion where water temperatures change rapidly with changing water depth. In Onondaga Lake, the thermocline (transition in water temperature) typically is observed at a water depth between 30 and 35 feet (9 and 11 meters).

EXECUTIVE SUMMARY

The baseline monitoring program being conducted in Onondaga Lake on behalf of Honeywell is documenting lake conditions prior to remedial action in the lake and is laying the groundwork for future evaluation of the effectiveness of the lake bottom remedy. This report presents the results of the 2009 baseline monitoring efforts.

The baseline monitoring program includes sampling media for which preliminary remediation goals have been established in the lake bottom Record of Decision (ROD) issued by the New York State Department of Environmental Conservation (NYSDEC) and the United States Environmental Protection Agency (USEPA) in 2005. The program also includes sampling media that will be used to measure remedy effectiveness in the future. Baseline monitoring was begun in 2008 and will continue through 2011.

Honeywell's second year of baseline monitoring consisted of three distinct types of efforts (called books), each of which was conducted based on a work plan approved by the NYSDEC prior to monitoring:

- Book 1 work during 2009 included collection and analysis of deep basin water samples by Upstate Freshwater Institute (UFI) with assistance from Syracuse University. Zooplankton and sediment trap samples were also collected at South Deep and analyzed, and profiles of gas dissolved in lake water were also analyzed.
- Book 2 work during 2009 included collection and chemical analysis of 192 adult sport fish and 40 composited samples of smaller prey fish, fish community assessments, fish population surveys, and an evaluation of fish diet. Anchor QEA and the State University of New York College of Environmental Science and Forestry (SUNY-ESF) collected Book 2 samples during 2009. The Cornell Stable Isotope Laboratory analyzed fish and benthic macroinvertebrate samples collected during 2008 and zooplankton samples collected during 2009 for stable carbon and nitrogen isotopes to further assess food web interconnections within the lake.
- Book 3 work included collection and analysis of surface water samples from nine lake tributaries and sediment samples from two major tributaries to Onondaga Lake—Ley Creek and Onondaga Creek. The Book 3 effort was new during 2009 and included baseline surface water and sediment samples, surface water samples during runoff events, and March 2010 snowmelt water samples.

SECTION 1

INTRODUCTION

Honeywell began baseline monitoring of Onondaga Lake in 2008 to document the condition of the lake prior to remedial action and to lay the groundwork for evaluating the effectiveness of the lake bottom remedy identified in the ROD issued by the NYSDEC and USEPA (NYSDEC and USEPA, 2005) and described in the Remedial Design Work Plan for the Lake Bottom (Parsons, 2009). Baseline monitoring will be conducted throughout the remedial design phase until implementation of the remedy begins in 2012. Additional monitoring will take place during and following remedy implementation.

The program objectives for baseline monitoring were presented in the Baseline Monitoring Scoping Document (Parsons, Exponent, and Anchor QEA, 2010) as follows:

- Establish a comprehensive description of baseline chemical conditions prior to remediation to assess remedy effectiveness and to facilitate remedy design
- Provide additional data for future understanding of remedy effectiveness in achieving remediation goals for Onondaga Lake
- Provide habitat-related information

The Baseline Monitoring Scoping Document also describes program elements (i.e., activities such as lake water sampling) and data uses and provides a summary of monitoring being conducted by Honeywell and other entities such as the Onondaga County Department of Water Environment Protection, UFI, SUNY-ESF, and the United States Geological Survey.

The 2009 work scopes for Honeywell's baseline monitoring efforts are documented in two work plan addenda and a work plan submitted to the NYSDEC for approval.

- Addendum to the 2008 Book 1 Work Plan: includes zooplankton and water quality monitoring in the deep basins of Onondaga Lake where water depths exceed 30 ft. and sediment trap sampling (Upstate Freshwater Institute and Syracuse University, 2009)
- Addendum to Book 2: Includes fish sampling (Parsons, Exponent and Anchor QEA, 2009)
- Book 3: Includes tributary water and sediment sampling and analysis (Parsons and Exponent, 2009)

These documents are available in the public document repositories. The baseline monitoring program objectives, program elements, and data uses relevant to Books 1, 2, and 3 are presented in Table 1.

This report describes the results of the 2009 baseline monitoring conducted for Honeywell in Onondaga Lake for Books 1, 2, and 3. Appendices A, B, and C, respectively provide the 2009

Data Usability and Summary Reports (DUSR) for Books 1, 2 and 3. The DUSRs include laboratory data verification, data validation, and data usability.

SECTION 2

SAMPLING AND ANALYSIS SUMMARY FOR 2009

Sample collection, sample management, equipment decontamination, and other field procedures were conducted in accordance with the approved Book 1, Book 2, and Book 3 work plans and addenda to the work plans for Books 1 and 2 for Honeywell's baseline monitoring work in Onondaga Lake. Details on the sampling and analysis program are provided in the Book 1, Book 2, and Book 3 DUSRs. Table 2 summarizes the media, sampling locations, and primary activities for the Honeywell 2009 baseline monitoring work efforts.

2.1 BOOK 1: DEEP BASIN WATER AND ZOOPLANKTON SAMPLING

Book 1 baseline monitoring for 2009 consisted of deep basin water and zooplankton monitoring, sediment trap sampling, and dissolved gas profiles. UFI, with assistance from Syracuse University, collected water column samples from the South Deep location at multiple depths and times from April to November. Zooplankton samples were also collected at South Deep monthly during April, May, and June, and biweekly thereafter. UFI picked samples of large *Daphnia* by hand under a microscope in the laboratory from the bulk zooplankton samples. In addition, vertically detailed *in situ* water quality measurements were made throughout the deep basin using a rapid profiling instrument *in situ* ultraviolet spectrophotometer (ISUS). UFI deployed sediment traps from April through October to collect sediment samples at South Deep at the 10-meter water depth (below the thermocline) to track short-term variations in solids and mercury deposition. Profiles of total dissolved gas were observed monthly. The Book 1 sampling program for 2009 is summarized in Table 3.

2.2 BOOK 2: FISH SAMPLING

The 2009 baseline monitoring included adult sport fish and prey fish sample collection throughout the lake (Figure 1). Unless indicated otherwise, the completed field sampling work was consistent with the scope presented in the Book 2 Work Plan Addendum for 2009 (Parsons, Exponent, and Anchor-QEA, 2009). Fish sampling for tissue chemical analyses was conducted during 2009 by Anchor QEA; and fish population, fish community assessments, and fish gut content work were conducted by SUNY-ESF.

Sampling locations for fish tissue chemical analyses were the same as sampled in 2008, coinciding with historical tissue sampling locations occupied during the remedial investigation (RI), as well as sampling locations included as part of the Onondaga County Ambient Monitoring Program.

Adult sport fish sampling for tissue chemical analyses was conducted from June 16 through July 29, 2009, while prey fish sampling for tissue chemical analyses was conducted from August 18 through August 26, 2009. Fish samples were collected for tissue analyses using the same methods used in 2008 including electrofishing, gill netting, trap netting, and seining. Four adult sport fish species including smallmouth bass (*Micropterus dolomieu*), brown bullhead (*Ameiurus nebulosus*), walleye (*Sander vitreum*), pumpkinseed sunfish (*Lepomis gibbosus*), and prey fish

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from the minnow family (*Cyprinidae*) were collected, excluding carp (*Cyprinus carpio*) and goldfish (*Carassius auratus*). As described in the Book 2 Work Plan Addendum for 2009 (Parsons, Exponent, and Anchor QEA, 2009), carp and goldfish were not included as part of prey fish collection for tissue analysis due to their large size. Exact species of prey fish were determined based on availability and included the two most common species currently captured in the lake, banded killifish (*Fundulus diaphanus*) and golden shiner (*Notemigonus crysoleucas*). In addition, alewife (*Alosa pseudoharengus*) less than 200 mm total length were also collected and analyzed.

The objective of the adult sport fish sampling was to sample 50 individual fish from each species for a total of 200 adult sport fish with a target of six to seven individual fish from each of the four species at each of the eight adult sport fish sampling locations. Each adult sport sample consisted of a single adult sport fish. The number of fish samples is similar to the numbers collected during the remedial investigation, as well as what is currently sampled by NYSDEC for New York State Department of Health (NYSDOH) fish consumption advisories.

Fillet samples (NYSDEC standard fish fillet; skin-on except for brown bullhead) and tissue plugs were collected from each adult sport fish for analysis of the comparability of mercury concentration in the two tissue types and comparison to site remediation goals. Tissue plugs from adult sport fish were evaluated in 2009 for possible use in reducing fish mortality in future years due to continued harvesting while still collecting the required tissue samples for mercury analysis.

Scale or pectoral spine (brown bullhead) samples were collected from each of the adult sport fish to assess age. In addition, otoliths (small ear bones) were collected from smallmouth bass and walleye since they provide a more reliable estimate of age in larger fish and scale samples in 2008 were difficult to interpret. An accurate estimate of age of these two species in the lake will help in understanding mercury dynamics within the lake food web.

For prey fish sampling, three composite samples were collected by seining at each of the eight locations, for a total of 24 composite samples submitted for chemical analyses. Composite samples were comprised of 10 to 15 prey fish per sample, depending on weight. In addition, 16 composites of alewife (three to five fish per sample) captured by gillnetting at three locations were submitted for chemical analysis.

Understanding the dynamics of the food web is important for understanding how mercury is bioaccumulating and resulting in exposure to upper level predators. To further assess the food web structure and mercury cycling in Onondaga Lake, the 2009 baseline monitoring conducted for Honeywell included sampling and analysis of fish gut contents in addition to an assessment of fish population and fish community composition.

Fish gut contents were checked in smallmouth and largemouth bass, bluegill and pumpkinseed sunfish, brown bullhead, alewife and banded killifish. Stomachs of at least 50 brown bullhead, walleye, largemouth bass and pumpkinseed were assessed for gut contents. Fewer than 50 smallmouth bass samples were collected due to limited success from numerous attempts to collect adult smallmouth bass. Stomach contents from each of the fish types were identified to the lowest taxonomic order reasonably achievable and abundance of each reported.

The density and distribution of adult sport fish were assessed during the spring, summer, and fall of 2009 at over 30 locations throughout the lake using gill and trap netting to determine overall community structure (Figure 2). Individual largemouth bass, pumpkinseed and bluegill sunfish were measured for total length (mm), marked with a fin clip (for smaller fish) or uniquely numbered t-bar anchor floy tag (for larger fish), and examined for marks during each sampling period. Similar to 2008, multiple fish population and fish community sampling efforts were completed during 2009 with each month representing one sampling period extending three to five days per month. Population estimates for largemouth bass were calculated using the modified Schnabel estimator (Ricker, 1975). Population estimates for pumpkinseed and bluegill sunfish were calculated using the Chapman estimate as described in the *Book 2 Work Plan for 2008* (Parsons, Exponent and QEA, 2008).

Also included as part of the 2009 Book 2 work were analyses of stable carbon (C) and nitrogen (N) isotope conducted by Cornell Isotope Laboratory. These stable isotope analyses resulted in ratios of carbon ($^{13}\text{C}/^{12}\text{C}$) and nitrogen ($^{15}\text{N}/^{14}\text{N}$) from fish and macroinvertebrate samples preserved from the 2008 baseline monitoring work and from zooplankton collected during 2009. These analyses were conducted to improve understanding of food web patterns and contaminant bioaccumulation in aquatic systems. An understanding of the relative significance of benthic or sediment-based food sources (located in littoral regions of the lake) and pelagic or plankton-based food sources (located in open waters) is important, as this differentiation may influence the effectiveness of the remedy. To that end, the ratio of $^{13}\text{C}/^{12}\text{C}$ is used to distinguish between food sources (e.g., benthic vs. pelagic) while the ratio of $^{15}\text{N}/^{14}\text{N}$ is used to assess trophic position of the organisms studied. Stable isotope data are often used in conjunction with gut content analysis, as each approach of assessing food webs has limitations. The analyses are described in Section 2.4.

2.3 BOOK 3: TRIBUTARY SURFACE WATER AND SEDIMENT SAMPLING

Book 3 tributary surface water sampling was conducted in Ninemile Creek and Onondaga Creek since these two tributaries were identified as the tributaries providing significant contributions of mercury to the lake in the *Onondaga Lake Remedial Investigation Report* (TAMS, 2002). Seven minor tributaries (Ley Creek, Harbor Brook, Tributary 5A, the East Flume, the West Flume, Sawmill Creek, and Bloody Brook) also contributed mercury to Onondaga Lake in 1992, so they were also sampled. Figure 3 shows the 2009 tributary sampling locations.

Surface water samples were collected manually as grab samples from 10 locations – two along Ninemile Creek (upstream at Amboy Dam and downstream at State Fair Boulevard), one along Onondaga Creek (downstream at Spencer Street – upstream of Syracuse Harbor) and one near mouth of each of the seven minor tributaries. Surface water samples for base flow (total of 20 biweekly base flow days) events were collected biweekly from May through November 2009 with three locations sampled for 16 days and all 10 locations sampled for four days. Two significant storm events at Ninemile Creek (Amboy Dam and State Fair Boulevard) and three storm events at Onondaga Creek (Spencer Street) were also sampled. In addition, continuous turbidity data were collected from Ninemile Creek at State Fair Boulevard.

Onondaga Creek and Ley Creek were selected for tributary sediment sampling, because they are potential sources of CPOIs to Onondaga Lake. Ley Creek, in particular, was identified as one of the most important sources of PCBs to Onondaga Lake in the *Onondaga Lake Remedial Investigation Report* (TAMS, 2002). Sediment samples were collected as grab samples one time from a total of 9 locations in Onondaga Creek and 5 locations in Ley Creek.

A total of 18 snowmelt samples were collected from March 11 through March 18, 2010 as part of the Book 3 work. Six of these snowmelt samples were collected from Onondaga Creek at Spencer Street, six were collected from Ninemile Creek upstream at Amboy Dam, and six snowmelt samples were collected from Ninemile Creek downstream at State Route 48 (State Fair Boulevard). Sampling of snowmelt along Onondaga Creek included collection of two samples while snowmelt flow was rising, two samples during peak flow and two samples while snowmelt flow was receding with the last sample collected four days following peak flow. Sampling of snowmelt along Ninemile Creek consisted of two snowmelt samples collected while snowmelt flow was rising, one sample during peak flow, and three samples collected while snowmelt flow was receding with the last sample collected four days following peak flow (Figure 17).

2.4 SAMPLE ANALYSES

Book 1 samples collected and analyzed during 2009 consisted of surface water, zooplankton, and sediment trap solids. Book 1 water samples collected during 2009 were analyzed for numerous water quality parameters including total mercury and methylmercury. Zooplankton samples were also analyzed for total mercury and methylmercury. Syracuse University analyzed the 2009 *Daphnia* zooplankton samples based on their ability to analyze total mercury and methylmercury using a nitric acid digestion to prepare the sample for analysis as described in the *2008 Baseline Monitoring Report* (Parsons, 2010). Sediment trap solids (slurry) were analyzed for total suspended solids, fixed and volatile suspended solids, inorganic carbon, calcium, and total mercury monthly from April through June and biweekly from July through mid October. Solids from one sediment trap were analyzed for total mercury while samples from two other sediment traps collected in triplicate on each date were archived for potential future analyses.

Fish samples collected and analyzed for chemical content during 2009 consisted of adult sport fish and prey fish. The 2009 adult sport fish samples included 42 smallmouth bass, 50 walleye, 50 pumpkinseed, and 50 brown bullhead that were analyzed for mercury in both tissue plugs and fillets. The 2009 prey fish samples consisted of 24 composite prey fish and 16 composite alewife samples that were analyzed for mercury.

A subset of adult sport fish fillet samples (12 smallmouth bass and 12 walleye) were analyzed for polychlorinated biphenyls (PCBs), dichloro diphenyl trichloroethane (DDT) and its metabolites, hexachlorobenzene, and lipids. Adult sport fish samples selected for analysis of PCBs, DDT and its metabolites, hexachlorobenzene, and lipids were representative of various locations in the lake.

Another part of the Book 2 program conducted in 2009 was analysis of 85 tissue samples for stable isotopic ratios of carbon ($^{13}\text{C}/^{12}\text{C}$) and nitrogen ($^{15}\text{N}/^{14}\text{N}$). A total of 85 samples collected in 2008 from different organism types including amphipods, chironomids, zebra

mussels, composite prey fish species (golden shiner and minnow), pumpkinseed, brown bullhead, small mouth bass and walleye; and a 10 zooplankton samples collected in 2009 were analyzed by the Cornell Isotope Laboratory for specific carbon and nitrogen isotopes.

Surface water grab samples collected as part of the Book 3 tributary sampling were analyzed for unfiltered total mercury, unfiltered methylmercury, and TSS. In addition, 48 base flow samples were analyzed for unfiltered PCB aroclors and dioxins/furans, and 8 grab samples analyzed for dissolved total mercury. Representative baseflow and storm event samples were analyzed for dissolved total mercury. Sediment grab samples were analyzed for target compound list (TCL) volatile organic compounds (VOCs), TCL semi-VOCs, total petroleum hydrocarbons, polychlorinated biphenyls (PCB) aroclors, eight metals including arsenic, cadmium, chromium, copper, lead, mercury, nickel, and zinc, total organic carbon (TOC) and percent solids. Representative samples from each tributary were analyzed for grain size.

The 18 snowmelt water samples collected from March 11 to 18, 2010 were analyzed unfiltered for total mercury, methylmercury, and total suspended solids (TSS). Nine of the 18 snowmelt samples were also analyzed for dissolved total mercury.

SECTION 3

DATA MANAGEMENT AND VALIDATION SUMMARY

3.1 FIELD DATABASE

Validated samples from each of the Baseline Monitoring Year 2 (2009) efforts were stored and accounted for in Honeywell's Locus Focus data management system for Onondaga Lake. The data collection program implemented for the 2009 baseline monitoring efforts for Onondaga Lake is the same as is being implemented for the Honeywell pre-design investigation efforts.

3.2 QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

Sample identification, QA/QC procedures, sample collection, data entry, and data validation for the Baseline Monitoring Year 2 (2009) efforts work were conducted in accordance with the agency-approved work plans for Books 1 and 2 for 2008 (UFI and SU, 2008; and Parsons, Exponent, and QEA, 2008; respectively) and agency-approved addenda to the 2008 work plans for Book 1 and 2 (UFI and SU, 2009; and Parsons, Exponent and Anchor QEA, 2009) in addition to the Book 3 *Tributary Monitoring Work Plan for 2009* (Parsons and Exponent, 2009). Verification of sampling information and chemical data occurred at several levels during the field and laboratory work. Data verification included checking procedures for compliance with the project plan, correctness of protocols used in the field and at the laboratory, comparability of the data collection and analysis procedures, and completeness of the data set and supporting documentation.

Test America Laboratories (TAL), Brooks Rand and Accutest conducted the 2009 baseline monitoring laboratory analyses with two exceptions: (1) water quality analyses by UFI for various parameters other than mercury and methylmercury; and (2) *Daphnia* zooplankton mercury analyses conducted by Syracuse University.

3.3 DATA VALIDATION

Chemical analytical data generated during this investigation from Test America, Brooks Rand, Accutest, and UFI were reviewed and validated for usability in accordance with data validation procedures described in the DUSRs (Appendices A, B, and C to this report). Baseline monitoring results presented in these appendices have been incorporated into the Locus Focus database. Data usability for the 2009 Books 1, 2, and 3 is presented in Appendices A, B, and C to this report.

SECTION 4

DATA ASSESSMENT

4.1 BOOK 1 RESULTS FOR 2009

4.1.1 Deep Basin Water Quality

The deep basin water monitoring data provide a basis to measure if surface water quality standards (one of the preliminary remediation goals identified in the ROD) have been achieved and a basis to measure success in controlling key processes (such as, mercury methylation in the hypolimnion and mercury release from profundal sediment), as indicated in Table 1. The deep basin water column sampling focuses on mercury, which undergoes a dynamic cycling process each summer in Onondaga Lake, primarily as a function of lake stratification and subsequent oxygen depletion. Mercury is of concern because methylmercury accumulates in the hypolimnion during stratification, bioaccumulates, and poses potential risks to human health and the environment if fish are consumed.

Other water quality parameters were also monitored to provide insight into lake stratification and mercury cycling. Dissolved oxygen and nitrate are particularly important parameters because methylmercury production occurs in the absence of dissolved oxygen and only at low concentrations of nitrate as discussed in the Interpretive Report (Upstate Freshwater Institute and Syracuse University, 2008a). The addition of oxygen and nitrate is under consideration during remedial design as a means to control methylmercury accumulation in the hypolimnion of Onondaga Lake. A three-year nitrate addition pilot test is scheduled for 2011 through 2013 based on a work plan submitted to the agencies in June 2010 (Parsons and UFI, 2010).

Figures 4 through 7 present the 2009 dissolved oxygen, nitrate-nitrogen, unfiltered methylmercury and unfiltered total mercury results measured at South Deep over time at depths of 2 meters (epilimnion), 12 meters (near the top of the hypolimnion), 16 meters (mid-hypolimnion), and 18 meters (bottom of the hypolimnion). Plots for these water depths are presented because they were the water depths most consistently sampled during 2009.

During summer stratification, dissolved oxygen and nitrate became depleted in the hypolimnion while the concentration of methylmercury increased. In 2009, dissolved oxygen concentrations declined to zero at 18-meter water depth by early July, nitrate concentrations declined to their lowest value at 18-meter water depth in early October, while methylmercury concentrations reached their peak (6.86 nanograms per liter or ng/L) at this same depth in the week prior to turnover, which occurred during the week of October 5, 2009. The highest methylmercury concentrations occurred under conditions of low oxygen and nitrate. At the 2-meter water depth, a depth which likely reflects the water quality conditions to which biota are primarily exposed, methylmercury concentrations ranged between 0.04 and 0.11 ng/L throughout the sampling period with the exception of the four weeks following fall turnover (October 5, 2009) when concentrations exceeded this range, with a maximum value of 0.3 ng/L. Total mercury concentrations at the 2-meter, 12-meter, 16-meter, and 18-meter depths in the water

column increased during July and again during September prior to fall turnover. At fall turnover, the lake mixes and the concentrations of dissolved oxygen, nitrate, and methylmercury are generally equivalent throughout the water column. These patterns can be seen in plots of dissolved oxygen, nitrate-nitrogen, methylmercury, and total mercury by depth for each sampling date provided in Appendix C. Dissolved total mercury concentrations are presented in Table 4. Only one sample (from June 22, 2009) exceeded the lowest NYSDEC surface water quality standard for dissolved total mercury (0.7 ng/L for protection of human health).

4.1.2 Zooplankton Mercury Concentrations

Figure 8 presents total mercury and methylmercury concentrations measured in zooplankton collected during 2009. Figure 9 presents methylmercury as a percent of total mercury for these samples. Total mercury concentrations were relatively low early in the season with the highest concentrations observed during and after fall turnover (October) and a decrease in concentrations late in the season (November, following fall turnover). Methylmercury concentrations followed the same trend as concentrations of total mercury with relatively low concentrations throughout the season but higher concentrations observed in October following lake turnover. Methylmercury as a percent of total mercury increased from late July to mid August with a decrease in percentages through mid September and highest percentage (approximately 60 percent) observed in mid August preceding fall turnover. There was another increase in percent methylmercury (of total mercury) following fall turnover in October before decrease in values late in the season (late November, post fall turnover). The increases in total mercury, methylmercury, and percent methylmercury in early October may be attributed to fall turnover mixing of upper waters with deeper waters that contain higher concentrations of total and methylmercury relative to upper waters.

Certain types of zooplankton (such as relatively large and visible *Daphnia*) have been documented in the literature to migrate vertically diurnally due to their ability to adapt to low dissolved oxygen (DO) conditions, and thus may be exposed to conditions found in deeper water and found well below the thermocline. The importance of this migration to bioaccumulation of mercury by fish in Onondaga Lake is unknown; however, dissolved oxygen levels at the 12-meter water depth were at or near zero throughout the summer of 2009 (Figure 4), while methylmercury levels were comparable to methylmercury levels at the 2-meter water depth (Figure 6). Dissolved oxygen levels at the 16-meter water depth are also at or near zero throughout the summer, while in late August to early September methylmercury levels started to rise to levels above methylmercury levels at the 2-meter water depth.

Table 5 presents results from the 2009 *Daphnia* analyses for total mercury and methylmercury, on a dry-weight basis. Total mercury concentrations in *Daphnia* ranged from 0.57 to 1.56 milligrams per kilogram (parts per million) which is equivalent to 0.06 to 0.17 parts per million on a wet-weight basis assuming *Daphnia* have a typical solids content of 11 percent by weight based on prior year work. Methylmercury as a percentage of total mercury ranged from 21 to 32 percent.

4.1.3 Zooplankton Community Composition

The zooplankton community was generally composed of copepods, rotiferers, other cladocerans, and daphnids. Their occurrence and biomass are presented in Figure 10. The highest biomass was observed in early July and mid August, with biomass quantities decreasing through November with the exception of a high biomass quantity observed in early November following fall turnover. Daphnid biomass was also recorded throughout this time period.

4.1.4 Sediment Trap Solids and Mercury

Table 6 presents mercury in slurry, triplicate TSS results, and calculated mercury on slurry solids collected from the sediment traps as part of the Book 1 effort in 2009. Slurry mercury concentrations ranged from 0.81 to 5.26 nanograms per milliliter (ng/ml) from late April through mid-September before increasing to a maximum concentration of 7.56 ng/ml on October 12 following fall turnover. Mercury concentrations in slurry solids ranged from 0.18 to 1.85 from late April through mid-September and ranged from 2.15 to 3.53 mg/kg) from mid-September until the end of the monitoring period in mid-October. The average mercury content of sediment trap solids measured from April through mid-October 2009 was 1.65 mg/kg.

4.1.5 Total Dissolved Gas Measurements

Total dissolved gas remained at or near 100 percent saturation throughout 2009 with no indications of over-saturation in the hypolimnion. As indicated in the 2008 Baseline Monitoring Report and supported by 2009 results, gas ebullition in the hypolimnion is unlikely to be a significant process for mercury release from sediment to overlying water.

4.2 BOOK 2 RESULTS FOR 2009

4.2.1 Adult Sport Fish and Prey Fish Chemical Results

Mercury was detected in all samples from adult sport fish plugs (0.10 to 4.0 mg/kg), adult sport fish fillets (0.10 to 4.80 mg/kg), whole-body prey fish composite samples (0.08 to 0.85 mg/kg), and whole-body alewife composite samples (0.01 to 0.29 mg/kg) (Table 7). PCBs were detected in all 12 smallmouth bass and walleye fillets samples (1.25 to 6.21 mg/kg in smallmouth bass and 1.38 to 15.80 mg/kg in walleye), DDT and metabolites were detected in all samples (0.01 to 0.10 mg/kg in smallmouth bass and 0.02 to 0.26 mg/kg in walleye) (Table 7). Lipids content in 12 smallmouth bass and in 12 walleye fillets ranged from 0.47 to 7.4 percent by weight (Table 7).

Total mercury was analyzed in adult sport fish plugs to assess the comparability of fillet and tissue plug results, and thus the feasibility of using tissue plugs in future sampling efforts for mercury to reduce the overall mortality of fish sampled for chemical analysis. Good correlation is evident among the four species between fillet mercury and plug mercury concentrations (Figure 11, data from 2008 are included as well).

PCB aroclor results can be reported differently and different bases for reporting aroclor totals can affect reported values. For example, overlapping chromatogram peaks can be quantified and then summed to quantify a total PCB concentration, thus potentially biasing high the reported result for total PCBs. Overall, the 2009 fixed PCB data were found to be acceptable and consistent with methods specified for this project.

Mercury and PCBs concentration versus age in adult sport fish was evaluated to assess trends with age. Mercury concentration tends to increase with age in smallmouth bass, walleye, and pumpkinseed sunfish; no trend is apparent for brown bullhead (Figures 12 and 13). PCBs concentration also tends to increase with age in smallmouth bass and walleye (Figure 14) although the correlation is less significant for PCBs than for mercury. Based on the objective to collect and analyze fish that may be consumed by humans, the majority of smallmouth bass sampled in 2009 were greater than 8 years old, given the legal size limit for smallmouth bass is a minimum of 12 inches.

4.2.2 Stable Isotope Results

Results of stable isotope analyses can be used to evaluate position of the lake's organisms within the food web as well as diet and original carbon source, both of which help to better understand local bioaccumulation pathways. A value called “ δ ” is calculated using the equation:

$$\delta = [(R_{\text{SAMPLE}}/R_{\text{STANDARD}} - 1)] * 1000$$

where R is the ratio of the heavy isotope to the light (and generally most abundant) isotope.

δ is reported in parts per thousand (‰), where a value of 0 ‰ means that the sample is identical to the standard. A negative δ value indicates that the sample is lighter and a positive value indicates that the sample is heavier than the standard. In general, an increase in $\delta^{15}\text{N}$ represents an increase in trophic level. Differences in $\delta^{13}\text{C}$ show differences in food sources.

Patterns in $\delta^{15}\text{N}$ values provide information on relative position in the food web. As shown in Figure 15, zebra mussels and amphipods from 2008 share similar, relatively low $\delta^{15}\text{N}$ values representing lower trophic level consumers. In comparison, smallmouth bass and walleye from 2008 also share similar $\delta^{15}\text{N}$ values, although higher than zebra mussels and amphipods, indicating upper trophic level predators (i.e., fish that consume other fish instead of plankton or invertebrates).

Patterns in $\delta^{13}\text{C}$ provide insight about diet of various lake organisms. As shown in Figure 16, two distinct $\delta^{13}\text{C}$ clusters are evident in organisms from Onondaga Lake, which represent two different food sources. One cluster includes amphipods, chironomids, golden shiners, and minnows and represents a benthic food source while the other cluster includes zebra mussels, zooplankton, smallmouth bass, and walleye and represents a water column food source. This second cluster is of particular importance for Onondaga Lake because it indicates a common carbon source amongst plankton, bass, and walleye. The carbon source is phytoplankton, which is consumed by zebra mussels and zooplankton and which is exposed to methylmercury through the water column. The observation that smallmouth bass and walleye share a similar carbon source with zooplankton, rather than through sediment via benthic macroinvertebrates, suggests that decreases in methylmercury concentrations in surface water and, therefore, phytoplankton should eventually be reflected in decreased smallmouth bass and walleye mercury concentrations.

4.2.3 Fish Gut Analysis

Fish diets as determined by SUNY-ESF based on gut content analysis are presented in Table 8. The diets of the two sunfish species, pumpkinseed and bluegill, varied considerably in

Onondaga Lake during 2009. Pumpkinseed diet was dominated by amphipods, gastropods, chironomids and chironomid pupae (fish lengths were 2.4 to 8.1 inches or 61 to 206 millimeters). The diet also consisted of a smaller amount of zebra mussels, eggs, lepidopterans, isopods and trichopteran. Bluegill diet was made up primarily of amphipods, chironomids, and lepidopterans (fish lengths were 2.0 to 8.1 inches or 52 to 205 millimeters). Trichopterans, chironomid pupae, acariforms, and eggs also were found consistently in bluegill stomachs. The observed difference in diet between sunfish and bluegill was expected based on general understanding of life histories of the two sunfish species. Young-of-year (YOY) sunfish diet was considerably different than that of the larger-sized sunfish discussed above (fish lengths were 0.9 to 2.4 inches or 24 to 60 millimeters). Chironomid larvae, bosmina, copepods, amphipods, and amphipod larvae made up the majority of their diet. Brown bullhead diet was dominated by chironomids, eggs, and amphipods (sample fish lengths were 11 to 14 inches or 274 to 350 millimeters).

A large number of largemouth bass stomach contents were evaluated since legal size smallmouth bass were not readily captured. The majority of bass sampled (38 out of 60) had empty stomach contents. The diet of largemouth bass (fish lengths were 10 to 18 inches (265 to 449 mm) from 22 fish) was dominated by fish (mainly centrarchid and tessellated darters). Stomachs from three largemouth bass also contained crayfish. Stomachs from the largemouth bass that contained crayfish were captured in SMU 3, SMU 2, and North of Ley Creek (in SMU 5). Stomachs from five smallmouth bass were examined (fish lengths were 8.4 to 9.2 inches [214 to 234 mm]). Stomach contents in the three fish that contained items were dominated by amphipods and small fish (centrarchid).

The diets of alewife and banded killifish were examined to evaluate the diet of prey species. These fish were captured in the littoral zone of the Onondaga Lake. Alewife (142 to 185 mm fish length) diet was dominated by amphipods with smaller amounts of chironomids and four other food species. Chironomid larvae and mussel veligers were the primary food found in the diet of banded killifish (fish lengths were 1.9 to 3.4 inches [48 to 86 mm]).

4.2.4 Fish Community Assessment

Fish representing 42 species were captured or observed in Onondaga Lake by the Honeywell team during sampling from May through October 2009. Fish from 33 species were captured with trapnets, 19 with gill nets, and 30 with a boat electroshocker. In addition, 3 fish species were observed in the lake without being captured (Table 9). Data from prey fish community assessment (seining performed during 2009 by Onondaga County) will be reported separately as part of Onondaga County's Ambient Monitoring Program work. A summary of fish species collected during electrofishing is included in Table 9.

During the monthly trap net sampling, nets were set in the evening and checked the following morning at each location. A total of 8,857 fish representing 33 species were captured during 60 net nights in 2009 (Table 10). The fish community sampled through trap netting was dominated by largemouth bass (22 percent), which included a large number of largemouth bass young-of-the-year (1,501) captured at Ninemile Creek in July 2009. Banded killifish made up 16 percent of the community followed by bluegill (9 percent), bluegill young-of-the-year (6 percent), pumpkinseed (10 percent), pumpkinseed young-of-the-year (5 percent), brown bullhead

(6 percent), and golden shiner (7 percent). The number of species captured at each site varied from 16 species at the Liverpool Marina to 23 species captured at Metro (see Table 10).

Sixty-two (62) gill nets were set for baseline community monitoring between May 19, 2009 and October 28, 2009 at 11 different locations throughout Onondaga Lake (Table 11). A total of 564 fish and 19 species were captured during sampling. The most common fish captured were walleye (36 percent), channel catfish (21 percent), and common carp (13 percent) (Table 12). Six lake sturgeons were captured, each of which was captured at a different gill-net site. Eight brown trout also were captured during sampling in May. The number of species captured with gill nets per site varied between zero captured South of Ley Creek (2 net sets) to 13 captured at the Wastebed B site (6 net sets) (see Table 12).

4.2.5 Fish Population Assessment

For adult pumpkinseed fish lengths of 4 inches (100 mm) or more, a total of 3,015 fish were captured during 2009, including 35 recaptures, during two sampling events. The lakewide pumpkinseed population for 2009 was estimated at 61,411 with a 95 percent confidence interval between 44,483 and 87,383 based on the adjusted Peterson estimator (Ricker, 1975). For adult bluegill (fish lengths of 4 inches or more), 520 fish were captured from May to September 2009, with no recaptures. Due to the lack of recaptures, a population estimate was not possible for 2009. For adult largemouth bass (fish lengths of 12 inches (300 mm) or more, 536 fish were captured, including 24 recaptures, during seven sampling events. The lake-wide largemouth bass population for 2009 was estimated at 4,752 with a 95 percent confidence interval of 3,246 to 7,244 fish based on the modified Schnabel estimator (Ricker, 1975).

4.3 BOOK 3 RESULTS FOR 2009

4.3.1 Tributary Surface Water Sampling Results

Table 13 presents unfiltered total mercury and methylmercury concentrations measured in tributary surface water samples collected as part of the Book 3 effort. The highest total mercury concentrations were observed in water samples from Onondaga Creek (77.1 ng/L) and Ninemile Creek (110 ng/L). Similarly, the highest methylmercury concentrations were observed in water samples from Onondaga Creek (0.86 ng/L) and Ninemile Creek (1.3 ng/L). Four samples (two from Onondaga Creek and two from Ninemile Creek) collected during September and October 2009 as part of the Book 3 work exceeded the NYSDEC water quality standard of 0.7 ng/L for dissolved total mercury as shown in Table 14. Dissolved total and unfiltered total mercury and methylmercury concentrations in water samples from the other smaller tributaries were relatively lower than concentrations in samples from the major tributaries, Onondaga Creek and Ninemile Creek. Unfiltered PCB concentrations in water samples collected on baseflow days are presented in Table 15. The highest and only detected PCB concentrations were 0.11 and 0.22 ug/L observed in Ley Creek and Harbor Brook respectively.

Toxicity equivalent quotients (TEQs) were calculated using human and mammalian toxic equivalency factors (TEFs) from Van den Berg et al. (2006) for the 42 tributary water samples analyzed in 2009 for dioxins-furans. These TEQs are presented in Table 16. The standard approach of using the detection limit for undetected congeners results in TEQs that are 41 to several thousand percent higher than when concentrations for undetected congeners are set equal

to one-half the detection limit. The influence of detection limits in the TEQ calculation indicates that numerous congeners are undetected in these samples.

4.3.2 Snowmelt Sampling Results

Figure 17 presents the creek flow and sampling times for Onondaga Creek and Ninemile Creek during snowmelt sampling conducted March 11-18, 2010. There was an increase in flow in both creeks between March 13 and 15. This increase was driven by snowmelt, as there was no significant rainfall during those three days. The recordable precipitation for these days ranged from 0.01 to 0.05 inch.

Table 17 presents total mercury, unfiltered methylmercury, and TSS concentrations measured in tributary snowmelt samples collected in March 2010 as part of the Book 3 effort. Total mercury concentrations in Onondaga Creek ranged from 3.41 to 7.14 ng/L and those in Ninemile Creek ranged from 2.11 to 22.7 ng/L. Dissolved total mercury concentrations were 7 to 15 percent of the unfiltered mercury concentrations. Unfiltered methylmercury concentrations ranged from 0.05 to 0.12 ng/l and 0.04 to 0.14 ng/L in Onondaga Creek and Ninemile Creek, respectively. Methylmercury concentrations in each of the snowmelt samples were less than 5 percent of the unfiltered total mercury concentrations. Mercury concentrations associated with solid particles in March 2010 snowmelt ranged from 0.06 to 0.57 parts per million.

4.3.3 Tributary Sediment Sampling Results

Six sediment samples collected from Ley Creek were analyzed for polyaromatic hydrocarbons (PAHs) and PCBs. Three of the sediment samples collected from Ley Creek were analyzed for PCB congeners and for PCB aroclors. Total PAH concentrations in Ley Creek sediment ranged from 18 to 526 parts per million based on PAHs detected, while total PCB concentrations in Ley Creek sediment based on PCB aroclors detected ranged from 0.91 to 5.2 parts per million.

Eleven samples from Onondaga Creek were analyzed for PAHs and PCBs. Two of the sediment samples collected from Onondaga Creek were analyzed for PCB congeners and for PCB aroclors.

Total PAH concentrations in Onondaga Creek sediment based on PAHs detected ranged from 4 to 19 parts per million while total PCB concentrations in Onondaga Creek sediment based on PCB aroclors detected ranged from 0.01 to 0.09 parts per million.

SECTION 5

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TABLES

TABLE 1

**ONONDAGA LAKE BASELINE MONITORING PROGRAM OBJECTIVES,
PROGRAM ELEMENTS, AND DATA USES RELEVANT TO BOOKS 1, 2 AND 3 FOR 2009**

Program Objective	Program Element	Data Use (as Baseline for Remedy Effectiveness)
Establish baseline chemical and physical conditions	Sport and prey fish sampling	Provide basis to measure achievement of PRG2 (fish tissue target concentrations)
	Lake water sampling	Provide basis to measure achievement of PRG3 (surface water quality standards) Provide basis to measure success in controlling key processes (e.g., mercury methylation, sediment resuspension from the in-lake waste deposit, mercury release from profundal sediment)
Provide additional data for future understanding of remedy effectiveness in achieving PRGs	Other biota sampling ^a	Assess biological factors that may contribute to variability in fish mercury concentrations
Provide additional data for future understanding of remedy effectiveness in achieving PRGs	Tributary surface water sampling	Provide basis to measure effectiveness of upland Honeywell remedies by quantifying loadings of mercury entering Onondaga Lake
	Tributary sediment sampling	Provide data to evaluate potential for CPOIs in Ley Creek and Onondaga Creek to impact lake following remediation

Adapted from Table 1 of Baseline Monitoring Scoping Document (Parsons, Exponent, and QEA, 2010)

^aOther than adult sport and prey fish (i.e zooplankton)

PRG - preliminary remediation goal

TABLE 2
SUMMARY OF HONEYWELL 2009 BASELINE MONITORING WORK COMPLETED

WORK PLAN AND MEDIA	LOCATIONS	PRIMARY ACTIVITY (April through November)
BOOK 1 Deep Basin Water and Zooplankton Monitoring		
Surface Water	South Deep (3 to 5 water depths)	Collected and analyzed monthly, biweekly or weekly grab samples for multiple parameters, including total mercury and methylmercury.
	10 locations	Collected weekly rapid profiling measurements for nitrate, sulfide, and six other parameters.
Zooplankton	South Deep	Monthly to biweekly sampling and analyses for total mercury and methylmercury.
Sediment Traps	South Deep	Monthly to biweekly sampling and analyses for total suspended solids, fixed and volatile suspended solids, particulate carbon, total and acidified calcium and total mercury.
BOOK 2 Fish Monitoring		
Adult Sport Fish	SMUs 2 through 7 (8 locations)	Collected and analyzed a total of 192 adult fish during June and early September from four fish species (50 brown bullhead, 50 walleye, 50 pumpkinseed, and 42 smallmouth bass). Assessed fish age, population, and community composition, including fish gut content.
Prey (forage) Fish	SMUs 2 through 7 (same 8 locations as for adult sport fish)	Collected and analyzed three composites of prey fish during August from eight locations (24 composites) in addition to 16 composites of alewife (40 composites total). Assessed fish population and community composition, including fish gut content.
BOOK 3 Tributary Monitoring		
Surface Water	Ninemile Creek, Onondaga Creek and smaller tributaries including Ley Creek, Harbor Brook, Tributary 5A, East Flume, West Flume, Sawmill Creek and Bloody Brook (10 locations)	Biweekly sampling from Ninemile Creek and Onondaga Creek locations conducted from May through November in addition to sampling during three storm events. Sampling from the other smaller tributaries was conducted four times as part of baseflow sampling.
Sediment	Onondaga Creek (9 locations) and Ley Creek (5 locations)	Sampling conducted from September 3-4 and once in November 2009.
Snowmelt Water	Onondaga Creek (6 samples) and Ninemile Creek (6 samples)	Sampling conducted March 11-18, 2010.

Note: Fall turnover during 2009 occurred in Onondaga Lake during the week October 5.

TABLE 3
2009 ONONDAGA LAKE BOOK 1 SMU 8 WATER COLUMN WORK SUMMARY

Date	Water column		Zooplankton South Deep	Sediment Trap Mercury South Deep (10- meter water depth)	Dissolved Gas Measurements
	South Deep	ISUS profiling 10 sites			
April 27	3 depths	◇	□	○	
May 26	3 depths	◇	□	○	
June 22	3 depths	◇	□*	○	
July 6	8 depths	◇	□*	○	⊙
July 20	10 depths	◇	□*	○	⊙
August 4	10 depths	◇	□*	○	⊙
August 17	11 depths	◇	□	○	⊙
August 31	10 depths	◇	□*	○	⊙
September 8	11 depths	◇	□	○	⊙
September 14	10 depths	◇		○	⊙
September 21	10 depths	◇	□	○	⊙
September 28	9 depths	◇		○	⊙
October 5	7 depths	◇	□	○	⊙
October 12	3 depths	◇	□	○	
October 26	3 depths	◇	□		
November 9	3 depths	◇	□		
November 23	3 depths	◇	□		

* Daphnia observed and collected for analysis.

TABLE 4

**2009 DISSOLVED MERCURY
WATER CONCENTRATIONS:
SOUTH DEEP
AT 2-METER DEPTH**

Sample Date	DISSOLVED MERCURY ng/L (avg of field dups)	DQ
4/27/2009	0.50	<i>U</i>
5/26/2009	0.50	<i>J</i>
6/22/2009	1.20*	<i>J</i>
7/6/2009	0.66	
7/20/2009	0.57	<i>J</i>
8/4/2009	0.54	
8/17/2009	0.40	<i>J</i>
8/31/2009	0.29	<i>J</i>
9/8/2009	0.30	<i>J</i>
9/14/2009	0.42	
9/21/2009	0.42	
9/28/2009	0.44	
10/5/2009	0.37	<i>J</i>
10/12/2009	0.42	
10/26/2009	0.40	<i>J</i>
11/9/2009	0.44	
11/23/2009	0.30	<i>J</i>

* Exceeds New York State surface water quality standard of 0.7 ng/L for class C/D waters based on human consumption of fish.

TABLE 5**MERCURY CONCENTRATIONS IN DAPHNIA ZOOPLANKTON SAMPLES
COLLECTED AT SOUTH DEEP DURING 2009 AND ANALYZED BY SYRACUSE
UNIVERSITY**

Field Sample ID	Date	Total mercury (part per million dry weight)	Methylmercury (part per million dry weight)	Methylmercury (Percent of Total Mercury)
D4	6/22/2009	1.56	0.45	29
D5	7/6/2009	0.70	0.22	32
Average of D6 and D9 (dup of D6)	7/20/2009	0.59	0.17	29
D7	8/4/2009	0.57	0.19	31
D8	8/31/2009	0.72	0.15	21

Note: These daphnia zooplankton data were not able to be validated, because documentation of quality assurance laboratory procedures was not available from the laboratory.

TABLE 6

**2009 BOOK 1 SEDIMENT TRAP MERCURY AND CORRESPONDING TOTAL SUSPENDED SOLIDS (TSS)
RESULTS**
(traps set at 33 ft (10-meter) water depth)

(a) Date	(b) Slurry Mercury Results (ng/ml)	(c) Triplicate TSS Results (mg/L)	(d) TSS Average (mg/L)	(e) Mercury in Slurry Solids, (mg/kg, calculated)
4/27/09	2.53	1964 / 1940 / 1776	1890	1.34
5/26/2009	1.58	1752 / 2160 / 992	1630	0.97
6/22/2009	2.84	1800 / 1820 / 1856	1820	1.56
7/6/2009	1.93	1108 / 1576 / 1476	1390	1.39
7/20/2009	5.26	3008 / 3076 / 2452	2850	1.85
8/4/2009	1.9	1732 / 1768 / 1892	1800	1.06
8/17/2009	0.81	4208 / 4636 / 4556	4470	0.18
9/8/2009	1.19	1476 / 2048 / 2176	1900	0.63
9/21/2009	3.74	1052 / 976 / 1148	1060	3.53
9/28/2009	1.31	656 / 500 / 672	609	2.15
10/5/2009	5.09	2172 / 1480 / 1544	1730	2.94
10/12/2009	7.56	3572 / 3152 / 3496	3410	2.22
Arithmetic Mean	2.98		2047	1.65

Notes:

1. Column (e) = Columns [(b)/(d)] x 1000 ml/L.
2. ng/ml - nanogram per milliliter
mg/L - milligram per liter
mg/kg - microgram per kilogram or part per million.

TABLE 7

SUMMARY OF BOOK 2 2009 FISH TISSUE CHEMICAL CONCENTRATIONS MEASURED
IN ONONDAGA LAKE (wet weight basis)

Parameter	Prep	Species	Sample Size	Mean (mean whole body)*	Min	Max	Standard Error
Mercury (mg/kg wet-weight)	whole body	Alewife	16	0.11	0.01	0.29	0.02
	whole body	Prey fish	24	0.30	0.08	0.85	0.05
	fillet	Brown bullhead	50	0.28 (0.20)	0.11	0.63	0.02
	fillet	Pumpkinseed	50	0.40 (0.28)	0.10	0.68	0.02
	fillet	Smallmouth bass	42	1.97 (1.38)	0.47	3.40	0.10
	fillet	Walleye	50	2.43 (1.70)	0.73	4.80	0.13
	plug	Brown bullhead	50	0.33	0.13	0.90	0.02
	plug	Pumpkinseed	49	0.48	0.10	0.84	0.02
	plug	Smallmouth bass	42	1.81	0.49	3.80	0.11
	plug	Walleye	50	2.39	0.71	4.00	0.12
Total PCBs (sum of Aroclors) (mg/kg wet-weight)	fillet	Smallmouth bass	12	3.28 (8.20)	1.25	6.21	0.50
	fillet	Walleye	12	5.22 (13.05)	1.38	15.80	1.17
Sum of DDT and metabolites (mg/kg wet-weight)	fillet	Smallmouth bass	12	0.05 (0.14)	0.01	0.10	0.01
	fillet	Walleye	12	0.08 (0.19)	0.02	0.26	0.02
Percent Lipid (% by weight)	fillet	Smallmouth bass	12	1.23	0.47	2.60	0.18
	fillet	Walleye	12	3.53	1.30	7.40	0.47

*Mean whole body concentrations for brown bullhead, pumpkinseed, smallmouth bass, and walleye were calculated as appropriate by multiplying mean fillet concentrations by the appropriate conversion factor from the baseline ecological risk assessment (TAMS 2002) as described in the text.

TABLE 8
SUMMARY OF BOOK 2 2009 FISH GUT CONTENTS IN ONONDAGA LAKE

	Lepomis (N = 99)		Bluegill (N = 99)		Pumpkinseed (N = 103)		Brown bullhead (N = 50)		Smallmouth bass (N = 5)		Largemouth bass (N = 60)		Alewife (N = 45)		Banded killifish (N = 59)	
Species/Taxa	Count	Total Dry wt (g)	Count	Total Dry wt (g)	Count	Total Dry wt (g)	Count	Total Dry wt (g)	Count	Total Dry wt (g)	Count	Total Dry wt (g)	Count	Total Dry wt (g)	Count	Total Dry wt (g)
Fish					1	0.001			3	1.821	21	43.231				
Crayfish											3	1.111				
Amphipoda	148	0.008	604	0.560	933	0.921	278	0.334	25	0.030	2	0.013	125	0.038	38	0.038
Isopoda					40	0.070	52	0.047								
Gastropoda			37	0.076	548	2.541	36	0.242					3	0.006	11	0.007
Zebra mussel			4	0.038	75	1.296	9	0.04								
Quagga mussel					2	0.012	1	0.003								
Lepidoptera	25	0.005	442	0.232	48	0.050	3	0.001							2	0.002
Chironomidae	433	0.024	527	0.043	259	0.293	861	0.241	1	<.001			25	0.005	249	0.052
Chironomidae pupae	6	<.001	111	0.046	128	0.070	34	0.055	3	0.003			18	0.007	14	0.002
Trichoptera	5	0.001	121	0.060	41	0.043	2	0.005			1	0.001			5	0.002
Zygoptera	3	<.001			6	0.008	1	<.001								
Ephemeroptera					1	<.001										
Coleoptera			1	0.011	2	0.013			1	0.020						
Formicidae					6	0.006					1	2.363			3	0.001
Oligochaeta					3	0.005	18	0.058			1	0.005				
Hirudinea	2	0.001	1	0.002							3	0.018				
Platyhelminthese			3	0.002			2	0.003								
Bosmina	267		13													
Copepoda	329		42		4		4						1			
Mussel Veliger	3												2		87	0.003
Amphipod larvae	100															
Daphnia	16		10		1											
Zooplankton (wet wt)	NA	2.086	NA	0.056	NA	0.004	NA	<.001					NA	<.001	NA	0.015
Acariformes	1	<.001	109	0.020	16	0.015										
Egg			99	0.025	75	0.064	371	0.161								
Plant matter					NA	0.044	NA	0.187	NA	0.028			NA	0.022		
Unidentified					NA	2.277	NA	1.413	NA	0.001	NA	0.016	NA	0.062		

Empty cells indicate species not found in gut contents

N is the number of fish for which gut contents were assessed

Count is the total number of individuals encountered in all fish samples

Total dry weight is the sum of dry weights of all samples for each species

NA - Not Applicable

TABLE 9
SUMMARY OF SPECIES COLLECTED BY GEAR TYPE MAY - OCTOBER 2009

	Common Name	Scientific Name	Trapnet	Gillnet	Electroshocker	Observed/other
1	alewife	<i>Alosa pseudoharengus</i>	X	X	X	
2	banded killifish	<i>Fundulus diaphanus</i>	X			
3	black crappie	<i>Pomoxis nigromaculatus</i>	X		X	
4	bluegill	<i>Lepomis macrochirus</i>	X		X	
5	bluntnose minnow	<i>Pimephales notatus</i>	X			
6	bowfin	<i>Amia calva</i>	X	X	X	
7	brook silverside	<i>Labidesthes sicculus</i>	X		X	
8	brook stickleback	<i>Culaea inconstans</i>				X
9	brown bullhead	<i>Ameiurus nebulosus</i>	X	X	X	
10	brown trout	<i>Salmo trutta</i>		X	X	
11	carp	<i>Cyprinus carpio</i>	X	X	X	
12	central mudminnow	<i>Umbra limi</i>				X
13	chain pickerel	<i>Esox niger</i>			X	
14	channel catfish	<i>Ictalurus punctatus</i>	X	X	X	
15	common shiner	<i>Luxilus cornutus</i>	X			
16	emerald shiner	<i>Notropis atherinoides</i>	X			
17	fathead minnow	<i>Pimephales promelas</i>	X			
18	freshwater drum	<i>Aplodinotus grunniens</i>	X	X	X	
19	gizzard shad	<i>Dorosoma cepedianum</i>	X	X	X	
20	golden shiner	<i>Notemigonus crysoleucas</i>	X		X	
21	goldfish	<i>Carassius auratus</i>	X		X	
22	lake sturgeon	<i>Acipenser fulvescens</i>		X		
23	largemouth bass	<i>Micropterus salmoides</i>	X	X	X	
24	log perch	<i>Percina caprodes</i>			X	
25	longnose gar	<i>Lepisosteus osseus</i>	X	X	X	
26	northern hog sucker	<i>Hypentelium nigricans</i>			X	
27	northern pike	<i>Esox lucius</i>		X	X	
28	pumpkinseed	<i>Lepomis gibbosus</i>	X		X	
29	quillback	<i>Carpionodes cyprinus</i>	X	X		
30	rock bass	<i>Ambloplites rupestris</i>	X		X	
31	rudd	<i>Scardinius erythrophthalmus</i>	X			
32	shorthead redhorse	<i>Moxostoma macrolepidotum</i>	X	X	X	
33	silver redhorse	<i>Moxostoma anisurum</i>	X	X	X	
34	smallmouth bass	<i>Micropterus dolomieu</i>	X	X	X	
35	tadpole madtom	<i>Noturus gyrinus</i>	X			
36	tessellated darter	<i>Etheostoma olmstedi</i>	X			
37	tiger muskie (hybrid)	<i>E. masquinongy</i> X <i>E. lucius</i>				X
38	walleye	<i>Sander vitreus</i>	X	X	X	
39	white perch	<i>Morone americana</i>	X	X	X	
40	white sucker	<i>Catostomus commersoni</i>	X	X	X	
41	yellow bullhead	<i>Ameiurus natalis</i>	X		X	
42	yellow perch	<i>Perca flavescens</i>	X		X	
	Total		33	19	30	3

TABLE 10
SUMMARY OF NUMBER OF INDIVIDUALS PER SPECIES CAPTURED IN TRAP NETS MAY - OCTOBER 2009

Common Name	Scientific Name	Station Description (Station Identifier: OL-STA)										Grand Total	Percentage of Community
		METRO (70124)	Harbor Brook (70124)	Rte. 690 (20158)	Wastebeds (30093)	Nine Mile Creek (40212)	Permanent Habitat Module (50057)	Maple Bay (50057)	Willow Bay (50057)	Marina (50058)	Trestle (50059)		
alewife	<i>Alosa pseudoharengus</i>	1							1	2	7	11	0.12
banded killifish	<i>Fundulus diaphanus</i>	22	47	5	32	192	169	307	14	609	23	1420	16.03
black crappie	<i>Pomoxis nigromaculatus</i>	1		1		3	13	9	15		1	43	0.49
bluegill	<i>Lepomis macrochirus</i>	20	69	139	36	99	74	111	185	28	72	833	9.40
bluegill (yoy)	<i>Lepomis macrochirus</i>	77	271	4	6	111	4		46		3	522	5.89
bluntnose minnow	<i>Pimephales notatus</i>	3	1				1	2				7	0.08
bowfin	<i>Amia calva</i>	11	20	12	11	13	17	12	12	5	2	115	1.30
brook silverside	<i>Labidesthes sicculus</i>	75	5	1	1	4					5	91	1.03
brown bullhead	<i>Ameiurus nebulosus</i>	166	87	67	18	48	22	12	20	30	20	490	5.53
channel catfish	<i>Ictalurus punctatus</i>	34	30	2	1	6						73	0.82
common carp	<i>Cyprinus carpio</i>	22	18	6	6	7	13	16	5	11	2	106	1.20
common shiner	<i>Luxilus cornutus</i>	1										1	0.01
emerald shiner	<i>Notropis atherinoides</i>				3				1			4	0.05
fathead minnow	<i>Pimephales promelas</i>		1									1	0.01
freshwater drum	<i>Aplodinotus grunniens</i>	1	2	1	2		1	1	1	2		11	0.12
gizzard shad	<i>Dorosoma cepedianum</i>	129	6		5	1	4	2			2	149	1.68
golden shiner	<i>Notemigonus crysoleucas</i>	70	259	32	38	30	51	38	33	57	32	640	7.23
goldfish	<i>Carassius auratus</i>		1									1	0.01
largemouth bass	<i>Micropterus salmoides</i>	4	26	8	72	1530	118	43	31	67	51	1950	22.02
longnose gar	<i>Lepisosteus osseus</i>		23	1	6	6				1	1	38	0.43
pumpkinseed	<i>Lepomis gibbosus</i>	31	84	192	9	123	87	91	141	49	46	853	9.63
pumpkinseed (yoy)	<i>Lepomis gibbosus</i>	336	38	3	1	23	2	45	5			453	5.11
quillback	<i>Carpiodes cyprinus</i>				1							1	0.01
rockbass	<i>Ambloplites rupestris</i>	1		3	4	24	16	8	14	13	4	87	0.98
rudd	<i>Scardinius erythrophthalmus</i>	8	24	3		2			2			39	0.44
shorthead redhorse	<i>Moxostoma macrolepidotum</i>	11	3		1			1	1		2	19	0.21
silver redhorse	<i>Moxostoma anisurum</i>					1	1					2	0.02
smallmouth bass	<i>Micropterus dolomieu</i>		1	1	2	3		5	8	3	8	31	0.35
sunfish (yoy)	<i>Lepomis spp.</i>	2	49	1		2	1					55	0.62
tadpole madtom	<i>Noturus gyrinus</i>						1					1	0.01
tessellated darter	<i>Etheostoma olmstedti</i>	1				1						2	0.02
walleye	<i>Sander vitreus</i>							2				2	0.02
white perch	<i>Morone americana</i>	107	31	28	31	25	6	39	40	16	13	336	3.79
white sucker	<i>Catostomus commersoni</i>	35	28	33	2	28	3	19	11		8	167	1.89
yellow bullhead	<i>Ameiurus natalis</i>					6	1	3		1		11	0.12
yellow perch	<i>Perca flavescens</i>	18	3	25	5	114	10	8	64	4	41	292	3.30
	Total captured fish	1187	1127	568	293	2402	615	774	650	898	343	8857	
	Species Richness	23	22	19	21	22	19	20	19	16	19	33	

Blank cells indicate species not captured at that location; station name (station ID) provided.

TABLE 11
2009 GILL NET SAMPLING LOCATIONS IN ONONDAGA LAKE

Site Name	Sampling Date	Set Time	End Time	Water Depth Shallow (m)	Water Depth Deep (m)	Number times sampled (N)
690 Point (OL-STA-20158)	5/21/2009	20:52	22:00	4.6	8.2	5
	6/15/2009	9:40	11:10	1.9	6.9	
	7/23/2009	10:09	11:09	1	6.4	
	9/23/2009	9:13	10:13	2	7	
	10/28/2009	8:00	9:00	3	6	
Harbor Brook (OL-STA-70124)	5/20/2009	21:10	22:12	4.4	5	6
	6/15/2009	11:50	1:50	4.3	5.6	
	7/23/2009	8:58	9:58	5	5.1	
	8/18/2009	9:10	10:12	4.5	5	
	9/23/2009	7:33	8:30	4.6	5.8	
	10/28/2009	9:40	10:40	3.4	4.9	
Hiawatha Pt (OL-STA-50057)	5/19/2009	22:00	22:57	2.9	11	6
	6/16/2009	9:00	10:00	3.2	9.8	
	7/21/2009	10:00	11:00	1.6	9.7	
	8/18/2009	10:52	11:55	2	9.5	
	9/23/2009	9:53	10:53	2.5	9.5	
	10/29/2009	8:28	9:28	1.5	9.6	
Ninemile Pier (south of) (OL-STA-40212)	5/19/2009	21:29	22:26	2.4	7.9	6
	6/16/2009	9:20	11:00	3	6.5	
	7/21/2009	11:00	12:00	2	7.4	
	8/17/2009	8:30	9:30	3.2	6.6	
	9/24/2009	7:17	8:20	2.5	7	
	10/29/2009	8:04	9:04			
Outlet (OL-STA-50057)	5/21/2009	22:37	23:37	5	5	6
	6/18/2009	11:40	1:00	2	6.5	
	7/23/2009	10:42	11:42	2	5.2	
	8/19/2009	9:47	10:45	3	4	
	9/24/2009	9:20	10:20			
	10/29/2009	10:12	11:12			
Parson's Dock (OL-STA-20158)	5/20/2009	20:40	21:39	4.5	8.4	6
	6/15/2009	10:00	12:00	3	4.5	
	7/23/2009	9:10	10:10	3.2	7.8	
	8/18/2009	9:21	10:22	2.7	7	
	9/23/2009	7:45	8:45	2.8	7.4	
	10/28/2009	8:35	9:35	4	7	
Permanent Habitat Module (PHM) (OL-STA-50057)	5/19/2009	20:49	21:50	3.9	8.6	6
	6/18/2009	10:20	11:50	3	8.4	
	7/21/2009	9:15	10:15	1.5	8.6	
	8/18/2009	11:02	12:20	4.5	8	
	9/24/2009	8:01	9:01			
	10/29/2009	9:29	10:29	2.5	9	
Marina (OL-STA-50058)	5/21/2009	20:32	21:30	2.9	7.8	6
	6/22/2009	11:45	12:45	5	8	
	7/22/2009	9:55	10:55	2.5	8.8	
	8/17/2009	10:10	11:10	3	9.2	
	9/22/2009	8:51		5	7.4	
	10/28/2009	6:40	7:40	3.5	9.5	

TABLE 11
2009 GILL NET SAMPLING LOCATIONS IN ONONDAGA LAKE

Site Name	Sampling Date	Set Time	End Time	Water Depth Shallow (m)	Water Depth Deep (m)	Number times sampled (N)
South Ley Creek (OL-STA-60225)	7/27/2009	8:31	9:31	7	8	2
	5/20/2009	22:25	23:25	5.2	7.2	
Trestle (OL-STA-50059)	5/20/2009	22:35	23:35	3.3	9.6	7
	6/22/2009	9:50	11:10	4	9.5	
	7/22/2009	10:48	11:55	2.5	8.7	
	8/17/2009	12:15	1:15	3.2	7.6	
	8/19/2009	8:26	9:26	2	9	
	9/22/2009	10:39		2	9	
	10/28/2009	7:10	8:10	3.6	9.5	
Wastebeds 1-8 (OL-STA-30093)	5/19/2009	22:43	23:40	2.1	8.1	6
	6/22/2009	9:20	10:20	3.5	8	
	7/27/2009	8:50	9:50	2.4	7.9	
	8/17/2009	9:00	10:00	3	8	
	9/22/2009	10:05		3	7.5	
	10/29/2009	7:10	8:10	2	8	
				Total number of Gill nets set		62

Blank cells indicate data were not recorded for the sampling event.

TABLE 12
SUMMARY OF NUMBER OF INDIVIDUALS PER SPECIES CAPTURED IN GILL NETS MAY - OCTOBER 2009

Common name	Scientific name	Station Description (Station Identifier: OL-STA)										Grand Total
		Harbor Brook (70124)	WBB (20158)	Rte. 690 Pt. (20158)	Wastebeds (30093)	Nine Mile Pier (40212)	PHM Pier (50057)	Outlet (50057)	Hiawatha Pt. (50057)	Salt Museum (Marina) (50058)	Trestle (50059)	
alewife	<i>Alosa pseudoharengus</i>				1				1			2
bowfin	<i>Amia calva</i>		1					1	1		1	4
brown bullhead	<i>Ameiurus nebulosus</i>				1	1					2	4
brown trout	<i>Salmo trutta</i>		1	1	2		1			3		8
channel catfish	<i>Ictalurus punctatus</i>	3	9	10	8	20	1	23	13	12	20	119
common carp	<i>Cyprinus carpio</i>	3	4	10	6	7	22	14		8	1	75
freshwater drum	<i>Aplodinotus grunniens</i>		4	4	2	2	3	10	2	3	2	32
gizzard shad	<i>Dorosoma cepedianum</i>	7	5	8	3	6	1	4	2	7	8	51
lake sturgeon	<i>Acipenser fulvescens</i>		1	1		1	1		1	1		6
largemouth bass	<i>Micropterus salmoides</i>		1					1			1	3
longnose gar	<i>Lepisosteus osseus</i>							1				1
northern pike	<i>Esox lucius</i>			1						1		2
quillback	<i>Carpionodes cyprinus</i>					2			1			3
shorthead redhorse	<i>Moxostoma macrolepidotum</i>	1	1	1		1	1		1		3	9
silver redhorse	<i>Moxostoma anisurum</i>		1		2		1				3	7
smallmouth bass	<i>Micropterus dolomieu</i>		2		1			1	1	5	2	12
walleye	<i>Sander vitreus</i>		49	14	18	8	22	25	24	20	24	204
white perch	<i>Morone americana</i>	1										1
white sucker	<i>Catostomus commersoni</i>		3	3	2	1	5		2	4	1	21
Total		15	82	53	46	49	58	80	49	64	68	564

TABLE 13

**2009 BOOK 3 TRIBUTARY SAMPLING
TOTAL MERCURY AND METHYLMERCURY SURFACE WATER CONCENTRATIONS**

Basin	Location ID	Number of Analyses	Unfiltered Total Mercury Concentration Range Detected (ng/L)	Unfiltered Methylmercury Concentration Range Detected (ng/L)	Highest during Storm Event ? (Yes [Y] or No [N])
Sawmill Creek	SC-Baseline	4	0.71 - 4.61	0.07 - 0.78	N
Bloody Brook	BB-Baseline	7	0.29 - 5.72	ND - 0.06	N
Ley Creek	LEYCK-Park	4	ND - 5.08	ND - 0.18	N
Onondaga Creek	ONCK-Spencer	53	ND - 77.1	0.02 - 0.86	Y
Harbor Brook	HB-Baseline	5	4.1 - 25.9	0.16 - 0.26	N
East Flume	EF-Baseline	4	38.2 - 59.2	0.21 - 0.45	N
Trib 5A	T5A-Baseline	4	3.83 - 8.87	0.07 - 0.11	N
Ninemile Creek	NMCK-Amboy	31	ND - 61.5	0.05 - 1.3	Y
West Flume	WF-Baseline	4	0.66 - 5.44	0.03 - 0.09	N
Ninemile Creek	NMCK-Rte48	31	ND - 110	ND - 1.15	Y

1. ND - Non-detect.
2. Numbers of analyses includes field duplicates.
3. ng/L - nanogram per liter.
4. Typical reporting limit for total mercury non-detects was 0.15 to 0.5 ng/L and typical reporting limit for methyl mercury non-detects was 0.02 ng/L.
5. A total of 4 filtered samples (2 from Onondaga Creek and 2 from Ninemile Creek) collected during September and October 2009 as part of the Book 3 work exceeded the lowest NYSDEC water quality standard for dissolved mercury of 0.7 ng/L.

TABLE 14
2009 BOOK 3 TRIBUTARY SAMPLING
DISSOLVED MERCURY SURFACE WATER CONCENTRATIONS

Basin	Location ID	Sample Date	Dissolved Mercury, ng/L (average of field duplicates) <i>where applicable</i>	Data Qualifier
Onondaga Creek	ONCK-Spencer	7/1/2009	0.5	<i>U</i>
Onondaga Creek	ONCK-Spencer	9/10/2009	0.94*	<i>J</i>
Onondaga Creek	ONCK-Spencer	10/22/2009	0.15	<i>UJ</i>
Onondaga Creek	ONCK-Spencer	10/22/2009	0.38	<i>J</i>
Onondaga Creek	ONCK-Spencer	10/28/2009	3.1*	
Ninemile Creek	NMCK-Rte48	7/1/2009	0.5	<i>U</i>
Ninemile Creek	NMCK-Rte48	9/10/2009	0.37	<i>J</i>
Ninemile Creek	NMCK-Rte48	10/22/2009	0.31	<i>J</i>
Ninemile Creek	NMCK-Rte48	10/29/2009	1.35*	
Ninemile Creek	NMCK-Rte48	10/28/2009	1.04*	

ng/L - nanogram per liter - 1 nanogram = 0.000001 milligram

* Measured concentrations that exceed the NYSDEC water quality standard of 0.7 ng/L established to protect human health based on fish consumption.

U - not detected at the concentration reported.

J - estimated value

TABLE 15

**2009 BOOK 3 TRIBUTARY SAMPLING
TOTAL PCBs IN BASEFLOW - SURFACE WATER CONCENTRATIONS**

Basin	Location ID	Number of Analyses	Number of PCB Detects	Total PCBs Concentration Range Detected (µg/l)	Date Highest Concentration Detected
Sawmill Creek	SC-Baseline	4	0	ND	None
Bloody Brook	BB-Baseline	7	0	ND	None
Ley Creek	LEYCK-Park	4	1	ND - 0.11	9/10/2009
Onondaga Creek	ONCK-Spencer	8	0	ND	None
Harbor Brook	HB-Baseline	5	1	ND - 0.21	8/13/2009
East Flume	EF-Baseline	4	0	ND	None
Trib 5A	T5A-Baseline	4	0	ND	None
Ninemile Creek	NMCK-Amboy	4	0	ND	None
West Flume	WF-Baseline	4	0	ND	None
Ninemile Creek	NMCK-Rte48	4	0	ND	None

µg/l - microgram per liter

- Notes: 1. Number of analyses includes field duplicates.
 2. Reporting limits for non-detects were 0.050 to 0.057 ug/L.
 3. 2009 Sampling dates for PCB analyses were August 12-13, September 9-10, October 7-8, and November 18.

TABLE 16
CALCULATED DIOXIN/FURAN HUMAN/MAMMALIAN TEQs IN 2009 BOOK 3
TRIBUTARY WATER SAMPLES

Tributary	Location ID	Field Sample ID	Date Sampled	TEQ (full dl) (ng/L)	TEQ (half dl) (ng/L)	TEQ (ND=0) (ng/L)
Bloody Brook	BB-Baseline	OL-0788-05	8/13/2009	0.11	0.06	<0.0001
Bloody Brook	BB-Baseline	OL-0905-05	9/9/2009	0.12	0.06	<0.0001
Bloody Brook	BB-Baseline	OL-0905-06	9/9/2009	0.12	0.06	<0.0001
Bloody Brook	BB-Baseline	OL-0926-05	10/7/2009	0.12	0.06	0.0003
Bloody Brook	BB-Baseline	OL-0926-06	10/7/2009	0.12	0.06	0.0002
Bloody Brook	BB-Baseline	OL-0946-05	11/18/2009	0.01	0.01	0.005
East Flume	EF-Baseline	OL-0788-03	8/13/2009	0.03	0.02	0.01
East Flume	EF-Baseline	OL-0905-03	9/9/2009	0.12	0.06	<0.0001
East Flume	EF-Baseline	OL-0926-03	10/7/2009	0.09	0.05	0.003
East Flume	EF-Baseline	OL-0946-03	11/18/2009	0.02	0.02	0.010
Harbor Brook	HB-Baseline	OL-0788-06	8/13/2009	0.11	0.06	<0.0001
Harbor Brook	HB-Baseline	OL-0788-07	8/13/2009	0.11	0.06	<0.0001
Harbor Brook	HB-Baseline	OL-0905-07	9/9/2009	0.12	0.06	0
Harbor Brook	HB-Baseline	OL-0926-07	10/7/2009	0.07	0.04	0.001
Ley Creek	LEYCK-Park	OL-0786-02	8/12/2009	0.10	0.05	0.0004
Ley Creek	LEYCK-Park	OL-0908-06	9/10/2009	0.11	0.06	0.0001
Ley Creek	LEYCK-Park	OL-0929-06	10/8/2009	0.09	0.05	0.0008
Ninemile Creek	NMCK-Amboy	OL-0786-03	8/12/2009	0.11	0.05	0.0002
Ninemile Creek	NMCK-Amboy	OL-0908-02	9/10/2009	0.12	0.06	0
Ninemile Creek	NMCK-Amboy	OL-0929-02	10/8/2009	0.11	0.06	<0.0001
Ninemile Creek	NMCK-Amboy	OL-0949-02	11/18/2009	0.11	0.06	0
Ninemile Creek	NMCK-Rte48	OL-0786-04	8/12/2009	0.11	0.06	<0.0001
Ninemile Creek	NMCK-Rte48	OL-0908-03	9/10/2009	0.12	0.06	0
Ninemile Creek	NMCK-Rte48	OL-0929-03	10/8/2009	0.12	0.06	<0.0001
Onondaga Creek	ONCK-Spencer	OL-0786-05	8/12/2009	0.12	0.06	<0.0001
Onondaga Creek	ONCK-Spencer	OL-0786-06	8/12/2009	0.12	0.06	<0.0001
Onondaga Creek	ONCK-Spencer	OL-0908-04	9/10/2009	0.12	0.06	0
Onondaga Creek	ONCK-Spencer	OL-0908-05	9/10/2009	0.12	0.06	0
Onondaga Creek	ONCK-Spencer	OL-0929-04	10/8/2009	0.12	0.06	<0.0001
Onondaga Creek	ONCK-Spencer	OL-0929-05	10/8/2009	0.12	0.06	0
Onondaga Creek	ONCK-Spencer	OL-0949-05	11/18/2009	0.11	0.06	0
Sawmill Creek	SC-Baseline	OL-0788-04	8/13/2009	0.11	0.06	0.0001
Sawmill Creek	SC-Baseline	OL-0905-04	9/9/2009	0.12	0.06	<0.0001
Sawmill Creek	SC-Baseline	OL-0926-04	10/7/2009	0.04	0.02	0.004
Sawmill Creek	SC-Baseline	OL-0946-04	11/18/2009	0.11	0.05	0.002
Tributary 5A	T5A-Baseline	OL-0788-08	8/13/2009	0.11	0.06	<0.0001
Tributary 5A	T5A-Baseline	OL-0905-08	9/9/2009	0.12	0.06	<0.0001
Tributary 5A	T5A-Baseline	OL-0926-08	10/7/2009	0.11	0.06	0.0001
Tributary 5A	T5A-Baseline	OL-0946-08	11/18/2009	0.25	0.12	<0.0001
West Flume	WF-Baseline	OL-0788-02	8/13/2009	0.11	0.06	<0.0001
West Flume	WF-Baseline	OL-0905-02	9/9/2009	0.11	0.06	0
West Flume	WF-Baseline	OL-0926-02	10/7/2009	0.01	0.01	0.01

Notes

dl - detection limit

TEQ - toxicity equivalent quotient calculated using human and mammalian toxic equivalency factors (TEFs)
from Van den Berg et al. (2006)

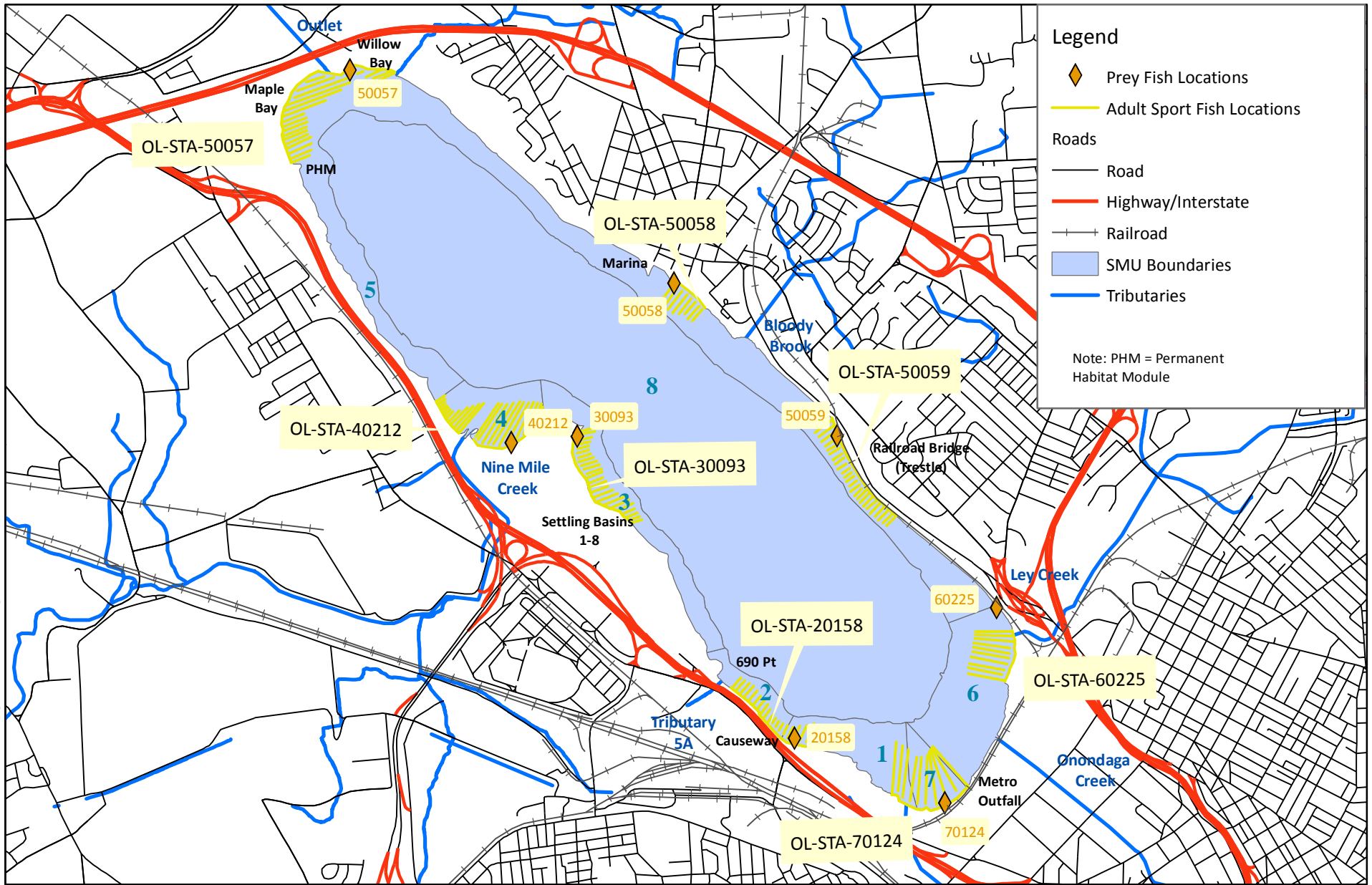
TABLE 17
MARCH 2010 SNOWMELT MERCURY CONCENTRATIONS

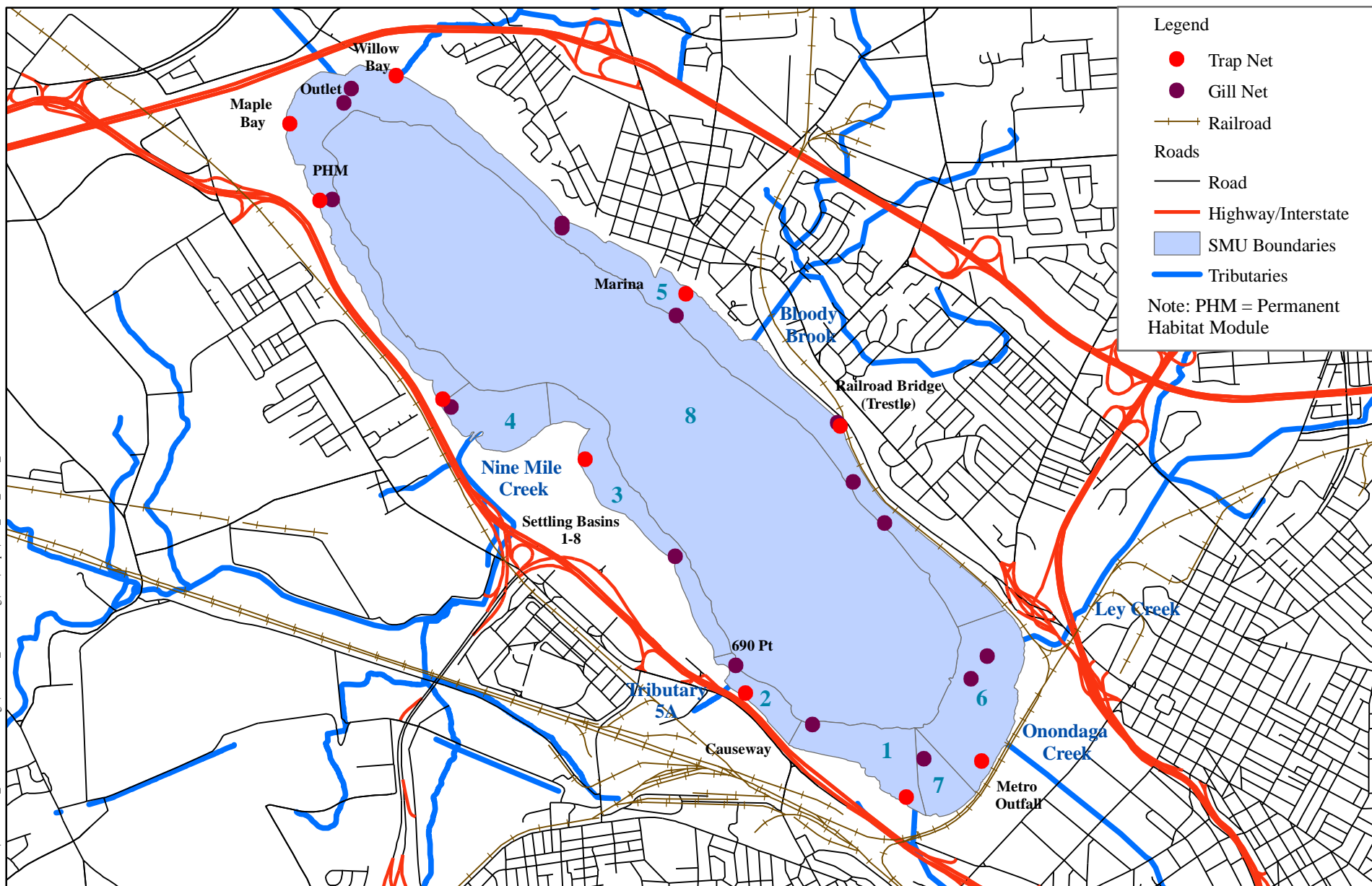
Location ID	Sample Date	Unfiltered Total Mercury (ng/L)	Dissolved (Filtered) Total Mercury (ng/L)	Unfiltered Methylmercury (ng/L)	TSS (mg/L)	Mercury on solids (ppm)
Onondaga Creek at Spencer Street						
ONCK-Spencer	3/11/2010	5.55	NA	0.09	102	
ONCK-Spencer	3/12/2010	5.57	NA	0.12	189	
ONCK-Spencer	3/13/2010	7.14	NA	0.09	150	
ONCK-Spencer	3/14/2010	5.93	0.59	0.06	96	0.06
ONCK-Spencer	3/15/2010	5.81	0.70	0.06	77	0.07
ONCK-Spencer	3/18/2010	3.41	0.27	0.05	48	0.07
Ninemile Creek at Amboy Dam						
NMCK-Amboy	3/11/2010	3.45	NA	0.07	16	
NMCK-Amboy	3/12/2010	11.50	NA	0.11	47	
NMCK-Amboy	3/13/2010	16.80	NA	0.14	61	
NMCK-Amboy	3/14/2010	14.40	1.31	0.10	52	0.25
NMCK-Amboy	3/15/2010	7.18	1.05	0.06	29	0.21
NMCK-Amboy	3/18/2010	2.11	0.25	0.04	7	0.27
Ninemile Creek - Route 48						
NMCK-Rte48	3/11/2010	5.94	NA	0.09	9	
NMCK-Rte48	3/12/2010	10.50	NA	0.10	49	
NMCK-Rte48	3/13/2010	22.70	NA	0.14	72	
NMCK-Rte48	3/14/2010	19.50	1.34	0.11	54	0.34
NMCK-Rte48	3/15/2010	7.73	1.04	0.06	26	0.26
NMCK-Rte48	3/18/2010	3.64	0.25	0.05	6	0.57

Notes:

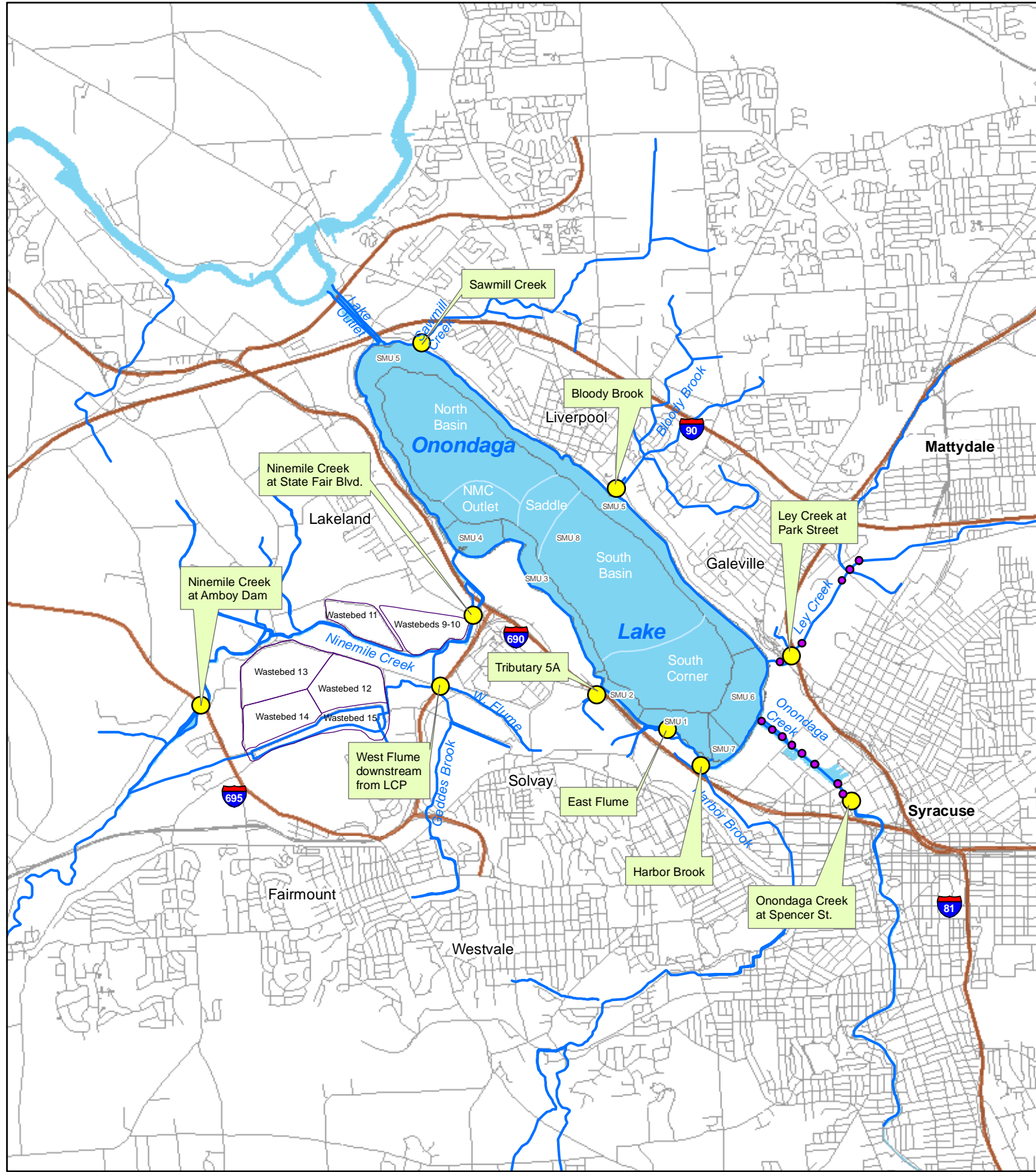
1. NA - Not Analyzed
2. The range of mercury quantified on solids within the snowmelt runoff is 0.06 to 0.57 ppm.
3. Mercury on solids = Unfiltered total mercury minus dissolved (filtered) mercury divided by TSS.

FIGURES





Q:\GIS\GIS_Lake\Baseline_Monitor\MXD\Trib_locs_2009-actual\prop.mxd



- 2009 Surface Water Sampling Location (Actual)
- 2009 Sediment Sampling Location (Actual)
- NYSDEC SMU 8 DEMARCATION

- River or Brook
- Major Road
- Minor Road
- SMU Boundaries



Figure 3

Honeywell Onondaga Lake
Syracuse, New York

2009 Baseline Monitoring
Tributary Sampling Locations

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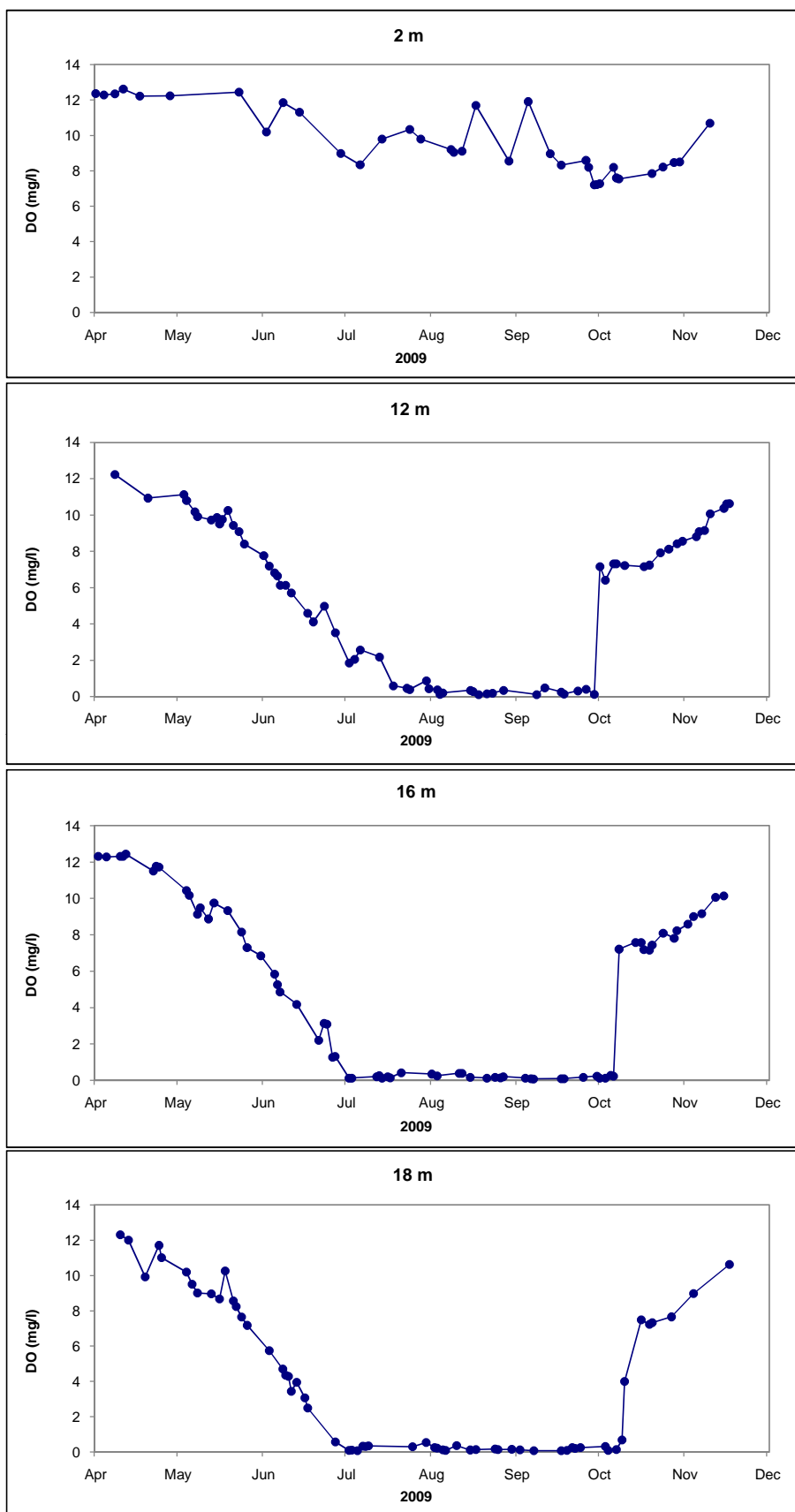


Figure 4. Dissolved oxygen concentrations at 2, 12, 16 and 18 m water depth at South Deep in 2009

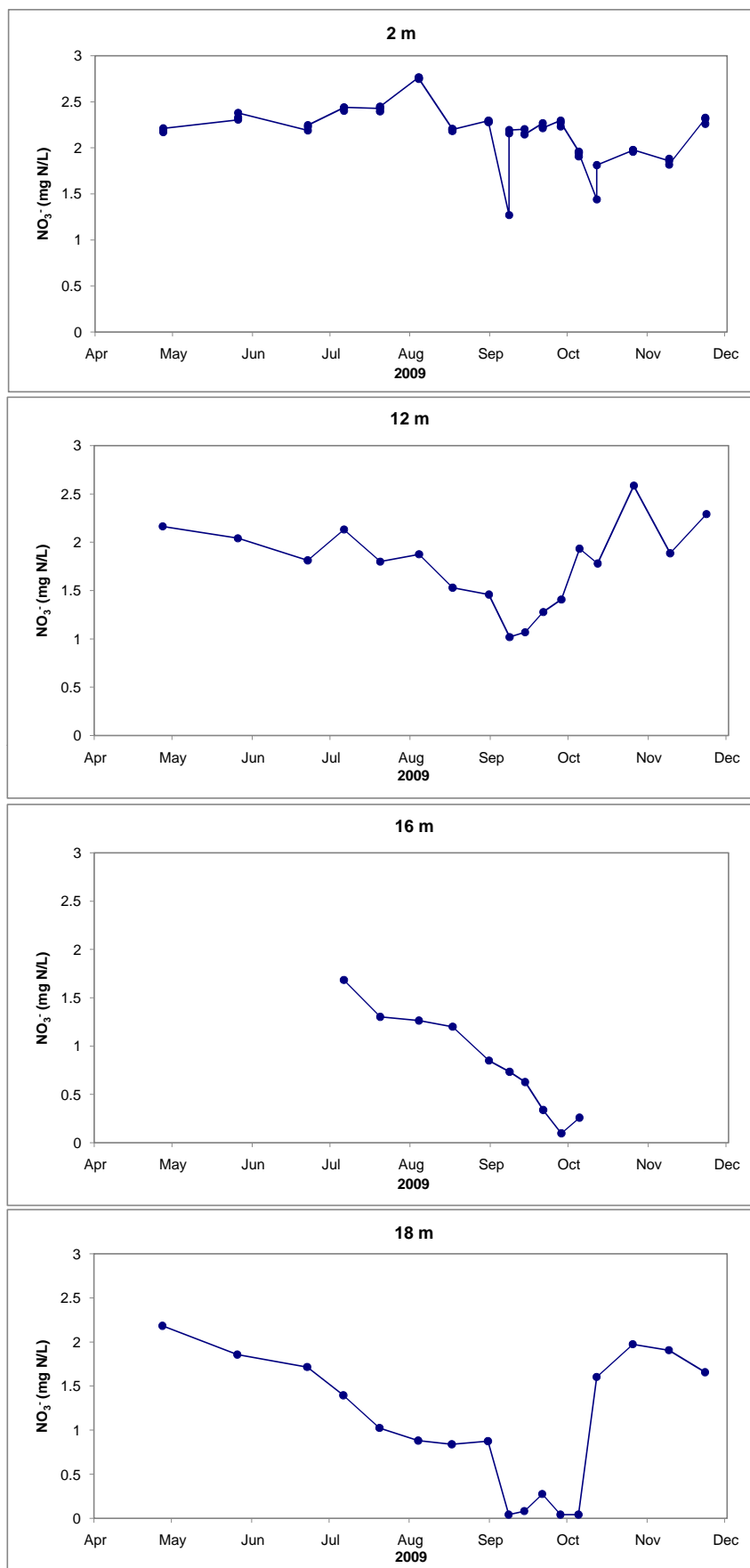


Figure 5. Nitrate concentrations at 2, 12, 16 and 18 m water depth at South Deep in 2009

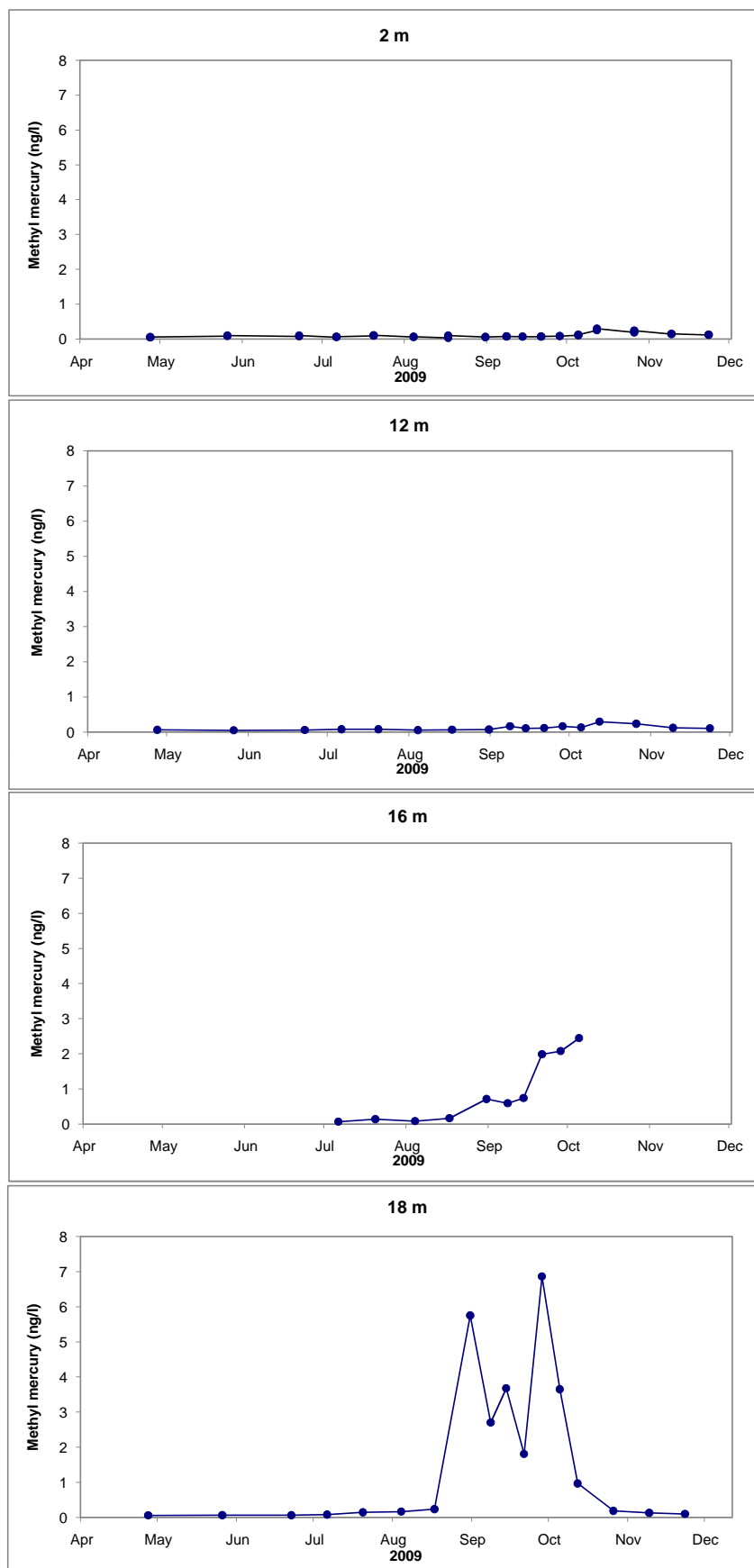


Figure 6. Methylmercury concentrations at 2, 12, 16, and 18 m water depth at South Deep in 2009

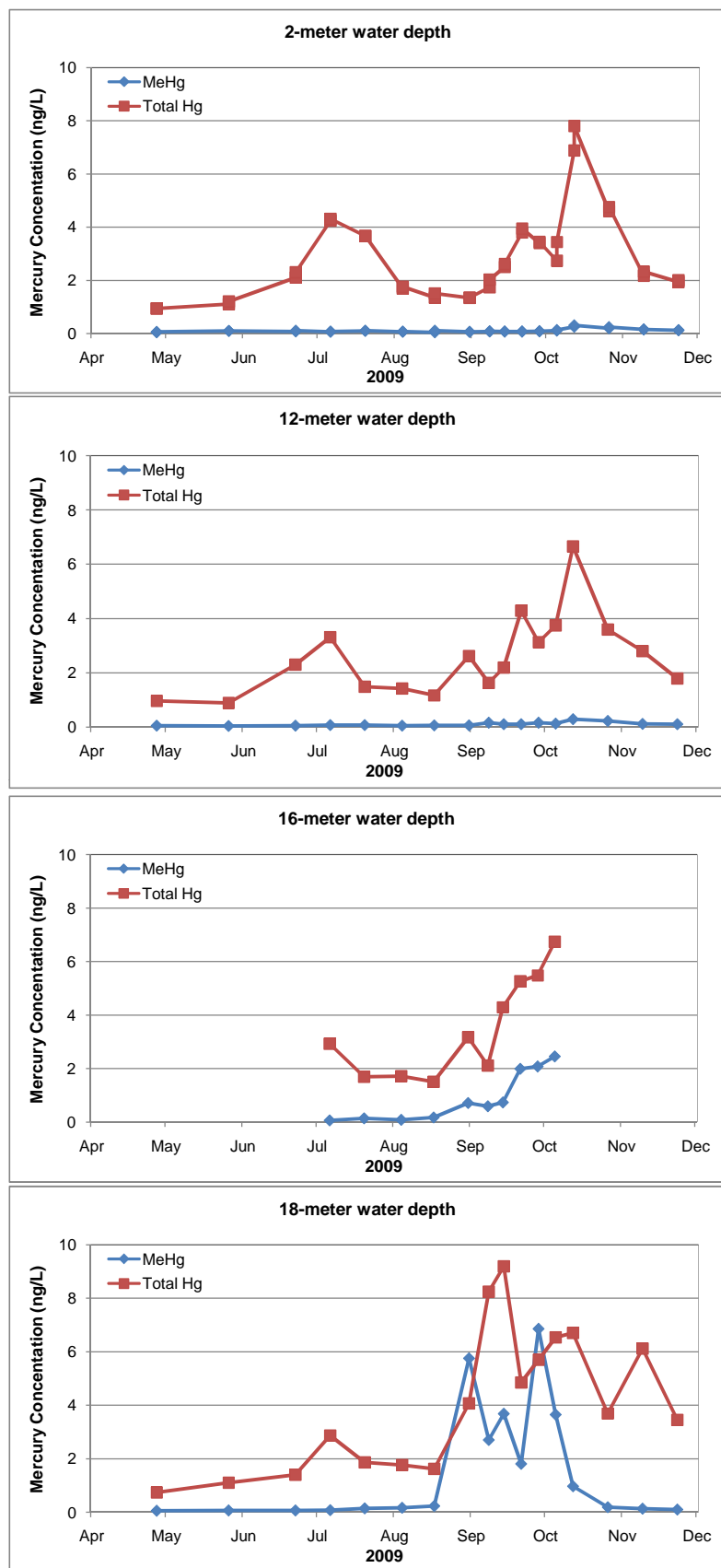


Figure 7. Total and Methyl mercury concentrations at 2, 12, 16, and 18 meter water depth at South Deep in 2009

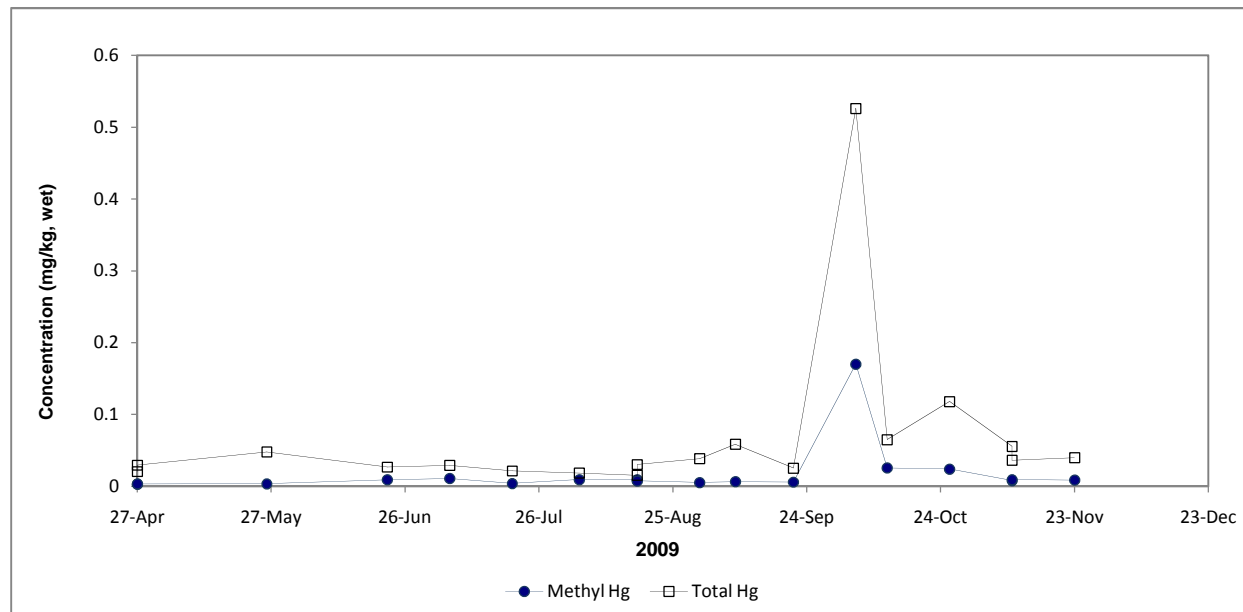


Figure 8. Total Mercury and Methylmercury Concentrations in Zooplankton in 2009

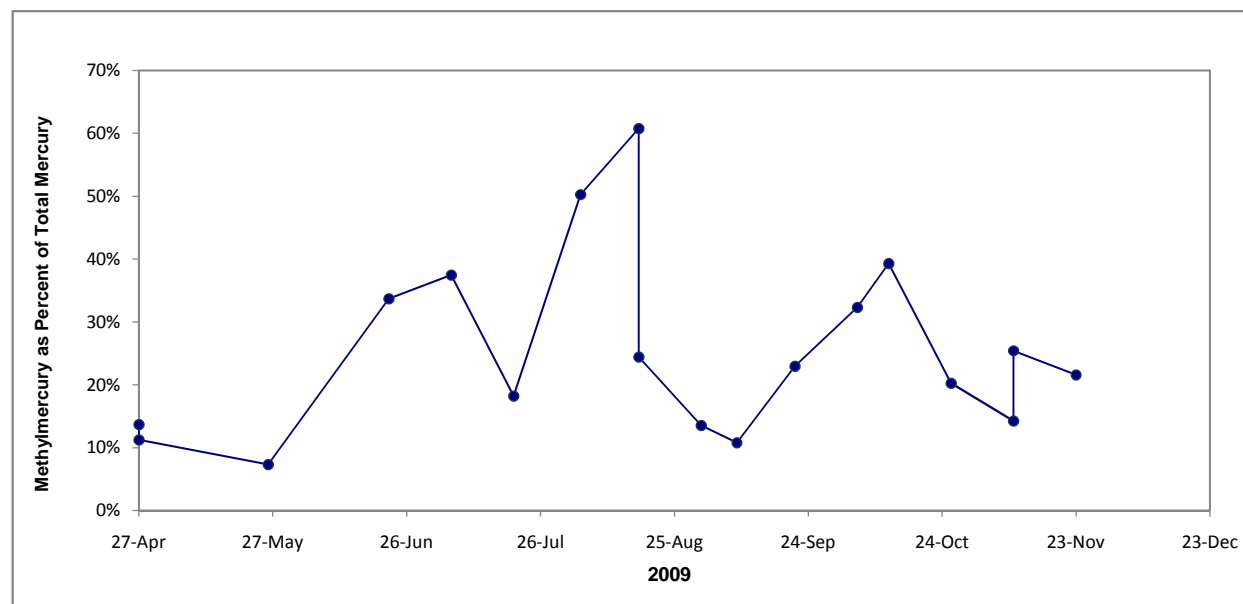
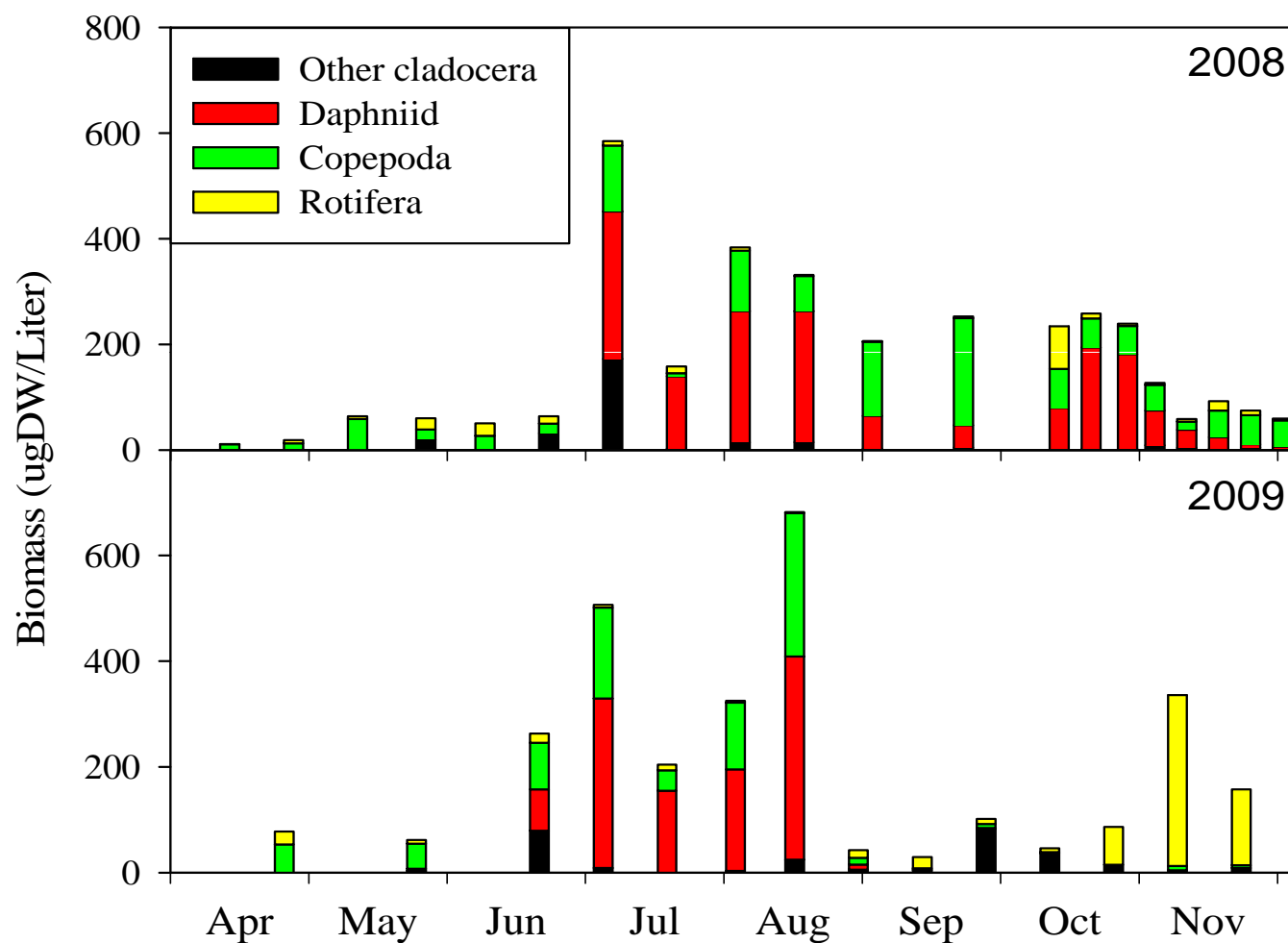


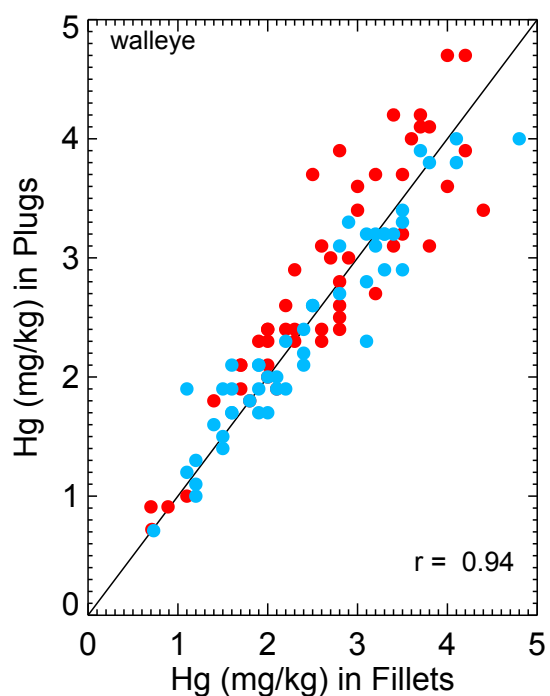
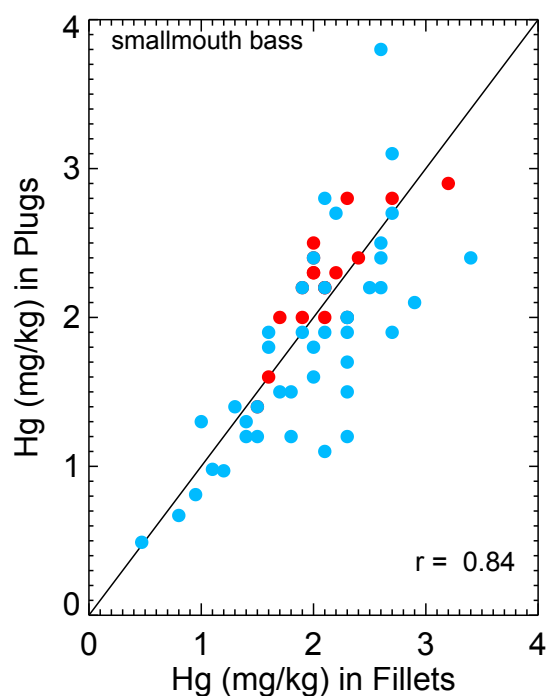
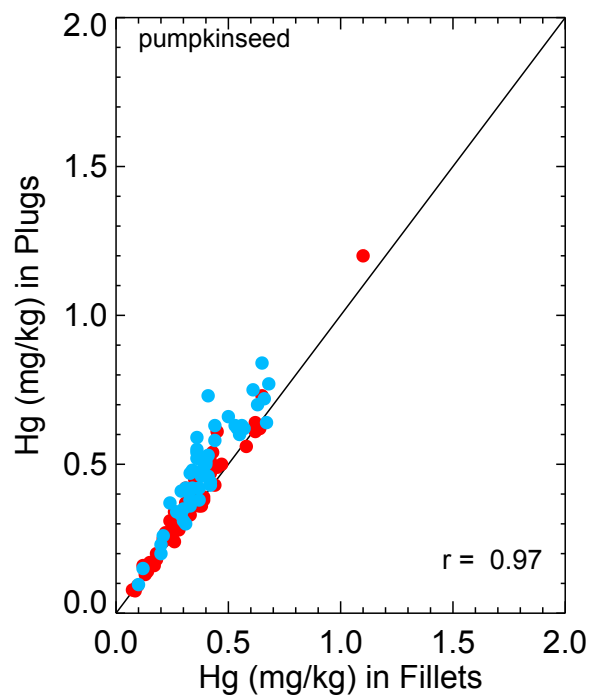
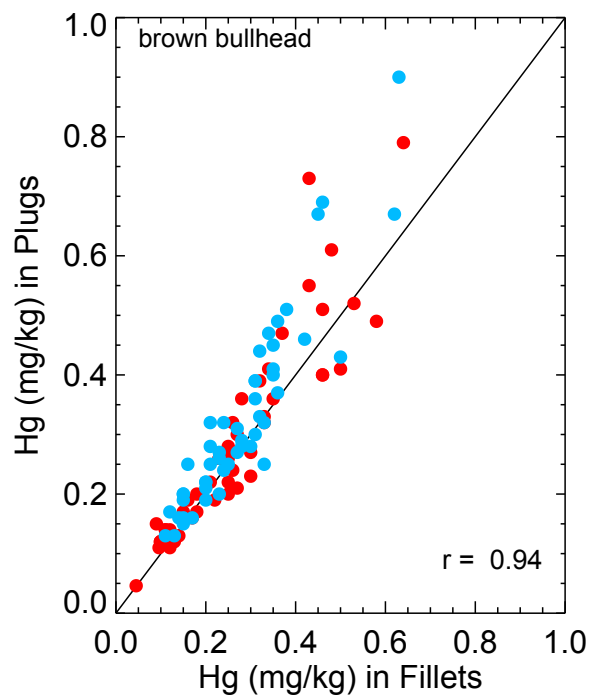
Figure 9. Methylmercury as a Percent of Total Mercury in Zooplankton

Notes:

1. These results are for zooplankton assemblages and do not include daphnia results.
2. These results are based on validated mercury data from laboratory analyses conducted by Brooks Rand.

Figure 10. Zooplankton Community Composition in 2008 and 2009



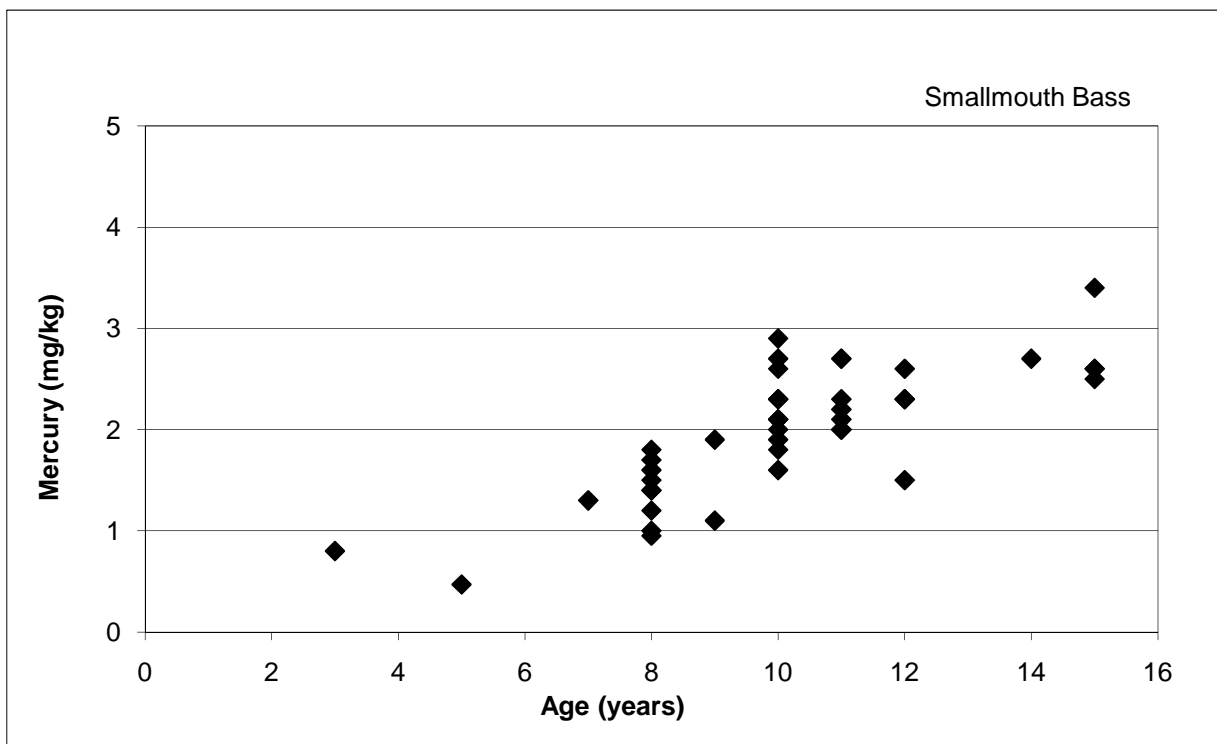
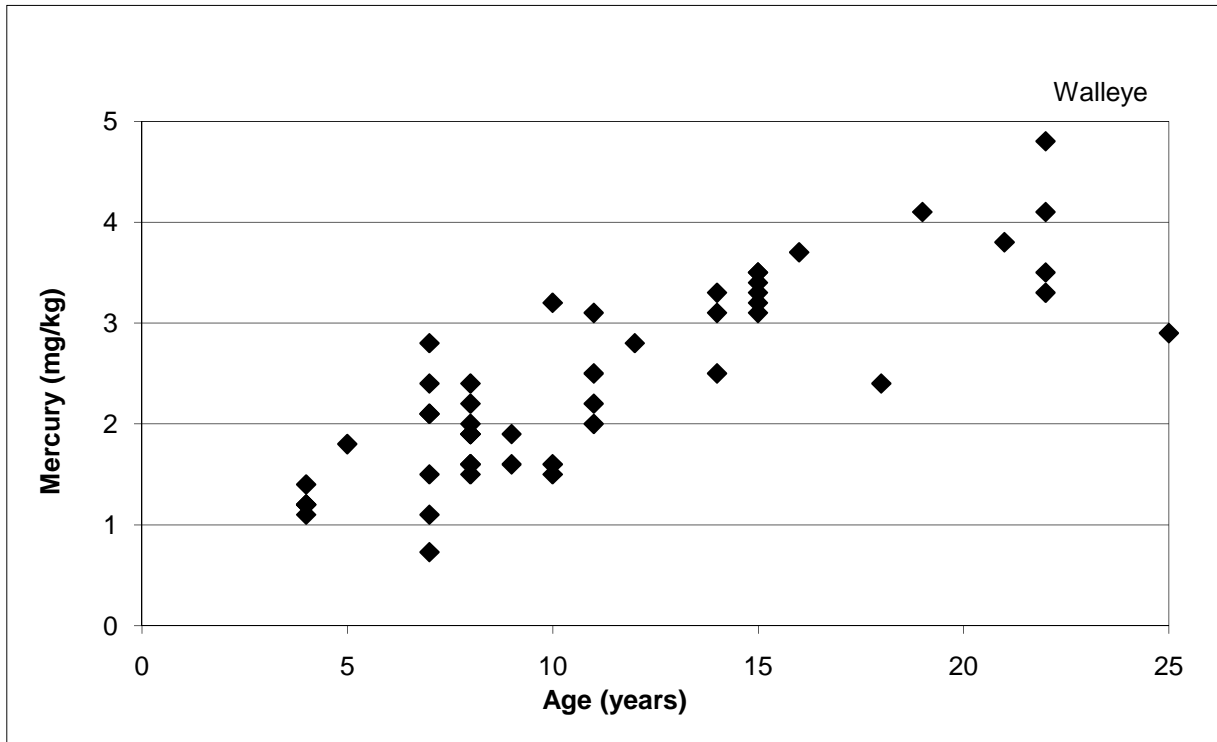


• 2008 • 2009

Figure 11. Scatter plot of fillet vs plug mercury concentrations (ppm wet) in fish collected from Onondaga Lake.

Data source: 2008-2009 Baseline Monitoring Program (BLM); non-detects reported at 1/2 the MDL.

Notes: all ages and genders combined.



*Ages based on otolith analysis

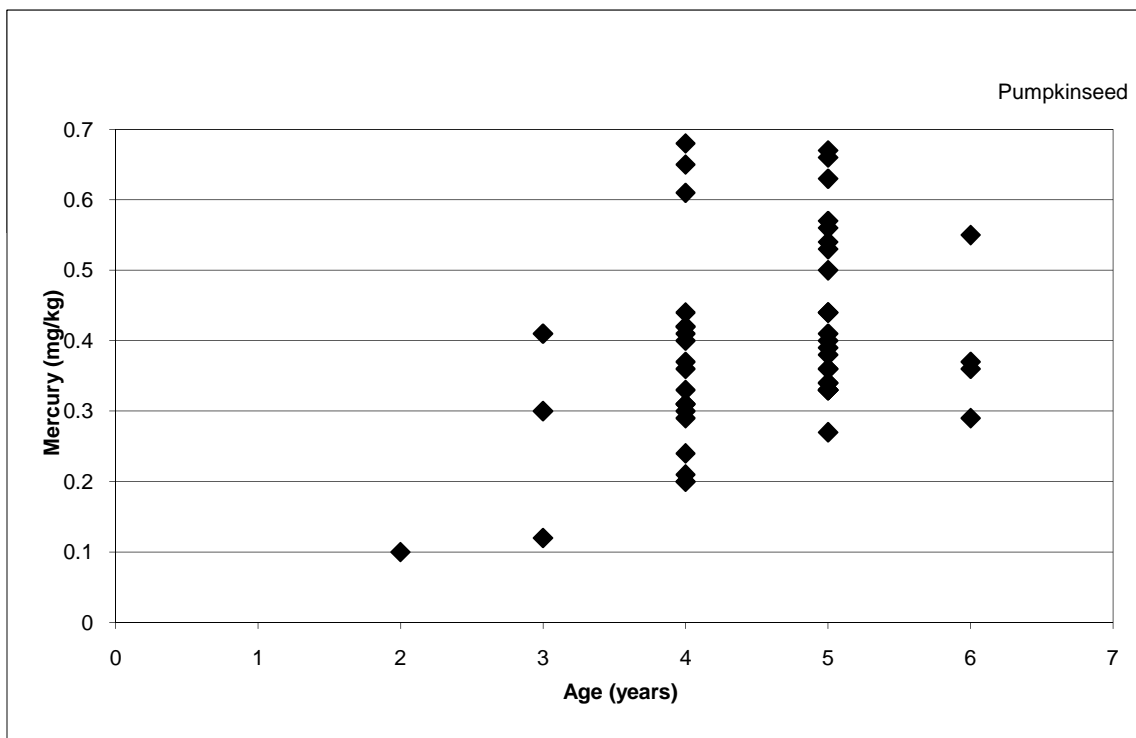
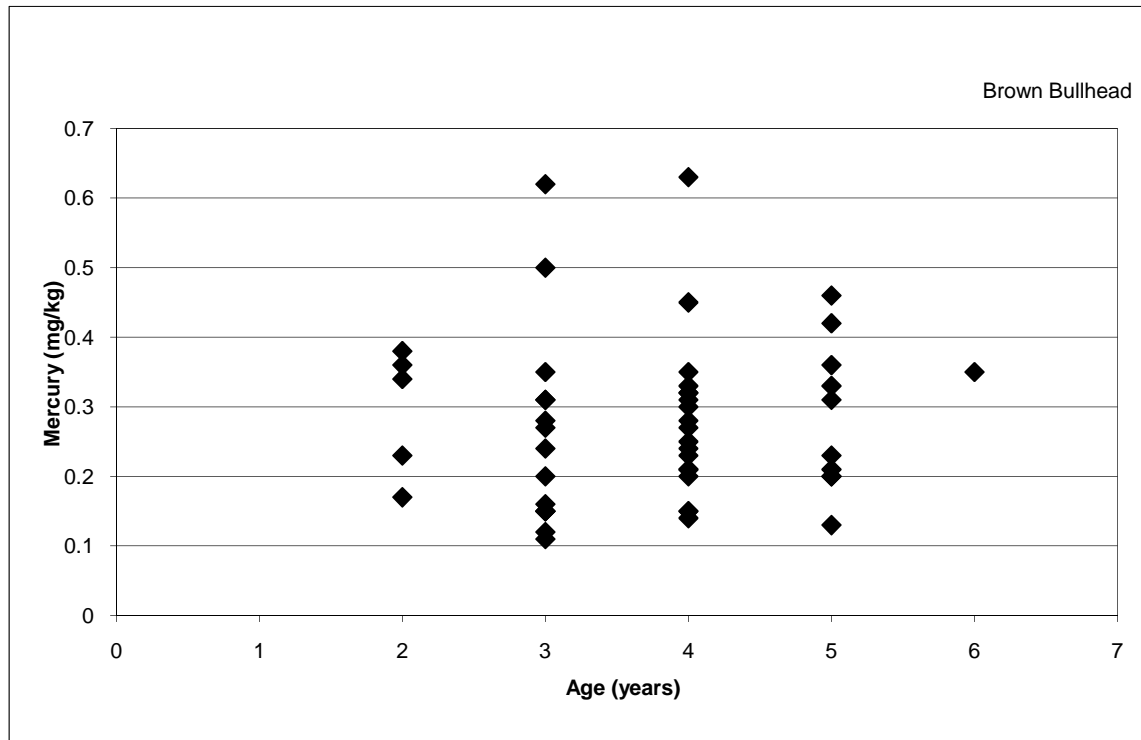
Figure 12 Mercury vs age in walleye and smallmouth bass from Onondaga Lake 2009

Data source: 2009 Baseline Monitoring Program (BLM), Honeywell International, Inc.

1/22/2010

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*Ages based on spines in bullhead and scales in pumpkinseed

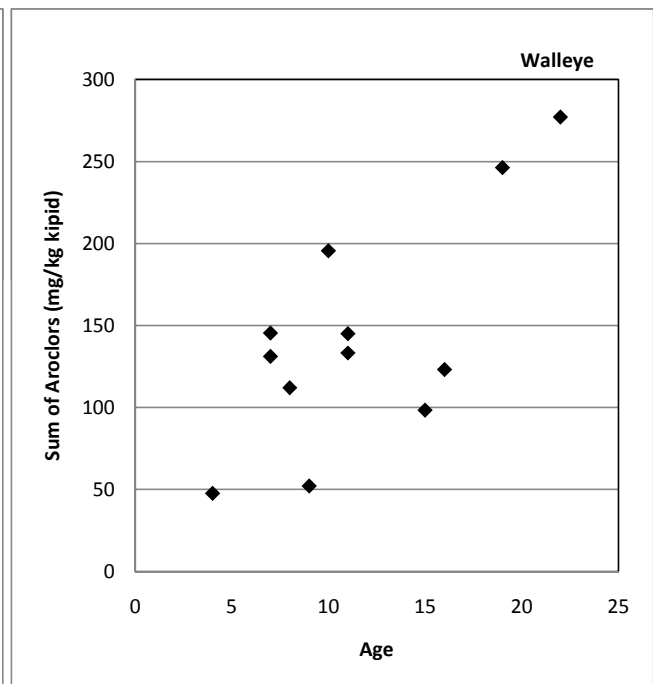
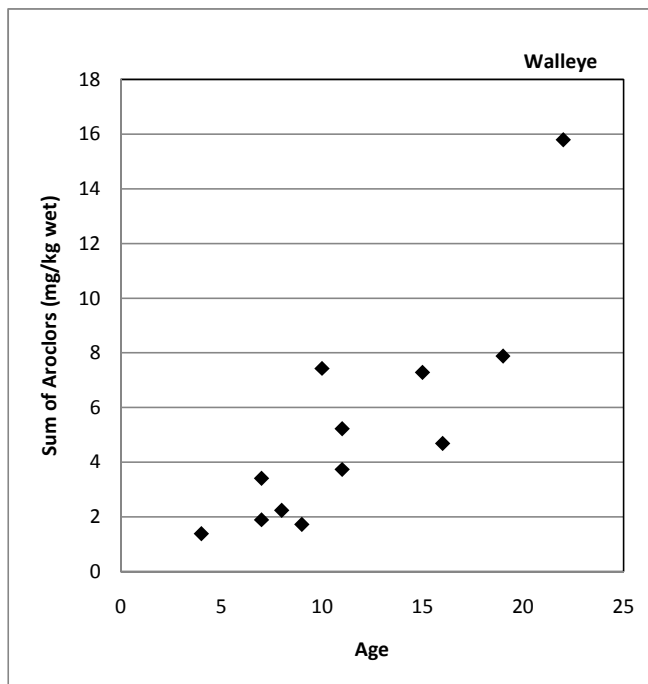
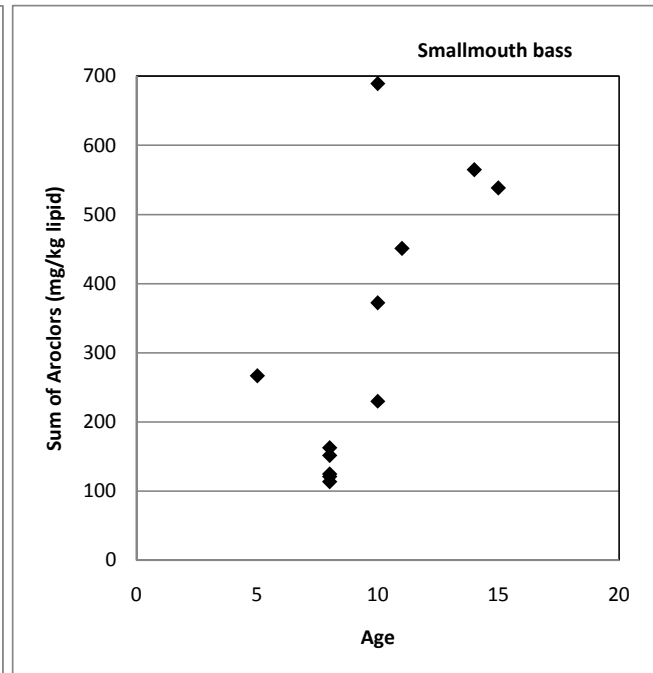
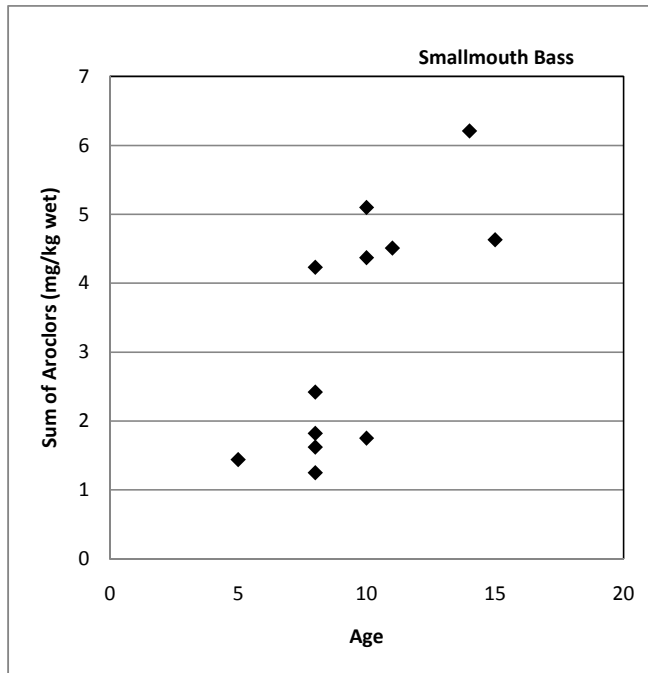
Figure 13 Mercury vs age in brown bullhead and pumpkinseed from Onondaga Lake in 2009.

Data source: 2009 Baseline Monitoring Program (BLM), Honeywell International, Inc.

1/22/2010

X:\090139-01_Parsons-Onondaga\Baseline_Monitoring\ANALYSIS\Fish\baseline\2009 BLM\mercury_vs_TL_Wt_age_2009.xls

Honeywell
PARSONS



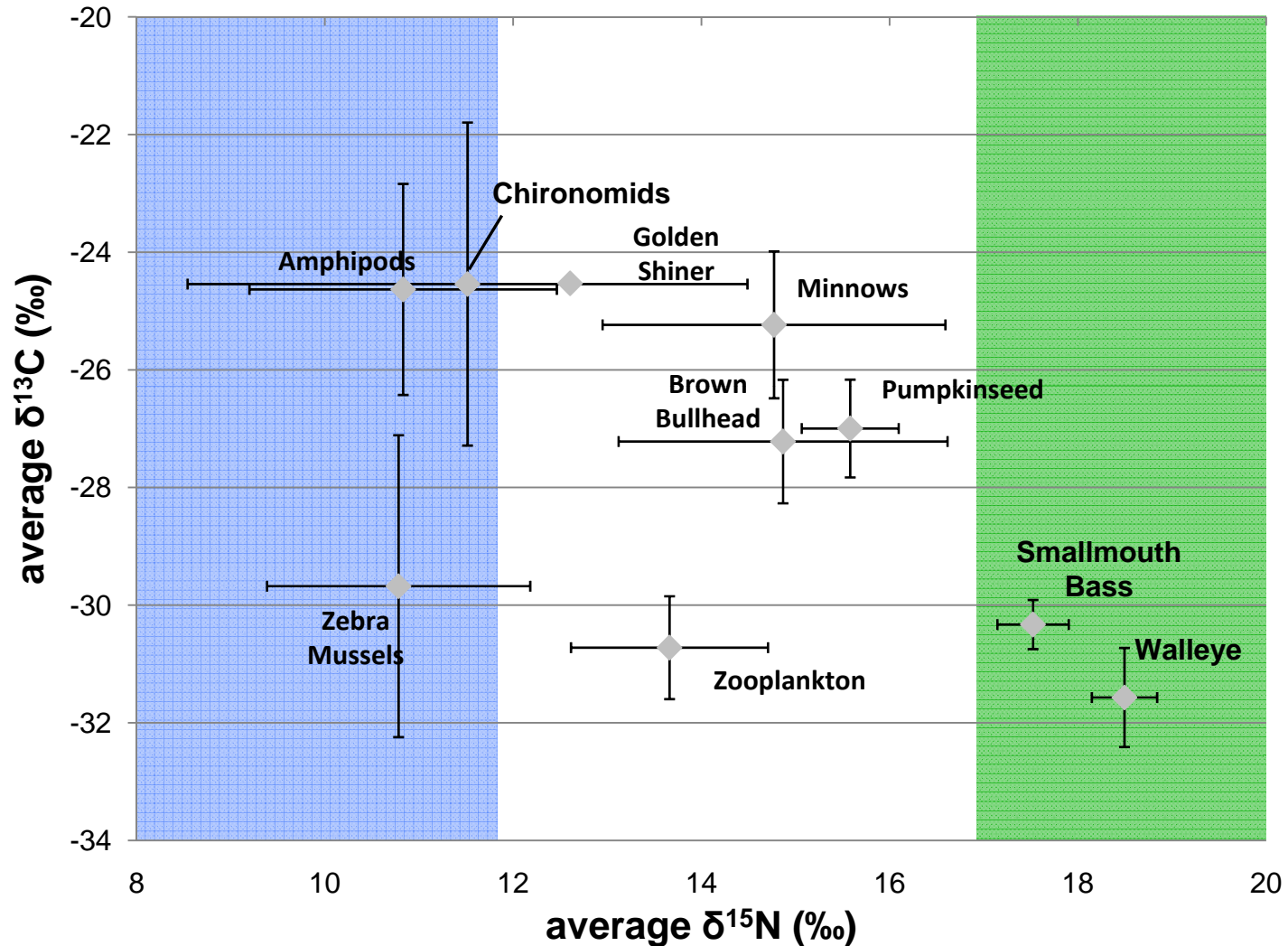
Ages based on otolith analysis
Sum of Aroclors includes detected Aroclors only.

Figure 14 PCBs vs age in smallmouth bass and walleye from Onondaga Lake 2009

Data source: 2009 Baseline Monitoring Program (BLM), Honeywell International, Inc.

Figure 15 Ratio of $\delta^{13}\text{C}$ to $\delta^{15}\text{N}$

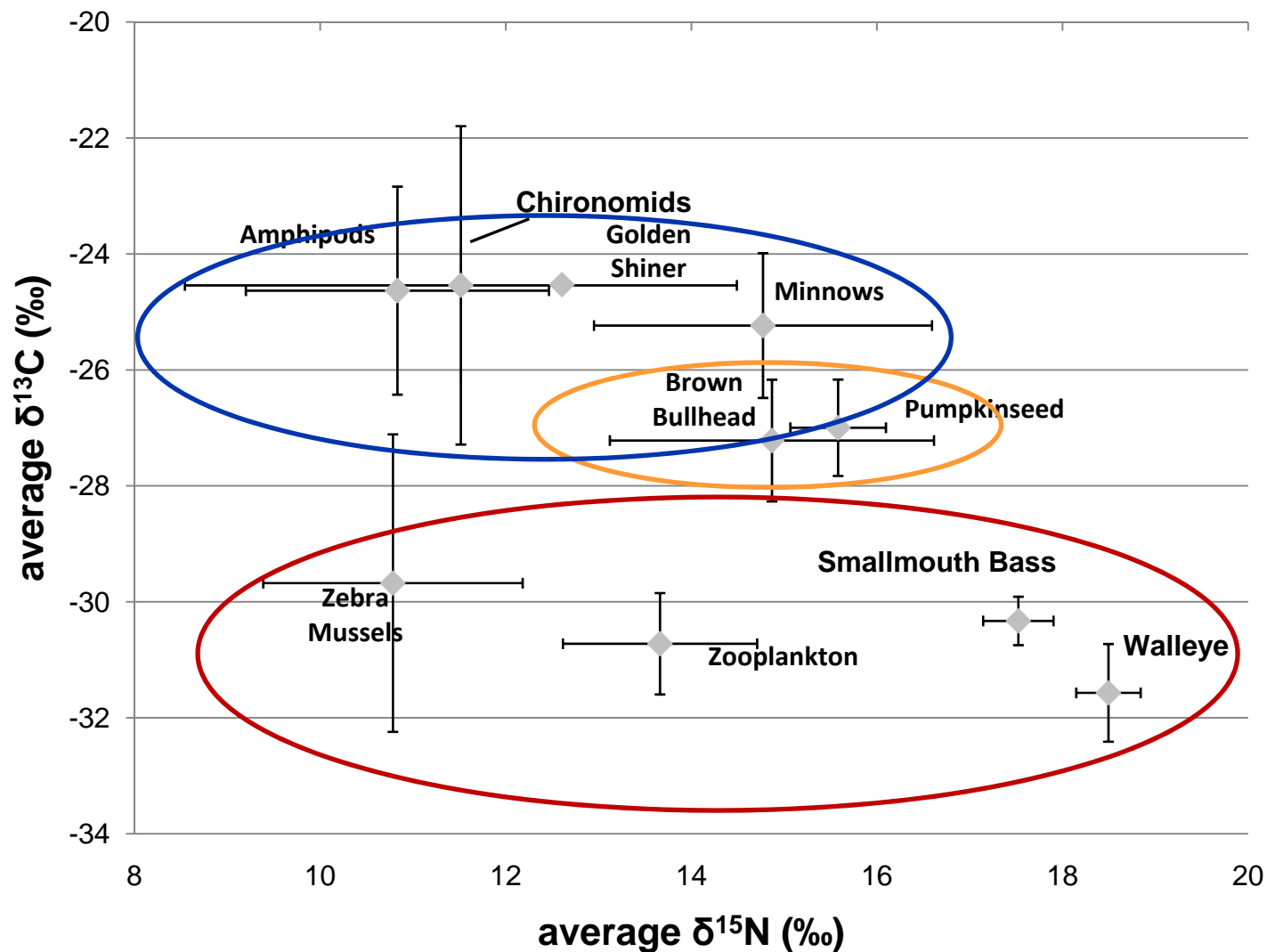
Honeywell



- $\delta^{15}\text{N}$ results clearly identify upper level consumers (i.e., piscivores) and primary consumers, with more intermediate consumers in the middle

Figure 16 Ratio of $\delta^{13}\text{C}$ to $\delta^{15}\text{N}$

Honeywell



- Two distinct $\delta^{13}\text{C}$ clusters suggest two separate food sources (benthic and pelagic)
- Intermediate cluster suggests combination of food sources (omnivory).

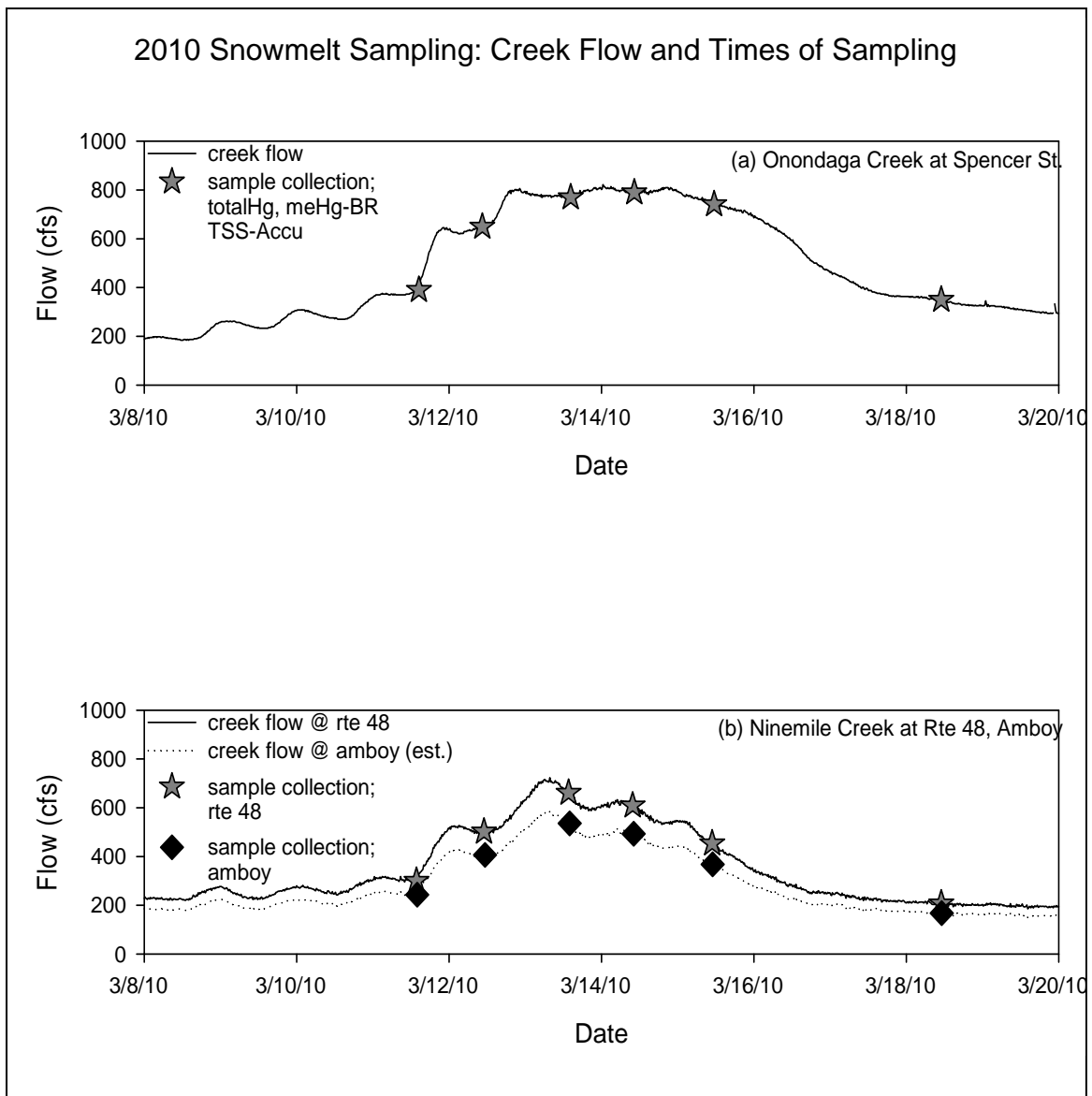


Figure 17 – March 2010 Summary of Snowmelt Sample Collection

APPENDIX A

**DATA USABILITY AND SUMMARY REPORT
ONONDAGA LAKE BASELINE MONITORING
BOOK 1: DEEP BASIN WATER AND ZOOPLANKTON MONITORING
FOR 2009**

DATA USABILITY SUMMARY REPORT

ONONDAGA LAKE BASELINE MONITORING BOOK 1: DEEP BASIN WATER AND ZOOPLANKTON MONITORING FOR 2009

Prepared For:

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OCTOBER 2011

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LIST OF ATTACHMENTS

ATTACHMENT A VALIDATED LABORATORY DATA

- ATTACHMENT A-1 VALIDATED LABORATORY DATA FOR SURFACE
WATER AND WATER COLUMN SAMPLES**
- ATTACHMENT A-2 VALIDATED LABORATORY DATA FOR ZOOPLANKTON
SAMPLES**
- ATTACHMENT A-3 VALIDATED LABORATORY DATA FOR SEDIMENT
TRAP SAMPLES**

SECTION A1**DATA USABILITY SUMMARY**

Surface water, zooplankton, water column, and sediment trap samples were collected as part of the Book 1 baseline monitoring efforts for Onondaga Lake from April 6, 2009 through November 23, 2009. Analytical results from these samples were validated and reviewed by Parsons for usability with respect to the following requirements:

- Onondaga Lake Baseline Monitoring Book 1 Work Plan,
- Onondaga Lake Baseline Monitoring Book 1 QAPP (Appendix B of the Work Plan), and
- USEPA Region II Standard Operating Procedures (SOPs) for inorganic data review.

The analytical laboratories for this project were Test America Laboratories (TAL) in North Canton, Ohio, Brooks Rand Labs (BRL) in Seattle, Washington, and Upstate Freshwater Institute (UFI) in Syracuse, New York. These laboratories are certified by the State of New York to conduct laboratory analyses for this project through the National Environmental Laboratory Accreditation Conference (NELAC).

In addition, Syracuse University analyzed daphnia zooplankton samples due to the limited zooplankton biomass available in these samples. However, analytical results from Syracuse University were not able to be validated, because data packages containing documentation of quality assurance procedures needed to validate data were not available.

A1.1 LABORATORY DATA PACKAGES

The laboratory data package turnaround time, defined as the time from sample receipt by the laboratory to receipt of the analytical data packages by Parsons, was 34 days on average for the samples.

The data packages received from the laboratories were paginated, complete, and overall were of good quality. Comments on specific quality control (QC) and other requirements are discussed in detail in the attached data validation report which is summarized by sample media in Section A2.

A1.2 SAMPLING AND CHAIN-OF-CUSTODY

The samples were collected, shipped under a COC record, and received at the laboratories within one to five days of sampling. All samples were received intact and in good condition at the laboratories. However, BRL noted that shipping coolers containing samples collected on 8/17/09 were received at ambient temperature with no ice present.

A1.3 LABORATORY ANALYTICAL METHODS

The surface water samples were collected from the site and analyzed for total and dissolved low level mercury and methyl mercury. Zooplankton samples were collected from the site and analyzed for low level mercury and methyl mercury. The sediment trap samples were collected from the site and analyzed for low level mercury, total and dissolved calcium, total organic carbon (TOC), total carbon, total suspended solids (TSS), and total fixed solids. The water column samples were collected and analyzed for low level mercury, methyl mercury, dissolved organic carbon (DOC), total inorganic carbon (TIC), chlorophyll, chloride, sulfide, methane, ferrous iron, nitrite, nitrate-nitrite, and ammonia. Summaries of deviations from the Work Plan, QAPP, or USEPA Region II SOPs concerning these laboratory analyses are presented in Subsections A1.3.1 through A1.3.4. The data qualifications resulting from the data validation review and statements on the laboratory analytical precision, accuracy, representativeness, completeness, and comparability (PARCC) are discussed for each analytical method by media in Section A2. The laboratory data were reviewed and may be qualified with the following validation flags:

- "U" - not detected at the value given,
- "UJ" - estimated and not detected at the value given,
- "J" - estimated at the value given,
- "N" - presumptive evidence at the value given, and
- "R" - unusable value.

The validated laboratory data were tabulated and are presented in Attachment A.

A1.3.1 Low Level Mercury Analysis

Surface water, zooplankton, sediment trap, and water column samples collected from the site were analyzed by TAL and BRL for low level mercury using the USEPA 1631E analytical method. Certain reported results for the low level mercury samples were qualified as estimated based upon matrix spike recoveries, field duplicate precision, and sample preservation. The reported low level mercury analytical results were considered 100% complete (i.e., usable) for the data presented by TAL and BRL. PARCC requirements were met.

A1.3.2 Methyl Mercury Analysis

Surface water, zooplankton, and water column samples collected from the site were analyzed by BRL for methyl mercury using the USEPA 1630 analytical method. Certain reported results for the methyl mercury samples were qualified as estimated based upon matrix spike recoveries, instrument calibrations, field duplicate precision, and sample preservation. The reported methyl mercury analytical results were considered 100% complete (i.e., usable) for the data presented by BRL. PARCC requirements were met.

A1.3.3 Other Sediment Trap Analyses

Sediment trap samples collected from the site were also analyzed by UFI for total and dissolved calcium using the SM18-20 3111B analytical method; TOC and total carbon using the SM18-20 5310B analytical method; and TSS and total fixed solids using the SM18-20 2540D/E analytical method. Certain reported results for these parameters were qualified as estimated based upon holding times, matrix spike recoveries, and laboratory duplicate precision. The reported analytical results for these parameters were considered 100% complete (i.e., usable) for the data presented by UFI. PARCC requirements were met.

A1.3.4 Other Water Column Analyses

Water column samples collected from the site were analyzed by UFI for DOC and TIC using the SM18-20 5310C analytical method; chlorophyll using the USEPA 445.0 analytical method; chloride using the SM18-20 4500-Cl-C analytical method; sulfide using the SM20 4500-S2 analytical method; methane using the Address 1990 analytical method; ferrous iron using the Heany Davidson 1977 analytical method; nitrite using the USEPA 350.2 analytical method; nitrate-nitrite using the USEPA 353.2 analytical method; and ammonia using the USEPA 350.1 analytical method. Certain reported results were qualified as estimated based upon holding times, matrix spike recoveries, and instrument calibrations. The reported analytical results for these parameters were considered 100% complete (i.e., usable) for the data presented by UFI. PARCC requirements were met.

SECTION A2**DATA VALIDATION REPORTS****A2.1 SURFACE WATER AND WATER COLUMN SAMPLES**

Data review has been completed for data packages generated by TAL – North Canton, BRL, and UFI containing surface water and water column samples collected from the site. The specific samples contained in these data packages, the analyses performed, and the validated laboratory data were tabulated and are presented in Attachment A-1. All of these samples were shipped under a COC record and received intact by the analytical laboratory.

Data validation was performed for all samples in accordance with the project work plan and QAPP as well as the USEPA Region II SOP HW-2, Revision 13 “Evaluation of Metals Data for the CLP Program”. This data validation and usability report is presented by analysis type.

A2.1.1 Total and Dissolved Low Level Mercury

The following items were reviewed for compliancy in the low level mercury analysis:

- Custody documentation
- Holding times
- Initial and continuing calibration verifications
- Initial and continuing calibration, laboratory preparation blank, field/equipment/trip blank contamination
- Matrix spike / matrix spike duplicate (MS/MSD) recoveries
- Laboratory duplicate precision
- Laboratory control sample (LCS)
- Field duplicate precision
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of MS/MSD recoveries, blank contamination, and field duplicate precision as discussed below.

MS/MSD Recoveries

All MS/MSD recoveries were considered acceptable and within the laboratory QC limit of 71-125%R for all designated project spiked samples with the exception of the low matrix spike recovery for dissolved mercury (70%R) associated with dissolved mercury samples OL-0756-03 and OL-0737-03. Therefore, the dissolved mercury results for these samples were considered estimated, possibly biased low, and qualified “J” for the affected samples.

Blank Contamination

The field equipment blank OL-0782-02 associated with samples collected on 8/4/09 contained total mercury below the reporting limit at a concentration of 0.21 ng/L; the trip blank OL-0799-01 and the field equipment blank OL-0799-02 associated with samples collected on 8/31/09 contained total mercury below the reporting limit at concentrations of 0.34 and 0.18 ng/L, respectively; the field equipment blank OL-0932-02 associated with samples collected on 10/12/09 contained total mercury below the reporting limit at a concentration of 0.22 ng/L; and the field equipment blank OL-0945-02 associated with samples collected on 11/9/09 contained total mercury below the reporting limit at a concentration of 0.2 ng/L. Validation qualification of associated sample results was not required since sample results were not affected by the contamination found in these blanks.

Field Duplicate Precision

All field duplicate precision results for designated project field duplicates and their parent samples were considered acceptable with the exception of the dissolved mercury precision result (53%RPD) for the field duplicate pair OL-0791-03 and -04. The dissolved mercury results were considered estimated and qualified “J” for these samples.

Usability

All total and dissolved mercury sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The total and dissolved low level mercury data presented by TAL and BRL were 100% complete (i.e., usable). The validated low level mercury laboratory data are tabulated and presented in Attachment A-1.

It was noted that the shipping cooler containing samples collected on 8/17/09 was received by BRL at ambient temperature. Therefore, all low level mercury results for these samples were

considered estimated, possibly biased low, with positive results qualified “J” and nondetected results qualified “UJ”.

It was also noted that dissolved low level mercury samples OL-0774-03 and -04 were filtered two days after sample collection at BRL and stored at ambient temperature due laboratory oversight. Therefore, the dissolved low level mercury results for these samples were considered estimated, possibly biased low, with the positive results qualified “J”.

A2.1.2 Methyl Mercury

The following items were reviewed for compliancy in the methyl mercury analysis:

- Custody documentation
- Holding times
- Initial and continuing calibration verifications
- Initial and continuing calibration, laboratory preparation blank, and field/equipment/trip blank contamination
- Matrix spike / matrix spike duplicate (MS/MSD) recoveries
- Laboratory duplicate precision
- Laboratory control sample (LCS)
- Field duplicate precision
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of blank contamination and field duplicate precision as discussed below.

Blank Contamination

The trip blank OL-0738-01 associated with samples collected on 5/26/09 contained methyl mercury below the reporting limit at a concentration of 0.021 ng/L; the field equipment blank OL-0766-02 associated with samples collected on 7/6/09 contained methyl mercury below the reporting limit at a concentration of 0.033 ng/L; methyl mercury was detected above the reporting limit in trip blank OL-0774-01 and below the reporting limit in field equipment blank OL-0774-02 at concentrations of 0.054 and 0.042 ng/L, respectively, associated with samples collected on 7/20/09; and the trip blank OL-0799-01 associated with samples collected on

8/31/09 contained methyl mercury below the reporting limit at 0.037 ng/L. Validation qualification of these samples was not warranted since sample concentrations were not affected by the contamination found in these blanks.

Field Duplicate Precision

All field duplicate precision results for designated project field duplicates and their parent samples were considered acceptable with the exception of the methyl mercury precision result (96%RPD) for the field duplicate pair OL-0791-03 and -04. The methyl mercury results were considered estimated and qualified “J” for these samples.

Usability

All methyl mercury sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The methyl mercury data presented by BRL were 100% complete (i.e., usable). The validated methyl mercury laboratory data are tabulated and presented in Attachment A-1.

It was noted that the shipping cooler containing samples collected on 8/17/09 was received by BRL at ambient temperature. Therefore, all methyl mercury results for these samples were considered estimated, possibly biased low, with positive results qualified “J” and nondetected results qualified “UJ”.

It was also noted that the shipping cooler containing the field QC blank samples EB and CB collected on 6/24/09 was received by BRL at 11°C. Therefore, the methyl mercury results for these samples which were nondetects were considered estimated and qualified “UJ”.

A2.1.3 DOC, TIC, Chlorophyll, Chloride, Sulfide, Methane, Ferrous Iron, Nitrite, Nitrate-Nitrite, and Ammonia

All custody documentation, holding times, matrix spike recoveries, laboratory duplicate precision, laboratory control sample recoveries, laboratory method blank contamination, QC field and trip blank contamination, initial and continuing calibration verifications, field duplicate precision, and quantitation limits were reviewed for compliance. Validation qualification of the sample results for these parameters was not required with the exception of the following:

- The DOC, chloride, and ammonia results for the QC trip blank samples OL-0724-01 and OL-0736-01 were considered not detected and qualified “U” based upon similar concentrations detected in the associated laboratory method blanks;

- The ammonia results for samples OL-0736-02, -03, and -04 were considered not detected and qualified “U” based upon associated method blank contamination;
- The nitrite and nitrate-nitrite results for samples OL-0736-01 through -06 were considered estimated, possibly biased low, and qualified “J” or “UJ” based upon analytical holding time exceedance;
- Positive nitrate-nitrite results for samples OL-0765-02, -03, -04, -05, -09, and -11 were considered estimated, possibly biased high, and qualified “J” based upon the associated matrix spike recovery exceeding the QC limit;
- The chlorophyll results for samples OL-0773-02, -03, -04, OL-0912-02, -03, -04, and -07 were considered estimated, possibly biased low, and qualified “J” or “UJ” based upon analytical holding time exceedance;
- Positive nitrate-nitrite results for samples *OL-0781-02, -03, -04, -08, -12, and -14* were considered estimated, possibly biased high, and qualified “J” based upon the associated continuing calibration verification exceeding the QC limit;
- The chloride results for QC trip blank samples OL-0781-01, OL-0790-01, OL-0903-01, OL-0910-01, OL-0912-01, OL-0919-01, OL-0924-01, OL-0931-01, and OL-0936-01 were considered not detected and qualified “U” based upon associated laboratory method blank contamination;
- Positive sulfide results for samples OL-0798-15, -16, and OL-0912-16 were considered estimated, possibly biased high, and qualified “J” based upon the associated matrix spike recovery exceeding the QC limit;
- The DOC, nitrate-nitrite, and chloride results for QC trip blank samples OL-0944-01 and OL-0951-01 were considered not detected and qualified “U” based upon associated laboratory method blank contamination;
- The chlorophyll results for QC trip blank samples OL-0903-01 and OL-0910-01 and samples OL-0903-08 and OL-0910-08 were considered not detected and qualified “U” based upon associated laboratory method blank contamination; and
- The nitrate-nitrite and nitrite results for QC trip blank sample OL-0936-01 were considered not detected and qualified “U” based upon associated laboratory method blank contamination.

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The data for these

parameters presented by UFI were 100% complete (i.e., usable). The validated laboratory data are tabulated and presented in Attachment A-1.

A2.2 ZOOPLANKTON SAMPLES

Data review has been completed for data packages generated by BRL containing zooplankton samples collected from the site. The specific samples contained in these data packages, the analyses performed, and the validated laboratory data were tabulated and are presented in Attachment A-2. All of these samples were shipped under a COC record and received intact by the analytical laboratory.

Data validation was performed for all samples analyzed by BRL in accordance with the project work plan and QAPP as well as the USEPA Region II SOP HW-2, Revision 13 "Evaluation of Metals Data for the CLP Program". This data validation and usability report is presented by analysis type.

Samples of daphnia zooplankton analyzed by Syracuse University because analytical data from Syracuse University did not include documentation of quality assurance procedures needed to validate the data.

A2.2.1 Low Level Mercury

The following items were reviewed for compliancy in the low level mercury analysis:

- Custody documentation
- Holding times
- Initial and continuing calibration verifications
- Initial and continuing calibration, and laboratory preparation blank contamination
- Matrix spike / matrix spike duplicate (MS/MSD) recoveries
- Laboratory duplicate precision
- Laboratory control sample (LCS)
- Field duplicate precision
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of field duplicate precision as discussed below.

Field Duplicate Precision

All field duplicate precision results for designated project field duplicates and their parent samples were considered acceptable with the exception of the mercury precision result (66%RPD) for the field duplicate pair OL-0791-08 and -09. The mercury results were considered estimated and qualified “J” for these samples.

Usability

All low level mercury sample results for the zooplankton were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The low level mercury data presented by BRL were 100% complete (i.e., usable). The validated low level mercury laboratory data are tabulated and presented in Attachment A-2.

It was noted that the shipping cooler containing samples collected on 8/17/09 was received by BRL at ambient temperature. Therefore, all low level mercury results for these samples were considered estimated, possibly biased low, with positive results qualified “J” and nondetected results qualified “UJ”.

A2.2.2 Methyl Mercury

The following items were reviewed for compliancy in the methyl mercury analysis:

- Custody documentation
- Holding times
- Initial and continuing calibration verifications
- Initial and continuing calibration, and laboratory preparation blank contamination
- Matrix spike / matrix spike duplicate (MS/MSD) recoveries
- Laboratory duplicate precision
- Laboratory control sample (LCS)
- Field duplicate precision
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of calibrations and MS/MSD recoveries as discussed below.

Calibrations

All initial and continuing calibration verifications were analyzed at the appropriate frequency with recoveries within the 80-120%R QC limit with the exception of the low methyl mercury initial calibration verification recovery (74%R) associated with the zooplankton samples within sample delivery group (SDG) 0937009. Therefore, the methyl mercury results for these samples were considered estimated, possibly biased low, with positive results qualified “J” and nondetected results qualified “UJ”.

MS/MSD Recoveries

All MS/MSD recoveries were considered acceptable and within the laboratory QC limit of 65-125%R for all designated project spiked samples with the exception of the high matrix spike recovery for methyl mercury (186%R) associated with zooplankton samples in SDG 0946005. The positive methyl mercury results for these samples were considered estimated, possibly biased high, and qualified “J” for the affected samples.

Usability

All methyl mercury sample results for the zooplankton were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The methyl mercury data presented by BRL were 100% complete (i.e., usable). The validated methyl mercury laboratory data are tabulated and presented in Attachment A-2.

It was noted that the shipping cooler containing samples collected on 8/17/09 was received by BRL at ambient temperature. Therefore, all methyl mercury results for these samples were considered estimated, possibly biased low, with positive results qualified “J” and nondetected results qualified “UJ”.

A2.3 SEDIMENT TRAP SAMPLES

Data review has been completed for data packages generated by BRL and UFI containing sediment trap samples collected from the site. The specific samples contained in these data packages, the analyses performed, and the validated laboratory data were tabulated and are

presented in Attachment A-3. All of these samples were properly preserved, shipped under a COC record, and received intact by the analytical laboratory.

Data validation was performed for all samples in accordance with the project work plan and QAPP as well as the USEPA Region II SOP HW-2, Revision 13 "Evaluation of Metals Data for the CLP Program". This data validation and usability report is presented by analysis type.

A2.3.1 Low Level Mercury

The following items were reviewed for compliancy in the low level mercury analysis:

- Custody documentation
- Holding times
- Initial and continuing calibration verifications
- Initial and continuing calibration, and laboratory preparation blank contamination
- Matrix spike / matrix spike duplicate (MS/MSD) recoveries
- Laboratory duplicate precision
- Laboratory control sample (LCS)
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols.

Usability

All low level mercury results for the sediment trap samples were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The low level mercury data presented by BRL were 100% complete (i.e., usable). The validated low level mercury laboratory data are tabulated and presented in Attachment A-3.

A2.3.2 Total and Dissolved Calcium, TOC, Total Carbon, TSS, and Total Fixed Solids

All custody documentation, holding times, matrix spike recoveries, laboratory duplicate precision, laboratory control sample recoveries, laboratory method blank contamination, QC field and trip blank contamination, initial and continuing calibration verifications, field duplicate precision, and quantitation limits were reviewed for compliance. Validation qualification of the sample results for these parameters was not required with the exception of the following:

- The positive TOC, total carbon, TSS, and total fixed solids results for samples OL-0724-07, -08, and -09 were considered estimated, possibly biased low, and qualified “J” based upon analytical holding time exceedance;
- The dissolved calcium results for samples OL-0731-01, -02, and -03 were considered estimated, possibly biased low, and qualified “J” based upon the associated matrix spike recovery falling below the QC limit;
- The TSS and total fixed solids results for samples OL-0727-01, -02, and -03 were considered estimated, possibly biased low, and qualified “J” based upon analytical holding time exceedance;
- The dissolved calcium results for samples OL-0776-03, OL-0781-19, OL-0784-01, -02, -03, OL-0924-14, -15, -16, OL-0931-09, -10, and -11 were considered estimated and qualified “J” based upon laboratory duplicate precision exceedance;
- The TOC and total carbon results for samples OL-0784-01, -02, and -03 were considered estimated, possibly biased low, and qualified “J” based upon analytical holding time exceedance; and
- The total calcium results for samples OL-0931-09, -10, and -11 were considered estimated, possibly biased low, and qualified “J” based upon the associated matrix spike recovery falling below the QC limit.

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The data for these parameters presented by UFI were 100% complete (i.e., usable). The validated laboratory data are tabulated and presented in Attachment A-3.

ATTACHMENT A

VALIDATED LABORATORY DATA

ATTACHMENT A-1

**VALIDATED LABORATORY DATA FOR
SURFACE WATER AND WATER COLUMN SAMPLES**

							Parameter	CHLORIDE	CHLOROPHYLL-A	FERROUS IRON (II)	METHANE	NITROGEN, AMMONIA (AS N)	NITROGEN, NITRATE-NITRITE	NITROGEN, NITRITE	SULFIDE	TOTAL INORGANIC CARBON	DISSOLVED ORGANIC CARBON
	Field Sample ID	Lab Sample ID	Sample Date	Sample Depth	Matrix	Purpose	Units	mg/l	ug/l	ug/l	ug/l	mg/l	mg/l	ug/l	mg/l	mg/l	mg/l
Location ID							Sample Type										
DEEP_S	OL-0724-02	2009117005	4/27/2009	6.6-6.6 Ft	WATER	REG	W-SW	410	4.8			0.15019	2.20202	18.819		44.8	2.8
DEEP_S	OL-0724-03	2009117006	4/27/2009	6.6-6.6 Ft	WATER	FD	W-SW	410	4.7			0.1438	2.1901	19.48		44.8	3
DEEP_S	OL-0724-04	2009117007	4/27/2009	6.6-6.6 Ft	WATER	FD2	W-SW	420	4.87			0.14261	2.23114	20.262		44.2	3.3
DEEP_S	OL-0724-05	2009117017	4/27/2009	39.6-39.6 Ft	WATER	REG	W-SW	410	6.86			0.15816	2.18414	19.433		44.9	3
DEEP_S	OL-0724-06	2009117026	4/27/2009	59.4-59.4 Ft	WATER	REG	W-SW	420				0.16366	2.20339	21.935		46.2	2.8
DEEP_S	OL-0736-02	2009146005	5/26/2009	6.6-6.6 Ft	WATER	REG	W-SW	440	10.26			0.00468 U	2.32785 J	23.184 J		41.6	3.2
DEEP_S	OL-0736-03	2009146006	5/26/2009	6.6-6.6 Ft	WATER	FD	W-SW	430	10.83			0.00608 U	2.35296 J	23.025 J		40.3	3.2
DEEP_S	OL-0736-04	2009146007	5/26/2009	6.6-6.6 Ft	WATER	FD2	W-SW	440	9.29			0.0145 U	2.40434 J	25.559 J		40.9	3.2
DEEP_S	OL-0736-05	2009146017	5/26/2009	39.6-39.6 Ft	WATER	REG	W-SW	440	6.33			0.11622	2.06501 J	23.431 J		45	3.1
DEEP_S	OL-0736-06	2009146026	5/26/2009	59.4-59.4 Ft	WATER	REG	W-SW	440				0.29378	1.89019 J	34.198 J		45.2	3
DEEP_S	OL-0755-02	2009173005	6/22/2009	6.6-6.6 Ft	WATER	REG	W-SW	397.4	4.21			0.05443	2.21408	25.283		38.2	3
DEEP_S	OL-0755-03	2009173006	6/22/2009	6.6-6.6 Ft	WATER	FD	W-SW	397.4	4.93			0.05571	2.2533	25.72		38.9	3.6
DEEP_S	OL-0755-04	2009173007	6/22/2009	6.6-6.6 Ft	WATER	FD2	W-SW	407.3	4.8			0.05965	2.27259	25.927		40	3.7
DEEP_S	OL-0755-05	2009173017	6/22/2009	39.6-39.6 Ft	WATER	REG	W-SW	447.1	0.4			0.22506	1.86534	51.952		46.9	2.8
DEEP_S	OL-0755-06	2009173026	6/22/2009	59.4-59.4 Ft	WATER	REG	W-SW	434.2				0.33525	1.83736	121.552		47.6	2.9
DEEP_S	OL-0765-02	2009187005	7/6/2009	6.6-6.6 FT	WATER	REG	W-SW	390	1.16			0.07965	2.46955 J	33.179		38.9	3.7
DEEP_S	OL-0765-03	2009187006	7/6/2009	6.6-6.6 FT	WATER	FD	W-SW	380	2.16			0.08003	2.43556 J	32.458		40.3	3.7
DEEP_S	OL-0765-04	2009187007	7/6/2009	6.6-6.6 FT	WATER	FD2	W-SW	390	2.29			0.0874	2.47403 J	34.958		40	3.7
DEEP_S	OL-0765-05	2009187017	7/6/2009	39.6-39.6 FT	WATER	REG	W-SW	440	0.57	10 U	500 U	0.02575	2.20061 J	68.862	0.067 U	46.6	3
DEEP_S	OL-0765-06	2009187018	7/6/2009	42.9-42.9 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0765-07	2009187019	7/6/2009	46.2-46.2 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0765-08	2009187020	7/6/2009	49.5-49.5 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0765-09	2009187021	7/6/2009	52.8-52.8 FT	WATER	REG	W-SW	450		10 U	500 U	0.10281	2.01737 J	333.773	0.067 U	47	3
DEEP_S	OL-0765-10	2009187025	7/6/2009	56.1-56.1 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0765-11	2009187026	7/6/2009	59.4-59.4 FT	WATER	REG	W-SW	450				0.48509	1.66106 J	267.343		49.7	3
DEEP_S	OL-0765-12	2009187027	7/6/2009	59.4-59.4 FT	WATER	REG	W-SW			10 U	500 U				0.067 U		
DEEP_S	OL-0765-13	2009187028	7/6/2009	59.4-59.4 FT	WATER	FD	W-SW			10 U	500 U				0.067 U		
DEEP_S	OL-0765-14	2009187029	7/6/2009	59.4-59.4 FT	WATER	FD2	W-SW			10 U	500 U				0.067 U		
DEEP_S	OL-0773-02	2009201008	7/20/2009	6.6-6.6 FT	WATER	REG	W-SW	400	11.37 J			0.02656 U	2.46526	36.358		40.3	3.8
DEEP_S	OL-0773-03	2009201009	7/20/2009	6.6-6.6 FT	WATER	FD	W-SW	410	9.42 J			0.02603 U	2.43279	36.919		40.5	3.9
DEEP_S	OL-0773-04	2009201010	7/20/2009	6.6-6.6 Ft	WATER	FD2	W-SW	400	11.56 J			0.03147 U	2.48453	36.889		40.1	3.9
DEEP_S	OL-0773-05	2009201018	7/20/2009	33-33 Ft	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0773-06	2009201019	7/20/2009	36.3-36.3 Ft	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0773-07	2009201020	7/20/2009	39.6-39.6 Ft	WATER	REG	W-SW	450	0.63 J	10 U	500 U	0.14534	1.89338	93.264	0.067 U	48.7	3
DEEP_S	OL-0773-08	2009201021	7/20/2009	42.9-42.9 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0773-09	2009201022	7/20/2009	46.2-46.2 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0773-10	2009201023	7/20/2009	49.5-49.5 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0773-11	2009201024	7/20/2009	52.8-52.8 FT	WATER	REG	W-SW	450		10 U	440 J	0.4375	1.50691	204.664	0.067 U	50.2	3.1
DEEP_S	OL-0773-12	2009201028	7/20/2009	56.1-56.1 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0773-13	2009201029	7/20/2009	59.4-59.4 FT	WATER	REG	W-SW	450				0.77225	1.22497	200.816		51.7	3
DEEP_S	OL-0773-14	2009201030	7/20/2009	59.4-59.4 FT	WATER	REG	W-SW			10 U	700				0.067 U		
DEEP_S	OL-0773-15	2009201031	7/20/2009	59.4-59.4 FT	WATER	FD	W-SW			10 U	960				0.067 U		
DEEP_S	OL-0773-16	2009201032	7/20/2009	59.4-59.4 FT	WATER	FD2	W-SW			10 U	710				0.067 U		
DEEP_S	OL-0781-02	2009201008	8/4/2009	6.6-6.6 FT	WATER	REG	W-SW		5.05								
DEEP_S	OL-0781-02	2009216048	8/4/2009	6.6-6.6 FT	WATER	REG	W-SW	390				0.01697 J	2.80212 J	37.008		35.7	3.8
DEEP_S	OL-0781-03	2009201009	8/4/2009	6.6-6.6 FT	WATER	FD	W-SW		5.37								
DEEP_S	OL-0781-03	2009216049	8/4/2009	6.6-6.6 FT	WATER	FD	W-SW	400				0.01658 J	2.7867 J	37.408		34.9	3.7
DEEP_S	OL-0781-04	2009201010	8/4/2009	6.6-6.6 FT	WATER	FD2	W-SW		5.78								
DEEP_S	OL-0781-04	2009216050	8/4/2009	6.6-6.6 FT	WATER	FD2	W-SW	400				0.0159 J	2.78951 J	36.156		35	3.8
DEEP_S	OL-0781-05	2009216057	8/4/2009	29.5-29.5 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0781-06	2009216058	8/4/2009	33-33 Ft	WATER	REG	W-SW								0.067 U		

							Parameter	CHLORIDE	CHLOROPHYLL-A	FERROUS IRON (II)	METHANE	NITROGEN, AMMONIA (AS N)	NITROGEN, NITRATE-NITRITE	NITROGEN, NITRITE	SULFIDE	TOTAL INORGANIC CARBON	DISSOLVED ORGANIC CARBON
	Field Sample ID	Lab Sample ID	Sample Date	Sample Depth	Matrix	Purpose	Units	mg/l	ug/l	ug/l	ug/l	mg/l	mg/l	ug/l	mg/l	mg/l	mg/l
Location ID							Sample Type										
DEEP_S	OL-0781-07	2009216059	8/4/2009	36.1-36.1 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0781-08	2009201020	8/4/2009	39.6-39.6 Ft	WATER	REG	W-SW		1	10 U	500 U						
DEEP_S	OL-0781-08	2009216060	8/4/2009	39.6-39.6 Ft	WATER	REG	W-SW	480				0.18295	1.94012 J	64.773	0.067 U	47.2	2.8
DEEP_S	OL-0781-09	2009216061	8/4/2009	42.6-42.6 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0781-10	2009216062	8/4/2009	45.9-45.9 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0781-11	2009216063	8/4/2009	49.2-49.2 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0781-12	2009201024	8/4/2009	52.8-52.8 Ft	WATER	REG	W-SW			10 U	500 U						
DEEP_S	OL-0781-12	2009216064	8/4/2009	52.8-52.8 Ft	WATER	REG	W-SW	450				0.53859	1.42277 J	159.518	0.067 U	48.1	3.1
DEEP_S	OL-0781-13	2009216068	8/4/2009	55.8-55.8 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0781-14	2009216069	8/4/2009	59.4-59.4 Ft	WATER	REG	W-SW	460				0.96641	0.947597 J	67.208		51.7	3
DEEP_S	OL-0781-15	2009201030	8/4/2009	59.4-59.4 Ft	WATER	REG	W-SW			10 U	1350						
DEEP_S	OL-0781-15	2009216070	8/4/2009	59.4-59.4 Ft	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0781-16	2009201031	8/4/2009	59.4-59.4 Ft	WATER	FD	W-SW			9.13 J	1210						
DEEP_S	OL-0781-16	2009216071	8/4/2009	59.4-59.4 Ft	WATER	FD	W-SW								0.067 U		
DEEP_S	OL-0781-17	2009201032	8/4/2009	59.4-59.4 Ft	WATER	FD2	W-SW			10 U	1260						
DEEP_S	OL-0781-17	2009216072	8/4/2009	59.4-59.4 Ft	WATER	FD2	W-SW								0.067 U		
DEEP_S	OL-0790-02	2009229017	8/17/2009	6.6-6.6 FT	WATER	REG	W-SW	347.7	4.9			0.037 J	2.241	36		34.7	4.2
DEEP_S	OL-0790-03	2009229018	8/17/2009	6.6-6.6 Ft	WATER	FD	W-SW	357.6	4.5			0.036 J	2.217	36		34.4	4.3
DEEP_S	OL-0790-04	2009229019	8/17/2009	6.6-6.6 Ft	WATER	FD2	W-SW	357.6	4.6			0.035 J	2.236	36		33.3	4.2
DEEP_S	OL-0790-05	2009229026	8/17/2009	29.7-29.7 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0790-06	2009229027	8/17/2009	33-33 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0790-07	2009229028	8/17/2009	36.3-36.3 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0790-08	2009229029	8/17/2009	39.6-39.6 FT	WATER	REG	W-SW	476.9	0.5	10 U	500 U	0.264	1.556	26	0.067 U	47.7	3.1
DEEP_S	OL-0790-09	2009229030	8/17/2009	42.9-42.9 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0790-10	2009229031	8/17/2009	46.2-46.2 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0790-11	2009229032	8/17/2009	49.5-49.5 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0790-12	2009229033	8/17/2009	52.8-52.8 FT	WATER	REG	W-SW	457		10 U	800	0.561	1.303	102	0.067 U	49.7	3.1
DEEP_S	OL-0790-13	2009229037	8/17/2009	56.1-56.1 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0790-14	2009229038	8/17/2009	59.4-59.4 FT	WATER	REG	W-SW	457				0.882	0.892	53		51.8	3.3
DEEP_S	OL-0790-15	2009229039	8/17/2009	59.4-59.4 FT	WATER	REG	W-SW			4 J	1200				0.067 U		
DEEP_S	OL-0790-16	2009229040	8/17/2009	59.4-59.4 FT	WATER	REG	W-SW			10 U	1300				0.067 U		
DEEP_S	OL-0790-17	2009229041	8/17/2009	59.4-59.4 FT	WATER	REG	W-SW			10 U	1200				0.067 U		
DEEP_S	OL-0798-02	2009243007	8/31/2009	6.6-6.6 FT	WATER	REG	W-SW	387.5	8.3			0.039	2.326	30		38.2	3.6
DEEP_S	OL-0798-03	2009243008	8/31/2009	6.6-6.6 FT	WATER	FD	W-SW	397.4	9.3			0.038 J	2.313	30		37.4	3.6
DEEP_S	OL-0798-04	2009243009	8/31/2009	6.6-6.6 FT	WATER	FD2	W-SW	397.4	9.5			0.038 J	2.307	30		38.4	3.7
DEEP_S	OL-0798-05	2009243016	8/31/2009	29.5-29.5 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0798-06	2009243017	8/31/2009	32.8-32.8 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0798-07	2009243018	8/31/2009	36.1-36.1 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0798-08	2009243019	8/31/2009	39.6-39.6 Ft	WATER	REG	W-SW	466.9	1.8	10 U	500 U	0.298	1.467	8 U	0.067 U	50.9	2.9
DEEP_S	OL-0798-10	2009243021	8/31/2009	45.9-45.9 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0798-11	2009243022	8/31/2009	49.2-49.2 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0798-12	2009243023	8/31/2009	52.8-52.8 Ft	WATER	REG	W-SW	447.1		10 U	1200	0.871	0.854	5 J	0.067 U	50.6	3.1
DEEP_S	OL-0798-13	2009243027	8/31/2009	55.8-55.8 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0798-14	2009243028	8/31/2009	59.4-59.4 Ft	WATER	REG	W-SW	447.1				0.839	0.883	9		53.6	3.1
DEEP_S	OL-0798-15	2009243029	8/31/2009	59.4-59.4 Ft	WATER	REG	W-SW			216	2100				0.022 J		
DEEP_S	OL-0798-16	2009243030	8/31/2009	59.4-59.4 Ft	WATER	FD	W-SW			10 U	2300				0.116 J		
DEEP_S	OL-0798-17	2009243031	8/31/2009	59.4-59.4 Ft	WATER	FD2	W-SW			10 U	2300				0.067 U		
DEEP_S	OL-0903-02	2009251009	9/8/2009	6.6-6.6 FT	WATER	REG	W-SW	410	8.4			0.011 J	1.304	33		33.9	3.5
DEEP_S	OL-0903-03	2009251010	9/8/2009	6.6-6.6 FT	WATER	FD	W-SW	400	8.5			0.011 J	2.19	33		34.3	3.7
DEEP_S	OL-0903-04	2009251011	9/8/2009	6.6-6.6 FT	WATER	FD2	W-SW	400	8.9			0.012 J	2.226	33		34.3	3.8
DEEP_S	OL-0903-05	2009251018	9/8/2009	29.7-29.7 FT	WATER	REG	W-SW								0.067 U		

							Parameter	CHLORIDE	CHLOROPHYLL-A	FERROUS IRON (II)	METHANE	NITROGEN, AMMONIA (AS N)	NITROGEN, NITRATE-NITRITE	NITROGEN, NITRITE	SULFIDE	TOTAL INORGANIC CARBON	DISSOLVED ORGANIC CARBON
	Field Sample ID	Lab Sample ID	Sample Date	Sample Depth	Matrix	Purpose	Units	mg/l	ug/l	ug/l	ug/l	mg/l	mg/l	ug/l	mg/l	mg/l	mg/l
Location ID							Sample Type										
DEEP_S	OL-0903-06	2009251019	9/8/2009	33-33 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0903-07	2009251020	9/8/2009	36.3-36.3 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0903-08	2009251021	9/8/2009	39.6-39.6 FT	WATER	REG	W-SW	470	1 U	10 U	600	0.441 J	1.028	8 U	0.067 U	49.8	3
DEEP_S	OL-0903-09	2009251022	9/8/2009	42.9-42.9 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0903-10	2009251023	9/8/2009	46.2-46.2 FT	WATER	REG	W-SW	460				0.625	0.956	8 U	0.067 U	50.9	3
DEEP_S	OL-0903-11	2009251024	9/8/2009	49.5-49.5 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0903-12	2009251025	9/8/2009	52.8-52.8 FT	WATER	REG	W-SW	470		10 U	1700	0.861	0.741	8 U	0.067 U	52.4	3.1
DEEP_S	OL-0903-13	2009251029	9/8/2009	56.1-56.1 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0903-14	2009251030	9/8/2009	59.4-59.4 FT	WATER	REG	W-SW	460				2.065	0.05 U	8 U		56.4	3.6
DEEP_S	OL-0903-15	2009251031	9/8/2009	59.4-59.4 FT	WATER	REG	W-SW			24	2700				0.092		
DEEP_S	OL-0903-16	2009251032	9/8/2009	59.4-59.4 FT	WATER	FD	W-SW			70	2900				0.266		
DEEP_S	OL-0903-17	2009251048	9/8/2009	59.4-59.4 FT	WATER	FD2	W-SW			39	2800				0.067 U		
DEEP_S	OL-0910-02	2009257005	9/14/2009	6.6-6.6 Ft	WATER	REG	W-SW	420	4.7			0.06	2.232	29		37.1	3.7
DEEP_S	OL-0910-03	2009257006	9/14/2009	6.6-6.6 Ft	WATER	FD	W-SW	400	5.2			0.063	2.179	28		37.1	3.8
DEEP_S	OL-0910-04	2009257007	9/14/2009	6.6-6.6 Ft	WATER	FD2	W-SW	400	4.9			0.057	2.174	28		35.6	3.7
DEEP_S	OL-0910-06	2009257015	9/14/2009	33-33 Ft	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0910-07	2009257016	9/14/2009	36.3-36.3 Ft	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0910-08	2009257017	9/14/2009	39.6-39.6 Ft	WATER	REG	W-SW	490	0.8 U	10 U	300 J	0.355	1.072	2 J	0.067 U	49.8	2.7
DEEP_S	OL-0910-09	2009257018	9/14/2009	42.9-42.9 Ft	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0910-10	2009257019	9/14/2009	46.2-46.2 Ft	WATER	REG	W-SW	460				0.666	0.954	8 U	0.067 U	49.2	2.8
DEEP_S	OL-0910-11	2009257020	9/14/2009	49.5-49.5 Ft	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0910-12	2009257021	9/14/2009	52.8-52.8 Ft	WATER	REG	W-SW	460		4 J	1500	1.126	0.635	8 U	0.067 U	52.1	2.9
DEEP_S	OL-0910-13	2009257025	9/14/2009	56.1-56.1 Ft	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0910-14	2009257026	9/14/2009	59.4-59.4 Ft	WATER	REG	W-SW	460				1.987	0.09	8 U		57	3.3
DEEP_S	OL-0910-15	2009257027	9/14/2009	59.4-59.4 Ft	WATER	REG	W-SW			10 U	3000				0.033 J		
DEEP_S	OL-0910-16	2009257028	9/14/2009	59.4-59.4 Ft	WATER	FD	W-SW			39	2800				0.067 U		
DEEP_S	OL-0910-17	2009257029	9/14/2009	59.4-59.4 Ft	WATER	FD2	W-SW			31	2200				0.067 U		
DEEP_S	OL-0912-02	2009264019	9/21/2009	6.6-6.6 Ft	WATER	REG	W-SW	420	5.8 J			0.074	2.297	30		37.2	3.9
DEEP_S	OL-0912-03	2009264020	9/21/2009	6.6-6.6 Ft	WATER	FD	W-SW	410	6.1 J			0.072	2.259	30		38.4	3.9
DEEP_S	OL-0912-04	2009264021	9/21/2009	6.6-6.6 Ft	WATER	FD2	W-SW	420	6.3 J			0.071	2.243	29		37.4	3.8
DEEP_S	OL-0912-05	2009264029	9/21/2009	33-33 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0912-06	2009264030	9/21/2009	36.3-36.3 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0912-07	2009264031	9/21/2009	39.6-39.6 FT	WATER	REG	W-SW	490	1.8 J	10 U	600	0.335	1.285	6 J	0.067 U	48	3.1
DEEP_S	OL-0912-08	2009264032	9/21/2009	42.9-42.9 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0912-09	2009264033	9/21/2009	46.2-46.2 FT	WATER	REG	W-SW	480				1.016	0.502	11	0.067 U	49.4	3.2
DEEP_S	OL-0912-10	2009264034	9/21/2009	49.5-49.5 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0912-11	2009264035	9/21/2009	52.8-52.8 FT	WATER	REG	W-SW	450		10 U	1900	1.158	0.354	15	0.067 U	52.8	3.4
DEEP_S	OL-0912-12	2009264039	9/21/2009	56.1-56.1 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0912-13	2009264040	9/21/2009	59.4-59.4 FT	WATER	REG	W-SW	450				1.253	0.289	14		54	3.3
DEEP_S	OL-0912-14	2009264041	9/21/2009	59.4-59.4 FT	WATER	REG	W-SW			5 J	2700				0.067 U		
DEEP_S	OL-0912-15	2009264042	9/21/2009	59.4-59.4 FT	WATER	FD	W-SW			33	2300				0.076		
DEEP_S	OL-0912-16	2009264043	9/21/2009	59.4-59.4 FT	WATER	FD2	W-SW			10 U	1900				0.038 J		
DEEP_S	OL-0919-02	2009271025	9/28/2009	6.6-6.6 FT	WATER	REG	W-SW	420	4.7			0.238	2.326	29		40.5	3.9
DEEP_S	OL-0919-03	2009271026	9/28/2009	6.6-6.6 FT	WATER	FD	W-SW	420	4.7			0.081	2.261	29		40.1	3.8
DEEP_S	OL-0919-04	2009271027	9/28/2009	6.6-6.6 FT	WATER	FD2	W-SW	420	4.9			0.08	2.302	29		39.1	3.8
DEEP_S	OL-0919-05	2009271036	9/28/2009	36.3-36.3 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0919-06	2009271037	9/28/2009	39.6-39.6 FT	WATER	REG	W-SW	490	1.4	4 J	500	0.339	1.423	15	0.067 U	53	3.2
DEEP_S	OL-0919-07	2009271038	9/28/2009	42.9-42.9 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0919-08	2009271039	9/28/2009	46.2-46.2 FT	WATER	REG	W-SW	480				0.811	0.756	12	0.067 U	55.5	3.2
DEEP_S	OL-0919-09	2009271040	9/28/2009	49.5-49.5 FT	WATER	REG	W-SW								0.067 U		
DEEP_S	OL-0919-10	2009271041	9/28/2009	52.8-52.8 FT	WATER	REG	W-SW	460		10 U	2200	1.551	0.122	25	0.067 U	58	3.6

							Parameter	CHLORIDE	CHLOROP HYLL-A	FERROUS IRON (II)	METHANE	NITROGEN, AMMONIA (AS N)	NITROGEN, NITRATE- NITRITE	NITROGEN, NITRITE		SULFIDE	TOTAL INORGANIC CARBON	DISSOLVED ORGANIC CARBON
							Units	mg/l	ug/l	ug/l	ug/l	mg/l	mg/l	ug/l		mg/l	mg/l	mg/l
Location ID	Field Sample ID	Lab Sample ID	Sample Date	Sample Depth	Matrix	Purpose	Sample Type											
DEEP_S	OL-0919-11	2009271045	9/28/2009	56.1-56.1 FT	WATER	REG	W-SW									0.067	U	
DEEP_S	OL-0919-12	2009271046	9/28/2009	59.4-59.4 FT	WATER	REG	W-SW	450				1.789	0.05	8	U		56.9	3.7
DEEP_S	OL-0919-13	2009271047	9/28/2009	59.4-59.4 FT	WATER	REG	W-SW			18	2200					0.067	U	
DEEP_S	OL-0919-14	2009271048	9/28/2009	59.4-59.4 FT	WATER	FD	W-SW			5	2500					0.067	U	
DEEP_S	OL-0919-15	2009271049	9/28/2009	59.4-59.4 FT	WATER	FD2	W-SW			54	2700					0.067	U	
DEEP_S	OL-0924-02	2009278005	10/5/2009	6.6-6.6 FT	WATER	REG	W-SW	450	5.4			0.158	1.985	25			40.8	3.6
DEEP_S	OL-0924-03	2009278006	10/5/2009	6.6-6.6 FT	WATER	REG	W-SW	450	5.9			0.157	1.932	25			41.5	3.6
DEEP_S	OL-0924-04	2009278007	10/5/2009	6.6-6.6 FT	WATER	FD2	W-SW	460	5.9			0.156	1.971	25			40.5	3.6
DEEP_S	OL-0924-05	2009278017	10/5/2009	39.6-39.6 FT	WATER	REG	W-SW	420	3.9			0.162	1.96	26			41.5	3.6
DEEP_S	OL-0924-06	2009278019	10/5/2009	46.2-46.2 FT	WATER	REG	W-SW	460				0.723	0.77	18	0.067	U	41.8	3.3
DEEP_S	OL-0924-07	2009278020	10/5/2009	49.5-49.5 FT	WATER	REG	W-SW									0.067	U	
DEEP_S	OL-0924-08	2009278021	10/5/2009	52.8-52.8 FT	WATER	REG	W-SW	470		10	500	1.269	0.303	44	0.067	U	53.5	3.4
DEEP_S	OL-0924-09	2009278025	10/5/2009	56.1-56.1 FT	WATER	REG	W-SW									0.067	U	
DEEP_S	OL-0924-10	2009278026	10/5/2009	59.4-59.4 FT	WATER	REG	W-SW	470				1.745	0.05	8	U		57.3	3.6
DEEP_S	OL-0924-11	2009278027	10/5/2009	59.4-59.4 FT	WATER	REG	W-SW			54	3200					0.376		
DEEP_S	OL-0924-12	2009278028	10/5/2009	59.4-59.4 FT	WATER	FD	W-SW			49	4800					0.067	U	
DEEP_S	OL-0924-13	2009278029	10/5/2009	59.4-59.4 FT	WATER	FD2	W-SW			87	3400					0.067	U	
DEEP_S	OL-0931-02	2009285005	10/12/2009	6.6-6.6 FT	WATER	REG	W-SW	430	11.8			0.239	1.466	26			43.2	3.7
DEEP_S	OL-0931-03	2009285006	10/12/2009	6.6-6.6 FT	WATER	FD	W-SW	420	10.8			0.241	1.839	26			41.9	3.6
DEEP_S	OL-0931-04	2009285007	10/12/2009	6.6-6.6 FT	WATER	FD2	W-SW	420	11			0.241	1.838	26			42.5	3.5
DEEP_S	OL-0931-05	2009285017	10/12/2009	39.6-39.6 FT	WATER	REG	W-SW	410	10.9			0.237	1.806	26			42.4	3.4
DEEP_S	OL-0931-06	2009285026	10/12/2009	59.4-59.4 Ft	WATER	REG	W-SW	450				0.399	1.63	28			46	3.4
DEEP_S	OL-0936-02	2009299002	10/26/2009	6.6-6.6 FT	WATER	REG	W-SW	430	8.4			0.323	2.013	40			42.9	3.5
DEEP_S	OL-0936-03	2009299003	10/26/2009	6.6-6.6 FT	WATER	FD	W-SW	430	8.8			0.323	1.998	40			43.2	3.6
DEEP_S	OL-0936-04	2009299004	10/26/2009	6.6-6.6 FT	WATER	FD2	W-SW	440	8.7			0.321	2.018	40			42.7	3.7
DEEP_S	OL-0936-05	2009299005	10/26/2009	39.6-39.6 FT	WATER	REG	W-SW	450	7.2			0.325	2.627	42			42.9	3.8
DEEP_S	OL-0936-06	2009299006	10/26/2009	59.4-59.4 FT	WATER	REG	W-SW	440				0.329	2.015	41			42.9	3.8
DEEP_S	OL-0944-02	2009313002	11/9/2009	6.6-6.6 FT	WATER	REG	W-SW	440	10.5			0.293	1.913	54			42.8	3.8
DEEP_S	OL-0944-03	2009313003	11/9/2009	6.6-6.6 FT	WATER	FD	W-SW	430	9.5			0.314	1.933	52			43.3	4.7
DEEP_S	OL-0944-04	2009313004	11/9/2009	6.6-6.6 FT	WATER	FD2	W-SW	430	10.2			0.317	1.868	51			43.1	4.1
DEEP_S	OL-0944-05	2009313005	11/9/2009	39.6-39.6 FT	WATER	REG	W-SW	440	7			0.32	1.94	54			42.7	4
DEEP_S	OL-0944-06	2009313006	11/9/2009	59.4-59.4 FT	WATER	REG	W-SW	430				0.316	1.957	52			44.3	4.1
DEEP_S	OL-0951-02	2009327003	11/23/2009	6.6-6.6 FT	WATER	REG	W-SW	420	16.2			0.171	2.376	60			43.4	3.6
DEEP_S	OL-0951-03	2009327004	11/23/2009	6.6-6.6 FT	WATER	FD	W-SW	420	18.6			0.169	2.32	59			43.2	4.4
DEEP_S	OL-0951-04	2009327005	11/23/2009	6.6-6.6 FT	WATER	FD2	W-SW	420	17.3			0.176	2.387	61			42.3	4.2
DEEP_S	OL-0951-05	2009327006	11/23/2009	39.6-39.6 FT	WATER	REG	W-SW	410	18.6			0.172	2.35	59			43.2	4
DEEP_S	OL-0951-06	2009327007	11/23/2009	59.4-59.4 FT	WATER	REG	W-SW	450				0.192	1.696	40			51.2	3.7

								Parameter	MERCURY		DISSOLVED, MERCURY	METHYL MERCURY	
								Units	ug/l		ug/l	ug/l	
Location ID	Field Sample ID	Filtered	Lab Sample ID	Sample Date	Sample Depth	Matrix	Purpose	Samp Type					
DEEP_S	OL-0725-04	N	A9D280124003	4/27/2009	6.6-6.6 Ft	WATER	FD	W-SW	0.00094				
DEEP_S	OL-0725-05	N	A9D280124004	4/27/2009	39.6-39.6 Ft	WATER	REG	W-SW	0.00097				
DEEP_S	OL-0725-06	N	A9D280124005	4/27/2009	59.4-59.4 Ft	WATER	REG	W-SW	0.00074				
DEEP_S	OL-0726-03	N	0918010-03RE1	4/27/2009	6.6-6.6 Ft	WATER	REG	W-SW				0.000045	J
DEEP_S	OL-0726-04	N	0918010-04RE1	4/27/2009	6.6-6.6 Ft	WATER	FD	W-SW				0.000058	
DEEP_S	OL-0726-05	N	0918010-05RE1	4/27/2009	39.6-39.6 Ft	WATER	REG	W-SW				0.000061	
DEEP_S	OL-0726-06	N	0918010-06RE1	4/27/2009	59.4-59.4 Ft	WATER	REG	W-SW				0.000062	
DEEP_S	OL-0737-03	N	A9E270249003	5/26/2009	6.6-6.6 Ft	WATER	REG	W-SW	0.0011		0.0005	J	
DEEP_S	OL-0737-04	N	A9E270249004	5/26/2009	6.6-6.6 Ft	WATER	FD	W-SW	0.0012				
DEEP_S	OL-0737-05	N	A9E270249005	5/26/2009	39.6-39.6 Ft	WATER	REG	W-SW	0.00089				
DEEP_S	OL-0737-06	N	A9E270249006	5/26/2009	59.4-59.4 Ft	WATER	REG	W-SW	0.0011				
DEEP_S	OL-0738-03	N	0922008-03	5/26/2009	6.6-6.6 Ft	WATER	REG	W-SW				0.0001	
DEEP_S	OL-0738-04	N	0922008-04	5/26/2009	6.6-6.6 Ft	WATER	FD	W-SW				0.00009	
DEEP_S	OL-0738-05	N	0922008-05	5/26/2009	39.6-39.6 Ft	WATER	REG	W-SW				0.00005	J
DEEP_S	OL-0738-06	N	0922008-06	5/26/2009	59.4-59.4 Ft	WATER	REG	W-SW				0.000064	
DEEP_S	OL-0756-03	N	A9F230122003	6/22/2009	6.6-6.6 Ft	WATER	REG	W-SW	0.0021		0.0013	J	
DEEP_S	OL-0756-04	N	A9F230122004	6/22/2009	6.6-6.6 Ft	WATER	FD	W-SW	0.0023		0.0011	J	
DEEP_S	OL-0756-05	N	A9F230122005	6/22/2009	39.6-39.6 Ft	WATER	REG	W-SW	0.0023				
DEEP_S	OL-0756-06	N	A9F230122006	6/22/2009	59.4-59.4 Ft	WATER	REG	W-SW	0.0014				
DEEP_S	OL-0757-03	N	0926010-03	6/22/2009	6.6-6.6 Ft	WATER	REG	W-SW				0.000078	
DEEP_S	OL-0757-04	N	0926010-04	6/22/2009	6.6-6.6 Ft	WATER	FD	W-SW				0.000103	
DEEP_S	OL-0757-05	N	0926010-05	6/22/2009	39.6-39.6 Ft	WATER	REG	W-SW				0.000055	
DEEP_S	OL-0757-06	N	0926010-06	6/22/2009	59.4-59.4 Ft	WATER	REG	W-SW				0.000065	
DEEP_S	OL-0766-03	N	0928010-03/04	7/6/2009	6.6-6.6 FT	WATER	REG	W-SW	0.00431		0.00072	0.000057	
DEEP_S	OL-0766-04	N	0928010-06/07	7/6/2009	6.6-6.6 FT	WATER	FD	W-SW	0.00424		0.0006	0.000071	
DEEP_S	OL-0766-05	N	0928010-08	7/6/2009	39.6-39.6 FT	WATER	REG	W-SW	0.00331			0.000077	
DEEP_S	OL-0766-06	N	0928010-09	7/6/2009	52.8-52.8 FT	WATER	REG	W-SW	0.00293			0.000068	
DEEP_S	OL-0766-07	N	0928010-10	7/6/2009	59.4-59.4 FT	WATER	REG	W-SW	0.00287			0.000081	
DEEP_S	OL-0774-03	N	0930010-03/08	7/20/2009	6.6-6.6 FT	WATER	REG	W-SW	0.00367		0.00052	J	0.00011
DEEP_S	OL-0774-04	N	0930010-04/09	7/20/2009	6.6-6.6 FT	WATER	FD	W-SW	0.00367		0.00061	J	0.000097
DEEP_S	OL-0774-05	N	0930010-05	7/20/2009	39.6-39.6 FT	WATER	REG	W-SW	0.00149			0.000077	
DEEP_S	OL-0774-06	N	0930010-06	7/20/2009	52.8-52.8 FT	WATER	REG	W-SW	0.00169			0.000139	
DEEP_S	OL-0774-07	N	0930010-07	7/20/2009	59.4-59.4 FT	WATER	REG	W-SW	0.00186			0.000148	
DEEP_S	OL-0782-03	N	0932020-03/04	8/4/2009	6.6-6.6 FT	WATER	REG	W-SW	0.00176		0.00052	0.000059	
DEEP_S	OL-0782-04	N	0932020-05/06	8/4/2009	6.6-6.6 FT	WATER	FD	W-SW	0.00169		0.00055	0.000071	
DEEP_S	OL-0782-05	N	0932020-07	8/4/2009	39.6-39.6 Ft	WATER	REG	W-SW	0.00142			0.000052	
DEEP_S	OL-0782-06	N	0932020-08	8/4/2009	52.8-52.8 Ft	WATER	REG	W-SW	0.00172			0.000087	
DEEP_S	OL-0782-07	N	0932020-09	8/4/2009	59.4-59.4 Ft	WATER	REG	W-SW	0.00177			0.000168	
DEEP_S	OL-0791-03	N	0934007-03/04	8/17/2009	6.6-6.6 FT	WATER	REG	W-SW	0.0015	J	0.00029	J	0.000102
DEEP_S	OL-0791-04	N	0934007-05/06	8/17/2009	6.6-6.6 FT	WATER	FD	W-SW	0.00135	J	0.0005	J	0.000036
DEEP_S	OL-0791-05	N	0934007-07	8/17/2009	39.6-39.6 FT	WATER	REG	W-SW	0.00118	J		0.000065	J
DEEP_S	OL-0791-06	N	0934007-08	8/17/2009	52.8-52.8 FT	WATER	REG	W-SW	0.00151	J		0.000169	J
DEEP_S	OL-0791-07	N	0934007-09	8/17/2009	59.4-59.4 FT	WATER	REG	W-SW	0.00162	J		0.000237	J
DEEP_S	OL-0799-03	N	0936009-03/04	8/31/2009	6.6-6.6 FT	WATER	REG	W-SW	0.00134		0.00031	J	0.000058
DEEP_S	OL-0799-04	N	0936009-05/06	8/31/2009	6.6-6.6 FT	WATER	FD	W-SW	0.00135		0.00027	J	0.000061
DEEP_S	OL-0799-05	N	0936009-07	8/31/2009	39.6-39.6 Ft	WATER	REG	W-SW	0.00262			0.000069	
DEEP_S	OL-0799-06	N	0936009-08	8/31/2009	52.8-52.8 Ft	WATER	REG	W-SW	0.00317			0.000713	
DEEP_S	OL-0799-07	N	0936009-09	8/31/2009	59.4-59.4 Ft	WATER	REG	W-SW	0.00407			0.00575	

								Parameter	MERCURY		DISSOLVED, MERCURY	METHYL MERCURY	
								Units	ug/l		ug/l	ug/l	
Location ID	Field Sample ID	Filtered	Lab Sample ID	Sample Date	Sample Depth	Matrix	Purpose	Samp Type					
DEEP_S	OL-0904-03	N	0937008-03/04	9/8/2009	6.6-6.6 FT	WATER	REG	W-SW	0.00174		0.00025 J	0.000079	
DEEP_S	OL-0904-04	N	0937008-05/06	9/8/2009	6.6-6.6 FT	WATER	FD	W-SW	0.00202		0.00034 J	0.000077	
DEEP_S	OL-0904-05	N	0937008-07	9/8/2009	39.6-39.6 FT	WATER	REG	W-SW	0.00163			0.000165	
DEEP_S	OL-0904-06	N	0937008-08	9/8/2009	46.2-46.2 FT	WATER	REG	W-SW	0.00146			0.000277	
DEEP_S	OL-0904-07	N	0937008-09	9/8/2009	52.8-52.8 FT	WATER	REG	W-SW	0.00211			0.000593	
DEEP_S	OL-0904-08	N	0937008-10	9/8/2009	59.4-59.4 FT	WATER	REG	W-SW	0.00824			0.0027	
DEEP_S	OL-0911-03	N	0938006-03/04	9/14/2009	6.6-6.6 Ft	WATER	REG	W-SW	0.00261		0.0005	0.00007	
DEEP_S	OL-0911-04	N	0938006-05/06	9/14/2009	6.6-6.6 Ft	WATER	FD	W-SW	0.0025		0.00034 J	0.000073	
DEEP_S	OL-0911-05	N	0938006-07	9/14/2009	39.6-39.6 Ft	WATER	REG	W-SW	0.00219			0.000108	
DEEP_S	OL-0911-06	N	0938006-08	9/14/2009	46.2-46.2 Ft	WATER	REG	W-SW	0.0033			0.000192	
DEEP_S	OL-0911-07	N	0938006-09	9/14/2009	52.8-52.8 Ft	WATER	REG	W-SW	0.0043			0.000739	
DEEP_S	OL-0911-08	N	0938006-10	9/14/2009	59.4-59.4 Ft	WATER	REG	W-SW	0.00919			0.00368	
DEEP_S	OL-0913-03	N	0939006-04/03	9/21/2009	3.3-3.3 FT	WATER	REG	W-SW	0.00394		0.00041	0.000077	
DEEP_S	OL-0913-04	N	0939006-06/05	9/21/2009	3.3-3.3 FT	WATER	FD	W-SW	0.0038		0.00042	0.000074	
DEEP_S	OL-0913-05	N	0939006-07	9/21/2009	39.6-39.6 FT	WATER	REG	W-SW	0.00429			0.000113	
DEEP_S	OL-0913-06	N	0939006-08	9/21/2009	46.2-46.2 FT	WATER	REG	W-SW	0.00477			0.00131	
DEEP_S	OL-0913-07	N	0939006-09	9/21/2009	52.8-52.8 FT	WATER	REG	W-SW	0.00526			0.00199	
DEEP_S	OL-0913-08	N	0939006-10	9/21/2009	59.4-59.4 FT	WATER	REG	W-SW	0.00485			0.00181	
DEEP_S	OL-0920-03	N	0940009-03/04	9/28/2009	6.6-6.6 FT	WATER	REG	W-SW	0.00344		0.00042	0.000088	
DEEP_S	OL-0920-04	N	0940009-05/06	9/28/2009	6.6-6.6 FT	WATER	FD	W-SW	0.0034		0.00046	0.000088	
DEEP_S	OL-0920-05	N	0940009-07	9/28/2009	39.6-39.6 FT	WATER	REG	W-SW	0.00313			0.000162	
DEEP_S	OL-0920-06	N	0940009-08	9/28/2009	46.2-46.2 FT	WATER	REG	W-SW	0.00341			0.000361	
DEEP_S	OL-0920-07	N	0940009-09	9/28/2009	52.8-52.8 FT	WATER	REG	W-SW	0.00549			0.00208	
DEEP_S	OL-0920-08	N	0940009-10	9/28/2009	59.4-59.4 FT	WATER	REG	W-SW	0.0057			0.00686	
DEEP_S	OL-0925-03	N	0941004-03/04	10/5/2009	6.6-6.6 FT	WATER	REG	W-SW	0.00345		0.00037 J	0.000109	
DEEP_S	OL-0925-04	N	0941004-05/06	10/5/2009	6.6-6.6 FT	WATER	FD	W-SW	0.00273		0.00036 J	0.000125	
DEEP_S	OL-0925-05	N	0941004-07	10/5/2009	39.6-39.6 FT	WATER	REG	W-SW	0.00375			0.000133	
DEEP_S	OL-0925-06	N	0941004-08	10/5/2009	46.2-46.2 FT	WATER	REG	W-SW	0.00428			0.000975	
DEEP_S	OL-0925-07	N	0941004-09	10/5/2009	52.8-52.8 FT	WATER	REG	W-SW	0.00674			0.00245	
DEEP_S	OL-0925-08	N	0941004-10	10/5/2009	59.4-59.4 FT	WATER	REG	W-SW	0.00654			0.00365	
DEEP_S	OL-0932-03	N	0942010-03/04	10/12/2009	6.6-6.6 FT	WATER	REG	W-SW	0.0078		0.00043	0.000254	
DEEP_S	OL-0932-04	N	0942010-05/06	10/12/2009	6.6-6.6 FT	WATER	FD	W-SW	0.00688		0.0004 J	0.000302	
DEEP_S	OL-0932-05	N	0942010-07	10/12/2009	39.6-39.6 FT	WATER	REG	W-SW	0.00666			0.000296	
DEEP_S	OL-0932-08	N	0942010-08	10/12/2009	59.4-59.4 FT	WATER	REG	W-SW	0.0067			0.000968	
DEEP_S	OL-0937-03	N	0944006-03/04	10/26/2009	6.6-6.6 FT	WATER	REG	W-SW	0.00477		0.00041 J	0.000192	
DEEP_S	OL-0937-04	N	0944006-05/06	10/26/2009	6.6-6.6 FT	WATER	FD	W-SW	0.0046		0.00038 J	0.000243	
DEEP_S	OL-0937-05	N	0944006-07	10/26/2009	39.6-39.6 FT	WATER	REG	W-SW	0.0036			0.000233	
DEEP_S	OL-0937-06	N	0944006-08	10/26/2009	59.4-59.4 FT	WATER	REG	W-SW	0.0037			0.000187	
DEEP_S	OL-0945-03	N	0946004-03/04	11/9/2009	6.6-6.6 FT	WATER	REG	W-SW	0.00217		0.00043	0.00015	
DEEP_S	OL-0945-04	N	0946004-05/06	11/9/2009	6.6-6.6 FT	WATER	FD	W-SW	0.00232		0.00045	0.000147	
DEEP_S	OL-0945-05	N	0946004-07	11/9/2009	39.6-39.6 FT	WATER	REG	W-SW	0.0028			0.000119	
DEEP_S	OL-0945-06	N	0946004-08	11/9/2009	59.4-59.4 FT	WATER	REG	W-SW	0.00612			0.000131	
DEEP_S	OL-0952-03	N	0948008-03/04	11/23/2009	6.6-6.6 FT	WATER	REG	W-SW	0.002		0.0003 J	0.000129	
DEEP_S	OL-0952-04	N	0948008-05/06	11/23/2009	6.6-6.6 FT	WATER	FD	W-SW	0.00194		0.0003 J	0.000119	
DEEP_S	OL-0952-05	N	0948008-07	11/23/2009	39.6-39.6 FT	WATER	REG	W-SW	0.00179			0.000107	
DEEP_S	OL-0952-06	N	0948008-08	11/23/2009	59.4-59.4 FT	WATER	REG	W-SW	0.00345			0.000099	

ATTACHMENT A-2

VALIDATED LABORATORY DATA FOR ZOOPLANKTON

Validated 2009 Book 1 Zooplankton Analytical Data

					Parameter	MERCURY		METHYL MERCURY		SOLIDS, PERCENT	
					Units	mg/kg		ng/g		%	
Location ID	Field Sample ID	Sample Date	Matrix	Purpose	Samp Type						
W1	OL-0726-07	4/27/2009	TISSUE	REG	T-ZP	0.0205		2.8 J			
W1	OL-0726-08	4/27/2009	TISSUE	FD	T-ZP	0.0294		3.3			
W1	OL-0738-07	5/26/2009	TISSUE	REG	T-ZP	0.0478		3.5			
W1	OL-0757-07	6/22/2009	TISSUE	REG	T-ZP	0.0267		9			
W1	OL-0766-08	7/6/2009	TISSUE	REG	T-ZP	0.0291		10.9			
W1	OL-0774-08	7/20/2009	TISSUE	REG	T-ZP	0.0214		3.9		13.03	
W1	OL-0782-08	8/4/2009	TISSUE	REG	T-ZP	0.0185		10.8		10.33	
W1	OL-0791-08	8/17/2009	TISSUE	REG	T-ZP	0.0153 J		9.3 J		8.2	
W1	OL-0791-09	8/17/2009	TISSUE	FD	T-ZP	0.0303 J		7.4		7.83	
W1	OL-0799-08	8/31/2009	TISSUE	REG	T-ZP	0.0384		5.2		9.93	
W1	OL-0904-09	9/8/2009	TISSUE	REG	T-ZP	0.0522		5.6 J			
W1	OL-0913-09	9/21/2009	TISSUE	REG	T-ZP	0.0253		5.8 J			
W1	OL-0925-09	10/5/2009	TISSUE	REG	T-ZP	0.526		170 J			
W1	OL-0932-09	10/12/2009	TISSUE	REG	T-ZP	0.0649		25.5 J			
W1	OL-0937-07	10/26/2009	TISSUE	REG	T-ZP	0.118		23.9 J			
W1	OL-0945-07	11/9/2009	TISSUE	REG	T-ZP	0.0555		7.9 J			
W1	OL-0945-08	11/9/2009	TISSUE	FD	T-ZP	0.0362		9.2 J			
W1	OL-0952-07	11/23/2009	TISSUE	REG	T-ZP	0.0399		8.6 J			

ATTACHMENT A-3

**VALIDATED LABORATORY DATA
FOR SEDIMENT TRAP SAMPLES**

Validated 2009 Book 1 Sediment Trap Analytical Data

							Parameter	CALCIUM	DISSOLVED, CALCIUM	MERCURY	TOTAL CARBON	TOTAL FIXED SOLIDS	TOTAL ORGANIC CARBON	Total Suspended Solids
	Field		Sample	Sample			Units	mg/l	mg/l	ng/mL	mg/l	mg/l	mg/l	mg/l
Location ID	Sample ID	Lab Sample ID	Date	Depth	Matrix	Purpose	Samp Type							
DEEP_S	OL-0719-01	9096031	4/6/2009	33-33 Ft	WATER	REG	SLURRY	506.5	124.8		355.5	3764	217.8	4300
DEEP_S	OL-0719-02	9096032	4/6/2009	33-33 Ft	WATER	FD	SLURRY	568.5	101.2		492	3488	263.8	3976
DEEP_S	OL-0719-03	9096033	4/6/2009	33-33 Ft	WATER	FD2	SLURRY	603	121.1		603	3812	259.6	4336
DEEP_S	OL-0720-01	9103028	4/13/2009	33-33 Ft	WATER	REG	SLURRY	299.9	132		212.5	2172	125.6	2464
DEEP_S	OL-0720-02	9103029	4/13/2009	33-33 Ft	WATER	FD	SLURRY	373.7	115.2		268.5	2700	141.8	3036
DEEP_S	OL-0720-03	9103030	4/13/2009	33-33 Ft	WATER	FD2	SLURRY	348.8	110.2		244	2360	133.2	2652
DEEP_S	OL-0721-01	9110001	4/20/2009	33-33 Ft	WATER	REG	SLURRY	232.95	124.2		147	876	42.4	1052
DEEP_S	OL-0721-02	9110002	4/20/2009	33-33 Ft	WATER	FD	SLURRY	235.85	119.8		94 J	664	45	796
DEEP_S	OL-0721-03	9110003	4/20/2009	33-33 Ft	WATER	FD2	SLURRY	213.4	118.6		123.5	1012	76.4	1204
DEEP_S	OL-0724-07	2009117028	4/27/2009	33-33 Ft	WATER	REG	SLURRY	328.5	92.94		234.5 J	1624 J	138 J	1964 J
DEEP_S	OL-0724-08	2009117029	4/27/2009	33-33 Ft	WATER	FD	SLURRY	319.55	92.74		227 J	1652 J	133.8 J	1940 J
DEEP_S	OL-0724-09	2009117030	4/27/2009	33-33 Ft	WATER	FD2	SLURRY	319.6	132.5		225.5 J	1468 J	143.2 J	1776 J
DEEP_S	OL-0793-01	0934036-02	4/27/2009	33-33 Ft	WATER	REG	SLURRY			2.53				
DEEP_S	OL-0727-01	2009124028	5/4/2009	33-33 Ft	WATER	REG	SLURRY	228.95	146		113	836 J	69.6	1000 J
DEEP_S	OL-0727-02	2009124029	5/4/2009	33-33 Ft	WATER	FD	SLURRY	246	148.5		113	820 J	75.4	1036 J
DEEP_S	OL-0727-03	2009124030	5/4/2009	33-33 Ft	WATER	FD2	SLURRY	255.85	140.8		134.5	924 J	88.2	1156 J
DEEP_S	OL-0731-01	2009131031	5/11/2009	33-33 Ft	WATER	REG	SLURRY	383.9	143.3 J		244	1828	127.6	2132
DEEP_S	OL-0731-02	2009131032	5/11/2009	33-33 Ft	WATER	FD	SLURRY	436.2	171.9 J		211.5	1728	134.2	2080
DEEP_S	OL-0731-03	2009131033	5/11/2009	33-33 Ft	WATER	FD2	SLURRY	400.6	161.6 J		218.5	1868	142.2	2200
DEEP_S	OL-0732-01	2009138031	5/18/2009	33-33 Ft	WATER	REG	SLURRY	648	119.8		366.5	2340	182.4	2924
DEEP_S	OL-0732-02	2009138032	5/18/2009	33-33 Ft	WATER	FD	SLURRY	656	133.7		422.5	3344	205.8	3976
DEEP_S	OL-0732-03	2009138033	5/18/2009	33-33 Ft	WATER	FD2	SLURRY	702.5	148.2		380.5	3488	241.2	4124
DEEP_S	OL-0736-07	2009146028	5/26/2009	33-33 Ft	WATER	REG	SLURRY	540	129		222.6	1328	92.7	1752
DEEP_S	OL-0736-08	2009146029	5/26/2009	33-33 Ft	WATER	FD	SLURRY	670.5	131.3		251.4	1712	113.6	2160
DEEP_S	OL-0736-09	2009146030	5/26/2009	33-33 Ft	WATER	FD2	SLURRY	343.65	125.9		121.8	740	46.9	992
DEEP_S	OL-0793-02	0934036-04	5/26/2009	33-33 Ft	WATER	REG	SLURRY			1.58				
DEEP_S	OL-0743-01	2009152028	6/1/2009	33-33 Ft	WATER	REG	SLURRY	422.5 J	116.1		203.2	1416	73.8	1684
DEEP_S	OL-0743-02	2009152029	6/1/2009	33-33 Ft	WATER	FD	SLURRY	482.85 J	115.6		208.8	1676	82.3	1860
DEEP_S	OL-0743-03	2009152030	6/1/2009	33-33 Ft	WATER	FD2	SLURRY	452.5 J	108.8		247.7	1924	93.8	2248
DEEP_S	OL-0747-01	2009159028	6/8/2009	33-33 Ft	WATER	REG	SLURRY	199.65 J	129.5		74.8 J	400	34.5	520
DEEP_S	OL-0747-02	2009159029	6/8/2009	33-33 Ft	WATER	FD	SLURRY	216.5 J	127.1		92.7 J	640	46.2	772
DEEP_S	OL-0747-03	2009159030	6/8/2009	33-33 Ft	WATER	FD2	SLURRY	190.45 J	130.1		99.4	464	35.3 J	604
DEEP_S	OL-0751-01	2009166028	6/15/2009	33-33 Ft	WATER	REG	SLURRY	466.15 J	128.8		213.8	1164	64	1516
DEEP_S	OL-0751-02	2009166029	6/15/2009	33-33 Ft	WATER	FD	SLURRY	505.5 J	143.5		247.9	1448	74.3	1824
DEEP_S	OL-0751-03	2009166030	6/15/2009	33-33 Ft	WATER	FD2	SLURRY	463.6 J	153.9		198.4	1344	62.9	1540
DEEP_S	OL-0755-07	2009173028	6/22/2009	33-33 Ft	WATER	REG	SLURRY	292.25	92.79		222.9	1536	100.2	1800
DEEP_S	OL-0755-08	2009173029	6/22/2009	33-33 Ft	WATER	FD	SLURRY	312.15	144.2		198.8	1644	93.5	1820
DEEP_S	OL-0755-09	2009173030	6/22/2009	33-33 Ft	WATER	FD2	SLURRY	304.05	117.3		210.2	1624	98.4	1856
DEEP_S	OL-0793-03	0934036-06RE1	6/22/2009	33-33 Ft	WATER	REG	SLURRY			2.84				
DEEP_S	OL-0761-01	2009180032	6/29/2009	33-33 FT	WATER	REG	SLURRY	184.85	130.5		93.5	796	58.6	932
DEEP_S	OL-0761-02	2009180033	6/29/2009	33-33 FT	WATER	FD	SLURRY	194.85	154.7		97.1	688	57.8	852
DEEP_S	OL-0761-03	2009180034	6/29/2009	33-33 FT	WATER	FD2	SLURRY	177.95	153.4		114.5	856	68.1	1028

Validated 2009 Book 1 Sediment Trap Analytical Data

							Parameter	CALCIUM	DISSOLVED, CALCIUM	MERCURY	TOTAL CARBON	TOTAL FIXED SOLIDS	TOTAL ORGANIC CARBON	Total Suspended Solids
	Field		Sample	Sample			Units	mg/l	mg/l	ng/mL	mg/l	mg/l	mg/l	mg/l
Location ID	Sample ID	Lab Sample ID	Date	Depth	Matrix	Purpose	Samp Type							
DEEP_S	OL-0765-15	2009187033	7/6/2009	33-33 FT	WATER	REG	SLURRY	194.45	147.2		127.7 J	976	61	1108
DEEP_S	OL-0765-16	2009187034	7/6/2009	33-33 FT	WATER	FD	SLURRY	244.45	143.9		138.7 J	1388	86.2	1576
DEEP_S	OL-0765-17	2009187035	7/6/2009	33-33 FT	WATER	FD2	SLURRY	235.05	145		157.3	1304	86.7	1476
DEEP_S	OL-0918-01	0939023-01	7/6/2009	33-33 Ft	WATER	REG	SLURRY			1.93				
DEEP_S	OL-0768-01	2009194030	7/13/2009	33-33 FT	WATER	REG	SLURRY	268.6	150.5		151.3	1008	75.2	1284
DEEP_S	OL-0768-02	2009194031	7/13/2009	33-33 FT	WATER	FD	SLURRY	262.2	151.2		156	1180	81.9	1488
DEEP_S	OL-0768-03	2009194032	7/13/2009	33-33 FT	WATER	FD2	SLURRY	267.4	152.3		164.4	1008	80.6	1312
DEEP_S	OL-0773-17	2009201043	7/20/2009	33-33 FT	WATER	REG	SLURRY	511	150.4		380.1	2548	185.3	3008
DEEP_S	OL-0773-18	2009201044	7/20/2009	33-33 FT	WATER	FD	SLURRY	569.5	123.7		369.2	2608	184.1	3076
DEEP_S	OL-0773-19	2009201045	7/20/2009	33-33 FT	WATER	FD2	SLURRY	650.5	169.2		370.2	2072	262.7	2452
DEEP_S	OL-0918-02	0939023-03	7/20/2009	33-33 Ft	WATER	REG	SLURRY			5.26				
DEEP_S	OL-0776-01	2009208030	7/27/2009	33-33 FT	WATER	REG	SLURRY	441.1	169.2		344.6	1768	115.4	2200
DEEP_S	OL-0776-02	2009208031	7/27/2009	33-33 FT	WATER	FD	SLURRY	529.5	178		309	1784	100.8	2060
DEEP_S	OL-0776-03	2009208032	7/27/2009	33-33 FT	WATER	FD2	SLURRY	524	81.4 J		319.6	1592	98.9	1932
DEEP_S	OL-0781-18	2009216136	8/4/2009	33-33 Ft	WATER	REG	SLURRY	401	196.8		265.4	1336	132.9	1732
DEEP_S	OL-0781-19	2009216137	8/4/2009	33-33 Ft	WATER	FD	SLURRY	484.95	85.8 J		259.2	1392	126.1	1768
DEEP_S	OL-0781-20	2009216138	8/4/2009	33-33 Ft	WATER	FD2	SLURRY	420.35	162.3		278.4	1524	134.5	1892
DEEP_S	OL-0918-03	0939023-05	8/4/2009	33-33 Ft	WATER	REG	SLURRY			1.9				
DEEP_S	OL-0784-01	2009222034	8/10/2009	33-33 Ft	WATER	REG	SLURRY	318.25	91.6 J		132 J	756	78 J	1044
DEEP_S	OL-0784-02	2009222035	8/10/2009	33-33 Ft	WATER	FD	SLURRY	302.55	72.4 J		146.228 J	812	87.461 J	1144
DEEP_S	OL-0784-03	2009222036	8/10/2009	33-33 Ft	WATER	FD2	SLURRY	300.25	111.2 J		151.576 J	772	94.293 J	1104
DEEP_S	OL-0790-18	2009229042	8/17/2009	33-33 FT	WATER	REG	SLURRY	491.05	202.1		239.909	3684	145.317	4208
DEEP_S	OL-0790-19	2009229043	8/17/2009	33-33 FT	WATER	FD	SLURRY	463.05	162.12		315.711	4040	152.596	4636
DEEP_S	OL-0790-20	2009229044	8/17/2009	33-33 FT	WATER	FD2	SLURRY	454.7	163.9		271.944	3976	152.289	4556
DEEP_S	OL-0918-04	0939023-07RE1	8/17/2009	33-33 Ft	WATER	REG	SLURRY			0.81				
DEEP_S	OL-0797-01	2009236042	8/24/2009	33-33 Ft	WATER	REG	SLURRY	278.8	129.1		134.193	460	73.219	756
DEEP_S	OL-0797-02	2009236043	8/24/2009	33-33 Ft	WATER	FD	SLURRY	279	146.1		134.906	508	78.09	780
DEEP_S	OL-0797-03	2009236044	8/24/2009	33-33 Ft	WATER	FD2	SLURRY	258	157.7		132.204	584	77.947	892
DEEP_S	OL-0798-18	2009243033	8/31/2009	32.8-32.8 F	WATER	REG	SLURRY	220.35	144.7		297.35	752	97.25	1000
DEEP_S	OL-0798-19	2009243034	8/31/2009	32.8-32.8 F	WATER	FD	SLURRY	214.3	156.2		244.521	640	83.446	896
DEEP_S	OL-0798-20	2009243035	8/31/2009	32.8-32.8 F	WATER	FD2	SLURRY	240.05	156.2		304.463	768	98.381	1036
DEEP_S	OL-0918-05	0939023-09	8/31/2009	33-33 Ft	WATER	REG	SLURRY			2.34				
DEEP_S	OL-0903-18	2009251050	9/8/2009	33-33 FT	WATER	REG	SLURRY	417.5	131.6		232.911	1016	84.582	1476
DEEP_S	OL-0903-19	2009251051	9/8/2009	33-33 FT	WATER	FD	SLURRY	545	159.7		278.83	1624	108.318	2048
DEEP_S	OL-0903-20	2009251052	9/8/2009	33-33 FT	WATER	FD2	SLURRY	565.5	155.8		284.84	1784	108.514	2176
DEEP_S	OL-0918-06	0939023-11	9/8/2009	33-33 Ft	WATER	REG	SLURRY			1.19				
DEEP_S	OL-0910-18	2009257031	9/14/2009	33-33 Ft	WATER	REG	SLURRY	251.45	152.9		124.266	524	47.237	752
DEEP_S	OL-0910-19	2009257032	9/14/2009	33-33 Ft	WATER	FD	SLURRY	316.9	158		143.179	604	62.56	828
DEEP_S	OL-0910-20	2009257033	9/14/2009	33-33 Ft	WATER	FD2	SLURRY	253.45	153.1		128.703	612	62.869	876
DEEP_S	OL-0918-07	0939023-13	9/14/2009	33-33 Ft	WATER	REG	SLURRY			1.26				
DEEP_S	OL-0958-01	0950003-02	9/14/2009	33-33 Ft	WATER	REG	SLURRY			1.39				
DEEP_S	OL-0912-17	2009264005	9/21/2009	33-33 FT	WATER	REG	SLURRY	184	132.8		136.578	768	73.794	1052

Validated 2009 Book 1 Sediment Trap Analytical Data

							Parameter	CALCIUM	DISSOLVED, CALCIUM	MERCURY	TOTAL CARBON	TOTAL FIXED SOLIDS	TOTAL ORGANIC CARBON	Total Suspended Solids
	Field		Sample	Sample			Units	mg/l	mg/l	ng/mL	mg/l	mg/l	mg/l	mg/l
Location ID	Sample ID	Lab Sample ID	Date	Depth	Matrix	Purpose	Samp Type							
DEEP_S	OL-0912-18	2009264006	9/21/2009	33-33 FT	WATER	FD	SLURRY	217.35	148.9		130.358	692	73.26	976
DEEP_S	OL-0912-19	2009264007	9/21/2009	33-33 FT	WATER	FD2	SLURRY	285.65	124.8		131.33	840	88.649	1148
DEEP_S	OL-0958-02	0950003-04	9/21/2009	33-33 Ft	WATER	REG	SLURRY			3.74				
DEEP_S	OL-0919-16	2009271003	9/28/2009	33-33 FT	WATER	REG	SLURRY	184.3	128		96	456	59	656
DEEP_S	OL-0919-17	2009271004	9/28/2009	33-33 FT	WATER	FD	SLURRY	167.8	148.9		83	352	45	500
DEEP_S	OL-0919-18	2009271005	9/28/2009	33-33 FT	WATER	FD2	SLURRY	204.8	158		97	500	58	672
DEEP_S	OL-0958-03	0950003-06	9/28/2009	33-33 Ft	WATER	REG	SLURRY			1.31				
DEEP_S	OL-0924-14	2009278031	10/5/2009	33-33 FT	WATER	REG	SLURRY	465.55	147.6 J		313.47	1688	132.801	2172
DEEP_S	OL-0924-15	2009278032	10/5/2009	33-33 FT	WATER	FD	SLURRY	361.45	190.9 J		187.924	1116	95.754	1480
DEEP_S	OL-0924-16	2009278033	10/5/2009	33-33 FT	WATER	FD2	SLURRY	322.95	165 J		153.306	1200	91.722	1544
DEEP_S	OL-0958-04	0950003-08	10/5/2009	33-33 Ft	WATER	REG	SLURRY			5.09				
DEEP_S	OL-0931-09	2009285028	10/12/2009	33-33 FT	WATER	REG	SLURRY	680.5 J	137.6 J		360.538	3044	197.929	3572
DEEP_S	OL-0931-10	2009285029	10/12/2009	33-33 FT	WATER	FD	SLURRY	541.5 J	237.5 J		314.844	2632	185.187	3152
DEEP_S	OL-0931-11	2009285030	10/12/2009	33-33 FT	WATER	FD2	SLURRY	622.5 J	168.6 J		324.819	3028	193.451	3496
DEEP_S	OL-0958-05	0950003-10	10/12/2009	33-33 Ft	WATER	REG	SLURRY			7.56				

APPENDIX B

**DATA USABILITY AND SUMMARY REPORT
ONONDAGA LAKE BASELINE MONITORING
BOOK 2: FISH MONITORING FOR 2009**

DATA USABILITY SUMMARY REPORT

ONONDAGA LAKE BOOK 2 BASELINE MONITORING

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LIST OF ATTACHMENTS

ATTACHMENT A VALIDATED LABORATORY DATA

SECTION B1**DATA USABILITY SUMMARY**

Fish samples were collected as part of the Book 2 baseline monitoring efforts for Onondaga Lake from June 16, 2009 through August 26, 2009. Analytical results from these samples were validated and reviewed by Parsons for usability with respect to the following requirements:

- Onondaga Lake Baseline Monitoring Work Plan,
- Onondaga Lake Baseline Monitoring QAPP (Appendix B of the Work Plan), and
- USEPA Region II Standard Operating Procedures (SOPs) for organic and inorganic data review.

The analytical laboratories for this project were Test America Laboratory (TAL) in Pittsburgh, Pennsylvania and Accutest Laboratories in Dayton, New Jersey. These laboratories are certified by the State of New York to conduct laboratory analyses for this project through the National Environmental Laboratory Accreditation Conference (NELAC).

B1.1 LABORATORY DATA PACKAGES

The laboratory data package turnaround time, defined as the time from sample receipt by the laboratory to receipt of the analytical data packages by Parsons, was 38 days on average for the samples.

The data packages received from the laboratories were paginated, complete, and overall were of good quality. Comments on specific quality control (QC) and other requirements are discussed in detail in the attached data validation report which is summarized in Section A2.

B1.2 SAMPLING AND CHAIN-OF-CUSTODY

The samples were collected, properly preserved, shipped under a COC record, and received at the laboratories within one to two days of sampling. All samples were received intact and in good condition at the laboratories.

B1.3 LABORATORY ANALYTICAL METHODS

The fish samples were collected from the site and analyzed for 4,4'-DDT and metabolites, polychlorinated biphenyls (PCBs), mercury, and/or selenium. Summaries of deviations from the Work Plan, QAPP, or USEPA Region II SOPs concerning these laboratory analyses are presented in Subsections B1.3.1 through B1.3.3. The data qualifications resulting from the data validation review and statements on the laboratory analytical precision, accuracy, representativeness, completeness, and comparability (PARCC) are discussed for each analytical method in Section B2. The laboratory data were reviewed and may be qualified with the following validation flags:

PARSONS

- "U" - not detected at the value given,
- "UJ" - estimated and not detected at the value given,
- "J" - estimated at the value given,
- "N" - presumptive evidence at the value given, and
- "R" - unusable value.

The validated laboratory data were tabulated and are presented in Attachment A.

B1.3.1 Mercury and Selenium Analysis

Fish samples collected from the site were analyzed by TAL and Accutest for mercury and/or selenium using the USEPA SW-846 7471A and 6020 analytical methods, respectively. Certain reported results for the mercury samples were qualified as estimated based upon matrix spike recoveries. The reported mercury and selenium analytical results were considered 100% complete (i.e., usable) for the data presented by TAL and Accutest. PARCC requirements were met.

B1.3.2 PCB Analysis

Fish samples collected from the site were analyzed by TAL for PCBs using the USEPA SW-846 8082 analytical method. The reported results for the PCB samples did not require qualification resulting from data validation. The reported PCB analytical results were considered 100% complete with all data considered usable and valid as reported by TAL. PARCC requirements were met.

B1.3.3 4,4'-DDT and Metabolites Analysis

Fish samples collected from the site were analyzed by TAL for 4,4'-DDT and metabolites using the USEPA SW-846 8081A analytical method. Certain reported results for these samples were qualified as estimated based upon sample result identifications. The reported analytical results for these samples were considered 100% complete with all data considered usable and valid as reported by TAL. PARCC requirements were met.

SECTION B2**DATA VALIDATION REPORT****B2.1 FISH**

Data review has been completed for data packages generated by TAL and Accutest containing fish samples collected from the site. The specific samples contained in these data packages, the analyses performed, and validated laboratory data are tabulated and presented in Attachment A. All of these samples were properly preserved, shipped under a COC record, and received intact by the analytical laboratory.

Data validation was performed for all samples in accordance with the project work plan and QAPP as well as the USEPA Region II SOPs HW-44, Revision 1 “Data Validation SOP of Organochlorine Pesticides by Gas Chromatography SW-846 Method 8081B”; HW-45, Revision 1 “Data Validation SOP of Organic Analysis of PCBs by Gas Chromatography SW-846 Method 8082A; and HW-2, Revision 13 “Evaluation of Metals Data for the CLP Program”. This data validation and usability report is presented by analysis type.

B2.1.1 Mercury and Selenium

The following items were reviewed for compliancy in the mercury and selenium analysis:

- Custody documentation
- Holding times
- Initial and continuing calibration verifications
- Extraction/homogenization, initial and continuing calibration, and laboratory preparation blank contamination
- Matrix spike/matrix spike duplicate (MS/MSD) recoveries
- Laboratory duplicate precision
- Laboratory control sample (LCS) recoveries
- Interference check sample recoveries
- Serial dilutions
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of MS/MSD recoveries as discussed below.

MS/MSD Recoveries

All the MS/MSD accuracy results were considered acceptable and within QC limits and have concentrations less than four times the spiking concentration, with the exception of the low recoveries for mercury (46.6%R, 52.6%R; QC limit 58-143%R) associated with samples in sample delivery group (SDG) JA25906; and the low mercury recovery (56.6%R; QC limit 58-143%R) associated with samples in SDG JA26543. The sample results for mercury were considered estimated, possibly biased low, with positive results qualified “J” and nondetected results qualified “UJ” for the affected samples.

Usability

All mercury and selenium sample results for the fish were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The mercury and selenium data presented by TAL and Accutest were 100% complete (i.e., usable). The validated mercury and selenium laboratory data are tabulated and presented in Attachment A.

B2.1.2 PCBs

The following items were reviewed for compliancy in the PCB analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) precision and accuracy
- Laboratory control sample (LCS) recoveries
- Laboratory method blank contamination
- Initial calibrations
- Verification calibrations
- Chromatogram quality
- Sample result verification and identification

- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of surrogate recoveries as discussed below.

Surrogate Recoveries

All sample surrogate recoveries were considered acceptable and within QC limits with the exception of high decachlorobiphenyl recoveries (QC limit 35-140%R) in samples OL-0812-06F (197%R), OL-0817-05F (170%R), -10F (173%R), OL-0825-03F (141%R), -08F (166%R), and -11F (193%R). Validation qualification of these samples was not required since only one surrogate was outside QC limits.

Usability

All PCB sample results for the fish were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The PCB data presented by TAL were 100% complete with all data considered usable and valid. The validated data are tabulated and presented in Attachment A.

B2.1.3 4,4'-DDT and Metabolites

The following items were reviewed for compliancy in the 4,4'-DDT and metabolites analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) precision and accuracy
- Laboratory control sample (LCS) recoveries
- Extraction/homogenization and laboratory method blank contamination
- Initial calibrations
- Verification calibrations
- 4,4'-DDT breakdown
- Chromatogram quality

- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exceptions of sample result identifications as discussed below.

Sample Result Identifications

Positive sample results were verified and confirmed present using dual column confirmation. The percent difference (%D) between the results on the dual columns was less than 25% with the exception of 4,4'-DDD and 4,4'-DDE in OL-0812-01F, -03F, -04F, -05F, -06F, -10F, -13F, OL-0817-05F, -06F, -07F, -08F, -10F, -11F, OL-0822-02F, OL-0823-01F, -03F, OL-0824-01F, -04F, OL-0825-03F, -06F, -08F, -09F, -10F, and -11F. These results were considered estimated and qualified "J" for the affected samples. However, for those compounds where the %D was greater than 90%, the results were considered estimated, tentatively identified, and qualified "JN" for the affected samples.

Usability

All 4,4'-DDT and metabolite sample results for the fish were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The 4,4'-DDT and metabolite data presented by TAL were 100% complete with all data considered usable and valid. The validated data are tabulated and presented in Attachment A.

**ATTACHMENT A
VALIDATED LABORATORY DATA**

2009 Baseline Monitoring
Validated Fish Results
Adult Sport Fish

		Location Field Sample ID Sample Date	OL-STA-20158 OL-0812-01F 06/16/2009 C9H080193 C9F170280	OL-STA-20158 OL-0812-01P 06/16/2009 C9F170280	OL-STA-20158 OL-0812-02F 06/16/2009 C9H080193 C9F170280	OL-STA-20158 OL-0812-02P 06/16/2009 C9F170280	OL-STA-20158 OL-0812-03F 06/16/2009 C9F170280 C9G210298	OL-STA-20158 OL-0812-03P 06/16/2009 C9F170280	OL-STA-20158 OL-0812-04F 06/16/2009 C9F170280 C9G210298	OL-STA-20158 OL-0812-04P 06/16/2009 C9F170280
		SDG Matrix Sample Purpose Sample Type Taxon Specimen Sex Specimen Length Specimen Weight Specimen Age	TISSUE Regular Sample Fish Tissue WALL 531 mm 1828 g 11 yrs	TISSUE Regular Sample Fish Tissue WALL 531 mm 1828 g 11 yrs	TISSUE Regular Sample Fish Tissue WALL 511 mm 1666 g 8+ yrs	TISSUE Regular Sample Fish Tissue WALL 511 mm 1666 g 8+ yrs	TISSUE Regular Sample Fish Tissue WALL 575 mm 2562 g 10 yrs	TISSUE Regular Sample Fish Tissue WALL 575 mm 2562 g 10 yrs	TISSUE Regular Sample Fish Tissue WALL 516 mm 2283 g 8 yrs	TISSUE Regular Sample Fish Tissue WALL 516 mm 2283 g 8 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%	3.2				3.8		3.8	
SW6020	SELENIUM	mg/kg	0.49		0.47					
SW7471	MERCURY	mg/kg	4.1	4	3.3	2.9	3.7	3.9	3.2	3.2
SW8081	4,4'-DDD	ug/kg	7.8 JN				8.1 JN		8.5 JN	
SW8081	4,4'-DDE	ug/kg	21 J				73 J		110 J	
SW8081	4,4'-DDT	ug/kg	1.7 U				1.7 U		1.7 U	
SW8082	AROCLOR-1016	ug/kg	42 U				42 U		42 U	
SW8082	AROCLOR-1221	ug/kg	42 U				42 U		42 U	
SW8082	AROCLOR-1232	ug/kg	42 U				42 U		42 U	
SW8082	AROCLOR-1242	ug/kg	42 U				42 U		42 U	
SW8082	AROCLOR-1248	ug/kg	4500				2500		4400	
SW8082	AROCLOR-1254	ug/kg	2600				1600		2300	
SW8082	AROCLOR-1260	ug/kg	780				580		730	

2009 Baseline Monitoring
Validated Fish Results
Adult Sport Fish

		Location Field Sample ID Sample Date	OL-STA-20158 OL-0812-05F 06/16/2009 C9H080193 C9F170280	OL-STA-20158 OL-0812-05P 06/16/2009 C9F170280	OL-STA-20158 OL-0812-06F 06/16/2009 C9F170280 C9G210298	OL-STA-20158 OL-0812-06P 06/16/2009 C9F170280	OL-STA-20158 OL-0812-07F 06/16/2009 C9H080193 C9F170280	OL-STA-20158 OL-0812-07P 06/16/2009 C9F170280	OL-STA-20158 OL-0812-08F 06/16/2009 C9H080193 C9F170280	OL-STA-20158 OL-0812-08P 06/16/2009 C9F170280
		SDG Matrix Sample Purpose Sample Type Taxon Specimen Sex Specimen Length Specimen Weight Specimen Age	TISSUE Regular Sample Fish Tissue SMB 475 mm 1277 g 8+ yrs	TISSUE Regular Sample Fish Tissue SMB 474 mm 1277 g 8+ yrs	TISSUE Regular Sample Fish Tissue WALL 487 mm 1629 g 6+ yrs	TISSUE Regular Sample Fish Tissue WALL 487 mm 1629 g 6+ yrs	TISSUE Regular Sample Fish Tissue WALL 501 mm 1698 g 10+ yrs	TISSUE Regular Sample Fish Tissue WALL 501 mm 1698 g 10+ yrs	TISSUE Regular Sample Fish Tissue WALL 588 mm 2126 g 13 yrs	TISSUE Regular Sample Fish Tissue WALL 588 mm 2126 g 13 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%	0.86		2.6					
SW6020	SELENIUM	mg/kg	0.41						0.5	
SW7471	MERCURY	mg/kg	3.4	2.4	1.5	1.5	4.1	3.8	4.8	4
SW8081	4,4'-DDD	ug/kg	3.5 JN		2.1 JN					
SW8081	4,4'-DDE	ug/kg	76 J		49 J					
SW8081	4,4'-DDT	ug/kg	1.7 U		1.7 U					
SW8082	AROCLOR-1016	ug/kg	42 U		42 U					
SW8082	AROCLOR-1221	ug/kg	42 U		42 U					
SW8082	AROCLOR-1232	ug/kg	42 U		42 U					
SW8082	AROCLOR-1242	ug/kg	42 U		42 U					
SW8082	AROCLOR-1248	ug/kg	2400		2100					
SW8082	AROCLOR-1254	ug/kg	1500		1000					
SW8082	AROCLOR-1260	ug/kg	730		310					

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		Location Field Sample ID Sample Date	OL-STA-20158 OL-0812-09F 06/16/2009	OL-STA-20158 OL-0812-09P 06/16/2009	OL-STA-20158 OL-0812-10F 06/16/2009 C9F170280 C9G210298	OL-STA-20158 OL-0812-10P 06/16/2009 C9F170280	OL-STA-20158 OL-0812-11F 06/16/2009 C9H080193 C9F170280	OL-STA-20158 OL-0812-11P 06/16/2009 C9F170280	OL-STA-20158 OL-0812-12F 06/16/2009 C9H080193 C9F170280	OL-STA-20158 OL-0812-12P 06/16/2009 C9F170280
		SDG Matrix Sample Purpose Sample Type Taxon Specimen Sex Specimen Length Specimen Weight Specimen Age	C9F170280 TISSUE Regular Sample Fish Tissue WALL 557 mm 2496 g 11 yrs	C9F170280 TISSUE Regular Sample Fish Tissue WALL 557 mm 2496 g 11 yrs	C9G210298 TISSUE Regular Sample Fish Tissue WALL 590 mm 2801 g 9+ yrs	C9F170280 TISSUE Regular Sample Fish Tissue WALL 590 mm 2801 g 9+ yrs	C9F170280 TISSUE Regular Sample Fish Tissue WALL 508 mm 1687 g 6+ yrs	C9F170280 TISSUE Regular Sample Fish Tissue WALL 508 mm 1687 g 6+ yrs	C9F170280 TISSUE Regular Sample Fish Tissue WALL 560 mm 2458 g 6+ yrs	C9F170280 TISSUE Regular Sample Fish Tissue WALL 560 mm 2458 g 6+ yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%			3.6					
SW6020	SELENIUM	mg/kg					0.43		0.41	
SW7471	MERCURY	mg/kg	3.3	3.2	2.5	2.6	2.8	2.7	1.1	1.9
SW8081	4,4'-DDD	ug/kg			5.3 JN					
SW8081	4,4'-DDE	ug/kg			83 J					
SW8081	4,4'-DDT	ug/kg			1.7 U					
SW8082	AROCLOR-1016	ug/kg			42 U					
SW8082	AROCLOR-1221	ug/kg			42 U					
SW8082	AROCLOR-1232	ug/kg			42 U					
SW8082	AROCLOR-1242	ug/kg			42 U					
SW8082	AROCLOR-1248	ug/kg			3100					
SW8082	AROCLOR-1254	ug/kg			1600					
SW8082	AROCLOR-1260	ug/kg			520					

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		Location Field Sample ID Sample Date	OL-STA-20158 OL-0812-13F 06/16/2009 C9F170280 C9G210298	OL-STA-20158 OL-0812-13P 06/16/2009 C9F170280	OL-STA-20158 OL-0812-14F 06/16/2009 C9H080193 C9F170280	OL-STA-20158 OL-0812-14P 06/16/2009 C9F170280	OL-STA-20158 OL-0819-08F 06/19/2009 C9F210102 C9H080196	OL-STA-20158 OL-0819-08P 06/19/2009 C9F210102	OL-STA-20158 OL-0819-09F 06/19/2009 C9F210102	OL-STA-20158 OL-0819-09P 06/19/2009 C9F210102
		SDG Matrix Sample Purpose Sample Type Taxon Specimen Sex Specimen Length Specimen Weight Specimen Age	TISSUE Regular Sample Fish Tissue WALL 543 mm 1963 g 11 yrs	TISSUE Regular Sample Fish Tissue WALL 543 mm 1963 g 11 yrs	TISSUE Regular Sample Fish Tissue WALL 572 mm 2598 g 10 yrs	TISSUE Regular Sample Fish Tissue WALL 572 mm 2598 g 10 yrs	TISSUE Regular Sample Fish Tissue PKSD 195 mm 207 g 4+ yrs	TISSUE Regular Sample Fish Tissue PKSD 195 mm 207 g 4+ yrs	TISSUE Regular Sample Fish Tissue PKSD 175 mm 125 g 6 yrs	TISSUE Regular Sample Fish Tissue PKSD 175 mm 125 g 6 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%	5.7							
SW6020	SELENIUM	mg/kg			0.51			0.4		
SW7471	MERCURY	mg/kg	3.5	3.4	3.5	2.9	0.65	0.84	0.36	0.54
SW8081	4,4'-DDD	ug/kg	20 JN							
SW8081	4,4'-DDE	ug/kg	240 J							
SW8081	4,4'-DDT	ug/kg	1.7 U							
SW8082	AROCLOR-1016	ug/kg	42 U							
SW8082	AROCLOR-1221	ug/kg	42 U							
SW8082	AROCLOR-1232	ug/kg	42 U							
SW8082	AROCLOR-1242	ug/kg	42 U							
SW8082	AROCLOR-1248	ug/kg	9400							
SW8082	AROCLOR-1254	ug/kg	4700							
SW8082	AROCLOR-1260	ug/kg	1700							

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		Location Field Sample ID Sample Date	OL-STA-20158 OL-0819-10F 06/19/2009 C9F210102 C9H080196 TISSUE Regular Sample Fish Tissue PKSD	OL-STA-20158 OL-0819-10P 06/19/2009 C9F210102 TISSUE Regular Sample Fish Tissue PKSD	OL-STA-20158 OL-0819-11F 06/19/2009 C9F210102 TISSUE Regular Sample Fish Tissue PKSD	OL-STA-20158 OL-0819-11P 06/19/2009 C9F210102 TISSUE Regular Sample Fish Tissue PKSD	OL-STA-20158 OL-0819-12F 06/19/2009 C9F210102 C9H080196 TISSUE Regular Sample Fish Tissue PKSD	OL-STA-20158 OL-0819-12P 06/19/2009 C9F210102 TISSUE Regular Sample Fish Tissue PKSD	OL-STA-20158 OL-0819-13F 06/19/2009 C9F210102 TISSUE Regular Sample Fish Tissue PKSD	OL-STA-20158 OL-0819-13P 06/19/2009 C9F210102 TISSUE Regular Sample Fish Tissue PKSD
		SDG Matrix Sample Purpose Sample Type Taxon Specimen Sex Specimen Length Specimen Weight Specimen Age	183 mm 160 g 3 yrs	183 mm 160 g 3 yrs	185 mm 189 g 5 yrs	185 mm 189 g 5 yrs	192 mm 212 g 4+ yrs	192 mm 212 g 4+ yrs	168 mm 130 g 5 yrs	168 mm 130 g 5 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%								
SW6020	SELENIUM	mg/kg	0.35		0.36	0.59	0.29			
SW7471	MERCURY	mg/kg	0.3	0.35			0.31	0.42	0.34	0.48
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

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		Location Field Sample ID Sample Date	OL-STA-20158 OL-0819-14F 06/19/2009 C9F210102 C9H080196	OL-STA-20158 OL-0819-14P 06/19/2009 C9F210102	OL-STA-20158 OL-0819-15F 06/19/2009 C9F210102	OL-STA-20158 OL-0819-15P 06/19/2009 C9F210102	OL-STA-20158 OL-0819-16F 06/19/2009 C9F210102	OL-STA-20158 OL-0819-16P 06/19/2009 C9F210102	OL-STA-20158 OL-0819-17F 06/19/2009 C9F210102	OL-STA-20158 OL-0819-17P 06/19/2009 C9F210102
		SDG Matrix Sample Purpose Sample Type Taxon	TISSUE Regular Sample Fish Tissue PKSD	TISSUE Regular Sample Fish Tissue PKSD	TISSUE Regular Sample Fish Tissue BB	TISSUE Regular Sample Fish Tissue BB	TISSUE Regular Sample Fish Tissue BB	TISSUE Regular Sample Fish Tissue BB	TISSUE Regular Sample Fish Tissue BB	TISSUE Regular Sample Fish Tissue BB
		Specimen Sex Specimen Length Specimen Weight Specimen Age	182 mm 189 g 5+ yrs	182 mm 189 g 5+ yrs	327 mm 437 g 3+ yrs	327 mm 437 g 3+ yrs	350 mm 557 g 5 yrs	350 mm 557 g 5 yrs	274 mm 265 g 3 yrs	274 mm 265 g 3 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%								
SW6020	SELENIUM	mg/kg	0.33		0.35	0.45	0.21	0.28	0.21 J	0.25
SW7471	MERCURY	mg/kg	0.41	0.73					0.16	
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

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		Location Field Sample ID Sample Date	OL-STA-20158 OL-0819-18F 06/19/2009 C9F210102 C9H080196	OL-STA-20158 OL-0819-18P 06/19/2009 C9F210102 C9H080196	OL-STA-20158 OL-0819-19F 06/19/2009 C9F210102 C9H080196	OL-STA-20158 OL-0819-19P 06/19/2009 C9F210102 C9H080196	OL-STA-20158 OL-0819-20F 06/19/2009 C9F210102 C9H080196	OL-STA-20158 OL-0819-20P 06/19/2009 C9F210102 C9H080196	OL-STA-20158 OL-0820-01F 06/19/2009 C9F210104 C9H080196	OL-STA-20158 OL-0820-01P 06/19/2009 C9F210104 C9H080196
		SDG Matrix Sample Purpose Sample Type Taxon	TISSUE Regular Sample Fish Tissue BB	TISSUE Regular Sample Fish Tissue BB	TISSUE Regular Sample Fish Tissue BB	TISSUE Regular Sample Fish Tissue BB	TISSUE Regular Sample Fish Tissue BB	TISSUE Regular Sample Fish Tissue BB	TISSUE Regular Sample Fish Tissue BB	TISSUE Regular Sample Fish Tissue BB
		Specimen Sex Specimen Length Specimen Weight Specimen Age								
			298 mm 354 g 4 yrs	298 mm 354 g 4 yrs	295 mm 389 g 4 yrs	295 mm 389 g 4 yrs	317 mm 473 g 5 yrs	317 mm 473 g 5 yrs	309 mm 344 g 3 yrs	309 mm 344 g 3 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%								
SW6020	SELENIUM	mg/kg	0.23 J		0.3		0.25			
SW7471	MERCURY	mg/kg	0.45	0.67	0.32	0.44	0.46	0.69	0.31	0.39
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

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		Location Field Sample ID Sample Date	OL-STA-20158 OL-0823-02F 06/23/2009	OL-STA-20158 OL-0823-02P 06/23/2009	OL-STA-20158 OL-0823-03F 06/23/2009 C9G210298	OL-STA-20158 OL-0823-03P 06/23/2009	OL-STA-20158 OL-0824-02F 06/24/2009	OL-STA-20158 OL-0824-02P 06/24/2009	OL-STA-20158 OL-0824-03F 06/24/2009	OL-STA-20158 OL-0824-03P 06/24/2009
		SDG Matrix Sample Purpose Sample Type Taxon Specimen Sex Specimen Length Specimen Weight Specimen Age	C9F240179 TISSUE Regular Sample Fish Tissue SMB 420 mm 1164 g 6+ yrs	C9F240179 TISSUE Regular Sample Fish Tissue SMB 420 mm 1164 g 6+ yrs	C9F240179 TISSUE Regular Sample Fish Tissue SMB 380 mm 784 g 9 yrs	C9F240179 TISSUE Regular Sample Fish Tissue SMB 380 mm 784 g 9 yrs	C9F250208 TISSUE Regular Sample Fish Tissue SMB 472 mm 1353 g 9+ yrs	C9F250208 TISSUE Regular Sample Fish Tissue SMB 472 mm 1353 g 9+ yrs	C9F250208 TISSUE Regular Sample Fish Tissue SMB 460 mm 1240 g 8+ yrs	C9F250208 TISSUE Regular Sample Fish Tissue SMB 460 mm 1240 g 8+ yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%			1.3					
SW6020	SELENIUM	mg/kg			1	1.3	2.1	2.2	2.9	2.1
SW7471	MERCURY	mg/kg	1.4	1.2	2.3 JN					
SW8081	4,4'-DDD	ug/kg			16 J					
SW8081	4,4'-DDE	ug/kg			1.7 U					
SW8081	4,4'-DDT	ug/kg			42 U					
SW8082	AROCLOR-1016	ug/kg			42 U					
SW8082	AROCLOR-1221	ug/kg			42 U					
SW8082	AROCLOR-1232	ug/kg			42 U					
SW8082	AROCLOR-1242	ug/kg			42 U					
SW8082	AROCLOR-1248	ug/kg			910					
SW8082	AROCLOR-1254	ug/kg			500					
SW8082	AROCLOR-1260	ug/kg			210					

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		Location Field Sample ID Sample Date	OL-STA-20158 OL-0824-04F 06/24/2009 C9G210298	OL-STA-20158 OL-0824-04P 06/24/2009	OL-STA-20158 OL-0824-05F 06/24/2009	OL-STA-20158 OL-0824-05P 06/24/2009	OL-STA-20158 OL-0824-06F 06/24/2009	OL-STA-20158 OL-0824-06P 06/24/2009	OL-STA-20158 OL-0824-07F 06/24/2009	OL-STA-20158 OL-0824-07P 06/24/2009
		SDG Matrix Sample Purpose Sample Type Taxon Specimen Sex Specimen Length Specimen Weight Specimen Age	C9F250208 TISSUE Regular Sample Fish Tissue SMB	C9F250208 TISSUE Regular Sample Fish Tissue SMB	C9F250208 TISSUE Regular Sample Fish Tissue SMB	C9F250208 TISSUE Regular Sample Fish Tissue SMB	C9F250208 TISSUE Regular Sample Fish Tissue SMB	C9F250208 TISSUE Regular Sample Fish Tissue SMB	C9F250208 TISSUE Regular Sample Fish Tissue SMB	C9F250208 TISSUE Regular Sample Fish Tissue SMB
			429 mm 1294 g 7+ yrs	429 mm 1294 g 7+ yrs	410 mm 1037 g 6+ yrs	410 mm 1037 g 6+ yrs	422 mm 1424 g 6+ yrs	422 mm 1424 g 6+ yrs	399 mm 1213 g 6+ yrs	399 mm 1213 g 6+ yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%	2.6							
SW6020	SELENIUM	mg/kg								
SW7471	MERCURY	mg/kg	1.8	1.2	1.5	1.2	0.95	0.81	1.1	0.98
SW8081	4,4'-DDD	ug/kg	8.7 JN							
SW8081	4,4'-DDE	ug/kg	54 J							
SW8081	4,4'-DDT	ug/kg	1.7 U							
SW8082	AROCLOR-1016	ug/kg	42 U							
SW8082	AROCLOR-1221	ug/kg	42 U							
SW8082	AROCLOR-1232	ug/kg	42 U							
SW8082	AROCLOR-1242	ug/kg	42 U							
SW8082	AROCLOR-1248	ug/kg	2400							
SW8082	AROCLOR-1254	ug/kg	1300							
SW8082	AROCLOR-1260	ug/kg	530							

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		Location Field Sample ID Sample Date	OL-STA-20158 OL-0825-01F 06/25/2009 C9F260333 C9H080198	OL-STA-20158 OL-0825-01P 06/25/2009 C9F260333 C9H080198	OL-STA-20158 OL-0825-02F 06/25/2009 C9F260333 C9H080198	OL-STA-20158 OL-0825-02P 06/25/2009 C9F260333 C9H080201	OL-STA-20158 OL-0825-03F 06/25/2009 C9F260333 C9H080201	OL-STA-20158 OL-0825-03P 06/25/2009 C9F260333 C9H080201	OL-STA-20158 OL-0825-04F 06/25/2009 C9F260333 C9H080201	OL-STA-20158 OL-0825-04P 06/25/2009 C9F260333 C9H080201
		SDG Matrix Sample Purpose Sample Type Taxon Specimen Sex Specimen Length Specimen Weight Specimen Age	TISSUE Regular Sample Fish Tissue SMB 454 mm 1317 g 7+ yrs	TISSUE Regular Sample Fish Tissue SMB 454 mm 1317 g 7+ yrs	TISSUE Regular Sample Fish Tissue SMB 447 mm 1163 g 6+ yrs	TISSUE Regular Sample Fish Tissue SMB 447 mm 1163 g 6+ yrs	TISSUE Regular Sample Fish Tissue SMB 415 mm 1147 g 6+ yrs	TISSUE Regular Sample Fish Tissue SMB 415 mm 1147 g 6+ yrs	TISSUE Regular Sample Fish Tissue SMB 470 mm 1543 g 11 yrs	TISSUE Regular Sample Fish Tissue SMB 470 mm 1543 g 11 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%					1.1			
SW6020	SELENIUM	mg/kg	0.27		0.35		0.29		0.33	
SW7471	MERCURY	mg/kg	2.1	1.1	2.6	2.2	1.2	0.97	2.3	1.7
SW8081	4,4'-DDD	ug/kg					1 JN			
SW8081	4,4'-DDE	ug/kg					12 J			
SW8081	4,4'-DDT	ug/kg					1.7 U			
SW8082	AROCLOR-1016	ug/kg					42 U			
SW8082	AROCLOR-1221	ug/kg					42 U			
SW8082	AROCLOR-1232	ug/kg					42 U			
SW8082	AROCLOR-1242	ug/kg					42 U			
SW8082	AROCLOR-1248	ug/kg					650			
SW8082	AROCLOR-1254	ug/kg					440			
SW8082	AROCLOR-1260	ug/kg					160			

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		Location Field Sample ID Sample Date	OL-STA-20158 OL-0825-05F 06/25/2009	OL-STA-20158 OL-0825-05P 06/25/2009	OL-STA-20158 OL-0825-06F 06/25/2009 C9F260333	OL-STA-20158 OL-0825-06P 06/25/2009	OL-STA-20158 OL-0849-01F 07/29/2009	OL-STA-20158 OL-0849-01P 07/29/2009	OL-STA-20158 OL-0849-02F 07/29/2009 C9H080201	OL-STA-20158 OL-0849-02P 07/29/2009
		SDG Matrix Sample Purpose Sample Type Taxon Specimen Sex Specimen Length Specimen Weight Specimen Age	C9F260333 TISSUE Regular Sample Fish Tissue SMB	C9F260333 TISSUE Regular Sample Fish Tissue SMB	C9H080201 TISSUE Regular Sample Fish Tissue SMB	C9F260333 TISSUE Regular Sample Fish Tissue SMB	C9G300239 TISSUE Regular Sample Fish Tissue SMB	C9G300239 TISSUE Regular Sample Fish Tissue SMB	C9G300239 TISSUE Regular Sample Fish Tissue SMB	C9G300239 TISSUE Regular Sample Fish Tissue SMB
Method	Parameter Name	Units	441 mm 1030 g 7+ yrs	441 mm 1030 g 7+ yrs	470 mm 1563 g 6+ yrs	470 mm 1563 g 6+ yrs	458 mm 1472 g 10 yrs	458 mm 1472 g 10 yrs	474 mm 1635 g 9+ yrs	474 mm 1635 g 9+ yrs
Percent Lipids	%LIPIDS DETERMINATION	%	2.3	1.5	1.9	1.5	2.3	1.9	0.37	3.1
SW6020	SELENIUM	mg/kg			0.34					
SW7471	MERCURY	mg/kg			1.8					
SW8081	4,4'-DDD	ug/kg			6.3 JN					
SW8081	4,4'-DDE	ug/kg			81 J					
SW8081	4,4'-DDT	ug/kg			1.7 U					
SW8082	AROCLOR-1016	ug/kg			42 U					
SW8082	AROCLOR-1221	ug/kg			42 U					
SW8082	AROCLOR-1232	ug/kg			42 U					
SW8082	AROCLOR-1242	ug/kg			42 U					
SW8082	AROCLOR-1248	ug/kg	2300							
SW8082	AROCLOR-1254	ug/kg	1500							
SW8082	AROCLOR-1260	ug/kg	570							

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		Location Field Sample ID Sample Date	OL-STA-20158 OL-0849-03F 07/29/2009	OL-STA-20158 OL-0849-03P 07/29/2009	OL-STA-20158 OL-0849-04F 07/29/2009 C9H080201	OL-STA-20158 OL-0849-04P 07/29/2009	OL-STA-20158 OL-0849-05F 07/29/2009	OL-STA-20158 OL-0849-05P 07/29/2009	OL-STA-20158 OL-0849-06F 07/29/2009 C9H080201	OL-STA-20158 OL-0849-06P 07/29/2009
		SDG	C9G300239	C9G300239	C9G300239	C9G300239	C9G300239	C9G300239	C9G300239	C9G300239
		Matrix	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
		Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
		Sample Type	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue
		Taxon	SMB	SMB	SMB	SMB	SMB	SMB	SMB	SMB
		Specimen Sex								
		Specimen Length	425 mm	425 mm	451 mm	451 mm	471 mm	471 mm	460 mm	460 mm
		Specimen Weight	1261 g	1261 g	1230 g	1230 g	1589 g	1589 g	1296 g	1296 g
		Specimen Age	5+ yrs	5+ yrs	8+ yrs	8+ yrs	8+ yrs	8+ yrs	9+ yrs	9+ yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%			0.28					
SW6020	SELENIUM	mg/kg			2.6				0.34	
SW7471	MERCURY	mg/kg	1.6	1.9		2.4	2.6	2.5	2.5	2.2
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

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Adult Sport Fish

		Location Field Sample ID Sample Date	OL-STA-20158 OL-0849-07F 07/29/2009	OL-STA-20158 OL-0849-07P 07/29/2009	OL-STA-20158 OL-0849-08F 07/29/2009 C9H080201	OL-STA-20158 OL-0849-08P 07/29/2009	OL-STA-30093 OL-0812-15F 06/16/2009 C9H080193	OL-STA-30093 OL-0812-15P 06/16/2009	OL-STA-30093 OL-0812-16F 06/16/2009 C9H080193	OL-STA-30093 OL-0812-16P 06/16/2009
		SDG	C9G300239	C9G300239	C9G300239	C9G300239	C9F170280	C9F170280	C9F170280	C9F170280
		Matrix	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
		Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
		Sample Type	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue
		Taxon	SMB	SMB	SMB	SMB	WALL	WALL	WALL	WALL
		Specimen Sex								
		Specimen Length	452 mm	452 mm	440 mm	440 mm	559 mm	559 mm	520 mm	520 mm
		Specimen Weight	1589 g	1589 g	1375 g	1375 g	2629 g	2629 g	1750 g	1750 g
		Specimen Age	7+ yrs	7+ yrs	7+ yrs	7+ yrs	8+ yrs	8+ yrs	10 yrs	10 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%								
SW6020	SELENIUM	mg/kg			0.37		0.47		0.5	
SW7471	MERCURY	mg/kg	2	2.4	2.1	2.8	1.9	1.7	3.8	3.8
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

2009 Baseline Monitoring
Validated Fish Results
Adult Sport Fish

		Location Field Sample ID Sample Date	OL-STA-30093 OL-0812-17F 06/16/2009	OL-STA-30093 OL-0812-17P 06/16/2009	OL-STA-30093 OL-0812-18F 06/16/2009	OL-STA-30093 OL-0812-18P 06/16/2009	OL-STA-30093 OL-0812-19F 06/16/2009 C9H080193	OL-STA-30093 OL-0823-01F 06/23/2009 C9G210298	OL-STA-30093 OL-0823-01P 06/23/2009 C9F240179	OL-STA-30093 OL-0841-03F 07/23/2009 C9H080201 C9G240247
		SDG Matrix Sample Purpose Sample Type Taxon Specimen Sex Specimen Length Specimen Weight Specimen Age	C9F170280 TISSUE Regular Sample Fish Tissue WALL 519 mm 1861 g 6+ yrs	C9F170280 TISSUE Regular Sample Fish Tissue WALL 519 mm 1861 g 6+ yrs	C9F170280 TISSUE Regular Sample Fish Tissue WALL 483 mm 1597 g 4+ yrs	C9F170280 TISSUE Regular Sample Fish Tissue WALL 483 mm 1597 g 4+ yrs	C9F170280 TISSUE Regular Sample Fish Tissue WALL 462 mm 1326 g 4+ yrs	C9F240179 TISSUE Regular Sample Fish Tissue SMB 438 mm 1225 g 5+ yrs	C9F240179 TISSUE Regular Sample Fish Tissue SMB 438 mm 1225 g 5+ yrs	C9G240247 TISSUE Regular Sample Fish Tissue SMB 445 mm 1245 g 11 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%								
SW6020	SELENIUM	mg/kg	1.6	1.7	1.4	1.6	0.46 1.8	0.47 2.3 3.4 JN 28 J 1.7 U 42 U 42 U 42 U 900 550 300	2	0.32 1.5
SW7471	MERCURY	mg/kg								
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

2009 Baseline Monitoring
Validated Fish Results
Adult Sport Fish

		Location	OL-STA-30093	OL-STA-30093	OL-STA-30093	OL-STA-30093	OL-STA-30093	OL-STA-30093	OL-STA-30093			
		Field Sample ID	OL-0841-03P	OL-0841-04F	OL-0841-04P	OL-0841-05F	OL-0841-05P	OL-0841-06F	OL-0841-06P			
		Sample Date	07/23/2009	07/23/2009	07/23/2009	07/23/2009	07/23/2009	07/23/2009	07/23/2009			
		SDG	C9G240247	C9G240247	C9G240247	C9G240247	C9G240247	C9G240247	C9G240247			
		Matrix	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE			
		Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample			
		Sample Type	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue			
		Taxon	SMB	SMB	SMB	SMB	SMB	SMB	SMB			
		Specimen Sex										
Specimen Length	445 mm	463 mm	463 mm	462 mm	462 mm	454 mm	454 mm					
Specimen Weight	1245 g	1473 g	1473 g	1391 g	1391 g	1221 g	1221 g					
Specimen Age	11 yrs	10+ yrs	10+ yrs	8 yrs	8 yrs	12 yrs	12 yrs					
Method	Parameter Name	Units										
Percent Lipids	%LIPIDS DETERMINATION	%										
SW6020	SELENIUM	mg/kg	1.4	0.32	3.8	0.29	2.7	2.2	2.7			
SW7471	MERCURY	mg/kg										
SW8081	4,4'-DDD	ug/kg										
SW8081	4,4'-DDE	ug/kg										
SW8081	4,4'-DDT	ug/kg										
SW8082	AROCLOR-1016	ug/kg										
SW8082	AROCLOR-1221	ug/kg										
SW8082	AROCLOR-1232	ug/kg										
SW8082	AROCLOR-1242	ug/kg										
SW8082	AROCLOR-1248	ug/kg										
SW8082	AROCLOR-1254	ug/kg										
SW8082	AROCLOR-1260	ug/kg										

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Validated Fish Results
Adult Sport Fish

		Location Field Sample ID Sample Date	OL-STA-30093 OL-0812-19P 06/16/2009	OL-STA-30093 OL-0812-20F 06/16/2009	OL-STA-30093 OL-0812-20P 06/16/2009	OL-STA-30093 OL-0813-01F 06/16/2009 C9H080193	OL-STA-30093 OL-0813-01P 06/16/2009	OL-STA-30093 OL-0813-02F 06/16/2009 C9H080193	OL-STA-30093 OL-0813-02P 06/16/2009	OL-STA-30093 OL-0813-03F 06/16/2009
		SDG Matrix Sample Purpose Sample Type Taxon Specimen Sex Specimen Length Specimen Weight Specimen Age	C9F170280 TISSUE Regular Sample Fish Tissue WALL 462 mm 1326 g 4+ yrs	C9F170280 TISSUE Regular Sample Fish Tissue WALL 493 mm 1680 g 4 yrs	C9F170280 TISSUE Regular Sample Fish Tissue WALL 493 mm 1680 g 4 yrs	C9F170284 TISSUE Regular Sample Fish Tissue WALL 522 mm 2038 g 5+ yrs	C9F170284 TISSUE Regular Sample Fish Tissue WALL 522 mm 2038 g 5+ yrs	C9F170284 TISSUE Regular Sample Fish Tissue WALL 556 mm 2167 g 11 yrs	C9F170284 TISSUE Regular Sample Fish Tissue WALL 556 mm 2167 g 11 yrs	C9F170284 TISSUE Regular Sample Fish Tissue WALL 491 mm 1644 g 4+ yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%				0.51		0.53		
SW6020	SELENIUM	mg/kg	1.8	1.1	1.2	2.1	1.9	2.4	2.1	1.2
SW7471	MERCURY	mg/kg								
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

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Validated Fish Results
Adult Sport Fish

		Location Field Sample ID Sample Date	OL-STA-30093 OL-0813-03P 06/16/2009	OL-STA-30093 OL-0813-04F 06/16/2009	OL-STA-30093 OL-0813-04P 06/16/2009	OL-STA-30093 OL-0815-01F 06/17/2009 C9H080193	OL-STA-30093 OL-0815-01P 06/17/2009	OL-STA-30093 OL-0815-02F 06/17/2009	OL-STA-30093 OL-0815-02P 06/17/2009	OL-STA-30093 OL-0815-03F 06/17/2009 C9H080193
		SDG Matrix Sample Purpose Sample Type Taxon Specimen Sex Specimen Length Specimen Weight Specimen Age	C9F170284 TISSUE Regular Sample Fish Tissue WALL 491 mm 1644 g 4+ yrs	C9F170284 TISSUE Regular Sample Fish Tissue WALL 551 mm 2002 g 9+ yrs	C9F170284 TISSUE Regular Sample Fish Tissue WALL 551 mm 2002 g 9+ yrs	C9F180239 TISSUE Regular Sample Fish Tissue PKSD 185 mm 175 g 5 yrs	C9F180239 TISSUE Regular Sample Fish Tissue PKSD 185 mm 175 g 5 yrs	C9F180239 TISSUE Regular Sample Fish Tissue PKSD 200 mm 211 g 5 yrs	C9F180239 TISSUE Regular Sample Fish Tissue PKSD 200 mm 211 g 5 yrs	C9F180239 TISSUE Regular Sample Fish Tissue PKSD 190 mm 179 g 5 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%								
SW6020	SELENIUM	mg/kg				0.41				0.31
SW7471	MERCURY	mg/kg	1.1	3.4	3.2	0.4	0.51	0.39	0.49	0.67
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

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Adult Sport Fish

		Location Field Sample ID Sample Date	OL-STA-30093 OL-0815-03P 06/17/2009	OL-STA-30093 OL-0815-04F 06/17/2009	OL-STA-30093 OL-0815-04P 06/17/2009	OL-STA-30093 OL-0815-05F 06/17/2009 C9H080193	OL-STA-30093 OL-0815-05P 06/17/2009	OL-STA-30093 OL-0815-06F 06/17/2009	OL-STA-30093 OL-0815-06P 06/17/2009	OL-STA-30093 OL-0815-07F 06/17/2009
		SDG Matrix Sample Purpose Sample Type Taxon Specimen Sex Specimen Length Specimen Weight Specimen Age	C9F180239 TISSUE Regular Sample Fish Tissue PKSD	C9F180239 TISSUE Regular Sample Fish Tissue PKSD	C9F180239 TISSUE Regular Sample Fish Tissue PKSD	C9F180239 TISSUE Regular Sample Fish Tissue PKSD	C9F180239 TISSUE Regular Sample Fish Tissue PKSD	C9F180239 TISSUE Regular Sample Fish Tissue PKSD	C9F180239 TISSUE Regular Sample Fish Tissue PKSD	C9F180239 TISSUE Regular Sample Fish Tissue BB
			190 mm	192 mm	192 mm	198 mm	198 mm	185 mm	185 mm	291 mm
			179 g	182 g	182 g	192 g	192 g	185 g	185 g	356 g
			5 yrs	5 yrs	5 yrs	5 yrs	5 yrs	5 yrs	5 yrs	3 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%								
SW6020	SELENIUM	mg/kg				0.37				
SW7471	MERCURY	mg/kg	0.64	0.5	0.66	0.36	0.55	0.54	0.62	0.15
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

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Adult Sport Fish

		Location Field Sample ID Sample Date	OL-STA-30093 OL-0815-07P 06/17/2009	OL-STA-30093 OL-0815-08F 06/17/2009 C9H080193	OL-STA-30093 OL-0815-08P 06/17/2009	OL-STA-30093 OL-0815-09F 06/17/2009 C9H080193	OL-STA-30093 OL-0815-09P 06/17/2009	OL-STA-30093 OL-0815-10F 06/17/2009 C9H080193	OL-STA-30093 OL-0815-10P 06/17/2009	OL-STA-30093 OL-0815-11F 06/17/2009 C9H080193
		SDG Matrix Sample Purpose Sample Type Taxon Specimen Sex Specimen Length Specimen Weight Specimen Age	C9F180239 TISSUE Regular Sample Fish Tissue BB	C9F180239 TISSUE Regular Sample Fish Tissue BB	C9F180239 TISSUE Regular Sample Fish Tissue BB	C9F180239 TISSUE Regular Sample Fish Tissue BB	C9F180239 TISSUE Regular Sample Fish Tissue BB	C9F180239 TISSUE Regular Sample Fish Tissue BB	C9F180239 TISSUE Regular Sample Fish Tissue BB	C9F180239 TISSUE Regular Sample Fish Tissue BB
			291 mm	308 mm	308 mm	321 mm	321 mm	296 mm	296 mm	311 mm
			356 g	435 g	435 g	448 g	448 g	400 g	400 g	437 g
			3 yrs	4 yrs	4 yrs	4+ yrs	4+ yrs	3 yrs	3 yrs	4+ yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%								
SW6020	SELENIUM	mg/kg		0.38		0.31		0.37		0.28
SW7471	MERCURY	mg/kg	0.16	0.25	0.25	0.35	0.41	0.11	0.13	0.31
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

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Adult Sport Fish

		Location Field Sample ID Sample Date	OL-STA-30093 OL-0815-11P 06/17/2009	OL-STA-30093 OL-0815-12F 06/17/2009	OL-STA-30093 OL-0815-12P 06/17/2009	OL-STA-30093 OL-0815-13F 06/17/2009	OL-STA-30093 OL-0815-13P 06/17/2009	OL-STA-40212 OL-0816-08F 06/17/2009 C9H080194	OL-STA-40212 OL-0816-08P 06/17/2009	OL-STA-40212 OL-0816-09F 06/17/2009
		SDG Matrix Sample Purpose Sample Type Taxon Specimen Sex Specimen Length Specimen Weight Specimen Age	C9F180239 TISSUE Regular Sample Fish Tissue BB	C9F180239 TISSUE Regular Sample Fish Tissue BB	C9F180239 TISSUE Regular Sample Fish Tissue BB	C9F180239 TISSUE Regular Sample Fish Tissue BB	C9F180239 TISSUE Regular Sample Fish Tissue BB	C9F180258 TISSUE Regular Sample Fish Tissue PKSD	C9F180258 TISSUE Regular Sample Fish Tissue PKSD	C9F180258 TISSUE Regular Sample Fish Tissue PKSD
			311 mm	331 mm	331 mm	309 mm	309 mm	206 mm	206 mm	191 mm
			437 g	429 g	429 g	396 g	396 g	240 g	240 g	197 g
			4+ yrs	4+ yrs	4+ yrs	3+ yrs	3+ yrs	6+ yrs	6+ yrs	5 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%								
SW6020	SELENIUM	mg/kg						0.23 J		
SW7471	MERCURY	mg/kg	0.3	0.24	0.32	0.24	0.24	0.55	0.6	0.33
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

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Adult Sport Fish

		Location Field Sample ID Sample Date SDG Matrix Sample Purpose Sample Type Taxon Specimen Sex Specimen Length Specimen Weight Specimen Age	OL-STA-40212 OL-0816-09P 06/17/2009 C9F180258 TISSUE Regular Sample Fish Tissue PKSD 191 mm 197 g 5 yrs	OL-STA-40212 OL-0816-10F 06/17/2009 C9H080194 C9F180258 TISSUE Regular Sample Fish Tissue PKSD 179 mm 150 g 4 yrs	OL-STA-40212 OL-0816-10P 06/17/2009 C9F180258 TISSUE Regular Sample Fish Tissue PKSD 179 mm 150 g 4 yrs	OL-STA-40212 OL-0816-11F 06/17/2009 C9H080194 C9F180258 TISSUE Regular Sample Fish Tissue PKSD 195 mm 213 g 4+ yrs	OL-STA-40212 OL-0816-12F 06/17/2009 C9F180258 TISSUE Regular Sample Fish Tissue PKSD 192 mm 183 g 4+ yrs	OL-STA-40212 OL-0816-12P 06/17/2009 C9F180258 TISSUE Regular Sample Fish Tissue PKSD 192 mm 183 g 4+ yrs	OL-STA-40212 OL-0816-13F 06/17/2009 C9F180258 TISSUE Regular Sample Fish Tissue PKSD 191 mm 199 g 5 yrs	OL-STA-40212 OL-0816-13P 06/17/2009 C9F180258 TISSUE Regular Sample Fish Tissue PKSD 191 mm 199 g 5 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%								
SW6020	SELENIUM	mg/kg		0.31		0.24 J				
SW7471	MERCURY	mg/kg	0.41	0.29	0.41	0.44	0.4	0.5	0.33	0.47
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

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Adult Sport Fish

		Location Field Sample ID Sample Date	OL-STA-40212 OL-0816-14F 06/17/2009	OL-STA-40212 OL-0816-14P 06/17/2009	OL-STA-40212 OL-0816-15F 06/17/2009 C9H080194	OL-STA-40212 OL-0816-15P 06/17/2009	OL-STA-40212 OL-0816-16F 06/17/2009 C9H080194	OL-STA-40212 OL-0816-16P 06/17/2009	OL-STA-40212 OL-0816-17F 06/17/2009	OL-STA-40212 OL-0816-17P 06/17/2009
		SDG Matrix Sample Purpose Sample Type Taxon Specimen Sex Specimen Length Specimen Weight Specimen Age	C9F180258 TISSUE Regular Sample Fish Tissue BB	C9F180258 TISSUE Regular Sample Fish Tissue BB	C9F180258 TISSUE Regular Sample Fish Tissue BB	C9F180258 TISSUE Regular Sample Fish Tissue BB	C9F180258 TISSUE Regular Sample Fish Tissue BB	C9F180258 TISSUE Regular Sample Fish Tissue BB	C9F180258 TISSUE Regular Sample Fish Tissue BB	C9F180258 TISSUE Regular Sample Fish Tissue BB
			330 mm	330 mm	348 mm	348 mm	316 mm	316 mm	312 mm	312 mm
			512 g	512 g	559 g	559 g	437 g	437 g	447 g	447 g
			4 yrs	4 yrs	3 yrs	3 yrs	4 yrs	4 yrs	4 yrs	4 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%			0.25		0.22 J			
SW6020	SELENIUM	mg/kg			0.5		0.14			
SW7471	MERCURY	mg/kg	0.3	0.28		0.43		0.16	0.33	0.25
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

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		Location Field Sample ID Sample Date	OL-STA-40212 OL-0816-18F 06/17/2009	OL-STA-40212 OL-0816-18P 06/17/2009	OL-STA-40212 OL-0816-19F 06/17/2009 C9H080194	OL-STA-40212 OL-0816-19P 06/17/2009 C9F180258	OL-STA-40212 OL-0817-05F 06/17/2009 C9F180265	OL-STA-40212 OL-0817-05P 06/17/2009 C9F180265	OL-STA-40212 OL-0817-06F 06/17/2009 C9F180265	OL-STA-40212 OL-0817-06P 06/17/2009 C9F180265
		SDG Matrix Sample Purpose Sample Type Taxon	C9F180258 TISSUE Regular Sample Fish Tissue BB	C9F180258 TISSUE Regular Sample Fish Tissue BB	C9F180258 TISSUE Regular Sample Fish Tissue BB	C9F180258 TISSUE Regular Sample Fish Tissue BB	C9G210298 TISSUE Regular Sample Fish Tissue WALL	C9F180265 TISSUE Regular Sample Fish Tissue WALL	C9H080194 TISSUE Regular Sample Fish Tissue WALL	C9F180265 TISSUE Regular Sample Fish Tissue WALL
		Specimen Sex Specimen Length Specimen Weight Specimen Age								
			342 mm 537 g 4+ yrs	342 mm 537 g 4+ yrs	317 mm 462 g 6 yrs	317 mm 462 g 6 yrs	552 mm 2298 g 5+ yrs	552 mm 2298 g 5+ yrs	647 mm 4485 g 9+ yrs	647 mm 4485 g 9+ yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%					1.3		2.8	
SW6020	SELENIUM	mg/kg			0.26				0.28	
SW7471	MERCURY	mg/kg	0.15	0.2	0.35	0.4		2	3.1	2.8
SW8081	4,4'-DDD	ug/kg					2.2 JN		4.3 JN	
SW8081	4,4'-DDE	ug/kg					17 J		69 J	
SW8081	4,4'-DDT	ug/kg					1.7 U		1.7 U	
SW8082	AROCLOR-1016	ug/kg					42 U		42 U	
SW8082	AROCLOR-1221	ug/kg					42 U		42 U	
SW8082	AROCLOR-1232	ug/kg					42 U		42 U	
SW8082	AROCLOR-1242	ug/kg					42 U		42 U	
SW8082	AROCLOR-1248	ug/kg					1100		2200	
SW8082	AROCLOR-1254	ug/kg					580		1100	
SW8082	AROCLOR-1260	ug/kg					210		430	

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Adult Sport Fish

		Location Field Sample ID Sample Date SDG Matrix Sample Purpose Sample Type Taxon Specimen Sex Specimen Length Specimen Weight Specimen Age	OL-STA-40212 OL-0817-07F 06/17/2009 C9F180265 C9H080194 TISSUE Regular Sample Fish Tissue WALL	OL-STA-40212 OL-0817-07P 06/17/2009 C9F180265 TISSUE Regular Sample Fish Tissue WALL	OL-STA-50057 OL-0815-17P 06/17/2009 C9F180239 TISSUE Regular Sample Fish Tissue PKSD	OL-STA-50057 OL-0815-18F 06/17/2009 C9F180239 TISSUE Regular Sample Fish Tissue PKSD	OL-STA-50057 OL-0815-18P 06/17/2009 C9F180239 TISSUE Regular Sample Fish Tissue PKSD	OL-STA-50057 OL-0815-19F 06/17/2009 C9F180239 TISSUE Regular Sample Fish Tissue PKSD	OL-STA-50057 OL-0815-19P 06/17/2009 C9F180239 TISSUE Regular Sample Fish Tissue PKSD	OL-STA-50057 OL-0815-20F 06/17/2009 C9F180239 TISSUE Regular Sample Fish Tissue PKSD
Method	Parameter Name	Units	506 mm 1644 g 4 yrs	506 mm 1644 g 4 yrs	184 mm 162 g 5+ yrs	192 mm 186 g 4 yrs	192 mm 186 g 4 yrs	179 mm 142 g 4 yrs	179 mm 142 g 4 yrs	174 mm 149 g 4+ yrs
Percent Lipids	%LIPIDS DETERMINATION	%	2.9							
SW6020	SELENIUM	mg/kg	0.28							
SW7471	MERCURY	mg/kg	1.2	1.3	0.46	0.33	0.38	0.3	0.31	0.2
SW8081	4,4'-DDD	ug/kg	1.7 JN							
SW8081	4,4'-DDE	ug/kg	16 J							
SW8081	4,4'-DDT	ug/kg	1.7 U							
SW8082	AROCLOR-1016	ug/kg	42 U							
SW8082	AROCLOR-1221	ug/kg	42 U							
SW8082	AROCLOR-1232	ug/kg	42 U							
SW8082	AROCLOR-1242	ug/kg	42 U							
SW8082	AROCLOR-1248	ug/kg	830							
SW8082	AROCLOR-1254	ug/kg	400							
SW8082	AROCLOR-1260	ug/kg	150							

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Adult Sport Fish

		Location Field Sample ID Sample Date	OL-STA-50057 OL-0815-20P 06/17/2009	OL-STA-50057 OL-0816-01F 06/17/2009	OL-STA-50057 OL-0816-20F 06/17/2009 C9H080194	OL-STA-50057 OL-0816-20P 06/17/2009	OL-STA-50057 OL-0817-01F 06/17/2009	OL-STA-50057 OL-0817-01P 06/17/2009	OL-STA-50057 OL-0817-02F 06/17/2009 C9F180265	OL-STA-50057 OL-0817-02P 06/17/2009
		SDG Matrix Sample Purpose Sample Type Taxon Specimen Sex Specimen Length Specimen Weight Specimen Age	C9F180239 TISSUE Regular Sample Fish Tissue PKSD	C9F180258 TISSUE Regular Sample Fish Tissue BB	C9F180258 TISSUE Regular Sample Fish Tissue WALL	C9F180258 TISSUE Regular Sample Fish Tissue WALL	C9F180265 TISSUE Regular Sample Fish Tissue WALL	C9F180265 TISSUE Regular Sample Fish Tissue WALL	C9H080194 TISSUE Regular Sample Fish Tissue WALL	C9F180265 TISSUE Regular Sample Fish Tissue WALL
			174 mm	326 mm	537 mm	537 mm	541 mm	541 mm	569 mm	569 mm
			149 g	511 g	1999 g	1999 g	2265 g	2265 g	1993 g	1993 g
			4+ yrs	5 yrs	7 yrs	7 yrs	9+ yrs	9+ yrs	9 yrs	9 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%			0.41				0.41	
SW6020	SELENIUM	mg/kg			1.9	1.9	3.1	2.3	3.5	3.3
SW7471	MERCURY	mg/kg	0.2	0.2						
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

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Adult Sport Fish

		Location Field Sample ID Sample Date	OL-STA-50057 OL-0817-03F 06/17/2009	OL-STA-50057 OL-0817-03P 06/17/2009	OL-STA-50057 OL-0817-04F 06/17/2009	OL-STA-50057 OL-0817-04P 06/17/2009	OL-STA-50057 OL-0818-01F 06/19/2009	OL-STA-50057 OL-0818-01P 06/19/2009	OL-STA-50057 OL-0818-02F 06/19/2009 C9F210103	OL-STA-50057 OL-0818-02P 06/19/2009 C9F210103
		SDG Matrix Sample Purpose Sample Type Taxon Specimen Sex Specimen Length Specimen Weight Specimen Age	C9F180265 TISSUE Regular Sample Fish Tissue WALL	C9F180265 TISSUE Regular Sample Fish Tissue WALL	C9F180265 TISSUE Regular Sample Fish Tissue WALL	C9F180265 TISSUE Regular Sample Fish Tissue WALL	C9F210103 TISSUE Regular Sample Fish Tissue WALL	C9F210103 TISSUE Regular Sample Fish Tissue WALL	C9H080196 TISSUE Regular Sample Fish Tissue WALL	C9F210103 TISSUE Regular Sample Fish Tissue WALL
			548 mm 2216 g 8 yrs	548 mm 2216 g 8 yrs	620 mm 3786 g 8 yrs	620 mm 3786 g 8 yrs	560 mm 2337 g 5 yrs	560 mm 2337 g 5 yrs	565 mm 2432 g 8 yrs	565 mm 2432 g 8 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%								
SW6020	SELENIUM	mg/kg			3.3	3.2	2.2	2.3	0.29	1.4
SW7471	MERCURY	mg/kg	2.4	2.4					1.5	
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

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Adult Sport Fish

		Location Field Sample ID Sample Date SDG Matrix Sample Purpose Sample Type Taxon Specimen Sex Specimen Length Specimen Weight Specimen Age	OL-STA-50057 OL-0818-03F 06/19/2009 C9F210103 C9H080196 Regular Sample Fish Tissue WALL	OL-STA-50057 OL-0818-03P 06/19/2009 C9F210103 TISSUE Regular Sample Fish Tissue WALL	OL-STA-50057 OL-0818-04F 06/19/2009 C9F210103 TISSUE Regular Sample Fish Tissue WALL	OL-STA-50057 OL-0818-04P 06/19/2009 C9F210103 TISSUE Regular Sample Fish Tissue WALL	OL-STA-50057 OL-0818-05F 06/19/2009 C9F210103 TISSUE Regular Sample Fish Tissue WALL	OL-STA-50057 OL-0818-05P 06/19/2009 C9F210103 TISSUE Regular Sample Fish Tissue WALL	OL-STA-50057 OL-0818-06F 06/19/2009 C9F210103 C9H080196 Regular Sample Fish Tissue WALL	OL-STA-50057 OL-0818-06P 06/19/2009 C9F210103 TISSUE Regular Sample Fish Tissue WALL
			550 mm 2051 g 7 yrs	550 mm 2051 g 7 yrs	543 mm 2137 g 10+ yrs	543 mm 2137 g 10+ yrs	552 mm 2253 g 10 yrs	552 mm 2253 g 10 yrs	525 mm 1431 g 8+ yrs	525 mm 1431 g 8+ yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%								
SW6020	SELENIUM	mg/kg	0.23 J		2.2	1.9	3.1	3.2	0.22 J	
SW7471	MERCURY	mg/kg	1.6	1.7					2.9	3.3
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

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		Location Field Sample ID Sample Date	OL-STA-50057 OL-0818-07F 06/19/2009	OL-STA-50057 OL-0818-07P 06/19/2009	OL-STA-50057 OL-0818-08F 06/19/2009 C9F210103	OL-STA-50057 OL-0818-08P 06/19/2009 C9F210103	OL-STA-50057 OL-0818-09F 06/19/2009 C9H080196	OL-STA-50057 OL-0818-09P 06/19/2009 C9F210103	OL-STA-50057 OL-0818-10F 06/19/2009 C9F210103	OL-STA-50057 OL-0818-10P 06/19/2009 C9F210103
		SDG Matrix Sample Purpose Sample Type Taxon Specimen Sex Specimen Length Specimen Weight Specimen Age	C9F210103 TISSUE Regular Sample Fish Tissue WALL	C9F210103 TISSUE Regular Sample Fish Tissue WALL	C9H080196 TISSUE Regular Sample Fish Tissue WALL	C9F210103 TISSUE Regular Sample Fish Tissue WALL	C9H080196 TISSUE Regular Sample Fish Tissue WALL	C9F210103 TISSUE Regular Sample Fish Tissue WALL	C9F210103 TISSUE Regular Sample Fish Tissue WALL	C9F210103 TISSUE Regular Sample Fish Tissue WALL
			493 mm 1648 g 4 yrs	493 mm 1648 g 4 yrs	543 mm 1929 g 7+ yrs	543 mm 1929 g 7+ yrs	503 mm 1657 g 8+ yrs	503 mm 1657 g 8+ yrs	519 mm 1852 g 7 yrs	519 mm 1852 g 7 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%			0.21 J		0.31			
SW6020	SELENIUM	mg/kg			1.5	1.9	0.73	0.71	2	1.7
SW7471	MERCURY	mg/kg	1.2	1						
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

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		Location Field Sample ID Sample Date	OL-STA-50057 OL-0818-11F 06/19/2009	OL-STA-50057 OL-0818-11P 06/19/2009	OL-STA-50057 OL-0818-12F 06/19/2009	OL-STA-50057 OL-0818-12P 06/19/2009	OL-STA-50057 OL-0818-13F 06/19/2009	OL-STA-50057 OL-0818-13P 06/19/2009	OL-STA-50057 OL-0818-14F 06/19/2009 C9F210103	OL-STA-50057 OL-0818-14P 06/19/2009 C9F210103
		SDG Matrix Sample Purpose Sample Type Taxon Specimen Sex Specimen Length Specimen Weight Specimen Age	C9F210103 TISSUE Regular Sample Fish Tissue WALL	C9F210103 TISSUE Regular Sample Fish Tissue WALL	C9F210103 TISSUE Regular Sample Fish Tissue WALL	C9F210103 TISSUE Regular Sample Fish Tissue WALL	C9F210103 TISSUE Regular Sample Fish Tissue WALL	C9F210103 TISSUE Regular Sample Fish Tissue WALL	C9H080196 TISSUE Regular Sample Fish Tissue WALL	C9F210103 TISSUE Regular Sample Fish Tissue WALL
			518 mm 2249 g 7+ yrs	518 mm 2249 g 7+ yrs	517 mm 1821 g 5+ yrs	517 mm 1821 g 5+ yrs	520 mm 1782 g 7 yrs	520 mm 1782 g 7 yrs	564 mm 2322 g 7+ yrs	564 mm 2322 g 7+ yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%								
SW6020	SELENIUM	mg/kg							0.29	
SW7471	MERCURY	mg/kg	2.4	2.2	1.9	2.1	1.9	2.1	2	2
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

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Adult Sport Fish

		Location Field Sample ID Sample Date SDG Matrix Sample Purpose Sample Type Taxon Specimen Sex Specimen Length Specimen Weight Specimen Age	OL-STA-50057 OL-0822-02F 06/22/2009 C9G210298 C9H080198 TISSUE Regular Sample Fish Tissue SMB	OL-STA-50057 OL-0822-02P 06/22/2009 C9F230230 TISSUE Regular Sample Fish Tissue SMB	OL-STA-50057 OL-0831-01F 07/08/2009 C9G090280 TISSUE Regular Sample Fish Tissue SMB	OL-STA-50057 OL-0831-01P 07/08/2009 C9G090280 TISSUE Regular Sample Fish Tissue SMB	OL-STA-50057 OL-0831-02F 07/08/2009 C9G090280 TISSUE Regular Sample Fish Tissue SMB	OL-STA-50057 OL-0831-02P 07/08/2009 C9G090280 TISSUE Regular Sample Fish Tissue SMB	OL-STA-50057 OL-0836-01F 07/22/2009 C9G230238 TISSUE Regular Sample Fish Tissue SMB	OL-STA-50057 OL-0836-01P 07/22/2009 C9G230238 TISSUE Regular Sample Fish Tissue SMB
Method	Parameter Name	Units	439 mm 1090 g 6 yrs	439 mm 1090 g 6 yrs	303 mm 441 g 4+ yrs	303 mm 441 g 4+ yrs	450 mm 1218 g 7+ yrs	450 mm 1218 g 7+ yrs	463 mm 1659 g 10 yrs	463 mm 1659 g 10 yrs
Percent Lipids	%LIPIDS DETERMINATION	%	0.74							
SW6020	SELENIUM	mg/kg	0.36							
SW7471	MERCURY	mg/kg	2.1	1.9	0.8	0.67	2.3	2	1.9	2.2
SW8081	4,4'-DDD	ug/kg	4.4 JN							
SW8081	4,4'-DDE	ug/kg	92 J							
SW8081	4,4'-DDT	ug/kg	1.7 U							
SW8082	AROCLOR-1016	ug/kg	42 U							
SW8082	AROCLOR-1221	ug/kg	42 U							
SW8082	AROCLOR-1232	ug/kg	42 U							
SW8082	AROCLOR-1242	ug/kg	42 U							
SW8082	AROCLOR-1248	ug/kg	2700							
SW8082	AROCLOR-1254	ug/kg	1700							
SW8082	AROCLOR-1260	ug/kg	700							

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Adult Sport Fish

		Location	OL-STA-50057	OL-STA-50057	OL-STA-50057	OL-STA-50057	OL-STA-50057	OL-STA-50057	OL-STA-50057	OL-STA-50057
		Field Sample ID	OL-0815-14F	OL-0815-14P	OL-0815-15F	OL-0815-15P	OL-0815-16F	OL-0815-16P	OL-0815-17F	OL-0816-01P
		Sample Date	06/17/2009	06/17/2009	06/17/2009	06/17/2009	06/17/2009	06/17/2009	06/17/2009	06/17/2009
		SDG	C9H080194	C9H080194	C9H080194	C9H080194	C9H080194	C9H080194	C9H080194	C9F180258
		Matrix	C9F180239	C9F180239	C9F180239	C9F180239	C9F180239	C9F180239	C9F180239	TISSUE
		Sample Purpose	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
		Sample Type	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
		Taxon	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue
		Specimen Sex	PKSD	PKSD	PKSD	PKSD	PKSD	PKSD	PKSD	BB
		Specimen Length	180 mm	180 mm	192 mm	192 mm	164 mm	164 mm	184 mm	326 mm
		Specimen Weight	142 g	142 g	193 g	193 g	127 g	127 g	162 g	511 g
		Specimen Age	4 yrs	4 yrs	5 yrs	5 yrs	6 yrs	6 yrs	5+ yrs	5 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%								
SW6020	SELENIUM	mg/kg	0.24 J		0.31		0.27			
SW7471	MERCURY	mg/kg	0.31	0.3	0.33	0.36	0.29	0.33	0.38	0.22
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

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Adult Sport Fish

		Location	OL-STA-50057	OL-STA-50057	OL-STA-50057	OL-STA-50057	OL-STA-50057	OL-STA-50057	OL-STA-50057	OL-STA-50057
		Field Sample ID	OL-0816-02F	OL-0816-02P	OL-0816-03F	OL-0816-03P	OL-0816-04F	OL-0816-04P	OL-0816-05F	OL-0816-05P
		Sample Date	06/17/2009	06/17/2009	06/17/2009	06/17/2009	06/17/2009	06/17/2009	06/17/2009	06/17/2009
		SDG	C9F180258	C9F180258	C9F180258	C9F180258	C9F180258	C9F180258	C9F180258	C9F180258
		Matrix	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
		Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
		Sample Type	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue
		Taxon	BB	BB	BB	BB	BB	BB	BB	BB
		Specimen Sex								
		Specimen Length	300 mm	300 mm	302 mm	302 mm	308 mm	308 mm	312 mm	312 mm
		Specimen Weight	390 g	390 g	422 g	422 g	437 g	437 g	468 g	468 g
		Specimen Age	4 yrs	4 yrs	2+ yrs	2+ yrs	3+ yrs	3+ yrs	5 yrs	5 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%								
SW6020	SELENIUM	mg/kg			0.26		0.17 J		0.22 J	
SW7471	MERCURY	mg/kg	0.21	0.25	0.17	0.16	0.28	0.28	0.2	0.21
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

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		Location	OL-STA-50057	OL-STA-50057	OL-STA-50057	OL-STA-50057	OL-STA-50058	OL-STA-50058	OL-STA-50058	OL-STA-50058
		Field Sample ID	OL-0816-06F	OL-0816-06P	OL-0816-07F	OL-0816-07P	OL-0817-08F	OL-0817-08P	OL-0817-09F	OL-0817-09P
		Sample Date	06/17/2009	06/17/2009	06/17/2009	06/17/2009	06/17/2009	06/17/2009	06/17/2009	06/17/2009
		SDG	C9F180258	C9F180258	C9F180258	C9F180258	C9G210298	C9F180265	C9F180265	C9F180265
		Matrix	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
		Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
		Sample Type	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue
		Taxon	BB	BB	BB	BB	WALL	WALL	WALL	WALL
		Specimen Sex								
		Specimen Length	301 mm	301 mm	299 mm	299 mm	574 mm	574 mm	548 mm	548 mm
		Specimen Weight	409 g	409 g	383 g	383 g	2675 g	2675 g	2648 g	2648 g
		Specimen Age	4 yrs	4 yrs	4 yrs	4 yrs	11 yrs	11 yrs	7 yrs	7 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%					7.4			
SW6020	SELENIUM	mg/kg								
SW7471	MERCURY	mg/kg	0.23	0.27	0.2	0.22	3.2	3.1	2.5	2.6
SW8081	4,4'-DDD	ug/kg					16 JN			
SW8081	4,4'-DDE	ug/kg					92 J			
SW8081	4,4'-DDT	ug/kg					1.7 U			
SW8082	AROCLOR-1016	ug/kg					42 U			
SW8082	AROCLOR-1221	ug/kg					42 U			
SW8082	AROCLOR-1232	ug/kg					42 U			
SW8082	AROCLOR-1242	ug/kg					42 U			
SW8082	AROCLOR-1248	ug/kg					3900			
SW8082	AROCLOR-1254	ug/kg					2700			
SW8082	AROCLOR-1260	ug/kg					680			

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Adult Sport Fish

		Location	OL-STA-50058	OL-STA-50058	OL-STA-50058	OL-STA-50058	OL-STA-50058	OL-STA-50058	OL-STA-50058	OL-STA-50058
		Field Sample ID	OL-0817-10F	OL-0817-10P	OL-0817-11F	OL-0817-11P	OL-0817-12F	OL-0817-12P	OL-0821-13F	OL-0821-13P
		Sample Date	06/17/2009	06/17/2009	06/17/2009	06/17/2009	06/17/2009	06/17/2009	06/22/2009	06/22/2009
		SDG	C9F180265	C9F180265	C9F180265	C9F180265	C9F180265	C9F180265	C9F230224	C9F230224
		Matrix	C9H080194	C9H080194	C9H080194	C9H080194	C9H080194	C9H080194	C9H080198	C9F230224
		Sample Purpose	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
		Sample Type	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
		Taxon	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue
		Specimen Sex	WALL	WALL	WALL	WALL	WALL	WALL	PKSD	PKSD
		Specimen Length	544 mm	544 mm	608 mm	608 mm	541 mm	541 mm	181 mm	181 mm
		Specimen Weight	2231 g	2231 g	2437 g	2437 g	2166 g	2166 g	171 g	171 g
		Specimen Age	7 yrs	7 yrs	8 yrs	8 yrs	6+ yrs	6+ yrs	5 yrs	5 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%	2		3.3					
SW6020	SELENIUM	mg/kg	0.28		0.33		0.31		0.26	
SW7471	MERCURY	mg/kg	1.6	2.1	1.6	1.9	2.8	3.1	0.44	0.63
SW8081	4,4'-DDD	ug/kg	2.6 JN		6.4 JN					
SW8081	4,4'-DDE	ug/kg	23 J		46 J					
SW8081	4,4'-DDT	ug/kg	1.7 U		1.7 U					
SW8082	AROCLOR-1016	ug/kg	42 U		42 U					
SW8082	AROCLOR-1221	ug/kg	42 U		42 U					
SW8082	AROCLOR-1232	ug/kg	42 U		42 U					
SW8082	AROCLOR-1242	ug/kg	42 U		42 U					
SW8082	AROCLOR-1248	ug/kg	1400		1000					
SW8082	AROCLOR-1254	ug/kg	630		530					
SW8082	AROCLOR-1260	ug/kg	210		190					

2009 Baseline Monitoring
Validated Fish Results
Adult Sport Fish

		Location	OL-STA-50058	OL-STA-50058	OL-STA-50058	OL-STA-50058	OL-STA-50058	OL-STA-50058	OL-STA-50058	OL-STA-50058
		Field Sample ID	OL-0821-14F	OL-0821-14P	OL-0821-15F	OL-0821-15P	OL-0821-16F	OL-0821-16P	OL-0821-17F	OL-0821-17P
		Sample Date	06/22/2009	06/22/2009	06/22/2009	06/22/2009	06/22/2009	06/22/2009	06/22/2009	06/22/2009
		SDG	C9F230224	C9F230224	C9H080198	C9F230224	C9F230224	C9F230224	C9H080198	C9F230224
		Matrix	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
		Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
		Sample Type	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue
		Taxon	PKSD	PKSD	PKSD	PKSD	PKSD	PKSD	PKSD	PKSD
		Specimen Sex								
		Specimen Length	184 mm	184 mm	183 mm	183 mm	185 mm	185 mm	190 mm	190 mm
		Specimen Weight	147 g	147 g	156 g	156 g	167 g	167 g	180 g	180 g
		Specimen Age	5 yrs	5 yrs	5 yrs	5 yrs	6 yrs	6 yrs	4+ yrs	4+ yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%			0.28				0.23 J	
SW6020	SELENIUM	mg/kg			0.34	0.42	0.37	0.38	0.37	0.42
SW7471	MERCURY	mg/kg	0.27	0.34						
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

2009 Baseline Monitoring
Validated Fish Results
Adult Sport Fish

		Location	OL-STA-50058	OL-STA-50058	OL-STA-50058	OL-STA-50058	OL-STA-50058	OL-STA-50058	OL-STA-50058	OL-STA-50058
		Field Sample ID	OL-0821-18F	OL-0821-18P	OL-0821-19F	OL-0821-19P	OL-0821-20F	OL-0821-20P	OL-0822-01F	OL-0822-01P
		Sample Date	06/22/2009	06/22/2009	06/22/2009	06/22/2009	06/22/2009	06/22/2009	06/22/2009	06/22/2009
		SDG	C9F230224	C9F230224	C9H080198	C9F230224	C9F230224	C9F230224	C9F230230	C9F230230
		Matrix	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
		Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
		Sample Type	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue
		Taxon	BB	BB	BB	BB	BB	BB	BB	BB
		Specimen Sex								
		Specimen Length	355 mm	355 mm	321 mm	321 mm	300 mm	300 mm	260 mm	260 mm
		Specimen Weight	545 g	545 g	418 g	418 g	344 g	344 g	268 g	268 g
		Specimen Age	5 yrs	5 yrs	3+ yrs	3+ yrs	4 yrs	4 yrs	2 yrs	2 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%			0.2 J				0.18 J	
SW6020	SELENIUM	mg/kg			0.15	0.19	0.27	0.31	0.23	0.2
SW7471	MERCURY	mg/kg	0.23	0.26						
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

2009 Baseline Monitoring
Validated Fish Results
Adult Sport Fish

		Location	OL-STA-50059	OL-STA-50059	OL-STA-50059	OL-STA-50059	OL-STA-50059	OL-STA-50059	OL-STA-50059	OL-STA-50059
		Field Sample ID	OL-0821-01F	OL-0821-01P	OL-0821-02F	OL-0821-02P	OL-0821-03F	OL-0821-03P	OL-0821-04F	OL-0821-04P
		Sample Date	06/22/2009	06/22/2009	06/22/2009	06/22/2009	06/22/2009	06/22/2009	06/22/2009	06/22/2009
		SDG	C9F230224	C9F230224	C9F230224	C9F230224	C9F230224	C9F230224	C9F230224	C9F230224
		Matrix	C9H080198	C9F230224	C9H080198	C9F230224	C9H080198	C9F230224	C9F230224	C9F230224
		Sample Purpose	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
		Sample Type	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
		Taxon	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue
		Specimen Sex	PKSD	PKSD	PKSD	PKSD	PKSD	PKSD	PKSD	PKSD
		Specimen Length	188 mm	188 mm	173 mm	173 mm	131 mm	131 mm	173 mm	173 mm
		Specimen Weight	161 g	161 g	143 g	143 g	60 g	60 g	140 g	140 g
		Specimen Age	5+ yrs	5+ yrs	5 yrs	5 yrs	3 yrs	3 yrs	4+ yrs	4+ yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%								
SW6020	SELENIUM	mg/kg	0.26		0.25		0.26			
SW7471	MERCURY	mg/kg	0.44	0.58	0.33	0.38	0.12	0.15	0.2	0.23
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

2009 Baseline Monitoring
Validated Fish Results
Adult Sport Fish

		Location	OL-STA-50059	OL-STA-50059	OL-STA-50059	OL-STA-50059	OL-STA-50059	OL-STA-50059	OL-STA-50059	OL-STA-50059
		Field Sample ID	OL-0821-05F	OL-0821-05P	OL-0821-06F	OL-0821-06P	OL-0821-07F	OL-0821-07P	OL-0821-08F	OL-0821-08P
		Sample Date	06/22/2009	06/22/2009	06/22/2009	06/22/2009	06/22/2009	06/22/2009	06/22/2009	06/22/2009
		SDG	C9F230224	C9F230224	C9F230224	C9F230224	C9F230224	C9F230224	C9F230224	C9F230224
		Matrix	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
		Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
		Sample Type	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue
		Taxon	PKSD	PKSD	PKSD	PKSD	BB	BB	BB	BB
		Specimen Sex								
		Specimen Length	133 mm	133 mm	155 mm	155 mm	302 mm	302 mm	328 mm	328 mm
		Specimen Weight	62 g	62 g	100 g	100 g	335 g	335 g	463 g	463 g
		Specimen Age	2+ yrs	2+ yrs	4+ yrs	4+ yrs	3+ yrs	3+ yrs	3 yrs	3 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%								
SW6020	SELENIUM	mg/kg							0.12 J	
SW7471	MERCURY	mg/kg	0.1	0.096 J	0.21	0.26	0.27	0.27	0.31	0.39
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

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Adult Sport Fish

		Location	OL-STA-50059	OL-STA-50059	OL-STA-50059	OL-STA-50059	OL-STA-50059	OL-STA-50059	OL-STA-50059	OL-STA-50059
		Field Sample ID	OL-0821-09F	OL-0821-09P	OL-0821-10F	OL-0821-10P	OL-0821-11F	OL-0821-11P	OL-0821-12F	OL-0821-12P
		Sample Date	06/22/2009	06/22/2009	06/22/2009	06/22/2009	06/22/2009	06/22/2009	06/22/2009	06/22/2009
		SDG	C9F230224	C9F230224	C9F230224	C9F230224	C9H080198	C9F230224	C9F230224	C9F230224
		Matrix	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
		Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
		Sample Type	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue
		Taxon	BB	BB	BB	BB	BB	BB	BB	BB
		Specimen Sex								
		Specimen Length	325 mm	325 mm	323 mm	323 mm	275 mm	275 mm	320 mm	320 mm
		Specimen Weight	419 g	419 g	443 g	443 g	343 g	343 g	422 g	422 g
		Specimen Age	5 yrs	5 yrs	5 yrs	5 yrs	3+ yrs	3+ yrs	4+ yrs	4+ yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%								
SW6020	SELENIUM	mg/kg					0.21 J			
SW7471	MERCURY	mg/kg	0.33	0.32	0.31	0.36	0.15	0.2	0.28	0.29
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

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Validated Fish Results
Adult Sport Fish

		Location	OL-STA-50059	OL-STA-50059	OL-STA-50059	OL-STA-50059	OL-STA-50059	OL-STA-50059	OL-STA-60225	OL-STA-60225
		Field Sample ID	OL-0824-01F	OL-0824-01P	OL-0841-01F	OL-0841-01P	OL-0841-02F	OL-0841-02P	OL-0820-02F	OL-0820-02P
		Sample Date	06/24/2009	06/24/2009	07/23/2009	07/23/2009	07/23/2009	07/23/2009	06/19/2009	06/19/2009
		SDG	C9G210298	C9F250208	C9H080201	C9G240247	C9H080201	C9G240247	C9F210104	C9F210104
		Matrix	C9H080198	C9F250208	C9G240247	C9G240247	C9G240247	C9G240247	C9H080196	C9F210104
		Sample Purpose	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
		Sample Type	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
		Taxon	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue
		Specimen Sex	SMB	SMB	SMB	SMB	SMB	SMB	PKSD	PKSD
		Specimen Length	332 mm	332 mm	428 mm	428 mm	415 mm	415 mm	185 mm	185 mm
		Specimen Weight	609 g	609 g	1346 g	1346 g	1195 g	1195 g	173 g	173 g
		Specimen Age	5 yrs	5 yrs	6+ yrs	6+ yrs	6+ yrs	6+ yrs	5 yrs	5 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%	0.54		0.32		0.23 J		0.26	
SW6020	SELENIUM	mg/kg	0.28		1.6	1.8	1.9	1.9	0.53	0.63
SW7471	MERCURY	mg/kg	0.47	0.49						
SW8081	4,4'-DDD	ug/kg	1.7 JN							
SW8081	4,4'-DDE	ug/kg	14 J							
SW8081	4,4'-DDT	ug/kg	1.7 U							
SW8082	AROCLOR-1016	ug/kg	42 U							
SW8082	AROCLOR-1221	ug/kg	42 U							
SW8082	AROCLOR-1232	ug/kg	42 U							
SW8082	AROCLOR-1242	ug/kg	42 U							
SW8082	AROCLOR-1248	ug/kg	800							
SW8082	AROCLOR-1254	ug/kg	450							
SW8082	AROCLOR-1260	ug/kg	190							

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Adult Sport Fish

		Location	OL-STA-60225	OL-STA-60225	OL-STA-60225	OL-STA-60225	OL-STA-60225	OL-STA-60225	OL-STA-60225	OL-STA-60225
		Field Sample ID	OL-0820-03F	OL-0820-03P	OL-0820-04F	OL-0820-04P	OL-0820-05F	OL-0820-05P	OL-0820-06F	OL-0820-06P
		Sample Date	06/19/2009	06/19/2009	06/19/2009	06/19/2009	06/19/2009	06/19/2009	06/19/2009	06/19/2009
		SDG	C9F210104	C9F210104	C9H080198	C9F210104	C9F210104	C9F210104	C9H080198	C9F210104
		Matrix	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
		Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
		Sample Type	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue
		Taxon	PKSD	PKSD	PKSD	PKSD	PKSD	PKSD	PKSD	PKSD
		Specimen Sex								
		Specimen Length	187 mm	187 mm	175 mm	175 mm	188 mm	188 mm	177 mm	177 mm
		Specimen Weight	177 g	177 g	140 g	140 g	162 g	162 g	132 g	132 g
		Specimen Age	5 yrs	5 yrs	4 yrs	4 yrs	4 yrs	4 yrs	3+ yrs	3+ yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%			0.18 J				0.25	
SW6020	SELENIUM	mg/kg			0.68	0.77	0.42	0.44	0.41	0.46
SW7471	MERCURY	mg/kg	0.66	0.72						
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

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Validated Fish Results
Adult Sport Fish

		Location	OL-STA-60225	OL-STA-60225	OL-STA-60225	OL-STA-60225	OL-STA-60225	OL-STA-60225	OL-STA-60225	OL-STA-60225
		Field Sample ID	OL-0820-07F	OL-0820-07P	OL-0820-08F	OL-0820-08P	OL-0820-09F	OL-0820-09P	OL-0820-10F	OL-0820-10P
		Sample Date	06/19/2009	06/19/2009	06/19/2009	06/19/2009	06/19/2009	06/19/2009	06/19/2009	06/19/2009
		SDG	C9F210104	C9F210104	C9F210104	C9F210104	C9F210104	C9F210104	C9H080198	C9F210104
		Matrix	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
		Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
		Sample Type	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue
		Taxon	PKSD	PKSD	PKSD	PKSD	BB	BB	BB	BB
		Specimen Sex								
		Specimen Length	178 mm	178 mm	180 mm	180 mm	349 mm	349 mm	304 mm	304 mm
		Specimen Weight	140 g	140 g	175 g	175 g	504 g	504 g	329 g	329 g
		Specimen Age	5 yrs	5 yrs	4 yrs	4 yrs	4+ yrs	4+ yrs	3 yrs	3 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%								
SW6020	SELENIUM	mg/kg					0.19 J		0.15 J	
SW7471	MERCURY	mg/kg	0.57	0.62	0.41	0.53	0.15	0.15	0.62	0.67
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

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Adult Sport Fish

		Location	OL-STA-60225	OL-STA-60225	OL-STA-60225	OL-STA-60225	OL-STA-60225	OL-STA-60225	OL-STA-60225	OL-STA-60225
		Field Sample ID	OL-0820-11F	OL-0820-11P	OL-0820-12F	OL-0820-12P	OL-0820-13F	OL-0820-13P	OL-0820-14F	OL-0820-14P
		Sample Date	06/19/2009	06/19/2009	06/19/2009	06/19/2009	06/19/2009	06/19/2009	06/19/2009	06/19/2009
		SDG	C9F210104	C9F210104	C9F210104	C9F210104	C9F210104	C9F210104	C9F210104	C9F210104
		Matrix	C9H080198	C9F210104	C9H080198	C9F210104	C9F210104	C9F210104	C9F210104	C9F210104
		Sample Purpose	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
		Sample Type	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
		Taxon	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue
		Specimen Sex	BB	BB	BB	BB	BB	BB	BB	BB
		Specimen Length	314 mm	314 mm	277 mm	277 mm	315 mm	315 mm	306 mm	306 mm
		Specimen Weight	400 g	400 g	346 g	346 g	432 g	432 g	390 g	390 g
		Specimen Age	3+ yrs	3+ yrs	5 yrs	5 yrs	5 yrs	5 yrs	4+ yrs	4+ yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%								
SW6020	SELENIUM	mg/kg	0.15 J		0.22 J					
SW7471	MERCURY	mg/kg	0.2	0.19	0.42	0.46	0.13	0.13	0.32	0.33
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

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Validated Fish Results
Adult Sport Fish

		Location	OL-STA-60225	OL-STA-60225	OL-STA-70124	OL-STA-70124	OL-STA-70124	OL-STA-70124	OL-STA-70124	OL-STA-70124
		Field Sample ID	OL-0820-15F	OL-0820-15P	OL-0818-19F	OL-0818-19P	OL-0818-20F	OL-0818-20P	OL-0819-01F	OL-0819-01P
		Sample Date	06/19/2009	06/19/2009	06/19/2009	06/19/2009	06/19/2009	06/19/2009	06/19/2009	06/19/2009
		SDG	C9F210104	C9F210104	C9H080196	C9F210103	C9H080196	C9F210103	C9F210102	C9F210102
		Matrix	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
		Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
		Sample Type	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue
		Taxon	BB	BB	PKSD	PKSD	PKSD	PKSD	PKSD	PKSD
		Specimen Sex								
		Specimen Length	305 mm	305 mm	189 mm	189 mm	180 mm	180 mm	185 mm	185 mm
		Specimen Weight	355 g	355 g	182 g	182 g	167 g	167 g	166 g	166 g
		Specimen Age	2+ yrs	2+ yrs	5 yrs	5 yrs	4 yrs	4 yrs	4 yrs	4 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%								
SW6020	SELENIUM	mg/kg			0.38		0.25			
SW7471	MERCURY	mg/kg	0.36	0.37	0.63	0.7	0.42	0.43	0.36	0.52
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

2009 Baseline Monitoring
Validated Fish Results
Adult Sport Fish

		Location	OL-STA-70124	OL-STA-70124	OL-STA-70124	OL-STA-70124	OL-STA-70124	OL-STA-70124	OL-STA-70124	OL-STA-70124
		Field Sample ID	OL-0819-02F	OL-0819-02P	OL-0819-03F	OL-0819-03P	OL-0819-04F	OL-0819-04P	OL-0819-05F	OL-0819-05P
		Sample Date	06/19/2009	06/19/2009	06/19/2009	06/19/2009	06/19/2009	06/19/2009	06/19/2009	06/19/2009
		SDG	C9F210102	C9F210102	C9F210102	C9F210102	C9F210102	C9F210102	C9H080196	C9F210102
		Matrix	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
		Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
		Sample Type	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue
		Taxon	BB	BB	BB	BB	BB	BB	BB	BB
		Specimen Sex								
		Specimen Length	342 mm	342 mm	296 mm	296 mm	284 mm	284 mm	328 mm	328 mm
		Specimen Weight	529 g	529 g	375 g	375 g	289 g	289 g	476 g	476 g
		Specimen Age	2+ yrs	2+ yrs	4 yrs	4 yrs	3 yrs	3 yrs	4 yrs	4 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%			0.21 J				0.15 J	
SW6020	SELENIUM	mg/kg			0.63	0.9	0.12	0.17	0.21	0.32
SW7471	MERCURY	mg/kg	0.38	0.51						
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

2009 Baseline Monitoring

Validated Fish Results

Adult Sport Fish

		Location Field Sample ID Sample Date	OL-STA-70124 OL-0818-15F 06/19/2009	OL-STA-70124 OL-0818-15P 06/19/2009	OL-STA-70124 OL-0818-16F 06/19/2009	OL-STA-70124 OL-0818-16P 06/19/2009	OL-STA-70124 OL-0818-17F 06/19/2009	OL-STA-70124 OL-0818-17P 06/19/2009	OL-STA-70124 OL-0818-18F 06/19/2009	OL-STA-70124 OL-0818-18P 06/19/2009
		SDG	C9F210103	C9F210103	C9F210103	C9F210103	C9F210103	C9F210103	C9F210103	C9F210103
		Matrix	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
		Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
		Sample Type	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue
		Taxon	SMB	SMB	PKSD	PKSD	PKSD	PKSD	PKSD	PKSD
		Specimen Sex								
		Specimen Length	412 mm	412 mm	183 mm	183 mm	178 mm	178 mm	187 mm	187 mm
		Specimen Weight	1097 g	1097 g	159 g	159 g	154 g	154 g	183 g	183 g
		Specimen Age	7 yrs	7 yrs	4+ yrs	4+ yrs	5 yrs	5 yrs	4+ yrs	4+ yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%								
SW6020	SELENIUM	mg/kg	1.3	1.4	0.61	0.75	0.18 J 0.56	0.63	0.24	0.37
SW7471	MERCURY	mg/kg								
SW8081	4,4'-DDD	ug/kg								
SW8081	4,4'-DDE	ug/kg								
SW8081	4,4'-DDT	ug/kg								
SW8082	AROCLOR-1016	ug/kg								
SW8082	AROCLOR-1221	ug/kg								
SW8082	AROCLOR-1232	ug/kg								
SW8082	AROCLOR-1242	ug/kg								
SW8082	AROCLOR-1248	ug/kg								
SW8082	AROCLOR-1254	ug/kg								
SW8082	AROCLOR-1260	ug/kg								

2009 Baseline Monitoring

Validated Fish Results

Adult Sport Fish

		Location Field Sample ID Sample Date	OL-STA-70124 OL-0819-06F 06/19/2009 C9F210102 C9H080196	OL-STA-70124 OL-0819-06P 06/19/2009 C9F210102 C9H080196	OL-STA-70124 OL-0819-07F 06/19/2009 C9F210102 C9H080196	OL-STA-70124 OL-0819-07P 06/19/2009 C9F210102 C9H080196	OL-STA-70124 OL-0825-07F 06/25/2009 C9F260333 C9H080201	OL-STA-70124 OL-0825-07P 06/25/2009 C9F260333 C9H080201	OL-STA-70124 OL-0825-08F 06/25/2009 C9H080201 C9G210298	OL-STA-70124 OL-0825-08P 06/25/2009 C9F260333 C9H080201
		SDG Matrix Sample Purpose Sample Type Taxon Specimen Sex Specimen Length Specimen Weight Specimen Age	TISSUE Regular Sample Fish Tissue BB 297 mm 354 g 5 yrs	TISSUE Regular Sample Fish Tissue BB 297 mm 354 g 5 yrs	TISSUE Regular Sample Fish Tissue BB 305 mm 370 g 2+ yrs	TISSUE Regular Sample Fish Tissue BB 305 mm 370 g 2+ yrs	TISSUE Regular Sample Fish Tissue SMB 450 mm 1429 g 7+ yrs	TISSUE Regular Sample Fish Tissue SMB 450 mm 1429 g 7+ yrs	TISSUE Regular Sample Fish Tissue SMB 411 mm 1106 g 7+ yrs	TISSUE Regular Sample Fish Tissue SMB 411 mm 1106 g 7+ yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%								
SW6020	SELENIUM	mg/kg	0.13 J	0.49	0.34	0.47	0.34	1.2	1.2	1.5
SW7471	MERCURY	mg/kg	0.36				2.3			
SW8081	4,4'-DDD	ug/kg							2.3 JN	
SW8081	4,4'-DDE	ug/kg							22 J	
SW8081	4,4'-DDT	ug/kg							1.7 U	
SW8082	AROCLOR-1016	ug/kg							42 U	
SW8082	AROCLOR-1221	ug/kg							42 U	
SW8082	AROCLOR-1232	ug/kg							42 U	
SW8082	AROCLOR-1242	ug/kg							42 U	
SW8082	AROCLOR-1248	ug/kg							1000	
SW8082	AROCLOR-1254	ug/kg							570	
SW8082	AROCLOR-1260	ug/kg							250	

2009 Baseline Monitoring

Validated Fish Results

Adult Sport Fish

		Location Field Sample ID Sample Date	OL-STA-70124 OL-0825-09F 06/25/2009 C9H080201 C9G210298	OL-STA-70124 OL-0825-09P 06/25/2009 C9F260333 C9G210298	OL-STA-70124 OL-0825-10F 06/25/2009 C9F260333 C9G210298	OL-STA-70124 OL-0825-10P 06/25/2009 C9F260333 C9G210298	OL-STA-70124 OL-0825-11F 06/25/2009 C9F260333 C9G210298	OL-STA-70124 OL-0825-11P 06/25/2009 C9F260333 C9G210298	OL-STA-70124 OL-0825-12F 06/25/2009 C9F260333 C9H080201	OL-STA-70124 OL-0825-12P 06/25/2009 C9F260333 C9G210298
		SDG Matrix Sample Purpose Sample Type Taxon Specimen Sex Specimen Length Specimen Weight Specimen Age	Regular Sample Fish Tissue SMB	Regular Sample Fish Tissue SMB	Regular Sample Fish Tissue SMB	Regular Sample Fish Tissue SMB	Regular Sample Fish Tissue SMB	Regular Sample Fish Tissue SMB	Regular Sample Fish Tissue SMB	Regular Sample Fish Tissue SMB
		Units	478 mm 1361 g 8+ yrs	478 mm 1361 g 8+ yrs	456 mm 1442 g 8+ yrs	456 mm 1442 g 8+ yrs	411 mm 1173 g 8 yrs	411 mm 1173 g 8 yrs	446 mm 1401 g 8 yrs	446 mm 1401 g 8 yrs
Method	Parameter Name	Units								
Percent Lipids	%LIPIDS DETERMINATION	%	1.1		1		2			
SW6020	SELENIUM	mg/kg	0.31						0.32	
SW7471	MERCURY	mg/kg	2.7	1.9		1.8		1.3	2	1.6
SW8081	4,4'-DDD	ug/kg	4 JN		4.2 JN		2.4 JN			
SW8081	4,4'-DDE	ug/kg	100 J		78 J		31 J			
SW8081	4,4'-DDT	ug/kg	1.7 U		1.7 U		1.7 U			
SW8082	AROCLOR-1016	ug/kg	42 U		42 U		42 U			
SW8082	AROCLOR-1221	ug/kg	42 U		42 U		42 U			
SW8082	AROCLOR-1232	ug/kg	42 U		42 U		42 U			
SW8082	AROCLOR-1242	ug/kg	42 U		42 U		42 U			
SW8082	AROCLOR-1248	ug/kg	3400		2400		1300			
SW8082	AROCLOR-1254	ug/kg	2100		1500		820			
SW8082	AROCLOR-1260	ug/kg	710		610		300			

**2009 Baseline Monitoring
Validated Fish Results
Prey Fish**

	Location	OL-STA-20158	OL-STA-20158	OL-STA-20158	OL-STA-30093	OL-STA-30093	OL-STA-30093	OL-STA-40212	OL-STA-40212
	Field Sample ID	OL-0869-11	OL-0869-12	OL-0869-13	OL-0869-16	OL-0869-17	OL-0869-18	OL-0870-01	OL-0870-02
	Sample Date	40031	40031	40031	40031	40031	40031	40031	40031
	SDG	JA25055	JA25055	JA25055	JA25055	JA25055	JA25055	JA25056	JA25056
	Matrix	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
	Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
	Sample Type	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue
	Taxon	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN
	Specimen Sex								
Method	Parameter Name	Units							
SW7471	MERCURY	mg/kg	0.85	0.8	0.83	0.28	0.41	0.31	0.4
									0.5

**2009 Baseline Monitoring
Validated Fish Results
Prey Fish**

		Location	OL-STA-40212	OL-STA-40212	OL-STA-40212	OL-STA-50057	OL-STA-50057	OL-STA-50057	OL-STA-50057	OL-STA-50057
		Field Sample ID	OL-0870-03	OL-0892-01	OL-0892-02	OL-0867-11	OL-0867-12	OL-0867-13	OL-0894-01	OL-1008-01
		Sample Date	40031	40043	40043	40030	40030	40030	40044	40050
		SDG	JA25056	JA25906	JA25906	JA24913	JA24913	JA24913	JA26001	JA26427
		Matrix	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
		Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
		Sample Type	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue
		Taxon	MIN	ALE	ALE	MIN	MIN	MIN	ALE	ALE
		Specimen Sex								
		Specimen Length	82 mm	189.67 mm	194.33 mm	76 mm	68.4 mm	77.7 mm	177.67 mm	89.33 mm
		Specimen Weight	5.54 g	74 g	74 g	4.98 g	2.8 g	4.47 g	63 g	7.67 g
Method	Parameter Name	Units								
SW7471	MERCURY	mg/kg	0.54	0.29 J	0.19 J	0.13	0.11	0.15	0.29	0.046

**2009 Baseline Monitoring
Validated Fish Results
Prey Fish**

	Location	OL-STA-50057	OL-STA-50057	OL-STA-50057	OL-STA-50057	OL-STA-50057	OL-STA-50057	OL-STA-50057	OL-STA-50057
	Field Sample ID	OL-1008-02	OL-1008-03	OL-1008-04	OL-1012-01	OL-1012-02	OL-1012-03	OL-1012-04	OL-1012-05
	Sample Date	40050	40050	40050	40051	40051	40051	40051	40051
	SDG	JA26427	JA26427	JA26427	JA26543	JA26543	JA26543	JA26543	JA26543
	Matrix	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
	Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
	Sample Type	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue
	Taxon	ALE	ALE	ALE	ALE	ALE	ALE	ALE	ALE
	Specimen Sex								
	Specimen Length	94.33 mm	94.67 mm	98 mm	95.2 mm	94.8 mm	94.4 mm	99.6 mm	98 mm
	Specimen Weight	9.67 g	8.67 g	9.33 g	9.2 g	10 g	9.4 g	10.6 g	10.8 g
Method	Parameter Name	Units							
SW7471	MERCURY	mg/kg	0.024 J	0.12	0.087	0.11 J	0.1 J	0.014 J	0.067 J
									0.087 J

**2009 Baseline Monitoring
Validated Fish Results
Prey Fish**

	Location		OL-STA-50057	OL-STA-50057	OL-STA-50057	OL-STA-50058	OL-STA-50058	OL-STA-50058	OL-STA-50058	OL-STA-50059
	Field Sample ID		OL-1012-06	OL-1012-07	OL-1012-08	OL-0867-06	OL-0867-07	OL-0867-08	OL-0892-03	OL-0867-01
	Sample Date		40051	40051	40051	40030	40030	40030	40043	40030
	SDG		JA26543	JA26543	JA26543	JA24913	JA24913	JA24913	JA25906	JA24913
	Matrix		TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
	Sample Purpose		Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
	Sample Type		Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue
	Taxon		ALE	ALE	ALE	MIN	MIN	MIN	ALE	MIN
	Specimen Sex									
	Specimen Length		98.2 mm	95 mm	101.8 mm	64.9 mm	64.2 mm	72 mm	92.33 mm	67.5 mm
Specimen Weight		10.4 g	9.6 g	11.8 g	2.87 g	2.7 g	4.03 g	8.67 g	3.57 g	
Method	Parameter Name	Units								
SW7471	MERCURY	mg/kg	0.1 J	0.061 J	0.11 J	0.13	0.11	0.11	0.096 J	0.13

**2009 Baseline Monitoring
Validated Fish Results
Prey Fish**

		Location	OL-STA-50059	OL-STA-50059	OL-STA-60225	OL-STA-60225	OL-STA-60225	OL-STA-70124	OL-STA-70124	OL-STA-70124
		Field Sample ID	OL-0867-02	OL-0867-03	OL-0869-01	OL-0869-02	OL-0869-03	OL-0869-06	OL-0869-07	OL-0869-08
		Sample Date	40030	40030	40031	40031	40031	40031	40031	40031
		SDG	JA24913	JA24913	JA25055	JA25055	JA25055	JA25055	JA25055	JA25055
		Matrix	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
		Sample Purpose	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample	Regular Sample
		Sample Type	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue
		Taxon	MIN	MIN	MIN	MIN	MIN	MIN	MIN	GOSH
		Specimen Sex								
		Specimen Length	68.4 mm	73 mm	73.2 mm	68.8 mm	64.3 mm	69.1 mm	50.87 mm	45.96 mm
		Specimen Weight	3.03 g	3.68 g	4.04 g	3.42 g	2.53 g	3.16 g	1.39 g	0.93 g
Method	Parameter Name	Units								
SW7471	MERCURY	mg/kg	0.1	0.15	0.13	0.097	0.083	0.31	0.3	0.17

APPENDIX C

**DATA USABILITY AND SUMMARY REPORT
ONONDAGA LAKE BASELINE MONITORING
BOOK 3: TRIBUTARY MONITORING FOR 2009**

**DATA USABILITY SUMMARY REPORT
ONONDAGA LAKE BASELINE MONITORING
BOOK 3: TRIBUTARY MONITORING FOR 2009**

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ATTACHMENT A-1	VALIDATED LABORATORY DATA FOR BASE FLOW MONITORING SAMPLES
ATTACHMENT A-2	VALIDATED LABORATORY DATA FOR STORM WATER MONITORING SAMPLES
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SECTION C1

DATA USABILITY SUMMARY

Surface water and sediment samples were collected as part of the Book 3 baseline monitoring efforts for Onondaga Lake from May 7, 2009 through March 18, 2010. Analytical results from these samples were validated and reviewed by Parsons for usability with respect to the following requirements:

- Onondaga Lake Baseline Monitoring Book 3 Work Plan,
- Onondaga Lake Baseline Monitoring Book 3 QAPP (Appendix B of the Work Plan), and
- USEPA Region II Standard Operating Procedures (SOPs) for organic and inorganic data review.

The analytical laboratories for this project were Test America Laboratories (TAL) in North Canton, Ohio; Brooks Rand Labs (BRL) in Seattle, Washington; Accutest Laboratories in Dayton, New Jersey; Accutest Laboratories in Orlando, Florida; SGS Environmental Services (SGS) in Wilmington, North Carolina; and Upstate Freshwater Institute (UFI) in Syracuse, New York. These laboratories are certified by the State of New York to conduct laboratory analyses for this project through the National Environmental Laboratory Accreditation Conference (NELAC).

C1.1 LABORATORY DATA PACKAGES

The laboratory data package turnaround time, defined as the time from sample receipt by the laboratory to receipt of the analytical data packages by Parsons, was 28 days on average for the samples.

The data packages received from the laboratories were paginated, complete, and overall were of good quality. Comments on specific quality control (QC) and other requirements are discussed in detail in the attached data validation report which is summarized by sample media in Section A2.

C1.2 SAMPLING AND CHAIN-OF-CUSTODY

The samples were collected, shipped under a COC record, and received at the laboratories within one to seven days of sampling. All samples were received intact and in good condition at the laboratories.

C1.3 LABORATORY ANALYTICAL METHODS

The surface water samples collected for the base flow monitoring, storm water monitoring, and snowmelt monitoring were analyzed for total and dissolved low level mercury, methyl mercury, total suspended solids (TSS), and turbidity. The tributary surface water samples were collected and analyzed for polychlorinated biphenyls (PCBs) and TSS. In addition, certain tributary surface water samples were analyzed for dioxins and furans. The tributary sediment samples were collected from the site and analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), PCBs, PCB congeners, metals, total organic carbon (TOC), and total petroleum hydrocarbons – diesel range organics (TPH-DRO). Summaries of deviations from the Work Plan, QAPP, or USEPA Region II SOPs concerning these laboratory analyses are presented in Subsections A1.3.1 through A1.3.8. The data qualifications resulting from the data validation review and statements on the laboratory analytical precision, accuracy, representativeness, completeness, and comparability (PARCC) are discussed for each analytical method by media in Section A2. The laboratory data were reviewed and may be qualified with the following validation flags:

- "U" - not detected at the value given,
- "UJ" - estimated and not detected at the value given,
- "J" - estimated at the value given,
- "N" - presumptive evidence at the value given, and
- "R" - unusable value.

The validated laboratory data were tabulated and are presented in Attachment A.

C1.3.1 Low Level Mercury Analysis

The base flow monitoring, storm water monitoring, and snowmelt surface water samples collected from the site were analyzed by TAL and BRL for total and dissolved low level mercury using the USEPA 1631E analytical method. Certain reported results for the low level mercury samples were qualified as estimated based upon matrix spike recoveries, instrument calibrations, field duplicate precision, and sample handling/preservation. The reported low level mercury analytical results were considered 100% complete (i.e., usable) for the data presented by TAL and BRL. PARCC requirements were met.

C1.3.2 Methyl Mercury Analysis

The base flow monitoring, storm water monitoring, and snowmelt surface water samples collected from the site were analyzed by BRL for methyl mercury using the USEPA 1630 analytical method. Certain reported results for the methyl mercury samples were qualified as estimated based upon instrument calibrations, field duplicate precision, and sample preservation. The reported methyl mercury analytical results were considered 100% complete (i.e., usable) for the data presented by BRL. PARCC requirements were met.

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C1.3.3 PCBs and PCB Congener Analysis

The tributary surface water samples collected from the site were analyzed by Accutest for PCBs using the USEPA SW-846 8082 analytical method; and the tributary sediment samples collected from the site were analyzed by Accutest for PCBs and PCB congeners using the USEPA SW-846 8082 analytical method. Certain reported results for the PCB and PCB congener samples were qualified as estimated based upon holding times, sample identification, field duplicate precision, and sample solids content. The reported analytical results for the PCBs and PCB congeners were considered 100% complete (i.e., usable) for the data presented by Accutest. PARCC requirements were met.

C1.3.4 Dioxins and Furans Analysis

Certain tributary surface water samples collected from the site were analyzed by SGS for dioxins and furans using the USEPA SW-846 8290 analytical method. Certain reported results for the dioxins and furans samples were qualified as estimated based upon surrogate recoveries. The reported analytical results for the dioxins and furans were considered 100% complete (i.e., usable) for the data presented by SGS. PARCC requirements were met.

C1.3.5 Volatile Analysis

The tributary sediment samples collected from the site were analyzed for target compound list (TCL) VOCs using the USEPA SW-846 8260B analytical method. Certain reported results for the TCL VOC samples were qualified as estimated based upon matrix spike/matrix spike duplicate recoveries, instrument calibrations, field duplicate precision, and sample solids content. Certain reported results for the TCL VOC samples were considered unusable and qualified “R” based upon poor matrix spike/matrix spike duplicate recoveries and instrument calibrations. The reported analytical results for the TCL VOCs were considered 99.6% complete (i.e., usable) for the data presented by Accutest. PARCC requirements were met.

C1.3.6 Semivolatile Analysis

The tributary sediment samples collected from the site were analyzed for TCL SVOCs using the USEPA SW-846 8270C analytical method. Certain reported results for the TCL SVOC samples were qualified as estimated based upon holding times, matrix spike/matrix spike duplicate recoveries, instrument calibrations, field duplicate precision, and sample solids content. The reported analytical results for the TCL SVOCs were considered 100% complete (i.e., usable) for the data presented by Accutest. PARCC requirements were met.

C1.3.7 Metals Analysis

The tributary sediment samples collected from the site were analyzed for certain metals including mercury using the USEPA SW-846 6010B/7471A analytical methods. Certain reported results for the metals samples were qualified as estimated based upon matrix spike recoveries, serial dilutions, field duplicate precision, and sample solids content. The reported analytical

results for the metals were considered 100% complete (i.e., usable) for the data presented by Accutest. PARCC requirements were met.

C1.3.8 TSS, Turbidity, TOC, and TPH-DRO Analyses

The surface water samples collected from the site were analyzed for TSS and turbidity using the SM18/20 2540D and 2130B analytical methods, respectively; and the sediment samples collected from the site were analyzed for TOC and TPH-DRO using the USEPA approved Lloyd Kahn and the USEPA SW-846 8015 analytical methods, respectively. Certain reported results for these samples were qualified as estimated based upon matrix spike recoveries, laboratory duplicate precision, field duplicate precision, and sample solids content. The reported analytical results for these parameters were considered 100% complete (i.e., usable) for the data presented by TAL, Accutest, and UFI.

SECTION C2

DATA VALIDATION REPORTS

C2.1 BASE FLOW MONITORING SAMPLES

Data review has been completed for data packages generated by TAL – North Canton, BRL, and UFI containing surface water samples collected from the site for base flow monitoring. The specific samples contained in these data packages, the analyses performed, and the validated laboratory data were tabulated and are presented in Attachment A-1. All of these samples were shipped under a COC record and received intact by the analytical laboratory.

Data validation was performed for all samples in accordance with the project work plan and QAPP as well as the USEPA Region II SOP HW-2, Revision 13 “Evaluation of Metals Data for the CLP Program.” This data validation and usability report is presented by analysis type.

C2.1.1 Total and Dissolved Low Level Mercury

The following items were reviewed for compliancy in the low level mercury analysis:

- Custody documentation
- Holding times
- Initial and continuing calibration verifications
- Initial and continuing calibration, laboratory preparation blank, field/equipment/trip blank contamination
- Matrix spike / matrix spike duplicate (MS/MSD) recoveries
- Laboratory duplicate precision
- Laboratory control sample (LCS)
- Field duplicate precision
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of instrument calibrations, blank contamination, MS/MSD recoveries, and field duplicate precision as discussed below.

Instrument Calibrations

All initial and continuing calibration verifications were analyzed at the appropriate frequency with recoveries within the QC limit with the exception of the low continuing calibration recovery for mercury (74%R; QC limit 77-123%R) associated with samples OL-0935-01 through -06. Therefore, the mercury results for these samples were considered estimated, possibly biased low, with positive results qualified “J” and nondetected results qualified “UJ” for the affected samples.

Blank Contamination

The field equipment blank OL-0796-01 and the trip blank OL-0796-06 associated with samples OL-0796-02, -03, -04, and -05 contained total mercury below the reporting limit at concentrations of 0.26 and 0.34 ng/L, respectively; the field equipment blank OL-0909-01 and the trip blank OL-0909-07 associated with samples OL-0909-02 through -06 contained total mercury below the reporting limit at concentrations of 0.21 and 0.30 ng/L, respectively; the field equipment blank OL-0917-01 and the trip blank OL-0917-06 associated with samples OL-0917-02 through -05 contained total mercury below the reporting limit at concentrations of 0.31 and 0.25 ng/L, respectively; and the trip blank OL-0954-01 associated with samples OL-0954-02 through -05 contained total mercury below the reporting limit at a concentration of 0.16 ng/L. Validation qualification of associated sample results was not required since sample results were not affected by the contamination found in these blanks.

MS/MSD Recoveries

All MS/MSD recoveries were considered acceptable and within the laboratory QC limit of 71-125%R for all designated project spiked samples with the exception of the low matrix spike recovery for mercury (69%R) associated with total mercury samples OL-0935-01 through -06. Therefore, the total mercury results for these samples were considered estimated, possibly biased low, with positive results qualified “J” and nondetected results qualified “UJ” for the affected samples.

Field Duplicate Precision

All field duplicate precision results for designated project field duplicates and their parent samples were considered acceptable with the exception of the mercury precision results for the field duplicate pairs OL-0763-04/-05 (96%RPD), OL-0906-05/-06 (46%RPD), OL-0909-04/-05 (dissolved=143%RPD), OL-0917-04/-05 (111%RPD), and OL-0947-05/-06 (43%RPD). The mercury results were considered estimated and qualified “J” for these samples.

Usability

All total and dissolved mercury sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The total and dissolved low level mercury data presented by TAL and BRL were 100% complete (i.e., usable). The validated low level mercury laboratory data are tabulated and presented in Attachment A-1.

It was noted that samples OL-0943-01 through -06 were received by BRL four days after sample collection. Therefore, all low level mercury results for these samples were considered estimated with positive results qualified “J” and nondetected results qualified “UJ”.

C2.1.2 Methyl Mercury

The following items were reviewed for compliancy in the methyl mercury analysis:

- Custody documentation
- Holding times
- Initial and continuing calibration verifications
- Initial and continuing calibration, laboratory preparation blank, and field/equipment/trip blank contamination
- Matrix spike / matrix spike duplicate (MS/MSD) recoveries
- Laboratory duplicate precision
- Laboratory control sample (LCS)
- Field duplicate precision
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of blank contamination and field duplicate precision as discussed below.

Blank Contamination

The field equipment blank sample OL-0730-02 contained methyl mercury above the reporting limit at a concentration of 0.07 ng/L. After a review of the field logbook, field notes, laboratory data, and data results for the remaining samples associated with this COC, it was concluded that this sample may have been inadvertently mislabeled during field collection. Validation qualification of samples associated with this field equipment blank was not required.

The field equipment blank OL-0754-01 associated with samples OL-0754-02, -03, -04, and -05 contained methyl mercury above the reporting limit at a concentration of 0.37 ng/L. Since sample OL-0754-05 detected methyl mercury at a similar concentration, the methyl mercury result was considered not detected and qualified “U” for this sample while the remaining methyl mercury results were considered estimated and qualified “J” for the affected samples.

A field audit was conducted as a result of the contamination detected in these blanks and corrective action measures were identified and implemented by the UFI field sampling personnel.

Field Duplicate Precision

All field duplicate precision results for designated project field duplicates and their parent samples were considered acceptable with the exception of the methyl mercury precision results for the field duplicate pairs OL-0754-04/-05 (50%RPD) and OL-0789-06/-07 (35%RPD). The methyl mercury results were considered estimated and qualified “J” for these samples.

Usability

All methyl mercury sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The methyl mercury data presented by BRL were 100% complete (i.e., usable). The validated methyl mercury laboratory data are tabulated and presented in Attachment A-1.

It was noted that samples OL-0943-01 through -06 were received by BRL four days after sample collection. Since these samples were not preserved in the field, all methyl mercury results for these samples were considered estimated with positive results qualified “J” and nondetected results qualified “UJ”.

BRL observed that the bottle containing methyl mercury sample OL-0746-03 had a small hole at the bottom thereby possibly compromising the sample. Therefore, the positive methyl mercury result for this sample was considered estimated and qualified “J.”

C2.1.3 TSS and Turbidity

All custody documentation, holding times, matrix spike recoveries, laboratory duplicate precision, laboratory control sample recoveries, laboratory method blank contamination, QC field and trip blank contamination, initial and continuing calibration verifications, field duplicate precision, and quantitation limits were reviewed for compliance. Validation qualification of the sample results for these parameters was not required with the exception of the following:

- The TSS results for the field duplicate samples OL-0763-04/-05, OL-0770-04/-05, and OL-0916-04/-05 were considered estimated and qualified “J” or “UJ” based upon poor field duplicate precision (96%RPD, 55%RPD, and 46%RPD, respectively);
- The TSS results for samples OL-0795-02, -03, -04, and -05 were considered not detected and qualified “U” based upon associated field equipment blank contamination; and
- The TSS results for samples OL-0728-01 through -03, OL-0744-01 through -03, OL-0752-02 through -04, OL-0907-01 through -04, OL-0915-01 through -04, OL-0928-01 through -04, and OL-0933-01 through -04 were considered estimated and qualified “J” or “UJ” based upon the laboratory duplicate precision exceeding the QC limit.

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The TSS data presented by TAL, Accutest, and UFI were 100% complete (i.e., usable). The validated laboratory data are tabulated and presented in Attachment A-1.

C2.2 STORM WATER MONITORING SAMPLES

Data review has been completed for data packages generated by BRL, Accutest, and UFI containing surface water samples collected from the site for the storm water monitoring. The specific samples contained in these data packages, the analyses performed, and the validated laboratory data were tabulated and are presented in Attachment A-2. All of these samples were shipped under a COC record and received intact by the analytical laboratory.

Data validation was performed for all samples in accordance with the project work plan and QAPP as well as the USEPA Region II SOP HW-2, Revision 13 “Evaluation of Metals Data for the CLP Program.” This data validation and usability report is presented by analysis type.

C2.2.1 Low Level Mercury (Total and Dissolved)

The following items were reviewed for compliancy in the low level mercury analysis:

- Custody documentation
- Holding times
- Initial and continuing calibration verifications
- Initial and continuing calibration blank, laboratory preparation blank, and field equipment blank contamination
- Matrix spike / matrix spike duplicate (MS/MSD) recoveries
- Laboratory duplicate precision
- Laboratory control sample (LCS)
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of blank contamination and MS/MSD recoveries as discussed below.

Blank Contamination

The field equipment blank OL-0749-26 associated with storm water samples collected on 6/11/09 and 6/12/09 contained low level mercury above the reporting limit at a concentration of 1.9 ng/L; and the field equipment blank OL-0940-10 associated with storm water samples collected on 10/28/09 and 10/29/09 contained low level mercury below the reporting limit at 0.18 ng/L. Therefore, mercury results less than validation action concentrations were considered not detected and qualified “U” for the affected samples.

MS/MSD Recoveries

All MS/MSD recoveries were considered acceptable and within the laboratory QC limit of 71-125%R for all designated project spiked samples with the exception of the high matrix spike recoveries for mercury (235%R, 222%R) associated with mercury samples OL-0749-21 through

-26. Therefore, the mercury results for these samples were considered estimated, possibly biased high, and qualified “J” for the affected samples.

Usability

All total and dissolved low level mercury sample results for the surface water samples were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The low level mercury data presented by TAL were 100% complete (i.e., usable). The validated low level mercury laboratory data are tabulated and presented in Attachment A-2.

C2.2.2 Methyl Mercury

The following items were reviewed for compliancy in the methyl mercury analysis:

- Custody documentation
- Holding times
- Initial and continuing calibration verifications
- Initial and continuing calibration blank, laboratory preparation blank, and field equipment blank contamination
- Matrix spike / matrix spike duplicate (MS/MSD) recoveries
- Laboratory duplicate precision
- Laboratory control sample (LCS)
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of calibrations as discussed below.

Calibrations

All initial and continuing calibration verifications were analyzed at the appropriate frequency with recoveries within the 80-120%R QC limit with the exception of the low methyl

mercury initial calibration verification recovery (74%R) associated with the samples OL-0923-01 through -11. Therefore, the methyl mercury results for these samples were considered estimated, possibly biased low, with positive results qualified “J” and nondetected results qualified “UJ.”

Usability

All methyl mercury sample results for the surface water were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The methyl mercury data presented by BRL were 100% complete (i.e., usable). The validated methyl mercury laboratory data are tabulated and presented in Attachment A-2.

It was noted that samples OL-0742-01 and -02 were received by BRL three days from sample collection. Since these samples were not preserved in the field, the methyl mercury results for these samples were considered estimated, possibly biased low; with positive results qualified “J” and nondetected results qualified “UJ.”

C2.2.3 TSS and Turbidity

All custody documentation, holding times, matrix spike recoveries, laboratory duplicate precision, laboratory control sample recoveries, laboratory method blank contamination, QC field and trip blank contamination, initial and continuing calibration verifications, field duplicate precision, and quantitation limits were reviewed for compliance. Validation qualification of the sample results for these parameters was not required with the exception of the TSS results for samples OL-0748-01 through -24 were considered estimated and qualified “J” based upon the laboratory duplicate precision exceeding the QC limit.

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The TSS and turbidity data presented by TAL, Accutest, and UFI were 100% complete (i.e., usable). The validated laboratory data are tabulated and presented in Attachment A-2.

C2.3 TRIBUTARY SURFACE WATER SAMPLES

Data review has been completed for data packages generated by Accutest and SGS containing tributary surface water samples collected from the site. The specific samples contained in these data packages, the analyses performed, and the validated laboratory data were

tabulated and are presented in Attachment A-3. All of these samples were properly preserved, shipped under a COC record, and received intact by the analytical laboratory.

Data validation was performed for all samples in accordance with the project work plan and QAPP as well as the USEPA Region II SOPs HW-45, Revision 1 “Data Validation SOP of Organic Analysis of PCBs by Gas Chromatography SW-846 Method 8082A;” and HW25, Revision 3 “Validating Tetra- through Octa-chlorinated Dioxins and Furans by Isotope Dilution (HRGC/HRMS) Method 1613, Rev. A.” This data validation and usability report is presented by analysis type.

C2.3.1 PCBs

The following items were reviewed for compliancy in the PCB analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) precision and accuracy
- Laboratory control sample (LCS) recoveries
- Laboratory method blank and field equipment blank contamination
- Initial calibrations
- Verification calibrations
- Field duplicate precision
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of sample result identification and field duplicate precision as discussed below.

Sample Result Identification

All positive PCB sample results were within retention time windows and verified present using secondary column confirmation. The precision between the PCB results on the quantitation and confirmation columns were less than 40%RPD with the exception of the precision results for PCB-1248 and total PCBs in sample OL-0788-06 (121.1%RPD and 103.4%RPD, respectively).

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These PCB results were considered estimated, tentatively identified, and qualified “JN” for this sample.

Field Duplicate Precision

All field duplicate results were considered acceptable with the exception of the results for PCB-1248, PCB-1254, and total PCBs for the field duplicate pair OL-0788-06 and -07. These results were considered estimated with the positive results qualified “J” and the nondetected results qualified “UJ” for this sample and field duplicate.

Usability

All PCB results for the tributary surface water samples were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The PCB surface water data presented by Accutest were 100% complete with all data considered usable and valid. The validated data are tabulated and presented in Attachment A-3.

C2.3.2 Dioxins and Furans

The following items were reviewed for compliancy in the dioxins and furans analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) precision and accuracy
- Laboratory control sample (LCS) recoveries
- Laboratory method blank and field equipment blank contamination
- Instrument performance
- Initial calibrations
- Verification calibrations
- Internal standard responses
- Sample result verification and identification

- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of surrogate recoveries and blank contamination as discussed below.

Surrogate Recoveries

All sample surrogate recoveries were considered acceptable and within the 70-130%R QC limit with the exception of the low recoveries for surrogates 13C12-2,3,7,8-TCDD and 13C12-OCDD in sample OL-0926-02 (69.1%R and 67.4%R, respectively). Therefore, the results for this sample were considered estimated, possibly biased low, with positive results qualified “J” and nondetected results qualified “UJ.”

Blank Contamination

The laboratory method blank associated with all samples in sample delivery groups (SDGs) JA25453X and JA25597X contained 2,3,7,8-TCDF, 1,2,3,7,8-PeCDF, 2,3,4,7,8-PeCDF, total TCDFs, and total PeCDFs at concentrations of 0.00696, 0.00172, 0.00186, 0.0201, and 0.00358 ng/L, respectively; the laboratory method blanks and the field equipment blank OL-0929-01 associated with all samples in SDG JA30069X contained OCDD at concentrations of 0.0114, 0.0124, and 0.0117; the field equipment blank OL-0946-01 associated with samples in SDG JA33399X contained 1,2,3,4,6,7,8-HpCDD, OCDD, 1,2,3,7,8-PeCDF, 1,2,3,4,7,8-HxCDF, total PeCDDs, total HpCDDs, total PeCDFs, and total HxCDFs at concentrations of 0.000958, 0.00218, 0.000348, 0.000392, 0.000675, 0.000958, 0.000348, and 0.000392 ng/L, respectively; and the laboratory method blank associated with all samples in SDG JA33399X except sample OL-0946-08 contained OCDD, 2,3,7,8-TCDF, 1,2,3,7,8-PeCDF, 1,2,3,7,8,9-HxCDF, 1,2,3,4,6,7,8-HpCDF, total TCDFs, total PeCDFs, total HxCDFs, and total HpCDFs at concentrations of 0.0034, 0.0006, 0.0011, 0.00088, 0.00072, 0.00126, 0.0011, 0.00088, and 0.00072 ng/L, respectively. Therefore, results for these compounds less than validation action concentrations were considered not detected and qualified “U” for the affected samples.

Usability

All dioxins and furans results for the tributary surface water samples were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The dioxins and furans

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data presented by SGS were 100% complete with all data considered usable and valid. The validated data are tabulated and presented in Attachment A-3.

The dioxins and furans analysis of samples OL-0949-03, -04, -06, OL-0946-02, -06, and -07 was cancelled since the bottles containing these samples froze and broke at SGS due to malfunction of the storage cooler.

C2.3.3 TSS

All custody documentation, holding times, matrix spike recoveries, laboratory duplicate precision, laboratory control sample recoveries, laboratory method blank contamination, QC field and trip blank contamination, initial and continuing calibration verifications, field duplicate precision, and quantitation limits were reviewed for compliance. Validation qualification of the sample results analyzed for TSS was not required with the exception of the TSS field duplicate samples OL-0946-05 and -06 which were considered estimated and qualified “J” based upon poor field duplicate precision (67%RPD).

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The TSS data presented by Accutest were 100% complete (i.e., usable). The validated laboratory data are tabulated and presented in Attachment A-3.

C2.4 TRIBUTARY SEDIMENT SAMPLES

Data review has been completed for data packages generated by Accutest containing tributary sediment samples collected from the site. The specific samples contained in these data packages, the analyses performed, and the validated laboratory data were tabulated and are presented in Attachment A-4. All of these samples were properly preserved, shipped under a COC record, and received intact by the analytical laboratory.

Data validation was performed for all samples in accordance with the project work plan and QAPP as well as the USEPA Region II SOPs HW-24, Revision 2 “Validating Volatile Organic Compounds by SW-846 Method 8260B;” HW-22, Revision 3 “Validating Semivolatile Organic Compounds by SW-846 Method 8270;” HW-45, Revision 1 “Data Validation SOP of Organic Analysis of PCBs by Gas Chromatography SW-846 Method 8082A;” and HW-2, Revision 13 “Evaluation of Metals Data for the CLP Program.” This data validation and usability report is presented by analysis type.

C2.4.1 TCL Volatiles

The following items were reviewed for compliancy in the volatile analysis:

- Custody documentation

- Holding times
- Surrogate recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) precision and accuracy
- Laboratory control sample (LCS) recoveries
- Laboratory method blank contamination
- GC/MS instrument performance
- Sample result verification and identification
- Initial and continuing calibrations
- Internal standard area counts and retention times
- Field duplicate precision
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of MS/MSD precision and accuracy, initial and continuing calibrations, and field duplicate precision as discussed below.

MS/MSD Precision and Accuracy

All MS/MSD precision (relative percent difference; RPD) and accuracy (percent recovery, %R) measurements were compliant, within QC acceptance limits for designated spiked project samples, and did not require qualification with the exception of the low MS/MSD accuracy results for bromodichloromethane, bromoform, dibromochloromethane, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, cis-1,3-dichloropropene, trans-1,3-dichloropropene, and 1,2,4-trichlorobenzene during the spiked analyses of sample OL-1020-03. The results for these compounds were considered estimated, possibly biased low, with positive results qualified “J” and nondetected results qualified “UJ” for the affected unspiked parent sample. However, the nondetected 1,2,4-trichlorobenzene result for the unspiked parent sample OL-1020-03 was considered unusable and qualified “R” based upon extremely low (less than 10%R) MS/MSD accuracy results.

Initial and Continuing Calibrations

All initial calibration compounds were compliant with a minimum mean relative response factor (RRF) of 0.05 and a maximum percent relative standard deviation (%RSD) of 30% with the exception of acetone (RRF=0.037) in the initial calibration associated with all samples

collected 11/19/09. Therefore, positive acetone results were considered estimated and qualified “J” while nondetected acetone results were considered unusable and qualified “R” for the affected samples.

All continuing calibrations compounds were within QC limits with a minimum relative response factor (RRF) of 0.05 and a maximum %D within $\pm 25\%$ with the exception of acetone (44%D) in the continuing calibration associated with samples OL-1020-01 through -08; 1,2,3-trichlorobenzene (-26.3%D) in the continuing calibration associated with sample OL-1020-09; methyl acetate (-26.4%D) in the continuing calibration associated with sample OL-1022-01; acetone (44%D) in the continuing calibration associated with sample OL-1022-05; acetone (RRF=0.038) and 2-butanone (RRF=0.048) in the continuing calibration associated with sample OL-1059-01; and acetone (RRF=0.047; -27%D) in the continuing calibration associated with samples OL-1059-02 through -05. The sample results for these compounds were considered estimated with positive results qualified "J" and nondetected results qualified "UJ" for the affected samples. However, nondetected sample results for those compounds where the RRF was outside criteria were considered unusable and qualified “R” for the affected samples.

Field Duplicate Precision

Field duplicate results were considered acceptable with the exception of the results for acetone for the field duplicate pair OL-1059-01 (427 $\mu\text{g/kg}$) and -02 (nondetect). Therefore, the acetone results for these samples were considered estimated with the positive result qualified “J” and nondetected result qualified “UJ.”

Usability

All volatile results for the sediment samples were considered usable following data validation with the exception of certain nondetected results based upon poor MS/MSD accuracy results and poor calibration linearity.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The volatile sediment data presented by Accutest were 99.6% complete (i.e., usable). The validated volatile laboratory data are tabulated and presented in Attachment A-4.

It was noted that sediment samples OL-1059-01 through -04 contained less than 50% solids. The sample results for these samples were considered estimated with positive results qualified “J” and nondetected results qualified “UJ.”

C2.4.2 TCL Semivolatiles

The following items were reviewed for compliancy in the semivolatile analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) precision and accuracy
- Laboratory control sample (LCS) recoveries
- Laboratory method blank contamination
- GC/MS instrument performance
- Sample result verification and identification
- Initial and continuing calibrations
- Internal standard area counts and retention times
- Field duplicate precision
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of holding times, MS/MSD precision and accuracy, initial and continuing calibrations, and field duplicate precision as discussed below.

Holding Times

All extraction and analytical holding times were within criteria for all samples with the exception of the samples OL-1022-01, -02, -03RE, -04, and -05RE which exceeded the 40-day analytical holding time requirement by sixteen days. Therefore, results reported for these samples were considered estimated, possibly biased low, with positive results qualified “J” and nondetected results qualified “UJ.”

MS/MSD Precision and Accuracy

All MS/MSD precision and accuracy measurements were within QC acceptance limits for designated spiked project samples with the exception of the high MS/MSD accuracy results for all compounds during the spiked analyses of OL-1020-03; and high MS/MSD accuracy results for benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene,

fluoranthene, phenanthrene, and pyrene during the spiked analyses of OL-1059-05. Therefore, the results for these compounds were considered estimated, possibly biased high, and qualified “J” for the affected unspiked parent sample.

Initial and Continuing Calibrations

All initial calibration compounds were compliant with a minimum mean relative response factor (RRF) of 0.05 and a maximum percent relative standard deviation (%RSD) of 30% with the exception of 2,4-dinitrophenol (45.59%RSD) in the initial calibration associated with samples collected on 9/3/09; 2,4-dinitrophenol (55.31%RSD) and 4,6-dinitro-2-methylphenol (43.81%RSD) in the initial calibration associated with samples collected on 9/4/09; and 2,4-dinitrophenol (44.48%RSD) and hexachlorocyclopentadiene (38.59%RSD) in the initial calibration associated with samples collected on 11/19/09. Therefore, the results for these compounds were considered estimated with positive results qualified “J” and nondetected results qualified “UJ” for the affected samples.

All continuing calibration compounds were compliant with a minimum RRF of 0.05 and a maximum percent difference (%D) within $\pm 25\%$ with the exception of isophorone (-25.4%D), 2,4-dimethylphenol (-27%D), hexachlorocyclopentadiene (51.5%D), 2,4-dinitrophenol (32.9%D), 4,6-dinitro-2-methylphenol (30.4%D), and pentachlorophenol (30.5%D) in the continuing calibration associated with sample OL-1020-03; 2,4-dimethylphenol (-26.2%D), hexachlorocyclopentadiene (52.9%D), pentachlorophenol (33.8%D), and atrazine (-41.8%D) in the continuing calibration associated with samples OL-1020-01, -04, -05, -06, and -09; 2,4-dimethylphenol (-25.9%D), hexachlorocyclopentadiene (60%D), atrazine (-38.2%D), and 4,6-dinitro-2-methylphenol (26.4%D) in the continuing calibration associated with samples OL-1020-02 and -08; and 4-nitrophenol (30.3%D) in the continuing calibration associated with all samples collected 9/4/09. Therefore, the sample results for these compounds were considered estimated with positive results qualified “J” and nondetected results qualified “UJ” for the affected samples.

Field Duplicate Precision

All field duplicate precision results were considered acceptable with the exception of the precision for benzo(k)fluoranthene (66%RPD) and bis(2-ethylhexyl)phthalate (104%RPD) between the field duplicate pair OL-1020-04/-05; and the precision for 3+4-methylphenol (51%RPD), acenaphthylene (116%RPD), 1,1'-biphenyl (68%RPD), and 2-methylnaphthalene (82%RPD) and the phenol results (nondetect and 206 $\mu\text{g/kg}$) between the field duplicate pair OL-1059-01/-02. These results were considered estimated with positive results qualified “J” and nondetected results qualified “UJ” for the affected samples.

Usability

All semivolatile results for the sediment samples were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The semivolatile sediment data presented by Accutest were 100% complete (i.e., usable). The validated semivolatile laboratory data are tabulated and presented in Attachment A-4.

It was noted that sediment samples OL-1059-01 through -04 contained less than 50% solids. The sample results for these samples were considered estimated with positive results qualified “J” and nondetected results qualified “UJ.”

C2.4.3 PCBs and PCB Congeners

The following items were reviewed for compliancy in the PCB analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) precision and accuracy
- Laboratory control samples (LCS) recoveries
- Laboratory method blank contamination
- Initial calibrations
- Verification calibrations
- Field duplicate precision
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of holding times, sample result identification, and field duplicate precision as discussed below.

Holding Times

All extraction and analytical holding times were within criteria for all samples with the exception of the PCB congener samples OL-1059-01, -03, and -05 which exceeded the 14-day extraction holding time requirement by six days. Therefore, the PCB congener results were considered estimated, possibly biased low, with positive results qualified “J” and nondetected results qualified “UJ” for these samples.

Sample Result Identification

All positive PCB sample results were within retention time windows and verified present using secondary column confirmation. The precision between the PCB results on the quantitation and confirmation columns were less than 25%RPD with the exception of the precision results for PCB-1248 in samples OL-1020-04 and -06; PCB-1254 in samples OL-1020-02, -03, -06, -08, and OL-1022-02; PCB-1260 in samples OL-1020-01, -03, -04, -06, OL-1022-01, and -02; total PCBs in samples OL-1020-01, -03, -04, -06, -08, OL-1022-01, and -02; 2,4-diCB in samples OL-1022-05 and OL-1059-01; 2,2,5-trCB in sample OL-1059-01; 2,4,4-trCB in sample OL-1059-01; 2,2,4,5-teCB in samples OL-1020-05 and OL-1069-01; 2,3,4,4-teCB in sample OL-1020-01; 3,3,4,4-teCB in samples OL-1020-01, OL-1022-04, OL-1059-01, -03, and -04; 2,2,4,5,5-peCB in samples OL-1020-01, -05, OL-1022-04, -05, OL-1059-01, -03, and -04; 2,3,3,4,4-peCB in samples OL-1020-01, -05, OL-1022-04, -05, and OL-1059-01; 2,3,4,4,5-peCB in samples OL-1020-01, -05, OL-1022-04, -05, OL-1059-01, and -03; 2,2,3,4,4,5-hxCB in samples OL-1020-05 and OL-1022-04; 2,2,3,5,5,6-hxCB in samples OL-1020-01, OL-1022-05, and OL-1059-03; 2,2,4,4,5,5-hxCB in samples OL-1020-01, -05, OL-1022-04, -05, OL-1059-03, and -04; 2,3,3,4,4,5-hxCB in sample OL-1020-01; 2,2,3,3,4,4,5-hpCB in sample OL-1059-01; and 2,2,3,4,5,5,6-hpCB in samples OL-1020-01 and OL-1059-01. The results for these PCBs and PCB congeners were considered estimated and qualified “J” for the affected samples. However, results where the precision between the quantitation and confirmation columns was greater than 90%RPD were considered estimated, tentatively identified, and qualified “JN” for the affected samples.

Field Duplicate Precision

All field duplicate precision results were considered acceptable with the exception of the PCB-1260 precision for the field duplicate pair OL-1020-04/-05. These results were considered estimated with the positive results qualified “J” and the nondetected result qualified “UJ” for these samples.

Usability

All PCB and PCB congeners results for the sediment samples were considered usable following data validation.

PARSONS

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The PCB sediment data presented by Accutest were 100% complete with all data considered usable and valid. The validated data are tabulated and presented in Attachment A-4.

It was noted that sediment samples OL-1059-01 through -04 contained less than 50% solids. The sample results for these samples were considered estimated with positive results qualified “J” and nondetected results qualified “UJ.”

C2.4.4 Metals

The following items were reviewed for compliancy in the metals analysis:

- Custody documentation
- Holding times
- Initial and continuing calibration verifications
- Initial and continuing calibration, and laboratory preparation blank contamination
- Matrix spike/matrix spike duplicate (MS/MSD) recoveries
- Laboratory duplicate precision
- Interference check sample recoveries
- Serial dilutions
- Laboratory control sample (LCS) recoveries
- Field duplicate precision
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of MS/MSD recoveries, serial dilutions, and field duplicate precision as discussed below.

MS/MSD Recoveries

All MS/MSD results were considered acceptable for designated project spike samples with sample concentrations less than four times the spike concentrations and recoveries within the 75-125%R QC limit with the exception of the low MS/MSD recoveries for copper (45.6%R, 47.8%R) associated with sediment samples collected on 11/19/09. Therefore, the copper results were considered estimated, possibly biased low, with positive results qualified “J” and nondetected results qualified “UJ” for the affected samples.

Serial Dilutions

All serial dilution results for all analytes were considered acceptable and less than 10%D with the exception of zinc, nickel, and lead associated with sediment samples collected 9/3/09 and zinc associated with sediment samples collected on 11/19/09. Therefore, the positive results for these analytes were considered estimated and qualified “J” for the affected samples.

Field Duplicate Precision

All field duplicate precision results were considered acceptable with the exception of the precision for arsenic (53%RPD), cadmium (74%RPD), copper (65%RPD), mercury (93%RPD), nickel (54%RPD), and zinc (112%RPD) associated with the field duplicate pair OL-1059-01/-02. The results for these analytes were considered estimated and qualified “J” for these field duplicate samples.

Usability

All metals results for the sediment samples were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The metals data for the sediment samples presented by Accutest were 100% complete (i.e., usable). The validated laboratory data are tabulated and presented in Attachment A-4.

It was noted that sediment samples OL-1059-01 through -04 contained less than 50% solids. The sample results for these samples were considered estimated with positive results qualified “J” and nondetected results qualified “UJ.”

C2.4.5 TOC and TPH-DRO

All custody documentation, holding times, laboratory blanks, matrix spikes, duplicates, calibrations, quantitation limits, control samples, and instrumentation were reviewed for compliance. The reported results for these samples did not require qualification resulting from data validation with the exception of the following:

- The TPH-DRO results reported for sample OL-1020-03 and OL-1022-01 were considered estimated, possibly biased low, and qualified “J” based upon 0% MS/MSD recoveries for the associated spiked samples;
- The TOC result reported for sample OL-1059-05 was considered estimated and qualified “J” based upon laboratory duplicate precision exceedance; and
- TOC and TPH-DRO results for samples OL-1059-01 through -04 were considered estimated and qualified “J” based upon sample percent solids content of less than 50%.

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The sediment data for these analyses presented by Accutest were 100% complete (i.e., usable). The validated laboratory data are tabulated and presented in Attachment A-4.

C2.5 SNOWMELT MONITORING SAMPLES

Data review has been completed for data packages generated by BRL, Accutest, and UFI containing surface water samples collected from the site for the snowmelt monitoring. The specific samples contained in these data packages, the analyses performed, and the validated laboratory data were tabulated and are presented in Attachment A-5. All of these samples were properly preserved, shipped under a COC record, and received intact by the analytical laboratory.

Data validation was performed for all samples in accordance with the project work plan and QAPP as well as the USEPA Region II SOP HW-2, Revision 13 “Evaluation of Metals Data for the CLP Program.” This data validation and usability report is presented by analysis type.

C2.5.1 Low Level Mercury (Total and Dissolved)

The following items were reviewed for compliancy in the low level mercury analysis:

- Custody documentation
- Holding times
- Initial and continuing calibration verifications

- Initial and continuing calibration blank, laboratory preparation blank, and field equipment blank contamination
- Matrix spike / matrix spike duplicate (MS/MSD) recoveries
- Laboratory duplicate precision
- Laboratory control sample (LCS)
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of blank contamination as discussed below.

Blank Contamination

The field trip blank OL-1081-05 associated with snowmelt samples collected on 3/11/10 and 3/12/10 contained low level mercury below the reporting limit at 0.33 ng/L. Validation qualification of these samples was not required.

Usability

All total and dissolved low level mercury sample results for the surface water samples were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The low level mercury data presented by BRL were 100% complete (i.e., usable). The validated low level mercury laboratory data are tabulated and presented in Attachment A-5.

It was noted that dissolved mercury samples OL-1084-04 through -09 were filtered by BRL four to five days from sample collection. Therefore, the dissolved mercury results for these samples were considered estimated with positive results qualified “J” and nondetected results qualified “UJ”.

C2.5.2 Methyl Mercury

The following items were reviewed for compliancy in the methyl mercury analysis:

- Custody documentation

- Holding times
- Initial and continuing calibration verifications
- Initial and continuing calibration blank, laboratory preparation blank, and field equipment blank contamination
- Matrix spike / matrix spike duplicate (MS/MSD) recoveries
- Laboratory duplicate precision
- Laboratory control sample (LCS)
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols.

Usability

All methyl mercury sample results for the snowmelt samples were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The methyl mercury data presented by BRL were 100% complete (i.e., usable). The validated methyl mercury laboratory data are tabulated and presented in Attachment A-5.

C2.5.3 TSS and Turbidity

All custody documentation, holding times, matrix spike recoveries, laboratory duplicate precision, laboratory control sample recoveries, laboratory method blank contamination, QC field and trip blank contamination, initial and continuing calibration verifications, field duplicate precision, and quantitation limits were reviewed for compliance. Validation qualification of the sample results for these parameters was not required.

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The TSS and turbidity data presented by Accutest and UFI were 100% complete (i.e., usable). The validated laboratory data are tabulated and presented in Attachment A-5.

**ATTACHMENT A
VALIDATED LABORATORY DATA**

ATTACHMENT A-1

**VALIDATED LABORATORY DATA FOR
BASE FLOW MONITORING SAMPLES**

Validated 2009 Tributary Baseflow Sampling

				Location	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy
				Field Sample ID	OL-0728-02	OL-0729-03	OL-0730-03	OL-0733-02	OL-0734-03	OL-0735-03	OL-0739-01
				SDG	UFI07182009	A9E080193	919026	UFI07182009	A9E200304	921014	UFI07182009
				Lab Sample ID	2009127012	A9E080193003	0919026-03RE2	2009139008	A9E200304003	0921014-03	2009148006
				Sample Date	5/7/2009	5/7/2009	5/7/2009	5/19/2009	5/19/2009	5/19/2009	5/27/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L				0.000079			0.000061	
N	E1631	MERCURY	ug/L			0.00052			0.0005 U		
N	SM2540D	Total Suspended Solids	mg/L			13			10 U		
N	UFI SOP	Total Suspended Solids	mg/L		8.5 J			6.1 J		12.6	7.8
N	UFI SOP	TURBIDITY	NTU		7.8			4.7		9.6	6
Y	E1631	MERCURY	ug/L								

Validated 2009 Tributary Baseflow Sampling

				Location	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy
				Field Sample ID	OL-0739-07	OL-0740-01	OL-0740-04	OL-0740-07	OL-0744-02	OL-0745-02	OL-0746-02
				SDG	UFI07182009	UFI07182009	UFI07182009	UFI07182009	UFI07182009	A9F040164	923015
				Lab Sample ID	2009148012	2009149001	2009149004	2009149007	2009154015	A9F040164002	0923015-02
				Sample Date	5/28/2009	5/28/2009	5/29/2009	5/29/2009	6/3/2009	6/3/2009	6/3/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L								
N	E1631	MERCURY	ug/L							0.0019	
N	SM2540D	Total Suspended Solids	mg/L							12	
N	UFI SOP	Total Suspended Solids	mg/L		10.3	11.2	11.3	34.8	12.4 J		11.4 J
N	UFI SOP	TURBIDITY	NTU		7.9	8.7	7.9	39.9	8.4		11.4
Y	E1631	MERCURY	ug/L								

Validated 2009 Tributary Baseflow Sampling

				Location	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy
				Field Sample ID	OL-0748-06	OL-0748-09	OL-0748-10	OL-0748-13	OL-0748-16	OL-0748-19	OL-0748-22
				SDG	UFI07182009	UFI07182009	UFI07182009	UFI07182009	UFI07182009	UFI07182009	UFI07182009
				Lab Sample ID	2009163035	2009163038	2009163039	2009163042	2009163045	2009163048	2009163051
				Sample Date	6/11/2009	6/12/2009	6/12/2009	6/12/2009	6/12/2009	6/12/2009	6/12/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L								
N	E1631	MERCURY	ug/L								
N	SM2540D	Total Suspended Solids	mg/L								
N	UFI SOP	Total Suspended Solids	mg/L		34.3 J	116 J	289.2 J	450.8 J	238.8 J	386 J	386.4 J
N	UFI SOP	TURBIDITY	NTU		34.3	116	289.2	450.8	238.8	386	386.4
Y	E1631	MERCURY	ug/L								12.2 J
											13

Validated 2009 Tributary Baseflow Sampling

				Location	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy
				Field Sample ID	OL-0753-02	OL-0754-02	OL-0762-03	OL-0763-02	OL-0764-02	OL-0769-02	OL-0770-02
				SDG	A9F180215	925016	UFI07182009	A9G020198	927018	UFI07182009	JA23258
				Lab Sample ID	A9F180215002	0925016-02	2009182071	A9G020198002	0927018-02	2009196064	JA23258-2
				Sample Date	6/17/2009	6/17/2009	7/1/2009	7/1/2009	7/1/2009	7/15/2009	7/15/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L			0.000631 J			0.000145		
N	E1631	MERCURY	ug/L	0.0033				0.0012			0.000082
N	SM2540D	Total Suspended Solids	mg/L	19				29			0.00345
N	UFI SOP	Total Suspended Solids	mg/L						9.5 J	6	
N	UFI SOP	TURBIDITY	NTU			13.7			7.2		
Y	E1631	MERCURY	ug/L								

Validated 2009 Tributary Baseflow Sampling

				Location	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy
				Field Sample ID	OL-0777-02	OL-0778-02	OL-0779-02	OL-0785-03	OL-0787-03	OL-0794-02	OL-0795-02
				SDG	UFI07182009	JA24180	931014	UFI07182009	933022	UFI07182009	JA26542
				Lab Sample ID	2009209040	JA24180-2	0931014-02	2009224089	8022-03 0933022-03	2009238045	JA26542-2
				Sample Date	7/28/2009	7/28/2009	7/28/2009	8/12/2009	8/12/2009	8/26/2009	8/26/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L				0.000093		0.000182		0.000078
N	E1631	MERCURY	ug/L				0.00205		0.00672		0.0034
N	SM2540D	Total Suspended Solids	mg/L			6				6 U	
N	UFI SOP	Total Suspended Solids	mg/L		9.6			34.8		8	
N	UFI SOP	TURBIDITY	NTU		4.3			17.6		4.6	
Y	E1631	MERCURY	ug/L								

Validated 2009 Tributary Baseflow Sampling

				Location	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy
				Field Sample ID	OL-0907-02	OL-0909-02	OL-0915-02	OL-0916-02	OL-0917-02	OL-0928-02	OL-0930-02
				SDG	UFICHM9060	937023	UFICHM9060	JA28864	939029	UFICHM9060	941029
				Lab Sample ID	2009253050	0937023-02	2009267008	JA28864-2	9029-02RE1 0939029	2009281016	0941029-02
				Sample Date	9/10/2009	9/10/2009	9/24/2009	9/24/2009	9/24/2009	10/8/2009	10/8/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L			0.000067			0.000069		0.000109
N	E1631	MERCURY	ug/L			0.0024			0.00272		0.00349
N	SM2540D	Total Suspended Solids	mg/L					6			
N	UFI SOP	Total Suspended Solids	mg/L		4.4 J		6.8 J			9.1 J	12.6 J
N	UFI SOP	TURBIDITY	NTU		5.9		5.8			5.4	6.1
Y	E1631	MERCURY	ug/L								

Validated 2009 Tributary Baseflow Sampling

				Location	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy
				Field Sample ID	OL-0921-01	OL-0921-04	OL-0921-07	OL-0934-02	OL-0935-02	OL-0938-01	OL-0938-04
				SDG	UFICHM9060	UFICHM9060	UFICHM9060	JA31227	943029	UFICHM9060	UFICHM9060
				Lab Sample ID	2009301056	2009301059	2009301062	JA31227-2	0943029-02	2009302001	2009302004
				Sample Date	10/28/2009	10/28/2009	10/28/2009	10/22/2009	10/22/2009	10/28/2009	10/28/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L						0.000071		
N	E1631	MERCURY	ug/L						0.00217 J		
N	SM2540D	Total Suspended Solids	mg/L					9			
N	UFI SOP	Total Suspended Solids	mg/L		12.8	14.3	34.5			73	107.8
N	UFI SOP	TURBIDITY	NTU		8.3	11.3	27.6			46.9	57.7
Y	E1631	MERCURY	ug/L								51.2
											49.2

Validated 2009 Tributary Baseflow Sampling

				Location	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy
				Field Sample ID	OL-0941-02	OL-0942-02	OL-0943-02	OL-0948-02	OL-0950-02	OL-0953-02	OL-0954-02
				SDG	UFICHM9068	JA32342	946001	UFICHM9068	947016	JA33799	948007
				Lab Sample ID	2009309008	JA32342-2	0946001-02	2009321008	0947016-01	JA33799-2	0948007-02
				Sample Date	11/5/2009	11/5/2009	11/5/2009	11/17/2009	11/18/2009	11/23/2009	11/23/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L				0.000049 J		0.000056		0.000076
N	E1631	MERCURY	ug/L				0.00166 J		0.0013		0.00125
N	SM2540D	Total Suspended Solids	mg/L			4 U				4 U	
N	UFI SOP	Total Suspended Solids	mg/L		6			4.8			
N	UFI SOP	TURBIDITY	NTU		3.7			3.7			
Y	E1631	MERCURY	ug/L								6.3

Validated 2009 Tributary Baseflow Sampling

				Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	NMCK-Amboy OL-0956-02 JA34062 JA34062-2 11/30/2009 WATER Regular sample Surface water	NMCK-Amboy OL-0957-02 949002 0949002-02 11/30/2009 WATER Regular sample Surface water
Filtered	Method	Parameter Name	Units			
N	E1630	METHYL MERCURY	ug/L			0.00008
N	E1631	MERCURY	ug/L			0.0023
N	SM2540D	Total Suspended Solids	mg/L	8		
N	UFI SOP	Total Suspended Solids	mg/L			
N	UFI SOP	TURBIDITY	NTU			
Y	E1631	MERCURY	ug/L			

Validated 2009 Tributary Baseflow Sampling

				Location	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48
				Field Sample ID	OL-0728-03	OL-0729-04	OL-0730-04	OL-0733-03	OL-0734-04	OL-0735-04	OL-0739-02
				SDG	UFI07182009	A9E080193	919026	UFI07182009	A9E200304	921014	UFI07182009
				Lab Sample ID	2009127013	A9E080193004	0919026-04RE1	2009139009	A9E200304004	0921014-04	2009148007
				Sample Date	5/7/2009	5/7/2009	5/7/2009	5/19/2009	5/19/2009	5/19/2009	5/27/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L				0.000081			0.000068	
N	E1631	MERCURY	ug/L			0.0026			0.0005 U		
N	SM2540D	Total Suspended Solids	mg/L			12			10 U		
N	UFI SOP	Total Suspended Solids	mg/L	8.4 J				7.2 J		12.9	11
N	UFI SOP	TURBIDITY	NTU	7.6				5.1		9.6	8.3
Y	E1631	MERCURY	ug/L								

Validated 2009 Tributary Baseflow Sampling

				Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	NMCK-Rte48 OL-0739-08 UFI07182009 2009148013 5/28/2009 WATER Regular sample Surface water	NMCK-Rte48 OL-0740-02 UFI07182009 2009149002 5/28/2009 WATER Regular sample Surface water	NMCK-Rte48 OL-0740-05 UFI07182009 2009149005 5/29/2009 WATER Regular sample Surface water	NMCK-Rte48 OL-0740-08 UFI07182009 2009149008 5/29/2009 WATER Regular sample Surface water	NMCK-Rte48 OL-0744-03 UFI07182009 2009154016 6/3/2009 WATER Regular sample Surface water	NMCK-Rte48 OL-0745-03 A9F040164 A9F040164003 6/3/2009 WATER Regular sample Surface water	NMCK-Rte48 OL-0746-03 923015 0923015-03 6/3/2009 WATER Regular sample Surface water	NMCK-Rte48 OL-0748-02 UFI07182009 2009163031 6/11/2009 WATER Regular sample Surface water
Filtered	Method	Parameter Name	Units									
N	E1630	METHYL MERCURY	ug/L									
N	E1631	MERCURY	ug/L							0.0026	0.000201 J	
N	SM2540D	Total Suspended Solids	mg/L							12		
N	UFI SOP	Total Suspended Solids	mg/L	13.6	9.4	10	10.7	13.9 J				148.6 J
N	UFI SOP	TURBIDITY	NTU	10.8	9.9	8.2	8.4	12.1				148.6
Y	E1631	MERCURY	ug/L									

Validated 2009 Tributary Baseflow Sampling

				Location	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48
				Field Sample ID	OL-0748-05	OL-0748-08	OL-0748-11	OL-0748-14	OL-0748-17	OL-0748-20	OL-0748-23
				SDG	UFI07182009	UFI07182009	UFI07182009	UFI07182009	UFI07182009	UFI07182009	UFI07182009
				Lab Sample ID	2009163034	2009163037	2009163040	2009163043	2009163046	2009163049	2009163052
				Sample Date	6/11/2009	6/11/2009	6/12/2009	6/12/2009	6/12/2009	6/12/2009	6/12/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L								
N	E1631	MERCURY	ug/L								
N	SM2540D	Total Suspended Solids	mg/L								
N	UFI SOP	Total Suspended Solids	mg/L	145 J	145	158.6 J	256 J	255.4 J	459.2 J	426.4 J	386.3 J
N	UFI SOP	TURBIDITY	NTU								
Y	E1631	MERCURY	ug/L								
											5.7 J
											10.6

Validated 2009 Tributary Baseflow Sampling

			Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	NMCK-Rte48 OL-0753-03 A9F180215 A9F180215003 6/17/2009 WATER Regular sample Surface water	NMCK-Rte48 OL-0754-03 925016 0925016-03 6/17/2009 WATER Regular sample Surface water	NMCK-Rte48 OL-0762-02 UFI07182009 2009182070 7/1/2009 WATER Regular sample Surface water	NMCK-Rte48 OL-0763-03 A9G020198 A9G020198003 7/1/2009 WATER Regular sample Surface water	NMCK-Rte48 OL-0764-03 927018 0927018-03 7/1/2009 WATER Regular sample Surface water	NMCK-Rte48 OL-0769-03 UFI07182009 2009196065 7/15/2009 WATER Regular sample Surface water	NMCK-Rte48 OL-0770-03 JA23258 JA23258-3 7/15/2009 WATER Regular sample Surface water	NMCK-Rte48 OL-0771-03 929021 0929021-03 7/15/2009 WATER Regular sample Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L		0.000624 J			0.000134			0.000077
N	E1631	MERCURY	ug/L	0.004			0.0031				0.0039
N	SM2540D	Total Suspended Solids	mg/L	15			20			8	
N	UFI SOP	Total Suspended Solids	mg/L						6.9 J		
N	UFI SOP	TURBIDITY	NTU			20.7			4.9		
Y	E1631	MERCURY	ug/L				0.0005 U				

Validated 2009 Tributary Baseflow Sampling

				Location	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48
				Field Sample ID	OL-0777-03	OL-0778-03	OL-0779-03	OL-0785-04	OL-0787-04	OL-0794-03	OL-0795-03
				SDG	UFI07182009	JA24180	931014	UFI07182009	933022	UFI07182009	JA26542
				Lab Sample ID	2009209041	JA24180-3	0931014-03	2009224090	3022-04 0933022-04	2009238046	JA26542-3
				Sample Date	7/28/2009	7/28/2009	7/28/2009	8/12/2009	8/12/2009	8/26/2009	8/26/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L				0.000151		0.000234		0.000069
N	E1631	MERCURY	ug/L				0.00331		0.0174		0.00277
N	SM2540D	Total Suspended Solids	mg/L			4				6 U	
N	UFI SOP	Total Suspended Solids	mg/L	7.7				34.9		4.9	
N	UFI SOP	TURBIDITY	NTU	6.7				22.1		3.4	
Y	E1631	MERCURY	ug/L								

Validated 2009 Tributary Baseflow Sampling

				Location	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48
				Field Sample ID	OL-0907-03	OL-0909-03	OL-0915-03	OL-0916-03	OL-0917-03	OL-0928-03	OL-0930-03
				SDG	UFICHM9060	937023	UFICHM9060	JA28864	939029	UFICHM9060	941029
				Lab Sample ID	2009253051	937023-04 0937023-4	2009267009	JA28864-3	9029-03 0939029-03	2009281017	0941029-03
				Sample Date	9/10/2009	9/10/2009	9/24/2009	9/24/2009	9/24/2009	10/8/2009	10/8/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L			0.000058			0.000088		0.000084
N	E1631	MERCURY	ug/L			0.00298			0.00365		0.00592
N	SM2540D	Total Suspended Solids	mg/L					8			
N	UFI SOP	Total Suspended Solids	mg/L	10.9 J			5.4 J			6.1 J	8.3 J
N	UFI SOP	TURBIDITY	NTU	3.6			5			5.8	
Y	E1631	MERCURY	ug/L			0.00037 J					5.1

Validated 2009 Tributary Baseflow Sampling

				Location	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48
				Field Sample ID	OL-0921-02	OL-0921-05	OL-0921-08	OL-0934-03	OL-0935-03	OL-0938-02	OL-0938-05
				SDG	UFICHM9060	UFICHM9060	UFICHM9060	JA31227	943029	UFICHM9060	UFICHM9060
				Lab Sample ID	2009301057	2009301060	2009301063	JA31227-3	43029-03 0943029-4	2009302002	2009302005
				Sample Date	10/28/2009	10/28/2009	10/28/2009	10/22/2009	10/22/2009	10/28/2009	10/28/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L						0.000072		
N	E1631	MERCURY	ug/L						0.00318 J		
N	SM2540D	Total Suspended Solids	mg/L					7			
N	UFI SOP	Total Suspended Solids	mg/L		49.2	72.2	125.7			85.1	101.2
N	UFI SOP	TURBIDITY	NTU		41.9	57.7	94.4			54.1	58.9
Y	E1631	MERCURY	ug/L						0.00031 J		60.4
											55.1

Validated 2009 Tributary Baseflow Sampling

				Location	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48
				Field Sample ID	OL-0941-03	OL-0942-03	OL-0943-03	OL-0948-03	OL-0950-03	OL-0953-03	OL-0955-03
				SDG	UFICHM9068	JA32342	946001	UFICHM9068	947016	JA33799	948007
				Lab Sample ID	2009309009	JA32342-3	0946001-03	2009321009	0947016-02	JA33799-3	0948007-03
				Sample Date	11/5/2009	11/5/2009	11/5/2009	11/17/2009	11/18/2009	11/23/2009	11/23/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L				0.00006 J		0.000049 J		0.000055
N	E1631	MERCURY	ug/L				0.00215 J		0.00138		0.0017
N	SM2540D	Total Suspended Solids	mg/L			5				4	
N	UFI SOP	Total Suspended Solids	mg/L		5.9			4.8			
N	UFI SOP	TURBIDITY	NTU		5.6			5			
Y	E1631	MERCURY	ug/L								7.1

Validated 2009 Tributary Baseflow Sampling

				Location	NMCK-Rte48	NMCK-Rte48
				Field Sample ID	OL-0956-03	OL-0957-03
				SDG	JA34062	949002
				Lab Sample ID	JA34062-3	0949002-03
				Sample Date	11/30/2009	11/30/2009
				Matrix	WATER	WATER
				Sample Purpose	Regular sample	Regular sample
				Sample Type	Surface water	Surface water
Filtered	Method	Parameter Name	Units			
N	E1630	METHYL MERCURY	ug/L			0.000066
N	E1631	MERCURY	ug/L			0.00287
N	SM2540D	Total Suspended Solids	mg/L	7		
N	UFI SOP	Total Suspended Solids	mg/L			
N	UFI SOP	TURBIDITY	NTU			
Y	E1631	MERCURY	ug/L			

Validated 2009 Tributary Baseflow Sampling

				Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	ONCK-Spencer OL-0728-04 UFI07182009 2009127016 5/7/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0729-05 A9E080193 A9E080193005 5/7/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0730-05 919026 0919026-05RE2 5/7/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0733-04 UFI07182009 2009139012 5/19/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0734-05 A9E200304 A9E200304005 5/19/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0735-05 921014 0921014-05 5/19/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0739-03 UFI07182009 2009148008 5/27/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0739-06 UFI07182009 2009148011 5/27/2009 WATER Regular sample Surface water
Filtered	Method	Parameter Name	Units									
N	E1630	METHYL MERCURY	ug/L				0.000046 J			0.000069		
N	E1631	MERCURY	ug/L			0.0011			0.0005 U			
N	SM2540D	Total Suspended Solids	mg/L			12			15			
N	UFI SOP	Total Suspended Solids	mg/L					11.1 J			28.8	70.7
N	UFI SOP	TURBIDITY	NTU		9.5			6.2			20.1	58.3
Y	E1631	MERCURY	ug/L									

Validated 2009 Tributary Baseflow Sampling

			Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	ONCK-Spencer OL-0739-09 UFI07182009 2009148014 5/28/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0740-03 UFI07182009 2009149003 5/28/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0740-06 UFI07182009 2009149006 5/29/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0740-09 UFI07182009 2009149009 5/29/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0744-04 UFI07182009 2009154019 6/3/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0745-04 A9F040164 A9F040164004 6/3/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0745-05 A9F040164 A9F040164005 6/3/2009 WATER Field duplicate Surface water	ONCK-Spencer OL-0746-04 923015 0923015-04 6/3/2009 WATER Regular sample Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L								0.00007
N	E1631	MERCURY	ug/L						0.0012	0.00088	
N	SM2540D	Total Suspended Solids	mg/L						11	13	
N	UFI SOP	Total Suspended Solids	mg/L	112.7	45.5	42.1	11.2				
N	UFI SOP	TURBIDITY	NTU	97.9	38	9	7.3	12.2			
Y	E1631	MERCURY	ug/L								

Validated 2009 Tributary Baseflow Sampling

			Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	ONCK-Spencer OL-0746-05 923015 0923015-05 6/3/2009 WATER Field duplicate Surface water	ONCK-Spencer OL-0748-01 UFI07182009 2009163030 6/11/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0748-04 UFI07182009 2009163033 6/11/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0748-07 UFI07182009 2009163036 6/11/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0748-12 UFI07182009 2009163041 6/12/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0748-15 UFI07182009 2009163044 6/12/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0748-18 UFI07182009 2009163047 6/12/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0748-21 UFI07182009 2009163050 6/12/2009 WATER Regular sample Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L	0.000074							
N	E1631	MERCURY	ug/L								
N	SM2540D	Total Suspended Solids	mg/L								
N	UFI SOP	Total Suspended Solids	mg/L		55.8 J	44.3 J	139.4 J	269.6 J	242 J	508 J	397.2 J
N	UFI SOP	TURBIDITY	NTU		55.8	44.3	139.4	269.6	242	508	397.2
Y	E1631	MERCURY	ug/L								

Validated 2009 Tributary Baseflow Sampling

				Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	ONCK-Spencer OL-0748-24 UFI07182009 2009163053 6/12/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0752-04 UFI07182009 2009168043 6/17/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0753-04 A9F180215 A9F180215004 6/17/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0753-05 A9F180215 A9F180215005 6/17/2009 WATER Field duplicate Surface water	ONCK-Spencer OL-0754-04 925016 0925016-04 6/17/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0754-05 925016 0925016-05 6/17/2009 WATER Field duplicate Surface water	ONCK-Spencer OL-0762-04 UFI07182009 2009182074 7/1/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0763-04 A9G020198 A9G020198004 7/1/2009 WATER Regular sample Surface water
Filtered	Method	Parameter Name	Units									
N	E1630	METHYL MERCURY	ug/L						0.000635 J	0.000381 UJ		
N	E1631	MERCURY	ug/L			0.001	0.00098					0.0037 J
N	SM2540D	Total Suspended Solids	mg/L			10	10					16 J
N	UFI SOP	Total Suspended Solids	mg/L	257.6 J	9.6 J							
N	UFI SOP	TURBIDITY	NTU	257.6	12.4						74.2	
Y	E1631	MERCURY	ug/L									0.0005 U

Validated 2009 Tributary Baseflow Sampling

				Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	ONCK-Spencer OL-0763-05 A9G020198 A9G020198005 7/1/2009 WATER Field duplicate Surface water	ONCK-Spencer OL-0764-04 927018 0927018-04 7/1/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0764-05 927018 0927018-05 7/1/2009 WATER Field duplicate Surface water	ONCK-Spencer OL-0769-04 UFI07182009 2009196068 7/15/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0770-04 JA23258 JA23258-4 7/15/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0770-05 JA23258 JA23258-5 7/15/2009 WATER Field duplicate Surface water	ONCK-Spencer OL-0771-04 929021 0929021-04 7/15/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0771-05 929021 0929021-05 7/15/2009 WATER Field duplicate Surface water
Filtered	Method	Parameter Name	Units									
N	E1630	METHYL MERCURY	ug/L			0.000215	0.000197					
N	E1631	MERCURY	ug/L	0.0013 J							0.00004 J	0.000036 J
N	SM2540D	Total Suspended Solids	mg/L	87 J					7 J	4 UJ	0.00094	0.00103
N	UFI SOP	Total Suspended Solids	mg/L					2.4 J				
N	UFI SOP	TURBIDITY	NTU					3.3				
Y	E1631	MERCURY	ug/L									

Validated 2009 Tributary Baseflow Sampling

				Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	ONCK-Spencer OL-0777-04 UFI07182009 2009209044 7/28/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0778-04 JA24180 JA24180-4 7/28/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0778-05 JA24180 JA24180-5 7/28/2009 WATER Field duplicate Surface water	ONCK-Spencer OL-0779-04 931014 0931014-04 7/28/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0779-05 931014 0931014-05 7/28/2009 WATER Field duplicate Surface water	ONCK-Spencer OL-0785-05 UFI07182009 2009224093 8/12/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0787-05 933022 3022-05RE1 0933022-06 8/12/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0787-06 933022 3022-06 0933022-06 8/12/2009 WATER Field duplicate Surface water
Filtered	Method	Parameter Name	Units									
N	E1630	METHYL MERCURY	ug/L					0.000067	0.000072		0.000199	0.000208
N	E1631	MERCURY	ug/L			4 U	5	0.00092	0.00082		0.00639	0.00572
N	SM2540D	Total Suspended Solids	mg/L									
N	UFI SOP	Total Suspended Solids	mg/L	4.4						47		
N	UFI SOP	TURBIDITY	NTU	7.2						44.4		
Y	E1631	MERCURY	ug/L									

Validated 2009 Tributary Baseflow Sampling

				Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	ONCK-Spencer OL-0794-04 UFI07182009 2009238049 8/26/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0795-04 JA26542 JA26542-4 8/26/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0795-05 JA26542 JA26542-5 8/26/2009 WATER Field duplicate Surface water	ONCK-Spencer OL-0796-04 935023 5023-04RE1 0935023-05 8/26/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0796-05 935023 5023-05 0935023-05 8/26/2009 WATER Field duplicate Surface water	ONCK-Spencer OL-0907-04 UFICHM9060 2009253054 9/10/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0909-04 937023 37023-06 0937023-07 9/10/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0909-05 937023 37023-07 0937023-08 9/10/2009 WATER Field duplicate Surface water
Filtered	Method	Parameter Name	Units									
N	E1630	METHYL MERCURY	ug/L					0.000024 J	0.000048 J		0.000046 J	0.000041 J
N	E1631	MERCURY	ug/L			4 U	4 U	0.00093	0.0011		0.00106	0.00092
N	SM2540D	Total Suspended Solids	mg/L									
N	UFI SOP	Total Suspended Solids	mg/L		7.2					3.9 J		
N	UFI SOP	TURBIDITY	NTU		4					3.3		
Y	E1631	MERCURY	ug/L								0.00161 J	0.00027 J

Validated 2009 Tributary Baseflow Sampling

				Location	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer
				Field Sample ID	OL-0915-04	OL-0916-04	OL-0916-05	OL-0917-04	OL-0917-05	OL-0928-04	OL-0930-04
				SDG	UFICHM9060	JA28864	JA28864	939029	939029	UFICHM9060	941029
				Lab Sample ID	2009267012	JA28864-4	JA28864-5	9029-04 0939029-04	9029-05RE1 0939029	2009281020	0941029-04
				Sample Date	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	10/8/2009	10/8/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Field duplicate	Regular sample	Field duplicate	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L					0.000074	0.000068		0.000118
N	E1631	MERCURY	ug/L			8 J	5 J	0.00658 J	0.00187 J		0.00304
N	SM2540D	Total Suspended Solids	mg/L								
N	UFI SOP	Total Suspended Solids	mg/L	8.4 J						53.3 J	
N	UFI SOP	TURBIDITY	NTU	3.9						37.4	
Y	E1631	MERCURY	ug/L								0.000126
											0.00254

Validated 2009 Tributary Baseflow Sampling

				Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	ONCK-Spencer OL-0921-03 UFICHM9060 2009301058 10/28/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0921-06 UFICHM9060 2009301061 10/28/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0921-09 UFICHM9060 2009301064 10/28/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0933-04 UFICHM9060 2009295014 10/22/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0934-04 JA31227 JA31227-4 10/22/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0934-05 JA31227 JA31227-5 10/22/2009 WATER Field duplicate Surface water	ONCK-Spencer OL-0935-04 943029 JA31227-5 10/22/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0935-05 943029 JA31227-5 10/22/2009 WATER Regular sample Surface water
Filtered	Method	Parameter Name	Units									
N	E1630	METHYL MERCURY	ug/L									
N	E1631	MERCURY	ug/L									
N	SM2540D	Total Suspended Solids	mg/L						4 U	4 U	0.000033 J 0.00038 J	0.000031 J 0.00015 UJ
N	UFI SOP	Total Suspended Solids	mg/L	45.3	114	71.2	2.9 J					
N	UFI SOP	TURBIDITY	NTU	51.7	67.5	62.7	2.7					
Y	E1631	MERCURY	ug/L								0.00015 UJ	0.00038 J

Validated 2009 Tributary Baseflow Sampling

				Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	ONCK-Spencer OL-0938-03 UFICHM9060 2009302003 10/28/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0938-06 UFICHM9060 2009302006 10/28/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0938-09 UFICHM9060 2009302009 10/29/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0941-04 UFICHM9068 2009309012 11/5/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0942-04 JA32342 JA32342-4 11/5/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0942-05 JA32342 JA32342-5 11/5/2009 WATER Field duplicate Surface water	ONCK-Spencer OL-0943-04 946001 0946001-04 11/5/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0943-05 946001 0946001-05 11/5/2009 WATER Field duplicate Surface water
Filtered	Method	Parameter Name	Units									
N	E1630	METHYL MERCURY	ug/L								0.000024 J	0.000026 J
N	E1631	MERCURY	ug/L								0.00062 J	0.00067 J
N	SM2540D	Total Suspended Solids	mg/L						4 U	4 U		
N	UFI SOP	Total Suspended Solids	mg/L	312.6	648.5	132.2	3.3					
N	UFI SOP	TURBIDITY	NTU	149	408	116	3.3					
Y	E1631	MERCURY	ug/L									

Validated 2009 Tributary Baseflow Sampling

				Location	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer
				Field Sample ID	OL-0948-04	OL-0950-04	OL-0950-05	OL-0953-04	OL-0953-05	OL-0954-04	OL-0954-05
				SDG	UFICHM9068	947016	947016	JA33799	JA33799	948007	948007
				Lab Sample ID	2009321012	0947016-03	0947016-04	JA33799-4	JA33799-5	0948007-04	0948007-05
				Sample Date	11/17/2009	11/18/2009	11/18/2009	11/23/2009	11/23/2009	11/23/2009	11/23/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Field duplicate	Regular sample	Field duplicate	Regular sample	Field duplicate
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L			0.000023 J	0.000024 J			0.00004 J	0.000032 J
N	E1631	MERCURY	ug/L			0.00028 J	0.00019 J			0.00064	0.00075
N	SM2540D	Total Suspended Solids	mg/L					4 U	4 U		
N	UFI SOP	Total Suspended Solids	mg/L		1.5 J						
N	UFI SOP	TURBIDITY	NTU		2.4						
Y	E1631	MERCURY	ug/L								7.9

Validated 2009 Tributary Baseflow Sampling

				Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	ONCK-Spencer OL-0956-04 JA34062 JA34062-4 11/30/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0956-05 JA34062 JA34062-5 11/30/2009 WATER Field duplicate Surface water	ONCK-Spencer OL-0957-04 949002 0949002-04 11/30/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0957-05 949002 0949002-05 11/30/2009 WATER Field duplicate Surface water
Filtered	Method	Parameter Name	Units					
N	E1630	METHYL MERCURY	ug/L				0.000037 J	0.00004 J
N	E1631	MERCURY	ug/L				0.00133	0.0013
N	SM2540D	Total Suspended Solids	mg/L	4 U	4 U			
N	UFI SOP	Total Suspended Solids	mg/L					
N	UFI SOP	TURBIDITY	NTU					
Y	E1631	MERCURY	ug/L					

Validated 2009 Tributary Baseflow Sampling

			Location	BB-Baseline	BB-Baseline	BB-Baseline	BB-Baseline	BB-Baseline	BB-Baseline	BB-Baseline
			Field Sample ID	OL-0789-05	OL-0906-05	OL-0906-06	OL-0927-05	OL-0927-06	OL-0947-05	OL-0947-06
			SDG	933032	937017	937017	941023	941023	947015	947015
			Lab Sample ID	0933032-05	0937017-05	0937017-06	0941023-05	0941023-06	0947015-05	0947015-06
			Sample Date	8/13/2009	9/9/2009	9/9/2009	10/7/2009	10/7/2009	11/18/2009	11/18/2009
			Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
			Sample Purpose	Regular sample	Regular sample	Field duplicate	Regular sample	Field duplicate	Regular sample	Field duplicate
			Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L	0.000028 J	0.00003 J	0.000026 J	0.000064	0.000066	0.00002 U	0.000019 U
N	E1631	MERCURY	ug/L	0.00091	0.00072 J	0.00115 J	0.00572	0.00487	0.00029 J	0.00045 J
N	SM2540D	Total Suspended Solids	mg/l							
N	UFI SOP	Total Suspended Solids	mg/L							
N	UFI SOP	TURBIDITY	NTU							
Y	E1631	MERCURY	ug/L							

Validated 2009 Tributary Baseflow Sampling

				EF-Baseline OL-0789-03 SDG 933032 Lab Sample ID 0933032-03 Sample Date 8/13/2009 Matrix WATER Sample Purpose Regular sample Sample Type Surface water	EF-Baseline OL-0906-03 937017 0937017-03 9/9/2009 WATER Regular sample Surface water	EF-Baseline OL-0927-03 941023 0941023-03 10/7/2009 WATER Regular sample Surface water	EF-Baseline OL-0947-03 947015 0947015-03 11/18/2009 WATER Regular sample Surface water
Filtered	Method	Parameter Name	Units				
N	E1630	METHYL MERCURY	ug/L	0.000273	0.000212	0.000448	0.000384
N	E1631	MERCURY	ug/L	0.0422	0.0382	0.0555	0.0592
N	SM2540D	Total Suspended Solids	mg/l				
N	UFI SOP	Total Suspended Solids	mg/L				
N	UFI SOP	TURBIDITY	NTU				
Y	E1631	MERCURY	ug/L				

Validated 2009 Tributary Baseflow Sampling

				HB-Baseline OL-0789-06 933032 0933032-06 8/13/2009 WATER Regular sample Surface water	HB-Baseline OL-0789-07 933032 0933032-07 8/13/2009 WATER Field duplicate Surface water	HB-Baseline OL-0906-07 937017 0937017-07 9/9/2009 WATER Regular sample Surface water	HB-Baseline OL-0927-07 941023 0941023-07 10/7/2009 WATER Regular sample Surface water	HB-Baseline OL-0947-07 947015 0947015-07 11/18/2009 WATER Regular sample Surface water
Filtered	Method	Parameter Name	Units					
N	E1630	METHYL MERCURY	ug/L	0.000253 J	0.000178 J	0.000184	0.00026	0.000158
N	E1631	MERCURY	ug/L	0.00604	0.00563	0.0041	0.0259	0.00438
N	SM2540D	Total Suspended Solids	mg/l					
N	UFI SOP	Total Suspended Solids	mg/L					
N	UFI SOP	TURBIDITY	NTU					
Y	E1631	MERCURY	ug/L					

Validated 2009 Tributary Baseflow Sampling

				Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	LEYCK-Park OL-0787-02 933022 3022-02RE1 0933023 8/12/2009 WATER Regular sample Surface water	LEYCK-Park OL-0909-06 937023 0937023-08 9/10/2009 WATER Regular sample Surface water	LEYCK-Park OL-0930-06 941029 0941029-06 10/8/2009 WATER Regular sample Surface water	LEYCK-Park OL-0950-07 947016 0947016-05 11/18/2009 WATER Regular sample Surface water
Filtered	Method	Parameter Name	Units					
N	E1630	METHYL MERCURY	ug/L	0.00018	0.000063	0.000077	0.00002 U	
N	E1631	MERCURY	ug/L	0.00508	0.00269	0.00466	0.00015 U	
N	SM2540D	Total Suspended Solids	mg/l					
N	UFI SOP	Total Suspended Solids	mg/L					
N	UFI SOP	TURBIDITY	NTU					
Y	E1631	MERCURY	ug/L					

Validated 2009 Tributary Baseflow Sampling

			Location	SC-Baseline	SC-Baseline	SC-Baseline	SC-Baseline
			Field Sample ID	OL-0789-04	OL-0906-04	OL-0927-04	OL-0947-04
			SDG	933032	937017	941023	947015
			Lab Sample ID	0933032-04	0937017-04	0941023-04	0947015-04
			Sample Date	8/13/2009	9/9/2009	10/7/2009	11/18/2009
			Matrix	WATER	WATER	WATER	WATER
			Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample
			Sample Type	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units				
N	E1630	METHYL MERCURY	ug/L	0.000782	0.000071	0.000136	0.000279
N	E1631	MERCURY	ug/L	0.00162	0.00093	0.00461	0.00071
N	SM2540D	Total Suspended Solids	mg/l				
N	UFI SOP	Total Suspended Solids	mg/L				
N	UFI SOP	TURBIDITY	NTU				
Y	E1631	MERCURY	ug/L				

Validated 2009 Tributary Baseflow Sampling

				Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	T5A-Baseline OL-0789-08 933032 0933032-08 8/13/2009 WATER Regular sample Surface water	T5A-Baseline OL-0906-08 937017 0937017-08 9/9/2009 WATER Regular sample Surface water	T5A-Baseline OL-0927-08 941023 0941023-08 10/7/2009 WATER Regular sample Surface water	T5A-Baseline OL-0947-08 947015 0947015-08 11/18/2009 WATER Regular sample Surface water
Filtered	Method	Parameter Name	Units					
N	E1630	METHYL MERCURY	ug/L	0.000098	0.00009	0.000111	0.000068	
N	E1631	MERCURY	ug/L	0.00485	0.00534	0.00887	0.00383	
N	SM2540D	Total Suspended Solids	mg/l					
N	UFI SOP	Total Suspended Solids	mg/L					
N	UFI SOP	TURBIDITY	NTU					
Y	E1631	MERCURY	ug/L					

Validated 2009 Tributary Baseflow Sampling

				Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	WF-Baseline OL-0789-02 933032 0933032-02 8/13/2009 WATER Regular sample Surface water	WF-Baseline OL-0906-02 937017 0937017-02 9/9/2009 WATER Regular sample Surface water	WF-Baseline OL-0927-02 941023 0941023-02 10/7/2009 WATER Regular sample Surface water	WF-Baseline OL-0947-02 947015 0947015-02 11/18/2009 WATER Regular sample Surface water
Filtered	Method	Parameter Name	Units					
N	E1630	METHYL MERCURY	ug/L	0.00005 J	0.000031 J	0.000087	0.000028 J	
N	E1631	MERCURY	ug/L	0.00283	0.00135	0.00544	0.00066	
N	SM2540D	Total Suspended Solids	mg/l					
N	UFI SOP	Total Suspended Solids	mg/L					
N	UFI SOP	TURBIDITY	NTU					
Y	E1631	MERCURY	ug/L					

Validated 2009 Tributary Baseflow Sampling

				Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	FIELD QC OL-0728-01 UFI07182009	FIELD QC OL-0729-01 A9E080193 A9E080193001	FIELD QC OL-0729-02 A9E080193 A9E080193002	FIELD QC OL-0730-01 919026 0919026-01RE1	FIELD QC OL-0730-02 919026 0919026-02RE1	FIELD QC OL-0733-01 UFI07182009
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L							
N	E1631	MERCURY	ug/L			0.0005 U	0.0005 U			
N	SM2540D	Total Suspended Solids	mg/L			10 U	10 U			
N	UFI SOP	Total Suspended Solids	mg/L		2.5 UJ					2.5 UJ
N	UFI SOP	TURBIDITY	NTU		0.1 J					0.1 J
Y	E1631	MERCURY	ug/L							

Validated 2009 Tributary Baseflow Sampling

				Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	FIELD QC OL-0734-01 A9E200304 A9E200304001 5/19/2009 WATER Trip blank Blank water	FIELD QC OL-0734-02 A9E200304 A9E200304002 5/19/2009 WATER Field blank Blank water	FIELD QC OL-0735-01 921014 0921014-01 5/19/2009 WATER Trip blank Blank water	FIELD QC OL-0735-02 921014 0921014-02 5/19/2009 WATER Field blank Blank water	FIELD QC OL-0744-01 UFI07182009 2009154008 6/3/2009 WATER Trip blank Blank water	FIELD QC OL-0745-01 A9F040164 A9F040164001 6/3/2009 WATER Field blank Blank water
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L				0.00002 U	0.000021 U		
N	E1631	MERCURY	ug/L		0.0005 U	0.0005 U				0.0005 U
N	SM2540D	Total Suspended Solids	mg/L		10 U	10 U				10 U
N	UFI SOP	Total Suspended Solids	mg/L						2.5 UJ	
N	UFI SOP	TURBIDITY	NTU						0.1 U	
Y	E1631	MERCURY	ug/L							

Validated 2009 Tributary Baseflow Sampling

				Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	FIELD QC OL-0746-01 923015 0923015-01 6/3/2009 WATER Field blank Blank water	FIELD QC OL-0752-01 UFI07182009 2009168032 6/17/2009 WATER Trip blank Blank water	FIELD QC OL-0753-01 A9F180215 A9F180215001 6/17/2009 WATER Field blank Blank water	FIELD QC OL-0754-01 925016 0925016-01 6/17/2009 WATER Field blank Blank water	FIELD QC OL-0762-01 UFI07182009 2009182063 7/1/2009 WATER Trip blank Blank water	FIELD QC OL-0763-01 A9G020198 A9G020198001 7/1/2009 WATER Field blank Blank water
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L		0.00002 U			0.00037		
N	E1631	MERCURY	ug/L				0.0005 U			0.0005 U
N	SM2540D	Total Suspended Solids	mg/L							10 U
N	UFI SOP	Total Suspended Solids	mg/L							
N	UFI SOP	TURBIDITY	NTU			0.1 J			0.1 J	
Y	E1631	MERCURY	ug/L							

Validated 2009 Tributary Baseflow Sampling

				Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	FIELD QC OL-0764-01 927018 0927018-01 7/1/2009 WATER Field blank Blank water	FIELD QC OL-0769-01 UFI07182009 2009196057 7/15/2009 WATER Trip blank Blank water	FIELD QC OL-0770-01 JA23258 JA23258-1 7/15/2009 WATER Field blank Blank water	FIELD QC OL-0771-01 929021 0929021-01 7/15/2009 WATER Field blank Blank water	FIELD QC OL-0777-01 UFI07182009 2009209033 7/28/2009 WATER Trip blank Blank water	FIELD QC OL-0778-01 JA24180 JA24180-1 7/28/2009 WATER Field blank Blank water
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L		0.00002 U				0.00002 U	
N	E1631	MERCURY	ug/L					0.00015 U		
N	SM2540D	Total Suspended Solids	mg/L				4 U			4 U
N	UFI SOP	Total Suspended Solids	mg/L			2.5 UJ			2.5 UJ	
N	UFI SOP	TURBIDITY	NTU			0.1 J			0.1 J	
Y	E1631	MERCURY	ug/L							

Validated 2009 Tributary Baseflow Sampling

				Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	FIELD QC OL-0779-01 931014 0931014-01 7/28/2009 WATER Field blank Blank water	FIELD QC OL-0785-01 UFI07182009 2009224082 8/12/2009 WATER Trip blank Blank water	FIELD QC OL-0787-01 933022 0933022-01 8/12/2009 WATER Field blank Blank water	FIELD QC OL-0789-01 933032 0933032-01 8/13/2009 WATER Field blank Blank water	FIELD QC OL-0794-01 UFI07182009 2009238038 8/26/2009 WATER Trip blank Blank water	FIELD QC OL-0795-01 JA26542 JA26542-1 8/26/2009 WATER Field blank Blank water
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L		0.00002 U		0.00002 U	0.000021 U		
N	E1631	MERCURY	ug/L		0.00015 U		0.00015 U	0.00015 U		
N	SM2540D	Total Suspended Solids	mg/L							4
N	UFI SOP	Total Suspended Solids	mg/L			2.5 U			2.5 U	
N	UFI SOP	TURBIDITY	NTU			0.1 J			0.1 J	
Y	E1631	MERCURY	ug/L							

Validated 2009 Tributary Baseflow Sampling

				Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	FIELD QC OL-0796-01 935023 0935023-01 8/26/2009 WATER Field blank Blank water	FIELD QC OL-0796-06 935023 0935023-06 8/26/2009 WATER Trip blank Blank water	FIELD QC OL-0906-01 937017 0937017-01 9/9/2009 WATER Field blank Blank water	FIELD QC OL-0906-09 937017 0937017-09 9/9/2009 WATER Trip blank Blank water	FIELD QC OL-0907-01 UFICHM9060 2009253043 9/10/2009 WATER Trip blank Blank water	FIELD QC OL-0909-01 937023 0937023-01 9/10/2009 WATER Trip blank Blank water
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L		0.00002 U	0.00002 U	0.00002 U	0.00002 U		0.00002 U
N	E1631	MERCURY	ug/L		0.00026 J	0.00034 J	0.00015 U	0.00015 U		0.00021 J
N	SM2540D	Total Suspended Solids	mg/L							
N	UFI SOP	Total Suspended Solids	mg/L						2.5 UJ	
N	UFI SOP	TURBIDITY	NTU						0.1 J	
Y	E1631	MERCURY	ug/L							

Validated 2009 Tributary Baseflow Sampling

				Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	FIELD QC OL-0909-07 937023 0937023-09 9/10/2009 WATER Trip blank Blank water	FIELD QC OL-0915-01 UFICHM9060 2009267001 9/24/2009 WATER Trip blank Blank water	FIELD QC OL-0916-01 JA28864 JA28864-1 9/24/2009 WATER Field blank Blank water	FIELD QC OL-0917-01 939029 0939029-01 9/24/2009 WATER Trip blank Blank water	FIELD QC OL-0917-06 939029 0939029-06 9/24/2009 WATER Trip blank Blank water	FIELD QC OL-0927-01 941023 0941023-01 10/7/2009 WATER Field blank Blank water
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L		0.00002 U			0.00002 U	0.00002 U	0.00002 U
N	E1631	MERCURY	ug/L		0.0003 J			0.00031 J	0.00025 J	0.00015 U
N	SM2540D	Total Suspended Solids	mg/L				4 U			
N	UFI SOP	Total Suspended Solids	mg/L			2.5 UJ				
N	UFI SOP	TURBIDITY	NTU			0.1 J				
Y	E1631	MERCURY	ug/L							

Validated 2009 Tributary Baseflow Sampling

				Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	FIELD QC OL-0928-01 UFICHM9060 2009281009 10/8/2009 WATER Trip blank Blank water	FIELD QC OL-0930-01 941029 0941029-01 10/8/2009 WATER Field blank Blank water	FIELD QC OL-0930-07 941029 0941029-07 10/8/2009 WATER Trip blank Blank water	FIELD QC OL-0933-01 UFICHM9060 2009295003 10/22/2009 WATER Trip blank Blank water	FIELD QC OL-0934-01 JA31227 JA31227-1 10/22/2009 WATER Field blank Blank water	FIELD QC OL-0935-01 943029 0943029-01 10/22/2009 WATER Field blank Blank water
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L			0.00002 U	0.00002 U			0.00002 U
N	E1631	MERCURY	ug/L			0.00015 U	0.00015 U			0.00015 UJ
N	SM2540D	Total Suspended Solids	mg/L						4 U	
N	UFI SOP	Total Suspended Solids	mg/L		2.5 UJ			2.5 UJ		
N	UFI SOP	TURBIDITY	NTU		0.1 J			0.1 J		
Y	E1631	MERCURY	ug/L							

Validated 2009 Tributary Baseflow Sampling

				Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	FIELD QC OL-0935-06 943029 0943029-06 10/22/2009 WATER Trip blank Blank water	FIELD QC OL-0941-01 UFICHM9068 2009309001 11/5/2009 WATER Trip blank Blank water	FIELD QC OL-0942-01 JA32342 JA32342-1 11/5/2009 WATER Field blank Blank water	FIELD QC OL-0943-01 946001 0946001-01 11/5/2009 WATER Field blank Blank water	FIELD QC OL-0943-06 946001 0946001-06 11/5/2009 WATER Field blank Blank water	FIELD QC OL-0948-01 UFICHM9068 2009321001 11/17/2009 WATER Trip blank Blank water
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L		0.00002 U			0.00002 UJ	0.00002 UJ	
N	E1631	MERCURY	ug/L		0.00015 UJ			0.00015 UJ	0.00015 UJ	
N	SM2540D	Total Suspended Solids	mg/L				4 U			
N	UFI SOP	Total Suspended Solids	mg/L			-0.1 U				-0.1 U
N	UFI SOP	TURBIDITY	NTU			0.1 J				0.4
Y	E1631	MERCURY	ug/L							

Validated 2009 Tributary Baseflow Sampling

				Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	FIELD QC OL-0947-01 947015 0947015-01 11/18/2009 WATER Field blank Blank water	FIELD QC OL-0950-06 947016 0947016-06 11/18/2009 WATER Trip blank Blank water	FIELD QC OL-0953-01 JA33799 JA33799-1 11/23/2009 WATER Field blank Blank water	FIELD QC OL-0954-01 948007 0948007-01 11/23/2009 WATER Trip blank Blank water	FIELD QC OL-0955-01 UFICHM9068 2009334001 11/30/2009 WATER Trip blank Blank water	FIELD QC OL-0956-01 JA34062 JA34062-1 11/30/2009 WATER Field blank Blank water
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L		0.00002 U	0.00006		0.00002 U		
N	E1631	MERCURY	ug/L		0.00015 U	0.00121		0.00016 J		
N	SM2540D	Total Suspended Solids	mg/L				4 U			4 U
N	UFI SOP	Total Suspended Solids	mg/L							
N	UFI SOP	TURBIDITY	NTU						0.1 J	
Y	E1631	MERCURY	ug/L							

Validated 2009 Tributary Baseflow Sampling

			Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	FIELD QC OL-0957-01 949002 0949002-01 11/30/2009 WATER Trip blank Blank water
Filtered	Method	Parameter Name	Units	
N	E1630	METHYL MERCURY	ug/L	0.00002 U
N	E1631	MERCURY	ug/L	0.00015 U
N	SM2540D	Total Suspended Solids	mg/L	
N	UFI SOP	Total Suspended Solids	mg/L	
N	UFI SOP	TURBIDITY	NTU	
Y	E1631	MERCURY	ug/L	

ATTACHMENT A-2

**VALIDATED LABORATORY DATA FOR
STORM WATER MONITORING SAMPLES**

2009 Tributary Storm Water Events Sampling

				Location	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy
				Field Sample ID	OL-0728-02	OL-0733-02	OL-0739-01	OL-0739-04	OL-0739-07	OL-0740-01	OL-0740-04
				SDG	UFI07182009	UFI07182009	UFI07182009	UFI07182009	UFI07182009	UFI07182009	UFI07182009
				Lab Sample ID	2009127012	2009139008	2009148006	2009148009	2009148012	2009149001	2009149004
				Sample Date	5/7/2009	5/19/2009	5/27/2009	5/27/2009	5/28/2009	5/28/2009	5/29/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L								
N	E1631	MERCURY	ug/L								
N	SM2540D	Total Suspended Solids	mg/L								
N	UFI SOP	Total Suspended Solids	mg/L	8.5 J	6.1 J	12.6	7.8	10.3	11.2	11.3	34.8
N	UFI SOP	TURBIDITY	NTU	7.8	4.7	9.6	6	7.9	8.7	7.9	39.9
Y	E1631	MERCURY	ug/L								

2009 Tributary Storm Water Events Sampling

				Location	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy
				Field Sample ID	OL-0744-02	OL-0748-03	OL-0748-06	OL-0749-03	OL-0749-06	OL-0750-03	OL-0750-06
				SDG	UFI07182009	UFI07182009	UFI07182009	A9F160221	A9F160221	924040	924040
				Lab Sample ID	2009154015	2009163032	2009163035	A9F160221003	A9F160221006	0924040-03	0924040-06
				Sample Date	6/3/2009	6/11/2009	6/11/2009	6/11/2009	6/11/2009	6/11/2009	6/11/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L							0.000094	0.000106
N	E1631	MERCURY	ug/L					0.0054 U	0.0067 U		
N	SM2540D	Total Suspended Solids	mg/L					21	33		
N	UFI SOP	Total Suspended Solids	mg/L		12.4 J	11.4 J	34.3 J				116 J
N	UFI SOP	TURBIDITY	NTU		8.4	11.4	34.3				116
Y	E1631	MERCURY	ug/L								

2009 Tributary Storm Water Events Sampling

				Location	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy
				Field Sample ID	OL-0748-10	OL-0748-13	OL-0748-16	OL-0748-19	OL-0748-22	OL-0749-09	OL-0749-10
				SDG	UFI07182009	UFI07182009	UFI07182009	UFI07182009	UFI07182009	A9F160221	A9F160221
				Lab Sample ID	2009163039	2009163042	2009163045	2009163048	2009163051	A9F160221009	A9F160221010
				Sample Date	6/12/2009	6/12/2009	6/12/2009	6/12/2009	6/12/2009	6/12/2009	6/12/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L								
N	E1631	MERCURY	ug/L								
N	SM2540D	Total Suspended Solids	mg/L							0.0093 U	0.0615
N	UFI SOP	Total Suspended Solids	mg/L	289.2 J		450.8 J	238.8 J	386 J	386.4 J	64	390
N	UFI SOP	TURBIDITY	NTU	289.2		450.8	238.8	386	386.4		
Y	E1631	MERCURY	ug/L								0.0613
											500

2009 Tributary Storm Water Events Sampling

				Location	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy
				Field Sample ID	OL-0749-16	OL-0749-19	OL-0749-22	OL-0750-09	OL-0750-10	OL-0750-13	OL-0750-16
				SDG	A9F160221	A9F160221	A9F160221	924040	924040	924040	924040
				Lab Sample ID	A9F160221016	A9F160221019	A9F160221022	0924040-09	0924040-10	0924040-13	0924040-16
				Sample Date	6/12/2009	6/12/2009	6/12/2009	6/12/2009	6/12/2009	6/12/2009	6/12/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L					0.000164	0.000891	0.0013	0.000822
N	E1631	MERCURY	ug/L	0.045	0.0377	0.0383 J					0.000832
N	SM2540D	Total Suspended Solids	mg/L	450	390	380					
N	UFI SOP	Total Suspended Solids	mg/L								
N	UFI SOP	TURBIDITY	NTU								
Y	E1631	MERCURY	ug/L								

2009 Tributary Storm Water Events Sampling

				Location Field Sample ID SDG	NMCK-Amboy OL-0750-22 924040	NMCK-Amboy OL-0752-02 UFI07182009	NMCK-Amboy OL-0762-03 UFI07182009	NMCK-Amboy OL-0769-02 UFI07182009	NMCK-Amboy OL-0777-02 UFI07182009	NMCK-Amboy OL-0785-03 UFI07182009	NMCK-Amboy OL-0794-02 UFI07182009	NMCK-Amboy OL-0907-02 UFICHM9060
				Lab Sample ID	0924040-22	2009168039	2009182071	2009196064	2009209040	2009224089	2009238045	2009253050
				Sample Date	6/12/2009	6/17/2009	7/1/2009	7/15/2009	7/28/2009	8/12/2009	8/26/2009	9/10/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units									
N	E1630	METHYL MERCURY	ug/L	0.000729								
N	E1631	MERCURY	ug/L									
N	SM2540D	Total Suspended Solids	mg/L									
N	UFI SOP	Total Suspended Solids	mg/L			12.2 J		9.5 J	9.6	34.8	8	4.4 J
N	UFI SOP	TURBIDITY	NTU			13	13.7	7.2	4.3	17.6	4.6	5.9
Y	E1631	MERCURY	ug/L									

2009 Tributary Storm Water Events Sampling

				Location	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy
				Field Sample ID	OL-0915-02	OL-0928-02	OL-0933-02	OL-0921-01	OL-0921-04	OL-0921-07	OL-0922-01
				SDG	UFICHM9060	UFICHM9060	UFICHM9060	UFICHM9060	UFICHM9060	UFICHM9060	JA31586
				Lab Sample ID	2009267008	2009281016	2009295010	2009301056	2009301059	2009301062	JA31586-1
				Sample Date	9/24/2009	10/8/2009	10/22/2009	10/28/2009	10/28/2009	10/28/2009	10/28/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L								
N	E1631	MERCURY	ug/L								
N	SM2540D	Total Suspended Solids	mg/L								
N	UFI SOP	Total Suspended Solids	mg/L	6.8 J		9.1 J	12.6 J	12.8	14.3	34.5	8
N	UFI SOP	TURBIDITY	NTU	5.8		5.4	6.1	8.3	11.3	27.6	12
Y	E1631	MERCURY	ug/L								

2009 Tributary Storm Water Events Sampling

				Location	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy
				Field Sample ID	OL-0922-07	OL-0923-01	OL-0923-04	OL-0923-07	OL-0938-01	OL-0938-04	OL-0939-01
				SDG	JA31586	944018	944018	944018	UFICHM9060	UFICHM9060	JA31696
				Lab Sample ID	JA31586-7	4018-01 0944018-01	0944018-04	0944018-07	2009302001	2009302004	JA31696-1
				Sample Date	10/28/2009	10/28/2009	10/28/2009	10/28/2009	10/28/2009	10/28/2009	10/28/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L			0.000104 J	0.000092 J	0.000151 J			
N	E1631	MERCURY	ug/L			0.00352	0.00393	0.00643			
N	SM2540D	Total Suspended Solids	mg/L	26					73	107.8	67
N	UFI SOP	Total Suspended Solids	mg/L						46.9	57.7	
N	UFI SOP	TURBIDITY	NTU								
Y	E1631	MERCURY	ug/L								107

2009 Tributary Storm Water Events Sampling

				Location Field Sample ID SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	NMCK-Amboy OL-0940-01 944026 0944026-01 10/28/2009 WATER Regular sample Surface water	NMCK-Amboy OL-0940-04 944026 0944026-04 10/28/2009 WATER Regular sample Surface water	NMCK-Amboy OL-0938-07 UFICHM9060 2009302007 10/29/2009 WATER Regular sample Surface water	NMCK-Amboy OL-0939-07 JA31696 JA31696-7 10/29/2009 WATER Regular sample Surface water	NMCK-Amboy OL-0940-07 944026 0944026-07 10/29/2009 WATER Regular sample Surface water
Filtered	Method	Parameter Name	Units						
N	E1630	METHYL MERCURY	ug/L	0.000168	0.000344				0.000141
N	E1631	MERCURY	ug/L	0.0148	0.0241				0.0126
N	SM2540D	Total Suspended Solids	mg/L				58		
N	UFI SOP	Total Suspended Solids	mg/L			51.2			
N	UFI SOP	TURBIDITY	NTU			49.2			
Y	E1631	MERCURY	ug/L						

2009 Tributary Storm Water Events Sampling

				Location						
				Field Sample ID						
				Sample Depth						
				SDG						
				Lab Sample ID						
				Sample Date						
				Matrix						
				Sample Purpose						
				Sample Type						
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L							
N	E1631	MERCURY	ug/L							
N	SM2540D	Total Suspended Solids	mg/L							
N	UFI SOP	Total Suspended Solids	mg/L		8.4 J	7.2 J	12.9	11	13.6	9.4
N	UFI SOP	TURBIDITY	NTU		7.6	5.1	9.6	8.3	10.8	9.9
Y	E1631	MERCURY	ug/L							10
										8.2

2009 Tributary Storm Water Events Sampling

				Location						
				Field Sample ID	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48
				Sample Depth	OL-0740-08	OL-0744-03	OL-0748-02	OL-0748-05	OL-0748-08	OL-0749-02
				SDG	0.00-0.00 FT	0-0 Ft	0-0 Ft	0-0 Ft	0-0 Ft	0-0 Ft
				Lab Sample ID	UFI07182009	UFI07182009	UFI07182009	UFI07182009	UFI07182009	A9F160221
				Sample Date	2009149008	2009154016	2009163031	2009163034	2009163037	A9F160221002
				Matrix	5/29/2009	6/3/2009	6/11/2009	6/11/2009	6/11/2009	6/11/2009
				Sample Purpose	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Type	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
					Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L							
N	E1631	MERCURY	ug/L						0.0517	0.0913
N	SM2540D	Total Suspended Solids	mg/L						150	160
N	UFI SOP	Total Suspended Solids	mg/L		10.7	13.9 J	148.6 J	145 J	158.6 J	
N	UFI SOP	TURBIDITY	NTU		8.4	12.1	148.6	145	158.6	
Y	E1631	MERCURY	ug/L							

2009 Tributary Storm Water Events Sampling

				Location						
				Field Sample ID						
				Sample Depth						
				SDG						
				Lab Sample ID						
				Sample Date						
				Matrix						
				Sample Purpose						
				Sample Type						
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L							
N	E1631	MERCURY	ug/L	0.0575	0.000482	0.00002 U	0.000182			
N	SM2540D	Total Suspended Solids	mg/L	190						
N	UFI SOP	Total Suspended Solids	mg/L					256 J	255.4 J	459.2 J
N	UFI SOP	TURBIDITY	NTU					256	255.4	459.2
Y	E1631	MERCURY	ug/L							

2009 Tributary Storm Water Events Sampling

				Location						
				Field Sample ID	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48
				Sample Depth	OL-0748-20	OL-0748-23	OL-0749-11	OL-0749-14	OL-0749-17	OL-0749-20
				SDG	0-0 Ft	0-0 Ft	0-0 Ft	0-0 Ft	0-0 Ft	0-0 Ft
				Lab Sample ID	UFI07182009	UFI07182009	A9F160221	A9F160221	A9F160221	A9F160221
				Sample Date	2009163049	2009163052	A9F160221011	A9F160221014	A9F160221017	A9F160221020
				Matrix	6/12/2009	6/12/2009	6/12/2009	6/12/2009	6/12/2009	6/12/2009
				Sample Purpose	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Type	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
					Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L							
N	E1631	MERCURY	ug/L				0.11	0.092	0.0604	0.0819
N	SM2540D	Total Suspended Solids	mg/L				330	270	470	490
N	UFI SOP	Total Suspended Solids	mg/L		426.4 J	386.3 J				
N	UFI SOP	TURBIDITY	NTU		426.4	386.3				
Y	E1631	MERCURY	ug/L							0.0713 J

2009 Tributary Storm Water Events Sampling

				Location						
				Field Sample ID	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48
				Sample Depth	OL-0750-11	OL-0750-14	OL-0750-17	OL-0750-20	OL-0750-23	OL-0752-03
				SDG	0-0 Ft	0-0 Ft	0-0 Ft	0-0 Ft	0-0 Ft	0-0 Ft
				Lab Sample ID	924040	924040	924040	924040	924040	UFI07182009
				Sample Date	0924040-11RE1	0924040-14	0924040-17	0924040-20	0924040-23	2009168040
				Matrix	6/12/2009	6/12/2009	6/12/2009	6/12/2009	6/12/2009	6/17/2009
				Sample Purpose	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Type	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
					Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L	0.00115	0.000991	0.00107	0.00108	0.000984		
N	E1631	MERCURY	ug/L							
N	SM2540D	Total Suspended Solids	mg/L							
N	UFI SOP	Total Suspended Solids	mg/L						5.7 J	
N	UFI SOP	TURBIDITY	NTU						10.6	20.7
Y	E1631	MERCURY	ug/L							

2009 Tributary Storm Water Events Sampling

				Location	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48
				Field Sample ID	OL-0769-03	OL-0777-03	OL-0785-04	OL-0794-03	OL-0907-03	OL-0915-03
				Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
				SDG	UFI07182009	UFI07182009	UFI07182009	UFI07182009	UFICHM9060	UFICHM9060
				Lab Sample ID	2009196065	2009209041	2009224090	2009238046	2009253051	2009267009
				Sample Date	7/15/2009	7/28/2009	8/12/2009	8/26/2009	9/10/2009	9/24/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L							
N	E1631	MERCURY	ug/L							
N	SM2540D	Total Suspended Solids	mg/L							
N	UFI SOP	Total Suspended Solids	mg/L		6.9 J	7.7	34.9	4.9	10.9 J	5.4 J
N	UFI SOP	TURBIDITY	NTU		4.9	6.7	22.1	3.4	3.6	5
Y	E1631	MERCURY	ug/L							6.1 J
										5.8

2009 Tributary Storm Water Events Sampling

				Location	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48
				Field Sample ID	OL-0933-03	OL-0921-02	OL-0921-05	OL-0921-08	OL-0922-02	OL-0922-05
				Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
				SDG	UFICHM9060	UFICHM9060	UFICHM9060	UFICHM9060	JA31586	JA31586
				Lab Sample ID	2009295011	2009301057	2009301060	2009301063	JA31586-2	JA31586-5
				Sample Date	10/22/2009	10/28/2009	10/28/2009	10/28/2009	10/28/2009	10/28/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L							
N	E1631	MERCURY	ug/L							
N	SM2540D	Total Suspended Solids	mg/L						52	62
N	UFI SOP	Total Suspended Solids	mg/L		8.3 J	49.2	72.2	125.7		137
N	UFI SOP	TURBIDITY	NTU		5.1	41.9	57.7	94.4		
Y	E1631	MERCURY	ug/L							

2009 Tributary Storm Water Events Sampling

				Location						
				Field Sample ID						
				Sample Depth						
				SDG						
				Lab Sample ID						
				Sample Date						
				Matrix						
				Sample Purpose						
				Sample Type						
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L	0.00016 J	0.000246 J	0.000536 J				
N	E1631	MERCURY	ug/L	0.0151	0.0309	0.101				
N	SM2540D	Total Suspended Solids	mg/L						91	94
N	UFI SOP	Total Suspended Solids	mg/L				85.1	101.2		
N	UFI SOP	TURBIDITY	NTU				54.1	58.9		
Y	E1631	MERCURY	ug/L			0.00104				

2009 Tributary Storm Water Events Sampling

				Location Field Sample ID Sample Depth SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	NMCK-Rte48 OL-0940-02 0-0 FT 944026 0944026-02 10/28/2009 WATER Regular sample Surface water	NMCK-Rte48 OL-0940-05 0-0 FT 944026 0944026-05 10/28/2009 WATER Regular sample Surface water	NMCK-Rte48 OL-0938-08 0-0 FT UFICHM9060 2009302008 10/29/2009 WATER Regular sample Surface water	NMCK-Rte48 OL-0939-08 0-0 FT JA31696 JA31696-8 10/29/2009 WATER Regular sample Surface water	NMCK-Rte48 OL-0940-08 0-0 FT 944026 944026-09 0944026-0 10/29/2009 WATER Regular sample Surface water
Filtered	Method	Parameter Name	Units						
N	E1630	METHYL MERCURY	ug/L	0.000284	0.000343				0.00019
N	E1631	MERCURY	ug/L	0.0418	0.0366				0.0202
N	SM2540D	Total Suspended Solids	mg/L				54		
N	UFI SOP	Total Suspended Solids	mg/L			60.4			
N	UFI SOP	TURBIDITY	NTU			55.1			
Y	E1631	MERCURY	ug/L						0.00135

2009 Tributary Storm Water Events Sampling

				Location	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer
				Field Sample ID	OL-0728-04	OL-0733-04	OL-0739-03	OL-0739-06	OL-0741-01	OL-0741-02
				Sample Depth	0.00-0.00 FT	0.00-0.00 Ft	0.00-0.00 FT	0.00-0.00 FT	0.00-0.00 FT	0.00-0.00 FT
				SDG	UFI07182009	UFI07182009	UFI07182009	UFI07182009	A9E300159	A9E300159
				Lab Sample ID	2009127016	2009139012	2009148008	2009148011	A9E300159001	A9E300159002
				Sample Date	5/7/2009	5/19/2009	5/27/2009	5/27/2009	5/27/2009	5/27/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L							0.000137 J
N	E1631	MERCURY	ug/L						0.0035	0.0066
N	SM2540D	Total Suspended Solids	mg/L						15	51
N	UFI SOP	Total Suspended Solids	mg/L			11.1 J	28.8	70.7		
N	UFI SOP	TURBIDITY	NTU		9.5	6.2	20.1	58.3		
Y	E1631	MERCURY	ug/L							

2009 Tributary Storm Water Events Sampling

				Location	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer
				Field Sample ID	OL-0742-02	OL-0739-09	OL-0740-03	OL-0741-03	OL-0741-04	OL-0742-03
				Sample Depth	0.00-0.00 FT	0.00-0.00 FT	0.00-0.00 FT	0.00-0.00 FT	0.00-0.00 FT	0.00-0.00 FT
				SDG	923001	UFI07182009	UFI07182009	A9E300159	A9E300159	923001
				Lab Sample ID	0923001-02	2009148014	2009149003	A9E300159003	A9E300159004	0923001-03
				Sample Date	5/27/2009	5/28/2009	5/28/2009	5/28/2009	5/28/2009	5/28/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L	0.00037 J				0.0095	0.0035	0.000254
N	E1631	MERCURY	ug/L					90	26	
N	SM2540D	Total Suspended Solids	mg/L			112.7	45.5			
N	UFI SOP	Total Suspended Solids	mg/L			97.9	38			
N	UFI SOP	TURBIDITY	NTU							
Y	E1631	MERCURY	ug/L							0.000188

2009 Tributary Storm Water Events Sampling

				Location	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer
				Field Sample ID	OL-0740-06	OL-0740-09	OL-0741-05	OL-0741-06	OL-0742-05	OL-0742-06
				Sample Depth	0.00-0.00 FT	0.00-0.00 FT	0.00-0.00 FT	0.00-0.00 FT	0.00-0.00 FT	0.00-0.00 FT
				SDG	UFI07182009	UFI07182009	A9E300159	A9E300159	923001	923001
				Lab Sample ID	2009149006	2009149009	A9E300159005	A9E300159006	0923001-05	0923001-06
				Sample Date	5/29/2009	5/29/2009	5/29/2009	5/29/2009	5/29/2009	5/29/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L							
N	E1631	MERCURY	ug/L				0.0026	0.0023	0.000167	0.00017
N	SM2540D	Total Suspended Solids	mg/L				45	41		
N	UFI SOP	Total Suspended Solids	mg/L	42.1	11.2					
N	UFI SOP	TURBIDITY	NTU	9	7.3					
Y	E1631	MERCURY	ug/L							12.2

2009 Tributary Storm Water Events Sampling

				Location	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer
				Field Sample ID	OL-0748-01	OL-0748-04	OL-0748-07	OL-0749-01	OL-0749-04	OL-0749-07
				Sample Depth	0-0 Ft	0-0 Ft	0-0 Ft	0-0 Ft	0-0 Ft	0-0 Ft
				SDG	UFI07182009	UFI07182009	UFI07182009	A9F160221	A9F160221	A9F160221
				Lab Sample ID	2009163030	2009163033	2009163036	A9F160221001	A9F160221004	A9F160221007
				Sample Date	6/11/2009	6/11/2009	6/11/2009	6/11/2009	6/11/2009	6/11/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L							0.000222
N	E1631	MERCURY	ug/L					0.02	0.0771	0.07
N	SM2540D	Total Suspended Solids	mg/L					75	73	170
N	UFI SOP	Total Suspended Solids	mg/L		55.8 J	44.3 J	139.4 J			
N	UFI SOP	TURBIDITY	NTU		55.8	44.3	139.4			
Y	E1631	MERCURY	ug/L							

2009 Tributary Storm Water Events Sampling

				Location	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer
				Field Sample ID	OL-0750-04	OL-0750-07	OL-0748-12	OL-0748-15	OL-0748-18	OL-0748-21
				Sample Depth	0-0 Ft	0-0 Ft	0-0 Ft	0-0 Ft	0-0 Ft	0-0 Ft
				SDG	924040	924040	UFI07182009	UFI07182009	UFI07182009	UFI07182009
				Lab Sample ID	0924040-04	0924040-07	2009163041	2009163044	2009163047	2009163050
				Sample Date	6/11/2009	6/11/2009	6/12/2009	6/12/2009	6/12/2009	6/12/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L		0.000212	0.000456				
N	E1631	MERCURY	ug/L							
N	SM2540D	Total Suspended Solids	mg/L							
N	UFI SOP	Total Suspended Solids	mg/L				269.6 J	242 J	508 J	397.2 J
N	UFI SOP	TURBIDITY	NTU				269.6	242	508	397.2
Y	E1631	MERCURY	ug/L							257.6

2009 Tributary Storm Water Events Sampling

				Location	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer
				Field Sample ID	OL-0749-12	OL-0749-15	OL-0749-18	OL-0749-21	OL-0749-24	OL-0749-25
				Sample Depth	0-0 Ft	0-0 Ft	0-0 Ft	0-0 Ft	0-0 Ft	0-0 Ft
				SDG	A9F160221	A9F160221	A9F160221	A9F160221	A9F160221	A9F160221
				Lab Sample ID	A9F160221012	A9F160221015	A9F160221018	A9F160221021	A9F160221024	A9F160221025
				Sample Date	6/12/2009	6/12/2009	6/12/2009	6/12/2009	6/12/2009	6/12/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Field duplicate
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L							0.000712
N	E1631	MERCURY	ug/L		0.0302	0.021	0.0209	0.0158 J	0.0121 J	0.014 J
N	SM2540D	Total Suspended Solids	mg/L		430	420	640	440	390	390
N	UFI SOP	Total Suspended Solids	mg/L							
N	UFI SOP	TURBIDITY	NTU							
Y	E1631	MERCURY	ug/L							

2009 Tributary Storm Water Events Sampling

				Location	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer
				Field Sample ID	OL-0750-15	OL-0750-18	OL-0750-21	OL-0750-24	OL-0752-04	OL-0762-04
				Sample Depth	0-0 Ft	0-0 Ft	0-0 Ft	0-0 Ft	0-0 Ft	0-0 FT
				SDG	924040	924040	924040	924040	UFI07182009	UFI07182009
				Lab Sample ID	0924040-15	0924040-18	0924040-21	0924040-24	2009168043	2009182074
				Sample Date	6/12/2009	6/12/2009	6/12/2009	6/12/2009	6/17/2009	7/1/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L		0.00078	0.000641	0.000589	0.000518		
N	E1631	MERCURY	ug/L							
N	SM2540D	Total Suspended Solids	mg/L							
N	UFI SOP	Total Suspended Solids	mg/L						9.6 J	2.4 J
N	UFI SOP	TURBIDITY	NTU						12.4	74.2
Y	E1631	MERCURY	ug/L							3.3

2009 Tributary Storm Water Events Sampling

				Location	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer
				Field Sample ID	OL-0777-04	OL-0785-05	OL-0794-04	OL-0907-04	OL-0915-04	OL-0928-04
				Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
				SDG	UFI07182009	UFI07182009	UFI07182009	UFICHM9060	UFICHM9060	UFICHM9060
				Lab Sample ID	2009209044	2009224093	2009238049	2009253054	2009267012	2009281020
				Sample Date	7/28/2009	8/12/2009	8/26/2009	9/10/2009	9/24/2009	10/8/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L							
N	E1631	MERCURY	ug/L							
N	SM2540D	Total Suspended Solids	mg/L							
N	UFI SOP	Total Suspended Solids	mg/L		4.4	47	7.2	3.9 J	8.4 J	2.9 J
N	UFI SOP	TURBIDITY	NTU		7.2	44.4	4	3.3	3.9	37.4
Y	E1631	MERCURY	ug/L							2.7

2009 Tributary Storm Water Events Sampling

				Location	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer
				Field Sample ID	OL-0921-03	OL-0921-06	OL-0921-09	OL-0922-03	OL-0922-06	OL-0922-09	OL-0923-03
				Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
				SDG	UFICHM9060	UFICHM9060	UFICHM9060	JA31586	JA31586	JA31586	944018
				Lab Sample ID	2009301058	2009301061	2009301064	JA31586-3	JA31586-6	JA31586-9	0944018-03
				Sample Date	10/28/2009	10/28/2009	10/28/2009	10/28/2009	10/28/2009	10/28/2009	10/28/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L								0.000335 J
N	E1631	MERCURY	ug/L								0.0606
N	SM2540D	Total Suspended Solids	mg/L					65	106	88	
N	UFI SOP	Total Suspended Solids	mg/L		45.3	114	71.2				
N	UFI SOP	TURBIDITY	NTU		51.7	67.5	62.7				
Y	E1631	MERCURY	ug/L								

2009 Tributary Storm Water Events Sampling

				Location	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer
				Field Sample ID	OL-0923-06	OL-0923-09	OL-0938-03	OL-0938-06	OL-0939-03	OL-0939-06	OL-0940-03
				Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
				SDG	944018	944018	UFICHM9060	UFICHM9060	JA31696	JA31696	944026
				Lab Sample ID	0944018-06	944018-11 0944018-	2009302003	2009302006	JA31696-3	JA31696-6	0944026-03
				Sample Date	10/28/2009	10/28/2009	10/28/2009	10/28/2009	10/28/2009	10/28/2009	10/28/2009
				Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
				Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L	0.000379 J	0.000246 J						0.000364
N	E1631	MERCURY	ug/L	0.059	0.0592						0.0246
N	SM2540D	Total Suspended Solids	mg/L						317	734	
N	UFI SOP	Total Suspended Solids	mg/L				312.6	648.5			
N	UFI SOP	TURBIDITY	NTU				149	408			
Y	E1631	MERCURY	ug/L			0.0031					

2009 Tributary Storm Water Events Sampling

				Location Field Sample ID Sample Depth SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	ONCK-Spencer OL-0940-06 0-0 FT 944026 0944026-06 10/28/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0938-09 0-0 FT UFICM9060 2009302009 10/29/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0939-09 0-0 FT JA31696 JA31696-9 10/29/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0940-09 0-0 FT 944026 0944026-10 10/29/2009 WATER Regular sample Surface water
Filtered	Method	Parameter Name	Units					
N	E1630	METHYL MERCURY	ug/L	0.000857				0.000235
N	E1631	MERCURY	ug/L	0.0465				0.0141
N	SM2540D	Total Suspended Solids	mg/L				127	
N	UFI SOP	Total Suspended Solids	mg/L		132.2			
N	UFI SOP	TURBIDITY	NTU		116			
Y	E1631	MERCURY	ug/L					

2009 Tributary Storm Water Events Sampling

			Location	FIELD QC	FIELD QC	FIELD QC	FIELD QC	FIELD QC	FIELD QC	FIELD QC
			Field Sample ID	OL-0728-01	OL-0733-01	OL-0741-07	OL-0742-07	OL-0744-01	OL-0749-26	OL-0750-26
			Sample Depth	0.00-0.00 FT	0.00-0.00 Ft	0.00-0.00 FT	0.00-0.00 FT		0-0 Ft	0-0 Ft
			SDG	UFI07182009	UFI07182009	A9E300159	923001	UFI07182009	A9F160221	924040
			Lab Sample ID	2009127005	2009139001	A9E300159007	0923001-07	2009154008	A9F160221026	0924040-25
			Sample Date	5/7/2009	5/19/2009	5/29/2009	5/29/2009	6/3/2009	6/12/2009	6/12/2009
			Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
			Sample Purpose	Trip blank	Trip blank	Field blank	Field blank	Trip blank	Field blank	Field blank
			Sample Type	Blank water	Blank water	Blank water	Blank water	Blank water	Blank water	Blank water
Filtered	Method	Parameter Name	Units							
N	E1630	METHYL MERCURY	ug/L				0.00002 U			0.00002 U
N	E1631	MERCURY	ug/L			0.0005 U			0.0019 J	
N	SM2540D	Total Suspended Solids	mg/l			10 U			10 U	
N	UFI SOP	Total Suspended Solids	mg/L	2.5 UJ	2.5 UJ			2.5 UJ		
N	UFI SOP	TURBIDITY	NTU	0.1 J	0.1 J			0.1 U		
Y	E1631	MERCURY	ug/L							

2009 Tributary Storm Water Events Sampling

				Location Field Sample ID Sample Depth SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	FIELD QC OL-0752-01 UFI07182009 2009168032 6/17/2009 WATER Trip blank Blank water	FIELD QC OL-0762-01 UFI07182009 2009182063 7/1/2009 WATER Trip blank Blank water	FIELD QC OL-0769-01 UFI07182009 2009196057 7/15/2009 WATER Trip blank Blank water	FIELD QC OL-0777-01 0-0 FT UFI07182009 2009209033 7/28/2009 WATER Trip blank Blank water	FIELD QC OL-0785-01 0-0 FT UFI07182009 2009224082 8/12/2009 WATER Trip blank Blank water	FIELD QC OL-0794-01 0-0 FT UFI07182009 2009238038 8/26/2009 WATER Trip blank Blank water	FIELD QC OL-0907-01 UFICHM9060 2009253043 9/10/2009 WATER Trip blank Blank water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L								
N	E1631	MERCURY	ug/L								
N	SM2540D	Total Suspended Solids	mg/l								
N	UFI SOP	Total Suspended Solids	mg/L				2.5 UJ	2.5 UJ	2.5 U	2.5 U	2.5 UJ
N	UFI SOP	TURBIDITY	NTU		0.1 J	0.1 J	0.1 J	0.1 J	0.1 J	0.1 J	0.1 J
Y	E1631	MERCURY	ug/L								

2009 Tributary Storm Water Events Sampling

				Location Field Sample ID Sample Depth SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	FIELD QC OL-0915-01 UFICHM9060 2009267001 9/24/2009 WATER Trip blank Blank water	FIELD QC OL-0928-01 UFICHM9060 2009281009 10/8/2009 WATER Trip blank Blank water	FIELD QC OL-0933-01 UFICHM9060 2009295003 10/22/2009 WATER Trip blank Blank water	FIELD QC OL-0922-10 0-0 Ft JA31586 JA31586-10 10/28/2009 WATER Field blank Blank water	FIELD QC OL-0923-10 0-0 FT 944018 0944018-12 10/28/2009 WATER Field blank Blank water	FIELD QC OL-0923-11 0-0 FT 944018 0944018-13 10/28/2009 WATER Trip blank Blank water	FIELD QC OL-0939-10 0-0 FT JA31696 JA31696-10 10/28/2009 WATER Field blank Blank water
Filtered	Method	Parameter Name	Units								
N	E1630	METHYL MERCURY	ug/L						0.00002 UJ	0.00002 UJ	
N	E1631	MERCURY	ug/L						0.00015 U	0.00015 U	
N	SM2540D	Total Suspended Solids	mg/l					4 U			4 U
N	UFI SOP	Total Suspended Solids	mg/L		2.5 UJ	2.5 UJ	2.5 UJ				
N	UFI SOP	TURBIDITY	NTU		0.1 J	0.1 J	0.1 J				
Y	E1631	MERCURY	ug/L								

2009 Tributary Storm Water Events Sampling

				FIELD QC	FIELD QC
				OL-0940-10	OL-0940-11
				0-0 FT	0-0 FT
				944026	944026
				0944026-11	0944026-12
				10/28/2009	10/28/2009
				WATER	WATER
				Field blank	Trip blank
				Blank water	Blank water
Filtered	Method	Parameter Name	Units		
N	E1630	METHYL MERCURY	ug/L	0.00002 U	0.00002 U
N	E1631	MERCURY	ug/L	0.00018 J	0.00015 U
N	SM2540D	Total Suspended Solids	mg/l		
N	UFI SOP	Total Suspended Solids	mg/L		
N	UFI SOP	TURBIDITY	NTU		
Y	E1631	MERCURY	ug/L		

ATTACHMENT A-3

**VALIDATED LABORATORY DATA FOR ORGANICS
ASSOCIATED WITH
TRIBUTARY SURFACE WATER SAMPLES**

2009 Validated Tributary Surface Water Samples

				Location Field Sample ID Sample Depth SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	BB-Baseline OL-0788-05 0-0 FT JA25597 JA25597X G383-758-5B JA25597-5 8/13/2009 WATER Regular sample Surface water	BB-Baseline OL-0905-05 JA27591 JA27591X G383-764-5B JA27591-5 9/9/2009 WATER Regular sample Surface water	BB-Baseline OL-0905-06 JA27591 JA27591X G383-764-6B JA27591-6 9/9/2009 WATER Field duplicate Surface water	BB-Baseline OL-0926-05 0-0 FT JA29933 JA29933X G383-776-5B JA29933-5 10/7/2009 WATER Regular sample Surface water	BB-Baseline OL-0926-06 0-0 FT JA29933 JA29933X G383-776-6B JA29933-6 10/7/2009 WATER Field duplicate Surface water	BB-Baseline OL-0946-05 0-0 FT JA33399X JA33399 G383-783-5B JA33399-5 11/18/2009 WATER Regular sample Surface water
Filtered	Method	Parameter Name	Units							
N	SM2540D	Total Suspended Solids	mg/l	4 U	4 U	4	29	31	4 J	
N	SW8082	AROCOR-1016	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1221	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1232	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1242	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1248	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1254	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1260	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1268	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	PCBS, N.O.S.	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8290	1,2,3,4,6,7,8-HPCDD	NG/L	0.00402 J	0.0515 U	0.0507 U	0.018 J	0.0157 J	0.00227 J	
N	SW8290	1,2,3,4,6,7,8-HPCDF	NG/L	0.0012 J	0.0515 U	0.0507 U	0.00498 J	0.00532 J	0.0512 U	
N	SW8290	1,2,3,4,7,8,9-HPCDF	NG/L	0.0508 U	0.0515 U	0.0507 U	0.051 U	0.0512 U	0.000757 J	
N	SW8290	1,2,3,4,7,8-HXCDD	NG/L	0.0508 U	0.0515 U	0.0507 U	0.051 U	0.0512 U	0.00086 J	
N	SW8290	1,2,3,4,7,8-HXCDF	NG/L	0.0508 U	0.0515 U	0.0507 U	0.051 U	0.0512 U	0.00102 J	
N	SW8290	1,2,3,6,7,8-HXCDD	NG/L	0.0508 U	0.0515 U	0.0507 U	0.051 U	0.0512 U	0.00086 J	
N	SW8290	1,2,3,6,7,8-HXCDF	NG/L	0.0508 U	0.0515 U	0.0507 U	0.051 U	0.0512 U	0.00102 J	
N	SW8290	1,2,3,7,8,9-HXCDD	NG/L	0.0508 U	0.0515 U	0.0507 U	0.051 U	0.0512 U	0.000942 J	
N	SW8290	1,2,3,7,8,9-HXCDF	NG/L	0.0508 U	0.0515 U	0.0507 U	0.051 U	0.0512 U	0.0512 U	
N	SW8290	1,2,3,7,8-PECDD	NG/L	0.0508 U	0.0515 U	0.0507 U	0.051 U	0.0512 U	0.00139 J	
N	SW8290	1,2,3,7,8-PCDF	NG/L	0.0508 U	0.0515 U	0.0507 U	0.051 U	0.0512 U	0.0512 U	
N	SW8290	2,3,4,6,7,8-HXCDF	NG/L	0.0508 U	0.0515 U	0.0507 U	0.051 U	0.0512 U	0.00086 J	
N	SW8290	2,3,4,7,8-PCDF	NG/L	0.0508 U	0.0515 U	0.0507 U	0.051 U	0.0512 U	0.00119 J	
N	SW8290	2,3,7,8-TCDD	NG/L	0.0102 U	0.0103 U	0.0101 U	0.0102 U	0.0102 U	0.00219 J	
N	SW8290	2,3,7,8-TCDF	NG/L	0.0102 U	0.0103 U	0.0101 U	0.0102 U	0.0102 U	0.01 U	
N	SW8290	OCDD	NG/L	0.0308 J	0.0405 J	0.0388 J	0.115	0.108	0.102 U	
N	SW8290	OCDF	NG/L	0.00224 J	0.103 U	0.101 U	0.00992 J	0.00911 J	0.00186 J	
N	SW8290	TOTAL HPCDD	NG/L	0.0072	0.0515 U	0.0507 U	0.031	0.03	0.00385	
N	SW8290	TOTAL HPCDF	NG/L	0.0012	0.0515 U	0.0507 U	0.0109	0.0124	0.000757 U	
N	SW8290	TOTAL HXCDD	NG/L	0.0508 U	0.0515 U	0.0507 U	0.00159	0.00561	0.0018	
N	SW8290	TOTAL HXCDF	NG/L	0.0508 U	0.0515 U	0.0507 U	0.00427	0.0069	0.00154 U	
N	SW8290	TOTAL PECDD	NG/L	0.0508 U	0.0515 U	0.0507 U	0.051 U	0.0512 U	0.00139	
N	SW8290	TOTAL PCDF	NG/L	0.00333 U	0.0515 U	0.0507 U	0.00171	0.00197	0.00121 U	
N	SW8290	TOTAL TCDD	NG/L	0.0102 U	0.0103 U	0.0101 U	0.0102 U	0.0102 U	0.01 U	
N	SW8290	Total TCDF	NG/L	0.015 U	0.0103 U	0.0101 U	0.0102 U	0.0102 U	0.000676 U	

2009 Validated Tributary Surface Water Samples

				Location Field Sample ID Sample Depth SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	BB-Baseline OL-0946-06 0-0 FT JA33399 JA33399-6 11/18/2009 WATER Field duplicate Surface water	EF-Baseline OL-0788-03 0-0 FT JA25597 JA25597X JA25597-3 G383-758-3B 8/13/2009 WATER Regular sample Surface water	EF-Baseline OL-0905-03 JA27591 JA27591X G383-764-3B JA27591-3 9/9/2009 WATER Regular sample Surface water	EF-Baseline OL-0926-03 0-0 FT JA29933 JA29933X JA29933-3 G383-776-3B 10/7/2009 WATER Regular sample Surface water	EF-Baseline OL-0946-03 0-0 FT JA33399X JA33399 JA33399-3 G383-783-3B 11/18/2009 WATER Regular sample Surface water	HB-Baseline OL-0788-06 0-0 FT JA25597 JA25597X JA25597-6 G383-758-6B 8/13/2009 WATER Regular sample Surface water
Filtered	Method	Parameter Name	Units							
N	SM2540D	Total Suspended Solids	mg/l	8 J	4 U	4 U	24	6	4 U	
N	SW8082	AROCOR-1016	ug/L	0.05 U	0.051 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1221	ug/L	0.05 U	0.051 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1232	ug/L	0.05 U	0.051 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1242	ug/L	0.05 U	0.051 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1248	ug/L	0.05 U	0.051 U	0.05 U	0.05 U	0.05 U	0.05 U	0.14 J
N	SW8082	AROCOR-1254	ug/L	0.05 U	0.051 U	0.05 U	0.05 U	0.05 U	0.05 U	0.069 J
N	SW8082	AROCOR-1260	ug/L	0.05 U	0.051 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1268	ug/L	0.05 U	0.051 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	PCBS, N.O.S.	ug/L	0.05 U	0.051 U	0.05 U	0.05 U	0.05 U	0.05 U	0.21 J
N	SW8290	1,2,3,4,6,7,8-HPCDD	NG/L		0.0067 J	0.0509 U	0.0657	0.00867 J	0.0052 J	
N	SW8290	1,2,3,4,6,7,8-HPCDF	NG/L		0.00387 J	0.0509 U	0.0364 J	0.00554 J	0.00145 J	
N	SW8290	1,2,3,4,7,8,9-HPCDF	NG/L		0.00242 J	0.0509 U	0.051 U	0.00216 J	0.0504 U	
N	SW8290	1,2,3,4,7,8-HXCDD	NG/L		0.00383 J	0.0509 U	0.002 J	0.00191 J	0.0504 U	
N	SW8290	1,2,3,4,7,8-HXCDF	NG/L		0.0047 J	0.0509 U	0.00145 J	0.00241 J	0.0504 U	
N	SW8290	1,2,3,6,7,8-HXCDD	NG/L		0.00395 J	0.0509 U	0.00398 J	0.00248 J	0.0504 U	
N	SW8290	1,2,3,6,7,8-HXCDF	NG/L		0.00438 J	0.0509 U	0.00228 J	0.00245 J	0.0504 U	
N	SW8290	1,2,3,7,8,9-HXCDD	NG/L		0.00371 J	0.0509 U	0.00347 J	0.0023 J	0.0504 U	
N	SW8290	1,2,3,7,8,9-HXCDF	NG/L		0.00411 J	0.0509 U	0.051 U	0.0899 U	0.0504 U	
N	SW8290	1,2,3,7,8-PECDD	NG/L		0.00697 J	0.0509 U	0.051 U	0.00306 J	0.0504 U	
N	SW8290	1,2,3,7,8-PECDF	NG/L		0.0509 U	0.0509 U	0.051 U	0.0899 U	0.0504 U	
N	SW8290	2,3,4,6,7,8-HXCDF	NG/L		0.0032 J	0.0509 U	0.00234 J	0.00209 J	0.0504 U	
N	SW8290	2,3,4,7,8-PECDF	NG/L		0.0509 U	0.0509 U	0.051 U	0.00281 J	0.0504 U	
N	SW8290	2,3,7,8-TCDD	NG/L		0.00291 J	0.0102 U	0.0102 U	0.00435 J	0.0101 U	
N	SW8290	2,3,7,8-TCDF	NG/L		0.0102 U	0.0102 U	0.0102 U	0.018 U	0.0101 U	
N	SW8290	OCDD	NG/L		0.0316 J	0.0232 J	0.329	0.03 J	0.0381 J	
N	SW8290	OCDF	NG/L		0.00629 J	0.102 U	0.0609 J	0.00799 J	0.00329 J	
N	SW8290	TOTAL HPCDD	NG/L		0.0113	0.0509 U	0.12	0.01	0.00891	
N	SW8290	TOTAL HPCDF	NG/L		0.00387	0.0509 U	0.0716	0.00799	0.00145	
N	SW8290	TOTAL HXCDD	NG/L		0.00778	0.0509 U	0.0271	0.08 U	0.0504 U	
N	SW8290	TOTAL HXCDF	NG/L		0.0144	0.0509 U	0.0407	0.00921	0.0504 U	
N	SW8290	TOTAL PECDD	NG/L		0.00697	0.0509 U	0.051 U	0.08 U	0.0504 U	
N	SW8290	TOTAL PECDF	NG/L		0.0176 U	0.0509 U	0.0105	0.00629	0.00302 U	
N	SW8290	TOTAL TCDD	NG/L		0.0102 U	0.0102 U	0.0102 U	0.01 U	0.0101 U	
N	SW8290	Total TCDF	NG/L		0.0173 U	0.0102 U	0.0102 U	0.01 U	0.0118 U	

2009 Validated Tributary Surface Water Samples

			Location Field Sample ID Sample Depth SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	HB-Baseline OL-0788-07 0-0 FT JA25597 JA25597X JA25597-7 G383-758-7B 8/13/2009 WATER Field duplicate Surface water	HB-Baseline OL-0905-07 JA27591 JA27591X JA27591-7 G383-764-7B 9/9/2009 WATER Regular sample Surface water	HB-Baseline OL-0926-07 0-0 FT JA29933 JA29933X JA29933-7 G383-776-7B 10/7/2009 WATER Regular sample Surface water	HB-Baseline OL-0946-07 0-0 FT JA33399 JA33399-7 11/18/2009 WATER Regular sample Surface water	LEYCK-Park OL-0786-02 0-0 FT JA25453X JA25453 G383-757-2B JA25453-2 8/12/2009 WATER Regular sample Surface water	LEYCK-Park OL-0908-06 JA27747 JA27747X G383-765-6B JA27747-6 9/10/2009 WATER Regular sample Surface water
Filtered	Method	Parameter Name	Units						
N	SM2540D	Total Suspended Solids	mg/l	4 U	4 U	4	4 U	10	11
N	SW8082	AROCOR-1016	ug/L	0.05 U	0.052 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1221	ug/L	0.05 U	0.052 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1232	ug/L	0.05 U	0.052 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1242	ug/L	0.05 U	0.052 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1248	ug/L	0.05 U	0.052 U	0.05 U	0.05 U	0.05 U	0.11
N	SW8082	AROCOR-1254	ug/L	0.05 U	0.052 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1260	ug/L	0.05 U	0.052 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1268	ug/L	0.05 U	0.052 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	PCBS, N.O.S.	ug/L	0.05 U	0.052 U	0.05 U	0.05 U	0.05 U	0.11
N	SW8290	1,2,3,4,6,7,8-HPCDD	NG/L	0.00664 J	0.0524 U	0.0112 J		0.015 J	0.00791 J
N	SW8290	1,2,3,4,6,7,8-HPCDF	NG/L	0.00123 J	0.0524 U	0.0052 J		0.00422 J	0.00247 J
N	SW8290	1,2,3,4,7,8,9-HPCDF	NG/L	0.0506 U	0.0524 U	0.0504 U		0.0505 U	0.0506 U
N	SW8290	1,2,3,4,7,8-HXCDD	NG/L	0.0506 U	0.0524 U	0.0504 U		0.0505 U	0.0506 U
N	SW8290	1,2,3,4,7,8-HXCDF	NG/L	0.0506 U	0.0524 U	0.000665 J		0.000848 J	0.0506 U
N	SW8290	1,2,3,6,7,8-HXCDD	NG/L	0.0506 U	0.0524 U	0.00107 J		0.0505 U	0.0506 U
N	SW8290	1,2,3,6,7,8-HXCDF	NG/L	0.0506 U	0.0524 U	0.00105 J		0.000566 J	0.0506 U
N	SW8290	1,2,3,7,8,9-HXCDD	NG/L	0.0506 U	0.0524 U	0.00105 J		0.0505 U	0.0506 U
N	SW8290	1,2,3,7,8,9-HXCDF	NG/L	0.0506 U	0.0524 U	0.0504 U		0.0505 U	0.0506 U
N	SW8290	1,2,3,7,8-PECDD	NG/L	0.0506 U	0.0524 U	0.0504 U		0.0505 U	0.0506 U
N	SW8290	1,2,3,7,8-PCDF	NG/L	0.0506 U	0.0524 U	0.000967 J		0.0505 U	0.0506 U
N	SW8290	2,3,4,6,7,8-HXCDF	NG/L	0.0506 U	0.0524 U	0.000765 J		0.0505 U	0.0506 U
N	SW8290	2,3,4,7,8-PCDF	NG/L	0.0506 U	0.0524 U	0.00101 J		0.0505 U	0.0506 U
N	SW8290	2,3,7,8-TCDD	NG/L	0.0101 U	0.0105 U	0.0101 U		0.0101 U	0.0101 U
N	SW8290	2,3,7,8-TCDF	NG/L	0.0101 U	0.0105 U	0.0101 U		0.0101 U	0.0101 U
N	SW8290	OCDD	NG/L	0.036 J	0.105 U	0.0667 J		0.12	0.0436 J
N	SW8290	OCDF	NG/L	0.101 U	0.105 U	0.00824 J		0.00933 J	0.101 U
N	SW8290	TOTAL HPCDD	NG/L	0.0116	0.0524 U	0.0193		0.0294	0.015
N	SW8290	TOTAL HPCDF	NG/L	0.00123	0.0524 U	0.0101		0.00974	0.00557
N	SW8290	TOTAL HXCDD	NG/L	0.0506 U	0.0524 U	0.00185		0.00776	0.0506 U
N	SW8290	TOTAL HXCDF	NG/L	0.0506 U	0.0524 U	0.0034		0.00657	0.0506 U
N	SW8290	TOTAL PECDD	NG/L	0.0506 U	0.0524 U	0.0504 U		0.0505 U	0.0506 U
N	SW8290	TOTAL PCDF	NG/L	0.00261 U	0.0524 U	0.00191		0.00572 U	0.0506 U
N	SW8290	TOTAL TCDD	NG/L	0.0101 U	0.0105 U	0.00318		0.0101 U	0.0101 U
N	SW8290	Total TCDF	NG/L	0.0147 U	0.0105 U	0.0101 U		0.0205 U	0.0101 U

2009 Validated Tributary Surface Water Samples

			Location Field Sample ID Sample Depth SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	LEYCK-Park OL-0929-06 0-0 FT JA30069 JA30069X JA30069-6 G383-777-6B 10/8/2009 WATER Regular sample Surface water	LEYCK-Park OL-0949-06 0-0 FT JA33398 JA33398-5 11/18/2009 WATER Regular sample Surface water	NMCK-Amboy OL-0786-03 0-0 FT JA25453X JA25453 G383-757-3B JA25453-3 8/12/2009 WATER Regular sample Surface water	NMCK-Amboy OL-0908-02 JA27747 JA27747X G383-765-2B JA27747-2 9/10/2009 WATER Regular sample Surface water	NMCK-Amboy OL-0929-02 0-0 FT JA30069 JA30069X JA30069-2 G383-777-2B 10/8/2009 WATER Regular sample Surface water	NMCK-Amboy OL-0949-02 0-0 FT JA33398X JA33398 JA33398-1 G383-784-1B 11/18/2009 WATER Regular sample Surface water
Filtered	Method	Parameter Name	Units						
N	SM2540D	Total Suspended Solids	mg/l	14	4	32	6	4	4 U
N	SW8082	AROCOR-1016	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1221	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1232	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1242	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1248	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1254	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1260	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1268	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	PCBS, N.O.S.	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8290	1,2,3,4,6,7,8-HPCDD	NG/L	0.0126 J		0.00694 J	0.0507 U	0.0019 J	0.05 U
N	SW8290	1,2,3,4,6,7,8-HPCDF	NG/L	0.0055 J		0.0019 J	0.0507 U	0.00118 J	0.05 U
N	SW8290	1,2,3,4,7,8,9-HPCDF	NG/L	0.0504 U		0.0506 U	0.0507 U	0.0507 U	0.05 U
N	SW8290	1,2,3,4,7,8-HXCDD	NG/L	0.0504 U		0.0506 U	0.0507 U	0.0507 U	0.05 U
N	SW8290	1,2,3,4,7,8-HXCDF	NG/L	0.00113 J		0.000547 J	0.0507 U	0.0507 U	0.05 U
N	SW8290	1,2,3,6,7,8-HXCDD	NG/L	0.0504 U		0.0506 U	0.0507 U	0.0507 U	0.05 U
N	SW8290	1,2,3,6,7,8-HXCDF	NG/L	0.000866 J		0.0506 U	0.0507 U	0.0507 U	0.05 U
N	SW8290	1,2,3,7,8,9-HXCDD	NG/L	0.0504 U		0.0506 U	0.0507 U	0.0507 U	0.05 U
N	SW8290	1,2,3,7,8,9-HXCDF	NG/L	0.0504 U		0.0506 U	0.0507 U	0.0507 U	0.05 U
N	SW8290	1,2,3,7,8-PECDD	NG/L	0.0504 U		0.0506 U	0.0507 U	0.0507 U	0.05 U
N	SW8290	1,2,3,7,8-PCDF	NG/L	0.0504 U		0.0506 U	0.0507 U	0.0507 U	0.05 U
N	SW8290	2,3,4,6,7,8-HXCDF	NG/L	0.0504 U		0.0506 U	0.0507 U	0.0507 U	0.05 U
N	SW8290	2,3,4,7,8-PCDF	NG/L	0.00113 J		0.0506 U	0.0507 U	0.0507 U	0.05 U
N	SW8290	2,3,7,8-TCDD	NG/L	0.0101 U		0.0101 U	0.0101 U	0.0101 U	0.01 U
N	SW8290	2,3,7,8-TCDF	NG/L	0.0101 U		0.0101 U	0.0101 U	0.0101 U	0.01 U
N	SW8290	OCDD	NG/L	0.0908 J		0.0523 J	0.101 U	0.101 U	0.1 U
N	SW8290	OCDF	NG/L	0.0117 J		0.00611 J	0.101 U	0.00314 J	0.1 U
N	SW8290	TOTAL HPCDD	NG/L	0.0252		0.0121	0.0507 U	0.00355	0.05 U
N	SW8290	TOTAL HPCDF	NG/L	0.00572		0.0052	0.0507 U	0.00272	0.05 U
N	SW8290	TOTAL HXCDD	NG/L	0.00777		0.0506 U	0.0507 U	0.0507 U	0.05 U
N	SW8290	TOTAL HXCDF	NG/L	0.00431		0.00294	0.0507 U	0.0507 U	0.05 U
N	SW8290	TOTAL PECDD	NG/L	0.0504 U		0.0506 U	0.0507 U	0.0507 U	0.05 U
N	SW8290	TOTAL PCDF	NG/L	0.00151		0.00393 U	0.0507 U	0.0507 U	0.05 U
N	SW8290	TOTAL TCDD	NG/L	0.00157		0.0101 U	0.0101 U	0.0101 U	0.01 U
N	SW8290	Total TCDF	NG/L	0.0101 U		0.0166 U	0.0101 U	0.0101 U	0.01 U

2009 Validated Tributary Surface Water Samples

				Location Field Sample ID Sample Depth SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	NMCK-Rte48 OL-0786-04 0-0 FT JA25453X JA25453 JA25453-4 G383-757-4B 8/12/2009 WATER Regular sample Surface water	NMCK-Rte48 OL-0908-03 JA27747 JA27747X G383-765-3B JA27747-3 9/10/2009 WATER Regular sample Surface water	NMCK-Rte48 OL-0929-03 0-0 FT JA30069 JA30069X JA30069-3 G383-777-3B 10/8/2009 WATER Regular sample Surface water	NMCK-Rte48 OL-0949-03 0-0 FT JA33398 JA33398-2 11/18/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0786-05 0-0 FT JA25453X JA25453 G383-757-5B JA25453-5 8/12/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0786-06 0-0 FT JA25453X JA25453 JA25453-6 G383-757-6B 8/12/2009 WATER Field duplicate Surface water
Filtered	Method	Parameter Name	Units							
N	SM2540D	Total Suspended Solids	mg/l	34	11	5	4 U	58	88	
N	SW8082	AROCOR-1016	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.054 U	
N	SW8082	AROCOR-1221	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.054 U	
N	SW8082	AROCOR-1232	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.054 U	
N	SW8082	AROCOR-1242	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.054 U	
N	SW8082	AROCOR-1248	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.054 U	
N	SW8082	AROCOR-1254	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.054 U	
N	SW8082	AROCOR-1260	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.054 U	
N	SW8082	AROCOR-1268	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.054 U	
N	SW8082	PCBS, N.O.S.	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.054 U	
N	SW8290	1,2,3,4,6,7,8-HPCDD	NG/L	0.0052 J	0.0505 U	0.00269 J		0.051 U	0.00202 J	
N	SW8290	1,2,3,4,6,7,8-HPCDF	NG/L	0.00144 J	0.0505 U	0.000979 J		0.051 U	0.00114 J	
N	SW8290	1,2,3,4,7,8-HPCDF	NG/L	0.0508 U	0.0505 U	0.051 U		0.051 U	0.051 U	
N	SW8290	1,2,3,4,7,8-HXCDD	NG/L	0.0508 U	0.0505 U	0.051 U		0.051 U	0.051 U	
N	SW8290	1,2,3,4,7,8-HXCDF	NG/L	0.0508 U	0.0505 U	0.051 U		0.051 U	0.051 U	
N	SW8290	1,2,3,6,7,8-HXCDD	NG/L	0.0508 U	0.0505 U	0.051 U		0.051 U	0.051 U	
N	SW8290	1,2,3,6,7,8-HXCDF	NG/L	0.0508 U	0.0505 U	0.051 U		0.051 U	0.051 U	
N	SW8290	1,2,3,7,8,9-HXCDD	NG/L	0.0508 U	0.0505 U	0.051 U		0.051 U	0.051 U	
N	SW8290	1,2,3,7,8,9-HXCDF	NG/L	0.0508 U	0.0505 U	0.051 U		0.051 U	0.051 U	
N	SW8290	1,2,3,7,8-PECDD	NG/L	0.0508 U	0.0505 U	0.051 U		0.051 U	0.051 U	
N	SW8290	1,2,3,7,8-PCDF	NG/L	0.0508 U	0.0505 U	0.051 U		0.051 U	0.051 U	
N	SW8290	2,3,4,6,7,8-HXCDF	NG/L	0.0508 U	0.0505 U	0.051 U		0.051 U	0.051 U	
N	SW8290	2,3,4,7,8-PCDF	NG/L	0.0508 U	0.0505 U	0.051 U		0.051 U	0.051 U	
N	SW8290	2,3,7,8-TCDD	NG/L	0.0102 U	0.0101 U	0.0102 U		0.0102 U	0.0102 U	
N	SW8290	2,3,7,8-TCDF	NG/L	0.0102 U	0.0101 U	0.0102 U		0.0102 U	0.0102 U	
N	SW8290	OCDD	NG/L	0.0496 J	0.101 U	0.102 U		0.00853 J	0.0203 J	
N	SW8290	OCDF	NG/L	0.00575 J	0.101 U	0.102 U		0.102 U	0.00336 J	
N	SW8290	TOTAL HPCDD	NG/L	0.00955	0.0505 U	0.00469		0.051 U	0.00202	
N	SW8290	TOTAL HPCDF	NG/L	0.00425	0.0505 U	0.00228		0.051 U	0.051 U	
N	SW8290	TOTAL HXCDD	NG/L	0.0508 U	0.0505 U	0.051 U		0.051 U	0.051 U	
N	SW8290	TOTAL HXCDF	NG/L	0.0508 U	0.0505 U	0.051 U		0.051 U	0.051 U	
N	SW8290	TOTAL PECDD	NG/L	0.0508 U	0.0505 U	0.051 U		0.051 U	0.051 U	
N	SW8290	TOTAL PCDF	NG/L	0.00803 U	0.0505 U	0.051 U		0.00312 U	0.00141 U	
N	SW8290	TOTAL TCDD	NG/L	0.0102 U	0.0101 U	0.0102 U		0.0102 U	0.0102 U	
N	SW8290	Total TCDF	NG/L	0.0164 U	0.0101 U	0.0102 U		0.0139 U	0.0141 U	

2009 Validated Tributary Surface Water Samples

				Location Field Sample ID Sample Depth SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	ONCK-Spencer OL-0908-04 JA27747 JA27747X G383-765-4B JA27747-4 9/10/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0908-05 JA27747 JA27747X G383-765-5B JA27747-5 9/10/2009 WATER Field duplicate Surface water	ONCK-Spencer OL-0929-04 0-0 FT JA30069 JA30069X JA30069-4 G383-777-4B 10/8/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0929-05 0-0 Ft JA30069 JA30069X JA30069-5 G383-777-5B 10/8/2009 WATER Field duplicate Surface water	ONCK-Spencer OL-0949-04 0-0 FT JA33398 JA33398-3 11/18/2009 WATER Regular sample Surface water	ONCK-Spencer OL-0949-05 0-0 Ft JA33398X JA33398 G383-784-4B JA33398-4 11/18/2009 WATER Field duplicate Surface water
Filtered	Method	Parameter Name	Units							
N	SM2540D	Total Suspended Solids	mg/l	4 U	4 U	41	53	4 U	4 U	
N	SW8082	AROCOR-1016	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1221	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1232	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1242	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1248	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1254	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1260	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1268	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	PCBS, N.O.S.	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8290	1,2,3,4,6,7,8-HPCDD	NG/L	0.0505 U	0.0509 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U
N	SW8290	1,2,3,4,6,7,8-HPCDF	NG/L	0.0505 U	0.0509 U	0.00132 J	0.0514 U	0.0514 U	0.0514 U	0.0514 U
N	SW8290	1,2,3,4,7,8,9-HPCDF	NG/L	0.0505 U	0.0509 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U
N	SW8290	1,2,3,4,7,8-HXCDD	NG/L	0.0505 U	0.0509 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U
N	SW8290	1,2,3,4,7,8-HXCDF	NG/L	0.0505 U	0.0509 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U
N	SW8290	1,2,3,6,7,8-HXCDD	NG/L	0.0505 U	0.0509 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U
N	SW8290	1,2,3,6,7,8-HXCDF	NG/L	0.0505 U	0.0509 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U
N	SW8290	1,2,3,7,8,9-HXCDD	NG/L	0.0505 U	0.0509 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U
N	SW8290	1,2,3,7,8,9-HXCDF	NG/L	0.0505 U	0.0509 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U
N	SW8290	1,2,3,7,8-PECDD	NG/L	0.0505 U	0.0509 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U
N	SW8290	1,2,3,7,8-PECDF	NG/L	0.0505 U	0.0509 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U
N	SW8290	2,3,4,6,7,8-HXCDF	NG/L	0.0505 U	0.0509 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U
N	SW8290	2,3,4,7,8-PECDF	NG/L	0.0505 U	0.0509 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U
N	SW8290	2,3,7,8-TCDD	NG/L	0.0101 U	0.0102 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U
N	SW8290	2,3,7,8-TCDF	NG/L	0.0101 U	0.0102 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U
N	SW8290	OCDD	NG/L	0.101 U	0.102 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U
N	SW8290	OCDF	NG/L	0.101 U	0.102 U	0.103 U	0.103 U	0.103 U	0.103 U	0.103 U
N	SW8290	TOTAL HPCDD	NG/L	0.0505 U	0.0509 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U
N	SW8290	TOTAL HPCDF	NG/L	0.0505 U	0.0509 U	0.00132	0.0514 U	0.0514 U	0.0514 U	0.0514 U
N	SW8290	TOTAL HXCDD	NG/L	0.0505 U	0.0509 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U
N	SW8290	TOTAL HXCDF	NG/L	0.0505 U	0.0509 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U
N	SW8290	TOTAL PECDD	NG/L	0.0505 U	0.0509 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U
N	SW8290	TOTAL PECDF	NG/L	0.0505 U	0.0509 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U	0.0514 U
N	SW8290	TOTAL TCDD	NG/L	0.0101 U	0.0102 U	0.00115	0.0103 U	0.0103 U	0.0103 U	0.0103 U
N	SW8290	Total TCDF	NG/L	0.0101 U	0.0102 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U

2009 Validated Tributary Surface Water Samples

				Location Field Sample ID Sample Depth SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	SC-Baseline OL-0788-04 0-0 FT JA25597 JA25597X G383-758-4B JA25597-4 8/13/2009 WATER Regular sample Surface water	SC-Baseline OL-0905-04 0-0 FT JA27591 JA27591X G383-764-4B JA27591-4 9/9/2009 WATER Regular sample Surface water	SC-Baseline OL-0926-04 0-0 FT JA29933 JA29933X G383-776-4B JA29933-4 10/7/2009 WATER Regular sample Surface water	SC-Baseline OL-0946-04 0-0 FT JA33399X JA33399 G383-783-4B JA33399-4 11/18/2009 WATER Regular sample Surface water	T5A-Baseline OL-0788-08 0-0 FT JA25597 JA25597X JA25597-8 G383-758-8B 8/13/2009 WATER Regular sample Surface water	T5A-Baseline OL-0905-08 0-0 FT JA27591 JA27591X JA27591-8 G383-764-8B 9/9/2009 WATER Regular sample Surface water
Filtered	Method	Parameter Name	Units							
N	SM2540D	Total Suspended Solids	mg/l	6	6	27	4 U	7	14	
N	SW8082	AROCOR-1016	ug/L	0.05 U	0.051 U	0.05 U	0.057 U	0.05 U	0.05 U	
N	SW8082	AROCOR-1221	ug/L	0.05 U	0.051 U	0.05 U	0.057 U	0.05 U	0.05 U	
N	SW8082	AROCOR-1232	ug/L	0.05 U	0.051 U	0.05 U	0.057 U	0.05 U	0.05 U	
N	SW8082	AROCOR-1242	ug/L	0.05 U	0.051 U	0.05 U	0.057 U	0.05 U	0.05 U	
N	SW8082	AROCOR-1248	ug/L	0.05 U	0.051 U	0.05 U	0.057 U	0.05 U	0.05 U	
N	SW8082	AROCOR-1254	ug/L	0.05 U	0.051 U	0.05 U	0.057 U	0.05 U	0.05 U	
N	SW8082	AROCOR-1260	ug/L	0.05 U	0.051 U	0.05 U	0.057 U	0.05 U	0.05 U	
N	SW8082	AROCOR-1268	ug/L	0.05 U	0.051 U	0.05 U	0.057 U	0.05 U	0.05 U	
N	SW8082	PCBS, N.O.S.	ug/L	0.05 U	0.051 U	0.05 U	0.057 U	0.05 U	0.05 U	
N	SW8290	1,2,3,4,6,7,8-HPCDD	NG/L	0.00868 J	0.0527 U	0.0856	0.05 U	0.00255 J	0.0522 U	
N	SW8290	1,2,3,4,6,7,8-HPCDF	NG/L	0.0025 J	0.0527 U	0.0273 J	0.0543 U	0.00104 J	0.0522 U	
N	SW8290	1,2,3,4,7,8,9-HPCDF	NG/L	0.0505 U	0.0527 U	0.0508 U	0.05 U	0.0502 U	0.0522 U	
N	SW8290	1,2,3,4,7,8-HXCDD	NG/L	0.0505 U	0.0527 U	0.00197 J	0.05 U	0.0502 U	0.0522 U	
N	SW8290	1,2,3,4,7,8-HXCDF	NG/L	0.0505 U	0.0527 U	0.00159 J	0.05 U	0.0502 U	0.0522 U	
N	SW8290	1,2,3,6,7,8-HXCDD	NG/L	0.0505 U	0.0527 U	0.00459 J	0.05 U	0.0502 U	0.0522 U	
N	SW8290	1,2,3,6,7,8-HXCDF	NG/L	0.0505 U	0.0527 U	0.00118 J	0.05 U	0.0502 U	0.0522 U	
N	SW8290	1,2,3,7,8,9-HXCDD	NG/L	0.0505 U	0.0527 U	0.00427 J	0.05 U	0.0502 U	0.0522 U	
N	SW8290	1,2,3,7,8,9-HXCDF	NG/L	0.0505 U	0.0527 U	0.0508 U	0.05 U	0.0502 U	0.0522 U	
N	SW8290	1,2,3,7,8-PECDD	NG/L	0.0505 U	0.0527 U	0.00144 J	0.05 U	0.0502 U	0.0522 U	
N	SW8290	1,2,3,7,8-PCDF	NG/L	0.0505 U	0.0527 U	0.0508 U	0.05 U	0.0502 U	0.0522 U	
N	SW8290	2,3,4,6,7,8-HXCDF	NG/L	0.0505 U	0.0527 U	0.00179 J	0.05 U	0.0502 U	0.0522 U	
N	SW8290	2,3,4,7,8-PCDF	NG/L	0.0505 U	0.0527 U	0.0508 U	0.05 U	0.0502 U	0.0522 U	
N	SW8290	2,3,7,8-TCDD	NG/L	0.0101 U	0.0105 U	0.0102 U	0.0023 J	0.01 U	0.0104 U	
N	SW8290	2,3,7,8-TCDF	NG/L	0.0101 U	0.0105 U	0.0102 U	0.01 U	0.01 U	0.0104 U	
N	SW8290	OCDD	NG/L	0.0644 J	0.0425 J	0.507	0.109 U	0.0117 J	0.0218 J	
N	SW8290	OCDF	NG/L	0.00509 J	0.105 U	0.0643 J	0.1 U	0.1 U	0.104 U	
N	SW8290	TOTAL HPCDD	NG/L	0.0169	0.0527 U	0.158	0.05 U	0.00255	0.0522 U	
N	SW8290	TOTAL HPCDF	NG/L	0.0025	0.0527 U	0.0718	0.000782 U	0.00104	0.0522 U	
N	SW8290	TOTAL HXCDD	NG/L	0.0505 U	0.0527 U	0.0349	0.05 U	0.0502 U	0.0522 U	
N	SW8290	TOTAL HXCDF	NG/L	0.0505 U	0.0527 U	0.0348	0.05 U	0.0502 U	0.0522 U	
N	SW8290	TOTAL PECDD	NG/L	0.0505 U	0.0527 U	0.00144	0.05 U	0.0502 U	0.0522 U	
N	SW8290	TOTAL PCDF	NG/L	0.00254 U	0.0527 U	0.00701	0.05 U	0.00247 U	0.0522 U	
N	SW8290	TOTAL TCDD	NG/L	0.0101 U	0.0105 U	0.0102 U	0.01 U	0.01 U	0.0104 U	
N	SW8290	Total TCDF	NG/L	0.0124 U	0.0105 U	0.0102 U	0.01 U	0.0133 U	0.0104 U	

2009 Validated Tributary Surface Water Samples

				Location Field Sample ID Sample Depth SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	T5A-Baseline OL-0926-08 0-0 FT JA29933 JA29933X G383-776-8B JA29933-8 10/7/2009 WATER Regular sample Surface water	T5A-Baseline OL-0946-08 0-0 FT JA33399X JA33399 G383-783-8B JA33399-8 11/18/2009 WATER Regular sample Surface water	WF-Baseline OL-0788-02 0-0 FT JA25597 JA25597X JA25597-2 G383-758-2B 8/13/2009 WATER Regular sample Surface water	WF-Baseline OL-0905-02 0-0 FT JA27591 JA27591X G383-764-2B JA27591-2 9/9/2009 WATER Regular sample Surface water	WF-Baseline OL-0926-02 0-0 FT JA29933 JA29933X G383-776-2B JA29933-2 10/7/2009 WATER Regular sample Surface water	WF-Baseline OL-0946-02 0-0 FT JA33399 JA33399-2 11/18/2009 WATER Regular sample Surface water
Filtered	Method	Parameter Name	Units							
N	SM2540D	Total Suspended Solids	mg/l	13	4 U	7	4 U	8	4 U	
N	SW8082	AROCOR-1016	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1221	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1232	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1242	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1248	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1254	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1260	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	AROCOR-1268	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8082	PCBS, N.O.S.	ug/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
N	SW8290	1,2,3,4,6,7,8-HPCDD	NG/L	0.00827 J	0.11 U	0.00231 J	0.0501 U	0.0158 J		
N	SW8290	1,2,3,4,6,7,8-HPCDF	NG/L	0.0046 J	0.11 U	0.0502 U	0.0501 U	0.00926 J		
N	SW8290	1,2,3,4,7,8-HPCDF	NG/L	0.0505 U	0.11 U	0.0502 U	0.0501 U	0.00381 J		
N	SW8290	1,2,3,4,7,8-HXCDD	NG/L	0.0505 U	0.11 U	0.0502 U	0.0501 U	0.00446 J		
N	SW8290	1,2,3,4,7,8-HXCDF	NG/L	0.0505 U	0.11 U	0.0502 U	0.0501 U	0.0049 J		
N	SW8290	1,2,3,6,7,8-HXCDD	NG/L	0.0505 U	0.11 U	0.0502 U	0.0501 U	0.00482 J		
N	SW8290	1,2,3,6,7,8-HXCDF	NG/L	0.0505 U	0.11 U	0.0502 U	0.0501 U	0.00595 J		
N	SW8290	1,2,3,7,8,9-HXCDD	NG/L	0.0505 U	0.11 U	0.0502 U	0.0501 U	0.0048 J		
N	SW8290	1,2,3,7,8,9-HXCDF	NG/L	0.0505 U	0.11 U	0.0502 U	0.0501 U	0.00466 J		
N	SW8290	1,2,3,7,8-PECDD	NG/L	0.0505 U	0.11 U	0.0502 U	0.0501 U	0.00577 J		
N	SW8290	1,2,3,7,8-PECDF	NG/L	0.0505 U	0.11 U	0.0502 U	0.0501 U	0.00664 J		
N	SW8290	2,3,4,6,7,8-HXCDF	NG/L	0.0505 U	0.11 U	0.0502 U	0.0501 U	0.00383 J		
N	SW8290	2,3,4,7,8-PECDF	NG/L	0.0505 U	0.11 U	0.0502 U	0.0501 U	0.00531 J		
N	SW8290	2,3,7,8-TCDD	NG/L	0.0101 U	0.02 U	0.01 U	0.01 U	0.00242 J		
N	SW8290	2,3,7,8-TCDF	NG/L	0.0101 U	0.02 U	0.01 U	0.01 U	0.00165 J		
N	SW8290	OCDD	NG/L	0.0382 J	0.01 J	0.0163 J	0.1 U	0.106 J		
N	SW8290	OCDF	NG/L	0.00509 J	0.23 U	0.1 U	0.1 U	0.0202 J		
N	SW8290	TOTAL HPCDD	NG/L	0.0149	0.11 U	0.00231	0.0501 U	0.029 J		
N	SW8290	TOTAL HPCDF	NG/L	0.00862	0.11 U	0.0502 U	0.0501 U	0.016 J		
N	SW8290	TOTAL HXCDD	NG/L	0.0041	0.11 U	0.0502 U	0.0501 U	0.00926 J		
N	SW8290	TOTAL HXCDF	NG/L	0.00426	0.11 U	0.0502 U	0.0501 U	0.0242 J		
N	SW8290	TOTAL PECDD	NG/L	0.0505 U	0.11 U	0.0502 U	0.0501 U	0.00577 J		
N	SW8290	TOTAL PECDF	NG/L	0.00127	0.11 U	0.000984 U	0.0501 U	0.0119 J		
N	SW8290	TOTAL TCDD	NG/L	0.0101 U	0.02 U	0.01 U	0.01 U	0.0101 U		
N	SW8290	Total TCDF	NG/L	0.0101 U	0.02 U	0.0163 U	0.01 U	0.00165 J		

2009 Validated Tributary Surface Water Samples

				Location Field Sample ID Sample Depth SDG Lab Sample ID Sample Date Matrix Sample Purpose Sample Type	FIELD QC OL-0786-01 JA25453X JA25453 G383-757-1B JA25453-1 8/12/2009 WATER Field blank Blank water	FIELD QC OL-0788-01 JA25597 JA25597X G383-758-1B JA25597-1 8/13/2009 WATER Field blank Blank water	FIELD QC OL-0905-01 JA27591 JA27591X JA27591-1 G383-764-1B 9/9/2009 WATER Field blank Blank water	FIELD QC OL-0908-01 JA27747 JA27747X JA27747-1 G383-765-1B 9/10/2009 WATER Field blank Blank water	FIELD QC OL-0926-01 JA29933 JA29933X JA29933-1 G383-776-1B 10/7/2009 WATER Field blank Blank water	FIELD QC OL-0929-01 JA30069 JA30069X G383-777-1B JA30069-1 10/8/2009 WATER Field blank Blank water
Filtered	Method	Parameter Name	Units							
N	SM2540D	Total Suspended Solids	mg/l		4 U	4 U	4 U	4 U	4 U	5
N	SW8082	AROCOR-1016	ug/L		0.056 U	0.06 U	0.05 U	0.056 U	0.063 U	0.05 U
N	SW8082	AROCOR-1221	ug/L		0.056 U	0.06 U	0.05 U	0.056 U	0.063 U	0.05 U
N	SW8082	AROCOR-1232	ug/L		0.056 U	0.06 U	0.05 U	0.056 U	0.063 U	0.05 U
N	SW8082	AROCOR-1242	ug/L		0.056 U	0.06 U	0.05 U	0.056 U	0.063 U	0.05 U
N	SW8082	AROCOR-1248	ug/L		0.056 U	0.06 U	0.05 U	0.056 U	0.063 U	0.05 U
N	SW8082	AROCOR-1254	ug/L		0.056 U	0.06 U	0.05 U	0.056 U	0.063 U	0.05 U
N	SW8082	AROCOR-1260	ug/L		0.056 U	0.06 U	0.05 U	0.056 U	0.063 U	0.05 U
N	SW8082	AROCOR-1268	ug/L		0.056 U	0.06 U	0.05 U	0.056 U	0.063 U	0.05 U
N	SW8082	PCBS, N.O.S.	ug/L		0.056 U	0.06 U	0.05 U	0.056 U	0.063 U	0.05 U
N	SW8290	1,2,3,4,6,7,8-HPCDD	NG/L		0.0605 U	0.0579 U	0.0509 U	0.0678 U	0.071 U	0.0507 U
N	SW8290	1,2,3,4,6,7,8-HPCDF	NG/L		0.0605 U	0.0579 U	0.0509 U	0.0678 U	0.071 U	0.0507 U
N	SW8290	1,2,3,4,7,8,9-HPCDF	NG/L		0.0605 U	0.0579 U	0.0509 U	0.0678 U	0.071 U	0.0507 U
N	SW8290	1,2,3,4,7,8-HXCDD	NG/L		0.0605 U	0.0579 U	0.0509 U	0.0678 U	0.071 U	0.0507 U
N	SW8290	1,2,3,4,7,8-HXCDF	NG/L		0.0605 U	0.0579 U	0.0509 U	0.0678 U	0.071 U	0.0507 U
N	SW8290	1,2,3,6,7,8-HXCDD	NG/L		0.0605 U	0.0579 U	0.0509 U	0.0678 U	0.071 U	0.0507 U
N	SW8290	1,2,3,6,7,8-HXCDF	NG/L		0.0605 U	0.0579 U	0.0509 U	0.0678 U	0.071 U	0.0507 U
N	SW8290	1,2,3,7,8,9-HXCDD	NG/L		0.0605 U	0.0579 U	0.0509 U	0.0678 U	0.071 U	0.0507 U
N	SW8290	1,2,3,7,8,9-HXCDF	NG/L		0.0605 U	0.0579 U	0.0509 U	0.0678 U	0.071 U	0.0507 U
N	SW8290	1,2,3,7,8-PECDD	NG/L		0.0605 U	0.0579 U	0.0509 U	0.0678 U	0.071 U	0.0507 U
N	SW8290	1,2,3,7,8-PCDF	NG/L		0.0605 U	0.0579 U	0.0509 U	0.0678 U	0.071 U	0.0507 U
N	SW8290	2,3,4,6,7,8-HXCDF	NG/L		0.0605 U	0.0579 U	0.0509 U	0.0678 U	0.071 U	0.0507 U
N	SW8290	2,3,4,7,8-PCDF	NG/L		0.0605 U	0.0579 U	0.0509 U	0.0678 U	0.071 U	0.0507 U
N	SW8290	2,3,7,8-TCDD	NG/L		0.0121 U	0.0116 U	0.0102 U	0.0136 U	0.0142 U	0.0101 U
N	SW8290	2,3,7,8-TCDF	NG/L		0.0121 U	0.0116 U	0.0102 U	0.0136 U	0.0142 U	0.0101 U
N	SW8290	OCDD	NG/L		0.00528 U	0.116 U	0.102 U	0.136 U	0.142 U	0.101 U
N	SW8290	OCDF	NG/L		0.121 U	0.116 U	0.102 U	0.136 U	0.142 U	0.101 U
N	SW8290	TOTAL HPCDD	NG/L		0.0605 U	0.0579 U	0.0509 U	0.0678 U	0.071 U	0.0507 U
N	SW8290	TOTAL HPCDF	NG/L		0.0605 U	0.0579 U	0.0509 U	0.0678 U	0.071 U	0.0507 U
N	SW8290	TOTAL HXCDD	NG/L		0.0605 U	0.0579 U	0.0509 U	0.0678 U	0.071 U	0.0507 U
N	SW8290	TOTAL HXCDF	NG/L		0.0605 U	0.0579 U	0.0509 U	0.0678 U	0.071 U	0.0507 U
N	SW8290	TOTAL PECDD	NG/L		0.0605 U	0.0579 U	0.0509 U	0.0678 U	0.071 U	0.0507 U
N	SW8290	TOTAL PCDF	NG/L		0.00182 U	0.00389 U	0.0509 U	0.0678 U	0.071 U	0.0507 U
N	SW8290	TOTAL TCDD	NG/L		0.0121 U	0.0116 U	0.0102 U	0.0136 U	0.0142 U	0.0101 U
N	SW8290	Total TCDF	NG/L		0.0154 U	0.0171 U	0.0102 U	0.0136 U	0.0142 U	0.0101 U

2009 Validated Tributary Surface Water Samples

			Location	FIELD QC
			Field Sample ID	OL-0946-01
			Sample Depth	0-0 FT
			SDG	JA33399X JA33399
			Lab Sample ID	G383-783-1B JA33399-1
			Sample Date	11/18/2009
			Matrix	WATER
			Sample Purpose	Field blank
			Sample Type	Blank water
Filtered	Method	Parameter Name	Units	
N	SM2540D	Total Suspended Solids	mg/l	4 U
N	SW8082	AROCLOR-1016	ug/L	0.054 U
N	SW8082	AROCLOR-1221	ug/L	0.054 U
N	SW8082	AROCLOR-1232	ug/L	0.054 U
N	SW8082	AROCLOR-1242	ug/L	0.054 U
N	SW8082	AROCLOR-1248	ug/L	0.054 U
N	SW8082	AROCLOR-1254	ug/L	0.054 U
N	SW8082	AROCLOR-1260	ug/L	0.054 U
N	SW8082	AROCLOR-1268	ug/L	0.054 U
N	SW8082	PCBS, N.O.S.	ug/L	0.054 U
N	SW8290	1,2,3,4,6,7,8-HPCDD	NG/L	0.000958 J
N	SW8290	1,2,3,4,6,7,8-HPCDF	NG/L	0.05 U
N	SW8290	1,2,3,4,7,8,9-HPCDF	NG/L	0.05 U
N	SW8290	1,2,3,4,7,8-HXCDD	NG/L	0.05 U
N	SW8290	1,2,3,4,7,8-HXCDF	NG/L	0.000392 J
N	SW8290	1,2,3,6,7,8-HXCDD	NG/L	0.05 U
N	SW8290	1,2,3,6,7,8-HXCDF	NG/L	0.00037 J
N	SW8290	1,2,3,7,8,9-HXCDD	NG/L	0.05 U
N	SW8290	1,2,3,7,8,9-HXCDF	NG/L	0.05 U
N	SW8290	1,2,3,7,8-PECDD	NG/L	0.05 U
N	SW8290	1,2,3,7,8-PECDF	NG/L	0.0544 U
N	SW8290	2,3,4,6,7,8-HXCDF	NG/L	0.05 U
N	SW8290	2,3,4,7,8-PECDF	NG/L	0.000501 J
N	SW8290	2,3,7,8-TCDD	NG/L	0.00237 J
N	SW8290	2,3,7,8-TCDF	NG/L	0.01 U
N	SW8290	OCDD	NG/L	0.109 U
N	SW8290	OCDF	NG/L	0.1 U
N	SW8290	TOTAL HPCDD	NG/L	0.000958
N	SW8290	TOTAL HPCDF	NG/L	0.05 U
N	SW8290	TOTAL HXCDD	NG/L	0.05 U
N	SW8290	TOTAL HXCDF	NG/L	0.000392 U
N	SW8290	TOTAL PECDD	NG/L	0.000675
N	SW8290	TOTAL PECDF	NG/L	0.000348 U
N	SW8290	TOTAL TCDD	NG/L	0.01 U
N	SW8290	Total TCDF	NG/L	0.01 U

ATTACHMENT A-4

**VALIDATED LABORATORY DATA FOR
TRIBUTARY SEDIMENT SAMPLES**

2009 Baseline Book 3
Validated Tributary Sediment Analytical Data

Method	Parameter Name	Units	Location	LEYCK-STA-01	LEYCK-STA-01	LEYCK-STA-02	LEYCK-STA-02	LEYCK-STA-03	LEYCK-STA-03	LEYCK-STA-03	LEYCK-STA-04	LEYCK-STA-04
			Sample Date	09/04/2009	09/04/2009	09/04/2009	09/04/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009
			Field Sample ID	OL-1021-08	OL-1022-04	OL-1021-09	OL-1022-05	OL-1059-01	OL-1059-02	OL-1060-01	OL-1059-03	OL-1059-04
			SDG	GTX-9278	JA27359 JA27359R	GTX-9278	JA27359 JA27359R	JA33601	JA33601	GTX-9278	JA33601	JA33601
Sample Type	Sample Depth	Matrix	Sample Purpose	0-1 FT	0-1 Ft	0-1.2 FT	0-1.2 Ft	0-1.5 FT	0-1.5 Ft	0-1.5 FT	0-0.8 FT	0.8-1.5 FT
				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Field duplicate	Regular sample	Regular sample	Regular sample
Sample Type	Sample Depth	Matrix	Sample Purpose	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
ASTM D422	PARTICLES SMALLER THAN 0.002 MM	%		7		9				7		
ASTM D422	PARTICLES SMALLER THAN 0.0050 MM	%		10		12				13		
ASTM D422	PERCENT FINES (CLAY & SILT)	%		31.6		26.7				38.7		
ASTM D422	PERCENT GRAVEL	%		1.8		18.7				3.8		
ASTM D422	PERCENT SAND	%		66.6		54.6				57.5		
Lloyd Kahn	TOTAL ORGANIC CARBON	mg/kg			34500		60200	67400 J	58200 J		41300 J	74500 J
SM2540G	SOLIDS, PERCENT	%			56.5		51.3	37.2	49		49.1	46.8
SW6010	ARSENIC	mg/kg			4.3		7.4	7.4 J	4.3 J		6.6 J	8.2 J
SW6010	CADMIUM	mg/kg			4		4.9	2.6 J	1.2 J		25.2 J	35.6 J
SW6010	CHROMIUM	mg/kg			54.4		57.7	143 J	97.4 J		172 J	225 J
SW6010	COPPER	mg/kg			62.9		76.2	157 J	79.6 J		198 J	249 J
SW6010	LEAD	mg/kg			133		115	116 J	128 J		107 J	142 J
SW6010	NICKEL	mg/kg			18.1		22.3	53.4 J	30.7 J		41.2 J	50.6 J
SW6010	ZINC	mg/kg			361		225	676 J	191 J		345 J	411 J
SW7471	MERCURY	mg/kg			0.18		0.41	0.19 J	0.52 J		0.46 J	0.56 J
SW8015	PETROLEUM HYDROCARBONS C10-C28	mg/kg			203		138	987 J	927 J		245 J	333 J
SW8082	2,2',3,3',4,4',5,5',6-NONACHLOROBIPHENYL	ug/kg			6 U		3 J	45 UJ			8.6 UJ	18 UJ
SW8082	2,2',3,4',5,5',6-HEPTACHLOROBIPHENYL	ug/kg			7.5		8.5	20.4 J			12.2 J	18.8 J
SW8082	2,2',3,4,4',5',6-HEPTACHLOROBIPHENYL	ug/kg			3.2 J		3.6 J	45 UJ			4.9 J	7.7 J
SW8082	2,2',3,4,5'-PENTACHLOROBIPHENYL	ug/kg			14.7		16.8	80.6 J			23.8 J	46.6 J
SW8082	2,2',3,5'-TETRACHLOROBIPHENYL	ug/kg			53.5		65.2	207 J			122 J	253 J
SW8082	2,2',3,5,5',6-HEXACHLOROBIPHENYL	ug/kg			4.5 J		4.1 J	34.4 J			6.3 J	11.9 J
SW8082	2,2',5-TRICHLOROBIPHENYL	ug/kg			38.9		37.6	115 J			90.3 J	164 J
SW8082	AROCLOR-1016	ug/kg			5.8 U		6.5 U	8.8 UJ	6.7 UJ		6.7 UJ	7.1 UJ
SW8082	AROCLOR-1221	ug/kg			5.8 U		6.5 U	8.8 UJ	6.7 UJ		6.7 UJ	7.1 UJ
SW8082	AROCLOR-1232	ug/kg			5.8 U		6.5 U	8.8 UJ	6.7 UJ		6.7 UJ	7.1 UJ
SW8082	AROCLOR-1242	ug/kg			764		1060	3810 J	2940 J		1110 J	1390 J
SW8082	AROCLOR-1248	ug/kg			5.8 U		6.5 U	8.8 UJ	6.7 UJ		6.7 UJ	7.1 UJ
SW8082	AROCLOR-1254	ug/kg			181		242	1010 J	866 J		435 J	475 J
SW8082	AROCLOR-1260	ug/kg			46.3		59.8	344 J	340 J		101 J	109 J
SW8082	AROCLOR-1268	ug/kg			5.8 U		6.5 U	8.8 UJ	6.7 UJ		6.7 UJ	7.1 UJ
SW8082	PCB 101	ug/kg			30.3 J		32.9 J	107 J			52.7 J	106 J
SW8082	PCB 118	ug/kg			15.6		14.7 J	43.6 J			37 J	68 J
SW8082	PCB 138	ug/kg			18.3 J		19.3	56.3 J			25 J	41 J
SW8082	PCB 153	ug/kg			16.6 J		26.1 J	73.2 J			31.7 J	52.4 J
SW8082	PCB 209	ug/kg			6 U		2.3 J	45 UJ			8.6 UJ	18 UJ
SW8082	PCB 28	ug/kg			80		92.8	380 J			173 J	391 J
SW8082	PCB 52	ug/kg			84.4		94.8	299 J			166 J	323 J
SW8082	PCB-105	ug/kg			6.7 J		7.3 J	21.8 J			13.6 J	26.5 J
SW8082	PCB-123	ug/kg			3.9 JN		5 JN	24.8 J			6 J	13.8 J
SW8082	PCB-126	ug/kg			6 U		6.6 U	45 UJ			8.6 UJ	18 UJ
SW8082	PCB-128/162	ug/kg			3.3 J		4.1 J	45 UJ			5.2 J	8.4 J
SW8082	PCB-156	ug/kg			6 U		6.6 U	45 UJ			8.6 UJ	18 UJ
SW8082	PCB-157	ug/kg			6 U		6.6 U	45 UJ			8.6 UJ	18 UJ
SW8082	PCB-167	ug/kg			6 U		6.6 U	45 UJ			8.6 UJ	18 UJ
SW8082	PCB-169	ug/kg			6 U		6.6 U	45 UJ			8.6 UJ	18 UJ
SW8082	PCB-170	ug/kg			7.9		9.4	25.6 J			11.4 J	19.2 J
SW8082	PCB-180	ug/kg			13		14	48.3 J			18.5 J	30.7 J
SW8082	PCB-184	ug/kg			6 U		6.6 U	45 UJ			8.6 UJ	18 UJ
SW8082	PCB-195	ug/kg			6 U		6.6 U	45 UJ			8.6 UJ	18 UJ
SW8082	PCB-49	ug/kg			69.9		72.6	193 J			138 J	267 J
SW8082	PCB-66	ug/kg			36.7		45.1	152 J			86.1 J	171 J
SW8082	PCB-77	ug/kg			6.4 J		13.1	45.2 J			17.3 J	27.6 J
SW8082	PCB-8	ug/kg			9.9 J		14.1 J	51.6 J			26.3 J	43.4 J
SW8082	PCB-90/101	ug/kg			6 U		6.6 U	45 UJ			8.6 UJ	18 UJ
SW8082	PCBS, N.O.S.	ug/kg			991		1360	5160 J	4150 J		1650 J	1970 J

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Validated Tributary Sediment Analytical Data

		Location	LEYCK-STA-01	LEYCK-STA-01	LEYCK-STA-02	LEYCK-STA-02	LEYCK-STA-03	LEYCK-STA-03	LEYCK-STA-03	LEYCK-STA-04	LEYCK-STA-04
		Sample Date	09/04/2009	09/04/2009	09/04/2009	09/04/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009	11/19/2009
		Field Sample ID	OL-1021-08	OL-1022-04	OL-1021-09	OL-1022-05	OL-1059-01	OL-1059-02	OL-1060-01	OL-1059-03	OL-1059-04
		SDG	GTX-9278	JA27359 JA27359R	GTX-9278	JA27359 JA27359R	JA33601	JA33601	GTX-9278	JA33601	JA33601
		Sample Depth	0-1 FT	0-1 Ft	0-1.2 FT	0-1.2 Ft	0-1.5 FT	0-1.5 Ft	0-1.5 FT	0-0.8 FT	0.8-1.5 FT
		Matrix	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Field duplicate	Regular sample	Regular sample	Regular sample
		Sample Type	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
Method	Parameter Name	Units									
SW8260	1,1,1-TRICHLOROETHANE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	1,1,2,2-TETRACHLOROETHANE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	1,1,2-TRICHLOROETHANE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	1,1-DICHLOROETHANE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	1,1-DICHLOROETHENE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	1,2,3-TRICHLOROBENZENE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	1,2,4-TRICHLOROBENZENE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	1,2-DIBROMO-3-CHLOROPROPANE	ug/kg		20 U		22 U	27 UJ	20 UJ		23 UJ	21 UJ
SW8260	1,2-DIBROMOETHANE	ug/kg		2 U		2.2 U	2.7 UJ	2 UJ		2.3 UJ	2.1 UJ
SW8260	1,2-DICHLOROBENZENE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	1,2-DICHLOROETHANE	ug/kg		2 U		2.2 U	2.7 UJ	2 UJ		2.3 UJ	2.1 UJ
SW8260	1,2-DICHLOROPROPANE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	1,3,5-TRICHLOROBENZENE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	1,3-DICHLOROBENZENE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	1,4-DICHLOROBENZENE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	2-BUTANONE	ug/kg		20 U		69.3	R	20 UJ		23 UJ	21 UJ
SW8260	2-HEXANONE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	4-METHYL-2-PENTANONE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	ACETONE	ug/kg		38.1		235 J	427 J	R		43.7 J	109 J
SW8260	BENZENE	ug/kg		2 U		2.2 U	2.7 UJ	2 UJ		2.3 UJ	2.1 UJ
SW8260	BROMODICHLOROMETHANE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	BROMOFORM	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	BROMOMETHANE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	CARBON DISULFIDE	ug/kg		9.8 U		3.4 J	4.4 J	1.3 J		2.3 J	3.7 J
SW8260	CARBON TETRACHLORIDE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	CHLOROBENZENE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	CHLORODIBROMOMETHANE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	CHLOROETHANE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	CHLOROFORM	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	CHLOROMETHANE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	CIS-1,2-DICHLOROETHENE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	CIS-1,3-DICHLOROPROPENE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	CYCLOHEXANE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	DICHLORODIFLUOROMETHANE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	ETHYLBENZENE	ug/kg		2 U		2.2 U	2.7 UJ	2 UJ		2.3 UJ	2.1 UJ
SW8260	ISOPROPYLBENZENE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	METHYL ACETATE	ug/kg		9.8 U		25.2	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	METHYL TERT-BUTYL ETHER	ug/kg		2 U		2.2 U	2.7 UJ	2 UJ		2.3 UJ	2.1 UJ
SW8260	METHYLCYCLOHEXANE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	METHYLENE CHLORIDE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	O-XYLENE	ug/kg		2 U		2.2 U	2.7 UJ	2 UJ		2.3 UJ	2.1 UJ
SW8260	STYRENE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	TETRACHLOROETHENE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	TOLUENE	ug/kg		2 U		2.2 U	2.7 UJ	2 UJ		2.3 UJ	2.1 UJ
SW8260	TRANS-1,2-DICHLOROETHENE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	TRANS-1,3-DICHLOROPROPENE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	TRICHLOROETHENE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	TRICHLOROFLUOROMETHANE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	VINYL CHLORIDE	ug/kg		9.8 U		11 U	14 UJ	10 UJ		11 UJ	10 UJ
SW8260	XYLENES, M & P	ug/kg		3.9 U		4.4 U	5.5 UJ	4.1 UJ		4.5 UJ	4.1 UJ
SW8260	XYLENES, TOTAL	ug/kg		3.9 U		4.4 U	5.5 UJ	4.1 UJ		4.5 UJ	4.1 UJ

Validated Tributary Sediment Analytical Data

Method	Parameter Name	Units	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
	Sample Type										
SW8270	1,1'-BIPHENYL	ug/kg		100 UJ		110 UJ	730 J		1490 J		120 UJ
SW8270	2,2'-OXYBIS(1-CHLOROPROPANE)	ug/kg		100 UJ		110 UJ	150 UJ		120 UJ		120 UJ
SW8270	2,4,5-TRICHLOROPHENOL	ug/kg		250 UJ		280 UJ	380 UJ		290 UJ		310 UJ
SW8270	2,4,6-TRICHLOROPHENOL	ug/kg		250 UJ		280 UJ	380 UJ		290 UJ		310 UJ
SW8270	2,4-DICHLOROPHENOL	ug/kg		250 UJ		280 UJ	380 UJ		290 UJ		310 UJ
SW8270	2,4-DIMETHYLPHENOL	ug/kg		250 UJ		280 UJ	380 UJ		101 J		310 UJ
SW8270	2,4-DINITROPHENOL	ug/kg		1000 UJ		1100 UJ	1500 UJ		1200 UJ		1200 UJ
SW8270	2,4-DINITROTOLUENE	ug/kg		100 UJ		110 UJ	150 UJ		120 UJ		120 UJ
SW8270	2,6-DINITROTOLUENE	ug/kg		100 UJ		110 UJ	150 UJ		120 UJ		120 UJ
SW8270	2-CHLORONAPHTHALENE	ug/kg		100 UJ		110 UJ	150 UJ		120 UJ		120 UJ
SW8270	2-CHLOROPHENOL	ug/kg		250 UJ		280 UJ	380 UJ		290 UJ		310 UJ
SW8270	2-METHYLNAPHTHALENE	ug/kg		100 UJ		570 J	2280 J		5480 J		120 UJ
SW8270	2-METHYLPHENOL	ug/kg		100 UJ		110 UJ	150 UJ		120 UJ		120 UJ
SW8270	2-NITROANILINE	ug/kg		250 UJ		280 UJ	380 UJ		290 UJ		310 UJ
SW8270	2-NITROPHENOL	ug/kg		250 UJ		280 UJ	380 UJ		290 UJ		310 UJ
SW8270	3&4-METHYLPHENOL	ug/kg		100 UJ		110 UJ	160 J		269 J		120 UJ
SW8270	3,3'-DICHLORO BENZIDINE	ug/kg		250 UJ		280 UJ	380 UJ		290 UJ		310 UJ
SW8270	3-NITROANILINE	ug/kg		250 UJ		280 UJ	380 UJ		290 UJ		310 UJ
SW8270	4,6-DINITRO-2-METHYLPHENOL	ug/kg		1000 UJ		1100 UJ	1500 UJ		1200 UJ		1200 UJ
SW8270	4-BROMOPHENYL PHENYL ETHER	ug/kg		100 UJ		110 UJ	150 UJ		120 UJ		120 UJ
SW8270	4-CHLORO-3-METHYLPHENOL	ug/kg		250 UJ		280 UJ	380 UJ		290 UJ		310 UJ
SW8270	4-CHLOROANILINE	ug/kg		250 UJ		280 UJ	380 UJ		290 UJ		310 UJ
SW8270	4-CHLOROPHENYL PHENYL ETHER	ug/kg		100 UJ		110 UJ	150 UJ		120 UJ		120 UJ
SW8270	4-NITROANILINE	ug/kg		250 UJ		280 UJ	380 UJ		290 UJ		310 UJ
SW8270	4-NITROPHENOL	ug/kg		500 UJ		560 UJ	770 UJ		580 UJ		610 UJ
SW8270	ACENAPHTHENE	ug/kg		104 J		305 J	11200 J		13400 J		109 J
SW8270	ACENAPHTHYLENE	ug/kg		203 J		222 J	527 J		1990 J		395 J
SW8270	ANTHRACENE	ug/kg		556 J		867 J	17100 J		20100 J		654 J
SW8270	ATRAZINE	ug/kg		250 UJ		280 UJ	380 UJ		290 UJ		310 UJ
SW8270	BENZALDEHYDE	ug/kg		250 UJ		280 UJ	380 UJ		290 UJ		310 UJ
SW8270	BENZO(A)ANTHRACENE	ug/kg		1700 J		2140 J	34700 J		36000 J		1310 J
SW8270	BENZO(A)PYRENE	ug/kg		1830 J		2100 J	28900 J		25600 J		1490 J
SW8270	BENZO(B)FLUORANTHENE	ug/kg		2170 J		2260 J	41600 J		35100 J		2380 J
SW8270	BENZO(G,H,I)PERYLENE	ug/kg		742 J		689 J	15300 J		12600 J		1080 J
SW8270	BENZO(K)FLUORANTHENE	ug/kg		1800 J		1980 J	13000 J		12200 J		598 J
SW8270	BIS(2-CHLOROETHOXY)METHANE	ug/kg		100 UJ		110 UJ	150 UJ		120 UJ		120 UJ
SW8270	BIS(2-CHLOROETHYL)ETHER	ug/kg		100 UJ		110 UJ	150 UJ		120 UJ		120 UJ
SW8270	BIS(2-ETHYLHEXYL)PHTHALATE	ug/kg		3610 J		204 J	1230 J		1150 J		418 J
SW8270	BUTYLBENZYL PHTHALATE	ug/kg		100 UJ		110 UJ	217 J		162 J		120 UJ
SW8270	CAPROLACTAM	ug/kg		100 UJ		110 UJ	150 UJ		120 UJ		120 UJ
SW8270	CARBAZOLE	ug/kg		176 J		326 J	13400 J		11400 J		202 J
SW8270	CHRYSENE	ug/kg		2000 J		2270 J	35900 J		35000 J		1380 J
SW8270	DI-N-BUTYL PHTHALATE	ug/kg		56.2 J		110 UJ	150 UJ		120 UJ		120 UJ
SW8270	DI-N-OCTYL PHTHALATE	ug/kg		100 UJ		110 UJ	150 UJ		120 UJ		120 UJ
SW8270	DIBENZO(A,H)ANTHRACENE	ug/kg		278 J		316 J	3620 J		4610 J		303 J
SW8270	DIBENZOFURAN	ug/kg		51.8 J		194 J	6780 J		10000 J		45 J
SW8270	DIETHYL PHTHALATE	ug/kg		100 UJ		110 UJ	150 UJ		120 UJ		120 UJ
SW8270	DIMETHYL PHTHALATE	ug/kg		100 UJ		110 UJ	150 UJ		120 UJ		120 UJ
SW8270	FLUORANTHENE	ug/kg		4280 J		6880 J	99000 J		84700 J		3760 J
SW8270	FLUORENE	ug/kg		144 J		381 J	12300 J		17100 J		142 J
SW8270	HEXACHLORO BENZENE	ug/kg		100 UJ		110 UJ	150 UJ		120 UJ		120 UJ
SW8270	HEXACHLORO BUTADIENE	ug/kg		50 UJ		56 UJ	77 UJ		58 UJ		61 UJ
SW8270	HEXACHLORO CYCLOPENTADIENE	ug/kg		1000 UJ		1100 UJ	1500 UJ		1200 UJ		1200 UJ
SW8270	HEXACHLOROETHANE	ug/kg		250 UJ		280 UJ	380 UJ		290 UJ		310 UJ
SW8270	INDENO(1,2,3-CD)PYRENE	ug/kg		806 J		795 J	19400 J		16500 J		913 J
SW8270	ISOPHORONE	ug/kg		100 UJ		110 UJ	150 UJ		120 UJ		120 UJ
SW8270	N-NITROSO-DI-N-PROPYLAMINE	ug/kg		100 UJ		110 UJ	150 UJ		120 UJ		120 UJ
SW8270	N-NITROSODIPHENYLAMINE	ug/kg		250 UJ		280 UJ	380 UJ		290 UJ		310 UJ
SW8270	NAPHTHALENE	ug/kg		44.1 J		362 J	6360 J		10700 J		25.2 J
SW8270	NITRO BENZENE	ug/kg		100 UJ		110 UJ	150 UJ		120 UJ		120 UJ
SW8270	PENTACHLOROPHENOL	ug/kg		500 UJ		560 UJ	770 UJ		580 UJ		610 UJ
SW8270	PHENANTHRENE	ug/kg		1510 J		2700 J	108000 J		107000 J		1520 J
SW8270	PHENOL	ug/kg		100 UJ		110 UJ	150 UJ		206 J		120 UJ
SW8270	PYRENE	ug/kg		3150 J		3690 J	78900 J		77000 J		2750 J
SW8270	TENTATIVELY IDENTIFIED COMPOUND	ug/kg		250 UJ		280 UJ	57.2 J		290 UJ		310 UJ

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		Location	LEYCK-STA-04	LEYCK-STA-04	LEYCK-STA-05	LEYCK-STA-05	ONCK-STA-01	ONCK-STA-01	ONCK-STA-02	ONCK-STA-03	ONCK-STA-03
		Sample Date	11/19/2009	11/19/2009	11/19/2009	11/19/2009	09/03/2009	09/03/2009	09/03/2009	09/03/2009	09/03/2009
		Field Sample ID	OL-1060-02	OL-1060-03	OL-1059-05	OL-1060-04	OL-1020-01	OL-1021-01	OL-1020-02	OL-1020-03	OL-1021-02
		SDG	GTX-9278	GTX-9278	JA33601	GTX-9278	JA27310 JA27310R	GTX-9278	JA27310 JA27310R	JA27310 JA27310R	GTX-9278
		Sample Depth	0-0.8 FT	0.8-1.5 FT	0-1.5 FT	0-1.5 FT	0-1.5 Ft	0-1.5 FT	0-1.25 Ft	0-1.5 Ft	0-1.5 FT
		Matrix	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
		Sample Type	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
Method	Parameter Name	Units									
ASTM D422	PARTICLES SMALLER THAN 0.002 MM	%	10	14		9		23			25
ASTM D422	PARTICLES SMALLER THAN 0.0050 MM	%	20	21		14		36			37
ASTM D422	PERCENT FINES (CLAY & SILT)	%	84.5	79.7		45.1		93.9			98.6
ASTM D422	PERCENT GRAVEL	%	0	0		0.6		0			0
ASTM D422	PERCENT SAND	%	15.5	20.3		54.3		6.1			1.4
Lloyd Kahn	TOTAL ORGANIC CARBON	mg/kg			15400 J		23100		21400	23600	
SM2540G	SOLIDS, PERCENT	%			75.7		53		49.6	53.3	
SW6010	ARSENIC	mg/kg			3.2		5.3		4.7	5.5	
SW6010	CADMIUM	mg/kg			1.8		1.2		0.42 J	0.53	
SW6010	CHROMIUM	mg/kg			18.8		29.6		26.7	25.1	
SW6010	COPPER	mg/kg			56.3 J		57.1		54.8	56.9	
SW6010	LEAD	mg/kg			36.5		59.4 J		48.5 J	46.3 J	
SW6010	NICKEL	mg/kg			11.6		25.1 J		24.4 J	24.5 J	
SW6010	ZINC	mg/kg			94.9 J		143 J		144 J	141 J	
SW7471	MERCURY	mg/kg			0.042		0.35		0.19	0.17	
SW8015	PETROLEUM HYDROCARBONS C10-C28	mg/kg			170		284		199	192 J	
SW8082	2,2',3,3',4,4',5,5',6-NONACHLOROBIPHENYL	ug/kg					1.1 J				
SW8082	2,2',3,4',5,5',6-HEPTACHLOROBIPHENYL	ug/kg					4.4 J				
SW8082	2,2',3,4,4',5',6-HEPTACHLOROBIPHENYL	ug/kg					2 J				
SW8082	2,2',3,4,5'-PENTACHLOROBIPHENYL	ug/kg					13.5				
SW8082	2,2',3,5'-TETRACHLOROBIPHENYL	ug/kg					6.8				
SW8082	2,2',3,5,5',6-HEXACHLOROBIPHENYL	ug/kg					3.6 J				
SW8082	2,2',5-TRICHLOROBIPHENYL	ug/kg					6.3 U				
SW8082	AROCLOR-1016	ug/kg			4.3 U		6.2 U		6.6 U	6.2 U	
SW8082	AROCLOR-1221	ug/kg			4.3 U		6.2 U		6.6 U	6.2 U	
SW8082	AROCLOR-1232	ug/kg			4.3 U		6.2 U		6.6 U	6.2 U	
SW8082	AROCLOR-1242	ug/kg			703		6.2 U		6.6 U	6.2 U	
SW8082	AROCLOR-1248	ug/kg			4.3 U		44.3		23.3	22.1	
SW8082	AROCLOR-1254	ug/kg			166		28.4		12.6 J	12.1 J	
SW8082	AROCLOR-1260	ug/kg			43.6		15.4 J		8.7	8.5 J	
SW8082	AROCLOR-1268	ug/kg			4.3 U		6.2 U		6.6 U	6.2 U	
SW8082	PCB 101	ug/kg					21.5 J				
SW8082	PCB 118	ug/kg					12 J				
SW8082	PCB 138	ug/kg					22.5				
SW8082	PCB 153	ug/kg					16.4 J				
SW8082	PCB 209	ug/kg					3.2 U				
SW8082	PCB 28	ug/kg					7				
SW8082	PCB 52	ug/kg					15.2				
SW8082	PCB-105	ug/kg					6.1 J				
SW8082	PCB-123	ug/kg					2.4 JN				
SW8082	PCB-126	ug/kg					3.2 U				
SW8082	PCB-128/162	ug/kg					5.3				
SW8082	PCB-156	ug/kg					2.5 J				
SW8082	PCB-157	ug/kg					3.2 U				
SW8082	PCB-167	ug/kg					3.2 U				
SW8082	PCB-169	ug/kg					3.2 U				
SW8082	PCB-170	ug/kg					5.5				
SW8082	PCB-180	ug/kg					8.1				
SW8082	PCB-184	ug/kg					3.2 U				
SW8082	PCB-195	ug/kg					3.2 U				
SW8082	PCB-49	ug/kg					6.4				
SW8082	PCB-66	ug/kg					6.5 J				
SW8082	PCB-77	ug/kg					3.5 J				
SW8082	PCB-8	ug/kg					6.3 U				
SW8082	PCB-90/101	ug/kg					3.2 U				
SW8082	PCBS, N.O.S.	ug/kg			913		88.1 J		44.6	42.6 J	

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			Location	LEYCK-STA-04	LEYCK-STA-04	LEYCK-STA-05	LEYCK-STA-05	ONCK-STA-01	ONCK-STA-01	ONCK-STA-02	ONCK-STA-03	ONCK-STA-03
			Sample Date	11/19/2009	11/19/2009	11/19/2009	11/19/2009	09/03/2009	09/03/2009	09/03/2009	09/03/2009	09/03/2009
			Field Sample ID	OL-1060-02	OL-1060-03	OL-1059-05	OL-1060-04	OL-1020-01	OL-1021-01	OL-1020-02	OL-1020-03	OL-1021-02
			SDG	GTX-9278	GTX-9278	JA33601	GTX-9278	JA27310 JA27310R	GTX-9278	JA27310 JA27310R	JA27310 JA27310R	GTX-9278
			Sample Depth	0-0.8 FT	0.8-1.5 FT	0-1.5 FT	0-1.5 FT	0-1.5 Ft	0-1.5 FT	0-1.25 Ft	0-1.5 Ft	0-1.5 FT
			Matrix	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
			Sample Type	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
Method	Parameter Name	Units										
SW8260	1,1,1-TRICHLOROETHANE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	1,1,2,2-TETRACHLOROETHANE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	1,1,2-TRICHLOROETHANE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	1,1-DICHLOROETHANE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	1,1-DICHLOROETHENE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	1,2,3-TRICHLOROBENZENE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	1,2,4-TRICHLOROBENZENE	ug/kg				6 U		10 U		11 U	R	
SW8260	1,2-DIBROMO-3-CHLOROPROPANE	ug/kg				12 U		21 U		22 U	19 U	
SW8260	1,2-DIBROMOETHANE	ug/kg				1.2 U		2.1 U		2.2 U	1.9 U	
SW8260	1,2-DICHLOROBENZENE	ug/kg				6 U		10 U		11 U	9.4 UJ	
SW8260	1,2-DICHLOROETHANE	ug/kg				1.2 U		2.1 U		2.2 U	1.9 U	
SW8260	1,2-DICHLOROPROPANE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	1,3,5-TRICHLOROBENZENE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	1,3-DICHLOROBENZENE	ug/kg				6 U		10 U		11 U	9.4 UJ	
SW8260	1,4-DICHLOROBENZENE	ug/kg				6 U		7.7 J		11 U	9.4 UJ	
SW8260	2-BUTANONE	ug/kg				12 U		26.4		22 U	19 U	
SW8260	2-HEXANONE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	4-METHYL-2-PENTANONE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	ACETONE	ug/kg				R		56.9 J		22 UJ	19.8 J	
SW8260	BENZENE	ug/kg				1.2 U		2.1 U		2.2 U	1.9 U	
SW8260	BROMODICHLOROMETHANE	ug/kg				6 U		10 U		11 U	9.4 UJ	
SW8260	BROMOFORM	ug/kg				6 U		10 U		11 U	9.4 UJ	
SW8260	BROMOMETHANE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	CARBON DISULFIDE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	CARBON TETRACHLORIDE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	CHLOROBENZENE	ug/kg				6 U		14.5		11 U	9.4 U	
SW8260	CHLORODIBROMOMETHANE	ug/kg				6 U		10 U		11 U	9.4 UJ	
SW8260	CHLOROETHANE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	CHLOROFORM	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	CHLOROMETHANE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	CIS-1,2-DICHLOROETHENE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	CIS-1,3-DICHLOROPROPENE	ug/kg				6 U		10 U		11 U	9.4 UJ	
SW8260	CYCLOHEXANE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	DICHLORODIFLUOROMETHANE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	ETHYLBENZENE	ug/kg				1.2 U		2.1 U		2.2 U	1.9 U	
SW8260	ISOPROPYLBENZENE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	METHYL ACETATE	ug/kg				6 U		11.9		45.9	19.1 J	
SW8260	METHYL TERT-BUTYL ETHER	ug/kg				1.2 U		2.1 U		2.2 U	2.5	
SW8260	METHYLCYCLOHEXANE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	METHYLENE CHLORIDE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	O-XYLENE	ug/kg				1.2 U		2.1 U		2.2 U	1.9 U	
SW8260	STYRENE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	TETRACHLOROETHENE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	TOLUENE	ug/kg				1.2 U		2.1 U		2.2 U	1.9 U	
SW8260	TRANS-1,2-DICHLOROETHENE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	TRANS-1,3-DICHLOROPROPENE	ug/kg				6 U		10 U		11 U	9.4 UJ	
SW8260	TRICHLOROETHENE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	TRICHLOROFLUOROMETHANE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	VINYL CHLORIDE	ug/kg				6 U		10 U		11 U	9.4 U	
SW8260	XYLENES, M & P	ug/kg				2.4 U		4.2 U		4.4 U	3.8 U	
SW8260	XYLENES, TOTAL	ug/kg				2.4 U		4.2 U		4.4 U	3.8 U	

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		Location	LEYCK-STA-04	LEYCK-STA-04	LEYCK-STA-05	LEYCK-STA-05	ONCK-STA-01	ONCK-STA-01	ONCK-STA-02	ONCK-STA-03	ONCK-STA-03
		Sample Date	11/19/2009	11/19/2009	11/19/2009	11/19/2009	09/03/2009	09/03/2009	09/03/2009	09/03/2009	09/03/2009
		Field Sample ID	OL-1060-02	OL-1060-03	OL-1059-05	OL-1060-04	OL-1020-01	OL-1021-01	OL-1020-02	OL-1020-03	OL-1021-02
		SDG	GTX-9278	GTX-9278	JA33601	GTX-9278	JA27310 JA27310R	GTX-9278	JA27310 JA27310R	JA27310 JA27310R	GTX-9278
		Sample Depth	0-0.8 FT	0.8-1.5 FT	0-1.5 FT	0-1.5 FT	0-1.5 Ft	0-1.5 FT	0-1.25 Ft	0-1.5 Ft	0-1.5 FT
		Matrix	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
		Sample Type	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
Method	Parameter Name	Units									
SW8270	1,1'-BIPHENYL	ug/kg			23 J		19.8 J		120 U	110 U	
SW8270	2,2'-OXYBIS(1-CHLOROPROPANE)	ug/kg			75 U		110 U		120 U	110 U	
SW8270	2,4,5-TRICHLOROPHENOL	ug/kg			190 U		270 U		290 U	270 U	
SW8270	2,4,6-TRICHLOROPHENOL	ug/kg			190 U		270 U		290 U	270 U	
SW8270	2,4-DICHLOROPHENOL	ug/kg			190 U		270 U		290 U	270 U	
SW8270	2,4-DIMETHYLPHENOL	ug/kg			190 U		270 UJ		290 UJ	270 UJ	
SW8270	2,4-DINITROPHENOL	ug/kg			750 UJ		1100 UJ		1200 UJ	1100 UJ	
SW8270	2,4-DINITROTOLUENE	ug/kg			75 U		110 U		120 U	110 U	
SW8270	2,6-DINITROTOLUENE	ug/kg			75 U		110 U		120 U	110 U	
SW8270	2-CHLORONAPHTHALENE	ug/kg			75 U		110 U		120 U	110 U	
SW8270	2-CHLOROPHENOL	ug/kg			190 U		270 U		290 U	270 U	
SW8270	2-METHYLNAPHTHALENE	ug/kg			73 J		78.3 J		120 U	110 U	
SW8270	2-METHYLPHENOL	ug/kg			75 U		110 U		120 U	110 U	
SW8270	2-NITROANILINE	ug/kg			190 U		270 U		290 U	270 U	
SW8270	2-NITROPHENOL	ug/kg			190 U		270 U		290 U	270 U	
SW8270	3&4-METHYLPHENOL	ug/kg			75 U		110 U		120 U	110 U	
SW8270	3,3'-DICHLOROBENZIDINE	ug/kg			190 U		270 U		290 U	270 U	
SW8270	3-NITROANILINE	ug/kg			190 U		270 U		290 U	270 U	
SW8270	4,6-DINITRO-2-METHYLPHENOL	ug/kg			750 U		1100 U		1200 UJ	1100 UJ	
SW8270	4-BROMOPHENYL PHENYL ETHER	ug/kg			75 U		110 U		120 U	110 U	
SW8270	4-CHLORO-3-METHYLPHENOL	ug/kg			190 U		270 U		290 U	270 U	
SW8270	4-CHLOROANILINE	ug/kg			190 U		270 U		290 U	270 U	
SW8270	4-CHLOROPHENYL PHENYL ETHER	ug/kg			75 U		110 U		120 U	110 U	
SW8270	4-NITROANILINE	ug/kg			190 U		270 U		290 U	270 U	
SW8270	4-NITROPHENOL	ug/kg			380 U		540 U		580 U	540 U	
SW8270	ACENAPHTHENE	ug/kg			276		148		50 J	54 U	
SW8270	ACENAPHTHYLENE	ug/kg			90.1		197		51.8 J	33.5 J	
SW8270	ANTHRACENE	ug/kg			658		397		116	91.6 J	
SW8270	ATRAZINE	ug/kg			190 U		270 UJ		290 UJ	270 U	
SW8270	BENZALDEHYDE	ug/kg			190 U		270 U		290 U	270 U	
SW8270	BENZO(A)ANTHRACENE	ug/kg			1990 J		878		441	349 J	
SW8270	BENZO(A)PYRENE	ug/kg			1790 J		1010		585	463 J	
SW8270	BENZO(B)FLUORANTHENE	ug/kg			2700 J		936		764	559 J	
SW8270	BENZO(G,H,I)PERYLENE	ug/kg			1010		771		561	424 J	
SW8270	BENZO(K)FLUORANTHENE	ug/kg			797 J		761		446	368 J	
SW8270	BIS(2-CHLOROETHOXY)METHANE	ug/kg			75 U		110 U		120 U	110 U	
SW8270	BIS(2-CHLOROETHYL)ETHER	ug/kg			75 U		110 U		120 U	110 U	
SW8270	BIS(2-ETHYLHEXYL)PHTHALATE	ug/kg			198		852		1060	762	
SW8270	BUTYLBENZYL PHTHALATE	ug/kg			75 U		110 U		120 U	110 U	
SW8270	CAPROLACTAM	ug/kg			75 U		110 U		120 U	110 U	
SW8270	CARBAZOLE	ug/kg			464		85.9 J		57.6 J	51.4 J	
SW8270	CHRYSENE	ug/kg			1870 J		1210		750	597 J	
SW8270	DI-N-BUTYL PHTHALATE	ug/kg			75 U		110 U		120 U	110 U	
SW8270	DI-N-OCTYL PHTHALATE	ug/kg			75 U		110 U		120 U	110 U	
SW8270	DIBENZO(A,H)ANTHRACENE	ug/kg			306		293		168	150 J	
SW8270	DIBENZOFURAN	ug/kg			208		56.3 J		120 U	110 U	
SW8270	DIETHYL PHTHALATE	ug/kg			75 U		110 U		120 U	110 U	
SW8270	DIMETHYL PHTHALATE	ug/kg			75 U		110 U		120 U	110 U	
SW8270	FLUORANTHENE	ug/kg			5980 J		1580		1070	838 J	
SW8270	FLUORENE	ug/kg			317		191		46.1 J	37.7 J	
SW8270	HEXACHLOROBENZENE	ug/kg			75 U		110 U		120 U	110 U	
SW8270	HEXACHLOROBUTADIENE	ug/kg			38 U		54 U		58 U	54 U	
SW8270	HEXACHLOROCYCLOPENTADIENE	ug/kg			750 UJ		1100 UJ		1200 UJ	1100 UJ	
SW8270	HEXACHLOROETHANE	ug/kg			190 U		270 U		290 U	270 U	
SW8270	INDENO(1,2,3-CD)PYRENE	ug/kg			934		665		470	365 J	
SW8270	ISOPHORONE	ug/kg			75 U		110 U		120 U	110 UJ	
SW8270	N-NITROSO-DI-N-PROPYLAMINE	ug/kg			75 U		110 U		120 U	110 U	
SW8270	N-NITROSODIPHENYLAMINE	ug/kg			190 U		270 U		290 U	270 U	
SW8270	NAPHTHALENE	ug/kg			155		124		25.4 J	54 U	
SW8270	NITROBENZENE	ug/kg			75 U		110 U		120 U	110 U	
SW8270	PENTACHLOROPHENOL	ug/kg			380 U		540 UJ		580 U	540 UJ	
SW8270	PHENANTHRENE	ug/kg			4350 J		1040		506	423 J	
SW8270	PHENOL	ug/kg			75 U		110 U		120 U	110 U	
SW8270	PYRENE	ug/kg			5070 J		1550		942	737 J	
SW8270	TENTATIVELY IDENTIFIED COMPOUND	ug/kg			190 U		270 U		290 U	270 U	

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Method	Parameter Name	Units	Location	ONCK-STA-04	ONCK-STA-04	ONCK-STA-04	ONCK-STA-05	ONCK-STA-05	ONCK-STA-06	ONCK-STA-06	ONCK-STA-07	ONCK-STA-07
			Sample Date	09/03/2009	09/03/2009	09/03/2009	09/03/2009	09/03/2009	09/03/2009	09/03/2009	09/03/2009	09/03/2009
			Field Sample ID	OL-1020-04	OL-1020-05	OL-1021-03	OL-1020-06	OL-1021-04	OL-1020-07	OL-1021-05	OL-1020-08	OL-1020-09
			SDG	JA27310 JA27310R	JA27310 JA27310R	GTX-9278	JA27310 JA27310R	GTX-9278	JA27310 JA27310R	GTX-9278	JA27310 JA27310R	JA27310 JA27310R
Sample Type	Sample Depth	Matrix	Sample Purpose	0-1.8 Ft	0-1.8 Ft	0-1.8 FT	0-1.7 Ft	0-1.7 FT	0-1.8 Ft	0-1.8 FT	0-0.8 Ft	0.8-1.7 Ft
				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Regular sample	Field duplicate	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
Sample Type	Sample Depth	Matrix	Sample Purpose	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
ASTM D422	PARTICLES SMALLER THAN 0.002 MM	%				22		2		17		
ASTM D422	PARTICLES SMALLER THAN 0.0050 MM	%				33		3		26		
ASTM D422	PERCENT FINES (CLAY & SILT)	%				97.6		93.1		78.7		
ASTM D422	PERCENT GRAVEL	%				0		0		0		
ASTM D422	PERCENT SAND	%				2.4		6.9		21.3		
Lloyd Kahn	TOTAL ORGANIC CARBON	mg/kg		19100	21800		23900		24300		17400	12400
SM2540G	SOLIDS, PERCENT	%		54.4	49.8		53.1		51.4		58.6	69.4
SW6010	ARSENIC	mg/kg		4.1	3.9		4		4		2.6	2.1
SW6010	CADMIUM	mg/kg		0.27 J	0.22 J		0.25 J		0.24 J		0.14 J	0.23 J
SW6010	CHROMIUM	mg/kg		21.3	20.7		20.8		20.2		20.9	25.2
SW6010	COPPER	mg/kg		44	42.8		45		46.6		40.1	42
SW6010	LEAD	mg/kg		31.3 J	33.9 J		32.4 J		40.5 J		29.1 J	74.1 J
SW6010	NICKEL	mg/kg		22.4 J	21.8 J		20.7 J		17.9 J		14.3 J	12.6 J
SW6010	ZINC	mg/kg		114 J	111 J		109 J		113 J		97.9 J	92.8 J
SW7471	MERCURY	mg/kg		0.086	0.1		2.4		0.64		0.13	0.17
SW8015	PETROLEUM HYDROCARBONS C10-C28	mg/kg		119	90.6		120		137		71.7	210
SW8082	2,2',3,3',4,4',5,5',6-NONACHLOROBIPHENYL	ug/kg			0.55 J							
SW8082	2,2',3,4',5,5',6-HEPTACHLOROBIPHENYL	ug/kg			1.4 J							
SW8082	2,2',3,4,4',5',6-HEPTACHLOROBIPHENYL	ug/kg			0.56 J							
SW8082	2,2',3,4,5'-PENTACHLOROBIPHENYL	ug/kg			1.4 J							
SW8082	2,2',3,5'-TETRACHLOROBIPHENYL	ug/kg			2.4							
SW8082	2,2',3,5,5',6-HEXACHLOROBIPHENYL	ug/kg			1.7 U							
SW8082	2,2',5-TRICHLOROBIPHENYL	ug/kg			3.4 U							
SW8082	AROCLOR-1016	ug/kg		6.1 U	6.6 U		6.2 U		6.5 U		5.6 U	4.7 U
SW8082	AROCLOR-1221	ug/kg		6.1 U	6.6 U		6.2 U		6.5 U		5.6 U	4.7 U
SW8082	AROCLOR-1232	ug/kg		6.1 U	6.6 U		6.2 U		6.5 U		5.6 U	4.7 U
SW8082	AROCLOR-1242	ug/kg		6.1 U	6.6 U		6.2 U		6.5 U		5.6 U	4.7 U
SW8082	AROCLOR-1248	ug/kg		32.3 J	33.1		28.6 J		6.5 U		5.6 U	4.7 U
SW8082	AROCLOR-1254	ug/kg		11.7	18		17.4 J		14.5		11 J	29.6
SW8082	AROCLOR-1260	ug/kg		8.2 J	15 J		14 J		11.8		9.5	10.7
SW8082	AROCLOR-1268	ug/kg		6.1 U	6.6 U		6.2 U		6.5 U		5.6 U	4.7 U
SW8082	PCB 101	ug/kg			3.1 J							
SW8082	PCB 118	ug/kg			1.7 J							
SW8082	PCB 138	ug/kg			3.2 J							
SW8082	PCB 153	ug/kg			3 J							
SW8082	PCB 209	ug/kg			1.7 U							
SW8082	PCB 28	ug/kg			4.8							
SW8082	PCB 52	ug/kg			3.3							
SW8082	PCB-105	ug/kg			0.81 J							
SW8082	PCB-123	ug/kg			1.7 U							
SW8082	PCB-126	ug/kg			1.7 U							
SW8082	PCB-128/162	ug/kg			0.65 J							
SW8082	PCB-156	ug/kg			1.7 U							
SW8082	PCB-157	ug/kg			1.7 U							
SW8082	PCB-167	ug/kg			1.7 U							
SW8082	PCB-169	ug/kg			1.7 U							
SW8082	PCB-170	ug/kg			1.8							
SW8082	PCB-180	ug/kg			2.6							
SW8082	PCB-184	ug/kg			1.7 U							
SW8082	PCB-195	ug/kg			1.7 U							
SW8082	PCB-49	ug/kg			2.3 J							
SW8082	PCB-66	ug/kg			2.4							
SW8082	PCB-77	ug/kg			0.84 J							
SW8082	PCB-8	ug/kg			3.4 U							
SW8082	PCB-90/101	ug/kg			1.7 U							
SW8082	PCBS, N.O.S.	ug/kg		52.2 J	66.1		60 J		26.2		20.5 J	40.3

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Method	Parameter Name	Units	Location	ONCK-STA-04	ONCK-STA-04	ONCK-STA-04	ONCK-STA-05	ONCK-STA-05	ONCK-STA-06	ONCK-STA-06	ONCK-STA-07	ONCK-STA-07
			Sample Date	09/03/2009	09/03/2009	09/03/2009	09/03/2009	09/03/2009	09/03/2009	09/03/2009	09/03/2009	09/03/2009
			Field Sample ID	OL-1020-04	OL-1020-05	OL-1021-03	OL-1020-06	OL-1021-04	OL-1020-07	OL-1021-05	OL-1020-08	OL-1020-09
			SDG	JA27310 JA27310R	JA27310 JA27310R	GTX-9278	JA27310 JA27310R	GTX-9278	JA27310 JA27310R	GTX-9278	JA27310 JA27310R	JA27310 JA27310R
Sample Depth	Matrix	Sample Purpose	Sample Type	0-1.8 Ft	0-1.8 Ft	0-1.8 Ft	0-1.7 Ft	0-1.7 FT	0-1.8 Ft	0-1.8 FT	0-0.8 Ft	0.8-1.7 Ft
				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Regular sample	Field duplicate	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
				Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
SW8260	1,1,1-TRICHLOROETHANE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	1,1,2,2-TETRACHLOROETHANE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	1,1,2-TRICHLOROETHANE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	1,1-DICHLOROETHANE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	1,1-DICHLOROETHENE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	1,2,3-TRICHLOROBENZENE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	1,2,4-TRICHLOROBENZENE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	1,2-DIBROMO-3-CHLOROPROPANE	ug/kg		18 U	20 U		22 U		20 U		17 U	14 U
SW8260	1,2-DIBROMOETHANE	ug/kg		1.8 U	2 U		2.2 U		2 U		1.7 U	1.4 U
SW8260	1,2-DICHLOROBENZENE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	1,2-DICHLOROETHANE	ug/kg		1.8 U	2 U		2.2 U		2 U		1.7 U	1.4 U
SW8260	1,2-DICHLOROPROPANE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	1,3,5-TRICHLOROBENZENE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	1,3-DICHLOROBENZENE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	1,4-DICHLOROBENZENE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	2-BUTANONE	ug/kg		18 U	20 U		22 U		20 U		17 U	15.6
SW8260	2-HEXANONE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	4-METHYL-2-PENTANONE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	ACETONE	ug/kg		18 UJ	20 UJ		22.3 J		54.2 J		33.5 J	33.9
SW8260	BENZENE	ug/kg		1.8 U	2 U		2.2 U		2 U		1.7 U	1.4 U
SW8260	BROMODICHLOROMETHANE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	BROMOFORM	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	BROMOMETHANE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	CARBON DISULFIDE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	2.3 J
SW8260	CARBON TETRACHLORIDE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	CHLOROBENZENE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	CHLORODIBROMOMETHANE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	CHLOROETHANE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	CHLOROFORM	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	CHLOROMETHANE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	CIS-1,2-DICHLOROETHENE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	CIS-1,3-DICHLOROPROPENE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	CYCLOHEXANE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	DICHLORODIFLUOROMETHANE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	ETHYLBENZENE	ug/kg		1.8 U	2 U		2.2 U		2 U		1.7 U	1.4 U
SW8260	ISOPROPYLBENZENE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	METHYL ACETATE	ug/kg		32	38.5		33.7		43.4		56.2	31.9
SW8260	METHYL TERT-BUTYL ETHER	ug/kg		1.8 U	2 U		2.2 U		2 U		1.7 U	1.4 U
SW8260	METHYLCYCLOHEXANE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	METHYLENE CHLORIDE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	O-XYLENE	ug/kg		1.8 U	2 U		2.2 U		2 U		1.7 U	1.4 U
SW8260	STYRENE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	TETRACHLOROETHENE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	TOLUENE	ug/kg		1.8 U	2 U		2.2 U		2 U		1.7 U	1.4 U
SW8260	TRANS-1,2-DICHLOROETHENE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	TRANS-1,3-DICHLOROPROPENE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	TRICHLOROETHENE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	TRICHLOROFLUOROMETHANE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	VINYL CHLORIDE	ug/kg		9.2 U	9.8 U		11 U		9.9 U		8.4 U	7.2 U
SW8260	XYLENES, M & P	ug/kg		3.7 U	3.9 U		4.4 U		4 U		3.3 U	2.9 U
SW8260	XYLENES, TOTAL	ug/kg		3.7 U	3.9 U		4.4 U		4 U		3.3 U	2.9 U

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		Location	ONCK-STA-04	ONCK-STA-04	ONCK-STA-04	ONCK-STA-05	ONCK-STA-05	ONCK-STA-06	ONCK-STA-06	ONCK-STA-07	ONCK-STA-07
		Sample Date	09/03/2009	09/03/2009	09/03/2009	09/03/2009	09/03/2009	09/03/2009	09/03/2009	09/03/2009	09/03/2009
		Field Sample ID	OL-1020-04	OL-1020-05	OL-1021-03	OL-1020-06	OL-1021-04	OL-1020-07	OL-1021-05	OL-1020-08	OL-1020-09
		SDG	JA27310 JA27310R	JA27310 JA27310R	GTX-9278	JA27310 JA27310R	GTX-9278	JA27310 JA27310R	GTX-9278	JA27310 JA27310R	JA27310 JA27310R
		Sample Depth	0-1.8 Ft	0-1.8 Ft	0-1.8 FT	0-1.7 Ft	0-1.7 FT	0-1.8 Ft	0-1.8 FT	0-0.8 Ft	0.8-1.7 Ft
		Matrix	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Sample Purpose	Regular sample	Field duplicate	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
		Sample Type	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
Method	Parameter Name	Units									
SW8270	1,1'-BIPHENYL	ug/kg	110 U	110 U		110 U		110 U		97 U	82 U
SW8270	2,2'-OXYBIS(1-CHLOROPROPANE)	ug/kg	110 U	110 U		110 U		110 U		97 U	82 U
SW8270	2,4,5-TRICHLOROPHENOL	ug/kg	260 U	290 U		270 U		280 U		240 U	210 U
SW8270	2,4,6-TRICHLOROPHENOL	ug/kg	260 U	290 U		270 U		280 U		240 U	210 U
SW8270	2,4-DICHLOROPHENOL	ug/kg	260 U	290 U		270 U		280 U		240 U	210 U
SW8270	2,4-DIMETHYLPHENOL	ug/kg	260 UJ	290 UJ		270 UJ		280 UJ		240 UJ	210 UJ
SW8270	2,4-DINITROPHENOL	ug/kg	1100 UJ	1100 UJ		1100 UJ		1100 UJ		970 UJ	820 UJ
SW8270	2,4-DINITROTOLUENE	ug/kg	110 U	110 U		110 U		110 U		97 U	82 U
SW8270	2,6-DINITROTOLUENE	ug/kg	110 U	110 U		110 U		110 U		97 U	82 U
SW8270	2-CHLORONAPHTHALENE	ug/kg	110 U	110 U		110 U		110 U		97 U	82 U
SW8270	2-CHLOROPHENOL	ug/kg	260 U	290 U		270 U		280 U		240 U	210 U
SW8270	2-METHYLNAPHTHALENE	ug/kg	110 U	110 U		110 U		110 U		97 U	82 U
SW8270	2-METHYLPHENOL	ug/kg	110 U	110 U		110 U		110 U		97 U	82 U
SW8270	2-NITROANILINE	ug/kg	260 U	290 U		270 U		280 U		240 U	210 U
SW8270	2-NITROPHENOL	ug/kg	260 U	290 U		270 U		280 U		240 U	210 U
SW8270	3&4-METHYLPHENOL	ug/kg	110 U	110 U		110 U		110 U		97 U	82 U
SW8270	3,3'-DICHLOROBENZIDINE	ug/kg	260 U	290 U		270 U		280 U		240 U	210 U
SW8270	3-NITROANILINE	ug/kg	260 U	290 U		270 U		280 U		240 U	210 U
SW8270	4,6-DINITRO-2-METHYLPHENOL	ug/kg	1100 U	1100 U		1100 U		1100 U		970 UJ	820 U
SW8270	4-BROMOPHENYL PHENYL ETHER	ug/kg	110 U	110 U		110 U		110 U		97 U	82 U
SW8270	4-CHLORO-3-METHYLPHENOL	ug/kg	260 U	290 U		270 U		280 U		240 U	210 U
SW8270	4-CHLOROANILINE	ug/kg	260 U	290 U		270 U		280 U		240 U	210 U
SW8270	4-CHLOROPHENYL PHENYL ETHER	ug/kg	110 U	110 U		110 U		110 U		97 U	82 U
SW8270	4-NITROANILINE	ug/kg	260 U	290 U		270 U		280 U		240 U	210 U
SW8270	4-NITROPHENOL	ug/kg	530 U	570 U		540 U		560 U		490 U	410 U
SW8270	ACENAPHTHENE	ug/kg	21 J	27 J		19.6 J		39.7 J		43.6 J	58.8
SW8270	ACENAPHTHYLENE	ug/kg	25.7 J	35.9 J		20.3 J		40.3 J		52	45
SW8270	ANTHRACENE	ug/kg	58.1	82.3		59.2		145		166	192
SW8270	ATRAZINE	ug/kg	260 UJ	290 UJ		270 UJ		280 UJ		240 UJ	210 UJ
SW8270	BENZALDEHYDE	ug/kg	260 U	290 U		270 U		280 U		240 U	210 U
SW8270	BENZO(A)ANTHRACENE	ug/kg	233	335		258		548		625	574
SW8270	BENZO(A)PYRENE	ug/kg	319	455		336		675		770	658
SW8270	BENZO(B)FLUORANTHENE	ug/kg	426	500		462		686		940	626
SW8270	BENZO(G,H,I)PERYLENE	ug/kg	289	399		297		585		654	506
SW8270	BENZO(K)FLUORANTHENE	ug/kg	193 J	385 J		257		657		555	578
SW8270	BIS(2-CHLOROETHOXY)METHANE	ug/kg	110 U	110 U		110 U		110 U		97 U	82 U
SW8270	BIS(2-CHLOROETHYL)ETHER	ug/kg	110 U	110 U		110 U		110 U		97 U	82 U
SW8270	BIS(2-ETHYLHEXYL)PHTHALATE	ug/kg	345 J	1090 J		306		655		601	365
SW8270	BUTYLBENZYL PHTHALATE	ug/kg	110 U	110 U		110 U		110 U		65.3 J	82 U
SW8270	CAPROLACTAM	ug/kg	110 U	110 U		110 U		110 U		97 U	82 U
SW8270	CARBAZOLE	ug/kg	34.4 J	48.7 J		38.9 J		98.2 J		114	78.9 J
SW8270	CHRYSENE	ug/kg	401	556		430		871		995	813
SW8270	DI-N-BUTYL PHTHALATE	ug/kg	110 U	110 U		110 U		75 J		225	82 U
SW8270	DI-N-OCTYL PHTHALATE	ug/kg	110 U	110 U		110 U		110 U		97 U	82 U
SW8270	DIBENZO(A,H)ANTHRACENE	ug/kg	82.3	114		85.7		197		228	178
SW8270	DIBENZOFURAN	ug/kg	110 U	110 U		110 U		110 U		24.5 J	27.9 J
SW8270	DIETHYL PHTHALATE	ug/kg	110 U	110 U		110 U		110 U		97 U	82 U
SW8270	DIMETHYL PHTHALATE	ug/kg	110 U	110 U		110 U		110 U		97 U	82 U
SW8270	FLUORANTHENE	ug/kg	586	811		649		1330		1500	1310
SW8270	FLUORENE	ug/kg	24.4 J	39.6 J		23.6 J		50.4 J		62.6	84.5
SW8270	HEXACHLOROBENZENE	ug/kg	110 U	110 U		110 U		110 U		97 U	82 U
SW8270	HEXACHLOROBUTADIENE	ug/kg	53 U	57 U		54 U		56 U		49 U	41 U
SW8270	HEXACHLOROCYCLOPENTADIENE	ug/kg	1100 UJ	1100 UJ		1100 UJ		1100 UJ		970 UJ	820 UJ
SW8270	HEXACHLOROETHANE	ug/kg	260 U	290 U		270 U		280 U		240 U	210 U
SW8270	INDENO(1,2,3-CD)PYRENE	ug/kg	241	350		251		506		593	467
SW8270	ISOPHORONE	ug/kg	110 U	110 U		110 U		110 U		97 U	82 U
SW8270	N-NITROSO-DI-N-PROPYLAMINE	ug/kg	110 U	110 U		110 U		110 U		97 U	82 U
SW8270	N-NITROSODIPHENYLAMINE	ug/kg	260 U	290 U		270 U		280 U		240 U	210 U
SW8270	NAPHTHALENE	ug/kg	53 U	57 U		54 U		56 U		49 U	41 U
SW8270	NITROBENZENE	ug/kg	110 U	110 U		110 U		110 U		97 U	82 U
SW8270	PENTACHLOROPHENOL	ug/kg	530 UJ	570 UJ		540 UJ		560 UJ		490 U	410 UJ
SW8270	PHENANTHRENE	ug/kg	274	394		308		715		798	848
SW8270	PHENOL	ug/kg	110 U	110 U		110 U		110 U		97 U	82 U
SW8270	PYRENE	ug/kg	530	724		574		1170		1320	1150
SW8270	TENTATIVELY IDENTIFIED COMPOUND	ug/kg	260 U	290 U		270 U		280 U		240 U	210 U

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		Location	ONCK-STA-07	ONCK-STA-08	ONCK-STA-08	ONCK-STA-09	ONCK-STA-09
		Sample Date	09/03/2009	09/04/2009	09/04/2009	09/04/2009	09/04/2009
		Field Sample ID	OL-1021-06	OL-1021-07	OL-1022-01	OL-1022-02	OL-1022-03
		SDG	GTX-9278	GTX-9278	JA27359 JA27359R	JA27359 JA27359R	JA27359 JA27359R
		Sample Depth	0.8-1.7 FT	0-0.8 FT	0-0.8 Ft	0-1.1 Ft	1.1-1.5 Ft
		Matrix	SOIL	SOIL	SOIL	SOIL	SOIL
		Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
		Sample Type	Sediment	Sediment	Sediment	Sediment	Sediment
Method	Parameter Name	Units					
ASTM D422	PARTICLES SMALLER THAN 0.002 MM	%	6	0			
ASTM D422	PARTICLES SMALLER THAN 0.0050 MM	%	9	0			
ASTM D422	PERCENT FINES (CLAY & SILT)	%	32.2	8.6			
ASTM D422	PERCENT GRAVEL	%	0	0			
ASTM D422	PERCENT SAND	%	67.8	91.4			
Lloyd Kahn	TOTAL ORGANIC CARBON	mg/kg			3570	5510	10200
SM2540G	SOLIDS, PERCENT	%			79.5	85	79
SW6010	ARSENIC	mg/kg			1.2 J	2.4	6
SW6010	CADMIUM	mg/kg			0.07 U	0.22 J	1.9
SW6010	CHROMIUM	mg/kg			8.6	19.2	25
SW6010	COPPER	mg/kg			17.9	34.9	60.8
SW6010	LEAD	mg/kg			21.7	60.6	168
SW6010	NICKEL	mg/kg			7.1	11.2	21.4
SW6010	ZINC	mg/kg			54.8	110	165
SW7471	MERCURY	mg/kg			0.22	0.049	0.42
SW8015	PETROLEUM HYDROCARBONS C10-C28	mg/kg			70 J	96.3	284
SW8082	2,2',3,3',4,4',5,5',6-NONACHLOROBIPHENYL	ug/kg					
SW8082	2,2',3,4',5,5',6-HEPTACHLOROBIPHENYL	ug/kg					
SW8082	2,2',3,4',5',6-HEPTACHLOROBIPHENYL	ug/kg					
SW8082	2,2',3,4,5'-PENTACHLOROBIPHENYL	ug/kg					
SW8082	2,2',3,5'-TETRACHLOROBIPHENYL	ug/kg					
SW8082	2,2',3,5,5',6-HEXACHLOROBIPHENYL	ug/kg					
SW8082	2,2',5-TRICHLOROBIPHENYL	ug/kg					
SW8082	AROCLOR-1016	ug/kg			4.1 U	3.9 U	4.2 U
SW8082	AROCLOR-1221	ug/kg			4.1 U	3.9 U	4.2 U
SW8082	AROCLOR-1232	ug/kg			4.1 U	3.9 U	4.2 U
SW8082	AROCLOR-1242	ug/kg			4.1 U	3.9 U	4.2 U
SW8082	AROCLOR-1248	ug/kg			4.1 U	3.9 U	12
SW8082	AROCLOR-1254	ug/kg			4.1 U	13.4 J	30.5
SW8082	AROCLOR-1260	ug/kg			9.8 J	10.5 J	28.6
SW8082	AROCLOR-1268	ug/kg			4.1 U	3.9 U	4.2 U
SW8082	PCB 101	ug/kg					
SW8082	PCB 118	ug/kg					
SW8082	PCB 138	ug/kg					
SW8082	PCB 153	ug/kg					
SW8082	PCB 209	ug/kg					
SW8082	PCB 28	ug/kg					
SW8082	PCB 52	ug/kg					
SW8082	PCB-105	ug/kg					
SW8082	PCB-123	ug/kg					
SW8082	PCB-126	ug/kg					
SW8082	PCB-128/162	ug/kg					
SW8082	PCB-156	ug/kg					
SW8082	PCB-157	ug/kg					
SW8082	PCB-167	ug/kg					
SW8082	PCB-169	ug/kg					
SW8082	PCB-170	ug/kg					
SW8082	PCB-180	ug/kg					
SW8082	PCB-184	ug/kg					
SW8082	PCB-195	ug/kg					
SW8082	PCB-49	ug/kg					
SW8082	PCB-66	ug/kg					
SW8082	PCB-77	ug/kg					
SW8082	PCB-8	ug/kg					
SW8082	PCB-90/101	ug/kg					
SW8082	PCBS, N.O.S.	ug/kg			9.8 J	23.9 J	71.1

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		Location	ONCK-STA-07	ONCK-STA-08	ONCK-STA-08	ONCK-STA-09	ONCK-STA-09
		Sample Date	09/03/2009	09/04/2009	09/04/2009	09/04/2009	09/04/2009
		Field Sample ID	OL-1021-06	OL-1021-07	OL-1022-01	OL-1022-02	OL-1022-03
		SDG	GTX-9278	GTX-9278	JA27359 JA27359R	JA27359 JA27359R	JA27359 JA27359R
		Sample Depth	0.8-1.7 FT	0-0.8 FT	0-0.8 Ft	0-1.1 Ft	1.1-1.5 Ft
		Matrix	SOIL	SOIL	SOIL	SOIL	SOIL
		Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
		Sample Type	Sediment	Sediment	Sediment	Sediment	Sediment
Method	Parameter Name	Units					
SW8260	1,1,1-TRICHLOROETHANE	ug/kg			7.3 U	6 U	7 U
SW8260	1,1,2,2-TETRACHLOROETHANE	ug/kg			7.3 U	6 U	7 U
SW8260	1,1,2-TRICHLOROETHANE	ug/kg			7.3 U	6 U	7 U
SW8260	1,1,2-TRICHLOROTRIFLUOROETHANE	ug/kg			7.3 U	6 U	7 U
SW8260	1,1-DICHLOROETHANE	ug/kg			7.3 U	6 U	7 U
SW8260	1,1-DICHLOROETHENE	ug/kg			7.3 U	6 U	7 U
SW8260	1,2,3-TRICHLOROBENZENE	ug/kg			7.3 U	6 U	7 U
SW8260	1,2,4-TRICHLOROBENZENE	ug/kg			7.3 U	6 U	7 U
SW8260	1,2-DIBROMO-3-CHLOROPROPANE	ug/kg			15 U	12 U	14 U
SW8260	1,2-DIBROMOETHANE	ug/kg			1.5 U	1.2 U	1.4 U
SW8260	1,2-DICHLOROBENZENE	ug/kg			7.3 U	6 U	7 U
SW8260	1,2-DICHLOROETHANE	ug/kg			1.5 U	1.2 U	1.4 U
SW8260	1,2-DICHLOROPROPANE	ug/kg			7.3 U	6 U	7 U
SW8260	1,3,5-TRICHLOROBENZENE	ug/kg			7.3 U	6 U	7 U
SW8260	1,3-DICHLOROBENZENE	ug/kg			9.5	6 U	7 U
SW8260	1,4-DICHLOROBENZENE	ug/kg			8.6	6 U	7 U
SW8260	2-BUTANONE	ug/kg			15 U	12 U	14 U
SW8260	2-HEXANONE	ug/kg			7.3 U	6 U	7 U
SW8260	4-METHYL-2-PENTANONE	ug/kg			7.3 U	6 U	7 U
SW8260	ACETONE	ug/kg			15 U	12 U	14 U
SW8260	BENZENE	ug/kg			1.5 U	1.2 U	1.4 U
SW8260	BROMODICHLOROMETHANE	ug/kg			7.3 U	6 U	7 U
SW8260	BROMOFORM	ug/kg			7.3 U	6 U	7 U
SW8260	BROMOMETHANE	ug/kg			7.3 U	6 U	7 U
SW8260	CARBON DISULFIDE	ug/kg			7.3 U	6 U	1.9 J
SW8260	CARBON TETRACHLORIDE	ug/kg			7.3 U	6 U	7 U
SW8260	CHLOROBENZENE	ug/kg			7.3 U	6 U	7 U
SW8260	CHLORODIBROMOMETHANE	ug/kg			7.3 U	6 U	7 U
SW8260	CHLOROETHANE	ug/kg			7.3 U	6 U	7 U
SW8260	CHLOROFORM	ug/kg			7.3 U	6 U	7 U
SW8260	CHLOROMETHANE	ug/kg			7.3 U	6 U	7 U
SW8260	CIS-1,2-DICHLOROETHENE	ug/kg			7.3 U	6 U	7 U
SW8260	CIS-1,3-DICHLOROPROPENE	ug/kg			7.3 U	6 U	7 U
SW8260	CYCLOHEXANE	ug/kg			7.3 U	6 U	7 U
SW8260	DICHLORODIFLUOROMETHANE	ug/kg			7.3 U	6 U	7 U
SW8260	ETHYLBENZENE	ug/kg			1.5 U	1.2 U	1.4 U
SW8260	ISOPROPYLBENZENE	ug/kg			7.3 U	6 U	7 U
SW8260	METHYL ACETATE	ug/kg			7.3 UJ	6 U	6 J
SW8260	METHYL TERT-BUTYL ETHER	ug/kg			1.5 U	1.2 U	1.4 U
SW8260	METHYLCYCLOHEXANE	ug/kg			7.3 U	6 U	7 U
SW8260	METHYLENE CHLORIDE	ug/kg			7.3 U	6 U	7 U
SW8260	O-XYLENE	ug/kg			1.5 U	1.2 U	1.4 U
SW8260	STYRENE	ug/kg			7.3 U	6 U	7 U
SW8260	TETRACHLOROETHENE	ug/kg			7.3 U	6 U	7 U
SW8260	TOLUENE	ug/kg			1.5 U	1.2 U	1.4 U
SW8260	TRANS-1,2-DICHLOROETHENE	ug/kg			7.3 U	6 U	7 U
SW8260	TRANS-1,3-DICHLOROPROPENE	ug/kg			7.3 U	6 U	7 U
SW8260	TRICHLOROETHENE	ug/kg			7.3 U	6 U	7 U
SW8260	TRICHLOROFLUOROMETHANE	ug/kg			7.3 U	6 U	7 U
SW8260	VINYL CHLORIDE	ug/kg			7.3 U	6 U	7 U
SW8260	XYLENES, M & P	ug/kg			2.9 U	2.4 U	2.8 U
SW8260	XYLENES, TOTAL	ug/kg			2.9 U	2.4 U	2.8 U

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		Location	ONCK-STA-07	ONCK-STA-08	ONCK-STA-08	ONCK-STA-09	ONCK-STA-09
		Sample Date	09/03/2009	09/04/2009	09/04/2009	09/04/2009	09/04/2009
		Field Sample ID	OL-1021-06	OL-1021-07	OL-1022-01	OL-1022-02	OL-1022-03
		SDG	GTX-9278	GTX-9278	JA27359 JA27359R	JA27359 JA27359R	JA27359 JA27359R
		Sample Depth	0.8-1.7 FT	0-0.8 FT	0-0.8 Ft	0-1.1 Ft	1.1-1.5 Ft
		Matrix	SOIL	SOIL	SOIL	SOIL	SOIL
		Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample
		Sample Type	Sediment	Sediment	Sediment	Sediment	Sediment
Method	Parameter Name	Units					
SW8270	1,1'-BIPHENYL	ug/kg			72 UJ	67 UJ	17.1 J
SW8270	2,2'-OXYBIS(1-CHLOROPROPANE)	ug/kg			72 UJ	67 UJ	72 UJ
SW8270	2,4,5-TRICHLOROPHENOL	ug/kg			180 UJ	170 UJ	180 UJ
SW8270	2,4,6-TRICHLOROPHENOL	ug/kg			180 UJ	170 UJ	180 UJ
SW8270	2,4-DICHLOROPHENOL	ug/kg			180 UJ	170 UJ	180 UJ
SW8270	2,4-DIMETHYLPHENOL	ug/kg			180 UJ	170 UJ	180 UJ
SW8270	2,4-DINITROPHENOL	ug/kg			720 UJ	670 UJ	720 UJ
SW8270	2,4-DINITROTOLUENE	ug/kg			72 UJ	67 UJ	72 UJ
SW8270	2,6-DINITROTOLUENE	ug/kg			72 UJ	67 UJ	72 UJ
SW8270	2-CHLORONAPHTHALENE	ug/kg			72 UJ	67 UJ	72 UJ
SW8270	2-CHLOROPHENOL	ug/kg			180 UJ	170 UJ	180 UJ
SW8270	2-METHYLNAPHTHALENE	ug/kg			72 UJ	67 UJ	81.8 J
SW8270	2-METHYLPHENOL	ug/kg			72 UJ	67 UJ	72 UJ
SW8270	2-NITROANILINE	ug/kg			180 UJ	170 UJ	180 UJ
SW8270	2-NITROPHENOL	ug/kg			180 UJ	170 UJ	180 UJ
SW8270	3&4-METHYLPHENOL	ug/kg			72 UJ	67 UJ	72 UJ
SW8270	3,3'-DICHLOROBENZIDINE	ug/kg			180 UJ	170 UJ	180 UJ
SW8270	3-NITROANILINE	ug/kg			180 UJ	170 UJ	180 UJ
SW8270	4,6-DINITRO-2-METHYLPHENOL	ug/kg			720 UJ	670 UJ	720 UJ
SW8270	4-BROMOPHENYL PHENYL ETHER	ug/kg			72 UJ	67 UJ	72 UJ
SW8270	4-CHLORO-3-METHYLPHENOL	ug/kg			180 UJ	170 UJ	180 UJ
SW8270	4-CHLOROANILINE	ug/kg			180 UJ	170 UJ	180 UJ
SW8270	4-CHLOROPHENYL PHENYL ETHER	ug/kg			72 UJ	67 UJ	72 UJ
SW8270	4-NITROANILINE	ug/kg			180 UJ	170 UJ	180 UJ
SW8270	4-NITROPHENOL	ug/kg			360 UJ	340 UJ	360 UJ
SW8270	ACENAPHTHENE	ug/kg			31.8 J	83.9 J	377 J
SW8270	ACENAPHTHYLENE	ug/kg			42.8 J	123 J	394 J
SW8270	ANTHRACENE	ug/kg			185 J	352 J	670 J
SW8270	ATRAZINE	ug/kg			180 UJ	170 UJ	180 UJ
SW8270	BENZALDEHYDE	ug/kg			180 UJ	170 UJ	180 UJ
SW8270	BENZO(A)ANTHRACENE	ug/kg			611 J	990 J	1520 J
SW8270	BENZO(A)PYRENE	ug/kg			640 J	1060 J	1410 J
SW8270	BENZO(B)FLUORANTHENE	ug/kg			706 J	1150 J	1330 J
SW8270	BENZO(G,H,I)PERYLENE	ug/kg			289 J	388 J	496 J
SW8270	BENZO(K)FLUORANTHENE	ug/kg			540 J	921 J	1370 J
SW8270	BIS(2-CHLOROETHOXY)METHANE	ug/kg			72 UJ	67 UJ	72 UJ
SW8270	BIS(2-CHLOROETHYL)ETHER	ug/kg			72 UJ	67 UJ	72 UJ
SW8270	BIS(2-ETHYLHEXYL)PHTHALATE	ug/kg			141 J	646 J	481 J
SW8270	BUTYLBENZYL PHTHALATE	ug/kg			77.6 J	67 UJ	72 UJ
SW8270	CAPROLACTAM	ug/kg			72 UJ	67 UJ	72 UJ
SW8270	CARBAZOLE	ug/kg			80 J	110 J	171 J
SW8270	CHRYSENE	ug/kg			723 J	1050 J	1580 J
SW8270	DI-N-BUTYL PHTHALATE	ug/kg			72 UJ	39.5 J	72 UJ
SW8270	DI-N-OCTYL PHTHALATE	ug/kg			72 UJ	67 UJ	72 UJ
SW8270	DIBENZO(A,H)ANTHRACENE	ug/kg			109 J	155 J	202 J
SW8270	DIBENZOFURAN	ug/kg			16.3 J	38.5 J	82.6 J
SW8270	DIETHYL PHTHALATE	ug/kg			72 UJ	67 UJ	72 UJ
SW8270	DIMETHYL PHTHALATE	ug/kg			72 UJ	67 UJ	72 UJ
SW8270	FLUORANTHENE	ug/kg			1650 J	2400 J	4410 J
SW8270	FLUORENE	ug/kg			44.8 J	90.6 J	224 J
SW8270	HEXACHLORO BENZENE	ug/kg			72 UJ	67 UJ	72 UJ
SW8270	HEXACHLOROBUTADIENE	ug/kg			36 UJ	34 UJ	36 UJ
SW8270	HEXACHLORO CYCLOPENTADIENE	ug/kg			720 UJ	670 UJ	720 UJ
SW8270	HEXACHLOROETHANE	ug/kg			180 UJ	170 UJ	180 UJ
SW8270	INDENO(1,2,3-CD)PYRENE	ug/kg			302 J	424 J	546 J
SW8270	ISOPHORONE	ug/kg			72 UJ	67 UJ	72 UJ
SW8270	N-NITROSO-DI-N-PROPYLAMINE	ug/kg			72 UJ	67 UJ	72 UJ
SW8270	N-NITROSODIPHENYLAMINE	ug/kg			180 UJ	170 UJ	180 UJ
SW8270	NAPHTHALENE	ug/kg			36 UJ	28 J	76.1 J
SW8270	NITROBENZENE	ug/kg			72 UJ	67 UJ	72 UJ
SW8270	PENTACHLOROPHENOL	ug/kg			360 UJ	340 UJ	360 UJ
SW8270	PHENANTHRENE	ug/kg			645 J	893 J	1600 J
SW8270	PHENOL	ug/kg			72 UJ	67 UJ	72 UJ
SW8270	PYRENE	ug/kg			1030 J	1660 J	2870 J
SW8270	TENTATIVELY IDENTIFIED COMPOUND	ug/kg			180 UJ	18.9 J	719 J

ATTACHMENT A-5

**VALIDATED LABORATORY DATA FOR
SNOWMELT MONITORING SAMPLES**

Validated 2010 Book 3 Snowmelt Analytical Data

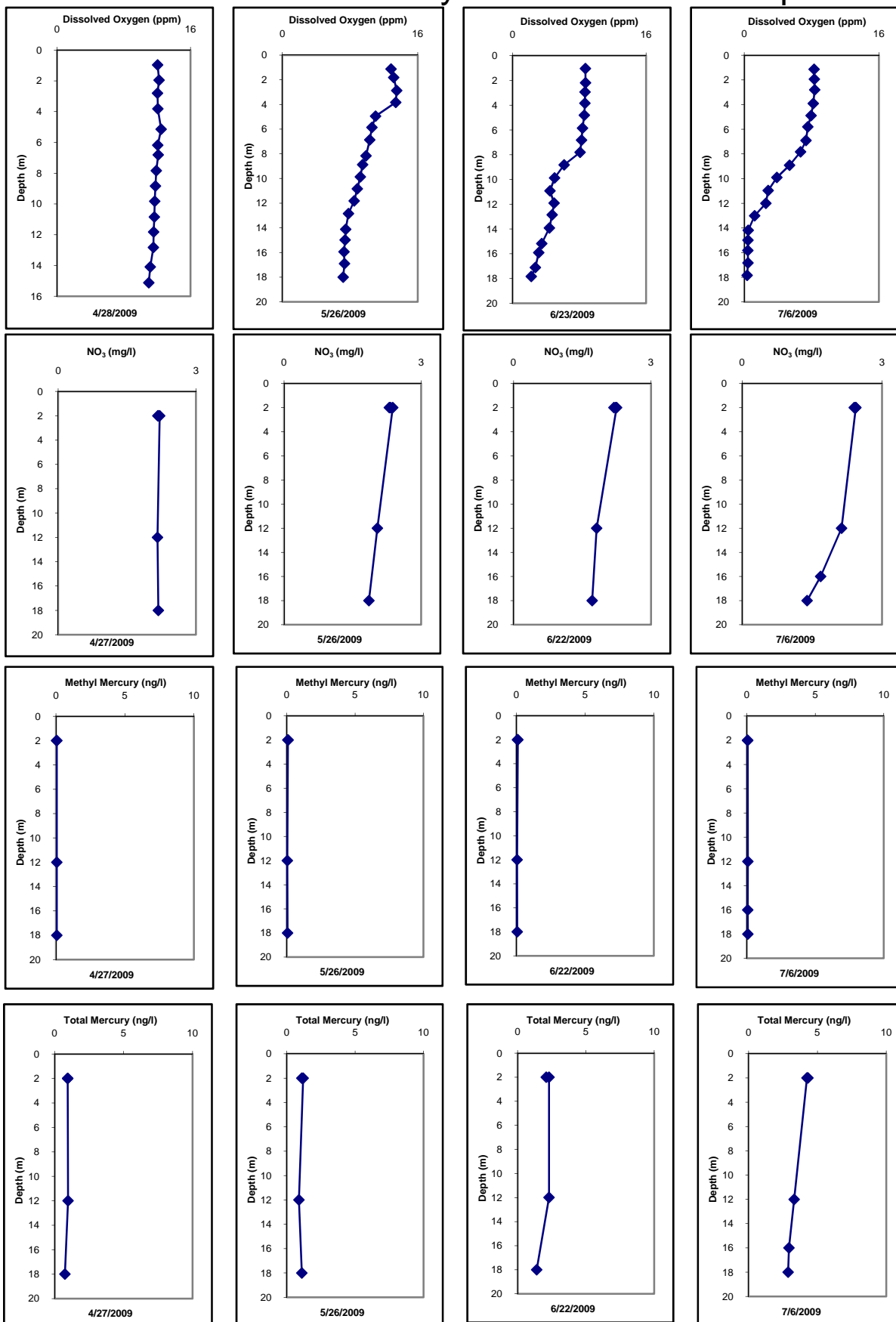
						Parameter	MERCURY	METHYL MERCURY	Total Suspended Solids	Total Suspended Solids	TURBIDITY
						Units	ug/l	ug/l	mg/l	mg/l	NTU
Location ID	Field Sample ID	Lab Sample ID	Sample Date	Matrix	Purpose	Samp Type					
FIELD QC	OL-1080-04	2010071004	3/11/2010	WATER	TB	BLKWATER				70	28.7
FIELD QC	OL-1081-04	1011035-07	3/11/2010	WATER	FB	BLKWATER	0.00015 U				
FIELD QC	OL-1081-05	1011035-08	3/12/2010	WATER	TB	BLKWATER	0.00033 J	0.00002 U			
FIELD QC	OL-1082-04	JA41823-7	3/11/2010	WATER	FB	BLKWATER			4 U		
FIELD QC	OL-1084-10	1012006-10	3/15/2010	WATER	FB	BLKWATER	0.00015 U	0.00002 U			
FIELD QC	OL-1085-10	JA41910-10	3/15/2010	WATER	FB	BLKWATER			4 U		
FIELD QC	OL-1088-04	1012030-07	3/18/2010	WATER	FB	BLKWATER	0.00015 U	0.00002 U			
FIELD QC	OL-1088-04	1012030-08	3/18/2010	WATER	FB	BLKWATER	0.00015 U				
FIELD QC	OL-1089-04	JA42317-4	3/18/2010	WATER	FB	BLKWATER			4 U		
NMCK-Amboy	OL-1080-02	2010071002	3/11/2010	WATER	REG	W-SW				15.2	9.9
NMCK-Amboy	OL-1080-05	2010071005	3/12/2010	WATER	REG	W-SW				48.9	35.5
NMCK-Amboy	OL-1080-06	2010071006	3/12/2010	WATER	REG	W-SW				164.8	145
NMCK-Amboy	OL-1081-02	1011035-02	3/11/2010	WATER	REG	W-SW	0.00345	0.000069			
NMCK-Amboy	OL-1081-07	1011035-05	3/12/2010	WATER	REG	W-SW	0.0115	0.00011			
NMCK-Amboy	OL-1082-02	JA41823-2	3/11/2010	WATER	REG	W-SW			16		
NMCK-Amboy	OL-1082-06	JA41823-5	3/12/2010	WATER	REG	W-SW			47		
NMCK-Amboy	OL-1083-02	2010073002	3/13/2010	WATER	REG	W-SW				70.2	46.1
NMCK-Amboy	OL-1083-05	2010073005	3/14/2010	WATER	REG	W-SW				56.6	38.5
NMCK-Amboy	OL-1084-02	1012006-02	3/13/2010	WATER	REG	W-SW	0.0168	0.000135			
NMCK-Amboy	OL-1084-05	1012006-05	3/14/2010	WATER	REG	W-SW	0.00131 J				
NMCK-Amboy	OL-1084-05	1012006-12	3/14/2010	WATER	REG	W-SW	0.0144	0.000099			
NMCK-Amboy	OL-1084-08	1012006-08	3/15/2010	WATER	REG	W-SW	0.00105 J				
NMCK-Amboy	OL-1084-08	1012006-15	3/15/2010	WATER	REG	W-SW	0.00718	0.000064			
NMCK-Amboy	OL-1085-02	JA41910-2	3/13/2010	WATER	REG	W-SW			61		
NMCK-Amboy	OL-1085-05	JA41910-5	3/14/2010	WATER	REG	W-SW			52		
NMCK-Amboy	OL-1085-08	JA41910-8	3/15/2010	WATER	REG	W-SW			29		
NMCK-Amboy	OL-1086-02	2010074002	3/15/2010	WATER	REG	W-SW				27.4	24.1
NMCK-Amboy	OL-1087-02	2010077005	3/18/2010	WATER	REG	W-SW				7.4	6
NMCK-Amboy	OL-1088-02	1012030-03	3/18/2010	WATER	REG	W-SW	0.00211	0.000035 J			
NMCK-Amboy	OL-1088-02	1012030-04	3/18/2010	WATER	REG	W-SW	0.00023 J				
NMCK-Amboy	OL-1089-02	JA42317-2	3/18/2010	WATER	REG	W-SW			7		
NMCK-Rte48	OL-1080-01	2010071001	3/11/2010	WATER	REG	W-SW				13.4	8.7
NMCK-Rte48	OL-1081-01	1011035-01	3/11/2010	WATER	REG	W-SW	0.00594	0.000086			
NMCK-Rte48	OL-1081-06	1011035-04	3/12/2010	WATER	FD2	W-SW	0.0105	0.000096			
NMCK-Rte48	OL-1082-01	JA41823-1	3/11/2010	WATER	REG	W-SW			9		
NMCK-Rte48	OL-1082-05	JA41823-4	3/12/2010	WATER	REG	W-SW			49		
NMCK-Rte48	OL-1083-01	2010073001	3/13/2010	WATER	REG	W-SW				72	47
NMCK-Rte48	OL-1083-04	2010073004	3/14/2010	WATER	REG	W-SW				60.2	40.6
NMCK-Rte48	OL-1084-01	1012006-01	3/13/2010	WATER	REG	W-SW	0.0227	0.000136			

Validated 2010 Book 3 Snowmelt Analytical Data

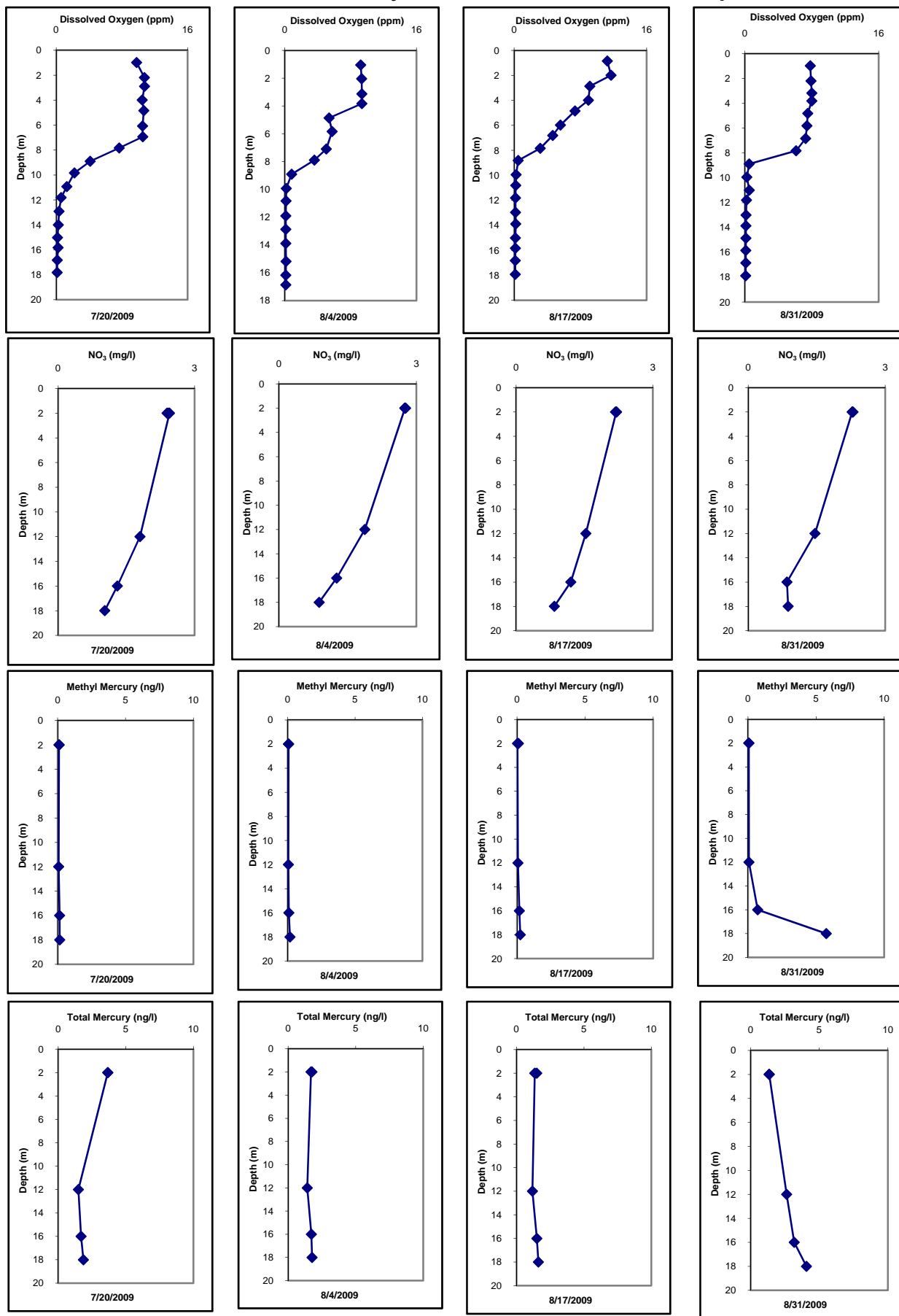
						Parameter	MERCURY	METHYL MERCURY	Total Suspended Solids	Total Suspended Solids	TURBIDITY
						Units	ug/l	ug/l	mg/l	mg/l	NTU
Location ID	Field Sample ID	Lab Sample ID	Sample Date	Matrix	Purpose	Samp Type					
NMCK-Rte48	OL-1084-04	1012006-04	3/14/2010	WATER	REG	W-SW	0.00134 J				
NMCK-Rte48	OL-1084-04	1012006-11	3/14/2010	WATER	REG	W-SW	0.0195	0.000114			
NMCK-Rte48	OL-1084-07	1012006-07	3/15/2010	WATER	REG	W-SW	0.00104 J				
NMCK-Rte48	OL-1084-07	1012006-14	3/15/2010	WATER	REG	W-SW	0.00773	0.000056			
NMCK-Rte48	OL-1085-01	JA41910-1	3/13/2010	WATER	REG	W-SW			72		
NMCK-Rte48	OL-1085-04	JA41910-4	3/14/2010	WATER	REG	W-SW			54		
NMCK-Rte48	OL-1085-07	JA41910-7	3/15/2010	WATER	REG	W-SW			26		
NMCK-Rte48	OL-1086-01	2010074001	3/15/2010	WATER	REG	W-SW				26.4	20.2
NMCK-Rte48	OL-1087-01	2010077006	3/18/2010	WATER	REG	W-SW				9.3	6.5
NMCK-Rte48	OL-1088-01	1012030-01	3/18/2010	WATER	REG	W-SW	0.00364	0.000045 J			
NMCK-Rte48	OL-1088-01	1012030-02	3/18/2010	WATER	REG	W-SW	0.00025 J				
NMCK-Rte48	OL-1089-01	JA42317-1	3/18/2010	WATER	REG	W-SW			6		
ONCK-Spencer	OL-1080-03	2010071003	3/11/2010	WATER	REG	W-SW				35.9	73
ONCK-Spencer	OL-1080-07	2010071007	3/12/2010	WATER	REG	W-SW				0.1 U	0.2 J
ONCK-Spencer	OL-1081-03	1011035-03	3/11/2010	WATER	REG	W-SW	0.00555	0.000094			
ONCK-Spencer	OL-1081-08	1011035-06	3/12/2010	WATER	FD	W-SW	0.00557	0.00012			
ONCK-Spencer	OL-1082-03	JA41823-3	3/11/2010	WATER	REG	W-SW			102		
ONCK-Spencer	OL-1082-07	JA41823-6	3/12/2010	WATER	REG	W-SW			189		
ONCK-Spencer	OL-1083-03	2010073003	3/13/2010	WATER	REG	W-SW				150.3	155
ONCK-Spencer	OL-1083-06	2010073006	3/14/2010	WATER	REG	W-SW				113.3	101
ONCK-Spencer	OL-1084-03	1012006-03	3/13/2010	WATER	REG	W-SW	0.00714	0.000091			
ONCK-Spencer	OL-1084-06	1012006-06	3/14/2010	WATER	REG	W-SW	0.00059 J				
ONCK-Spencer	OL-1084-06	1012006-13	3/14/2010	WATER	REG	W-SW	0.00593	0.000061			
ONCK-Spencer	OL-1084-09	1012006-09	3/15/2010	WATER	REG	W-SW	0.0007 J				
ONCK-Spencer	OL-1084-09	1012006-16	3/15/2010	WATER	REG	W-SW	0.00581	0.000061			
ONCK-Spencer	OL-1085-03	JA41910-3	3/13/2010	WATER	REG	W-SW			150		
ONCK-Spencer	OL-1085-06	JA41910-6	3/14/2010	WATER	REG	W-SW			96		
ONCK-Spencer	OL-1085-09	JA41910-9	3/15/2010	WATER	REG	W-SW			77		
ONCK-Spencer	OL-1086-03	2010074003	3/15/2010	WATER	REG	W-SW				75	81.6
ONCK-Spencer	OL-1087-03	2010077009	3/18/2010	WATER	REG	W-SW				42	46.2
ONCK-Spencer	OL-1088-03	1012030-05	3/18/2010	WATER	REG	W-SW	0.00341	0.000052			
ONCK-Spencer	OL-1088-03	1012030-06	3/18/2010	WATER	REG	W-SW	0.00027 J				
ONCK-Spencer	OL-1089-03	JA42317-3	3/18/2010	WATER	REG	W-SW			48		

APPENDIX D**PLOTS OF DISSOLVED OXYGEN, NITRATE, TOTAL MERCURY AND
METHYLMERCURY BY DEPTH AT SOUTH DEEP IN 2009**

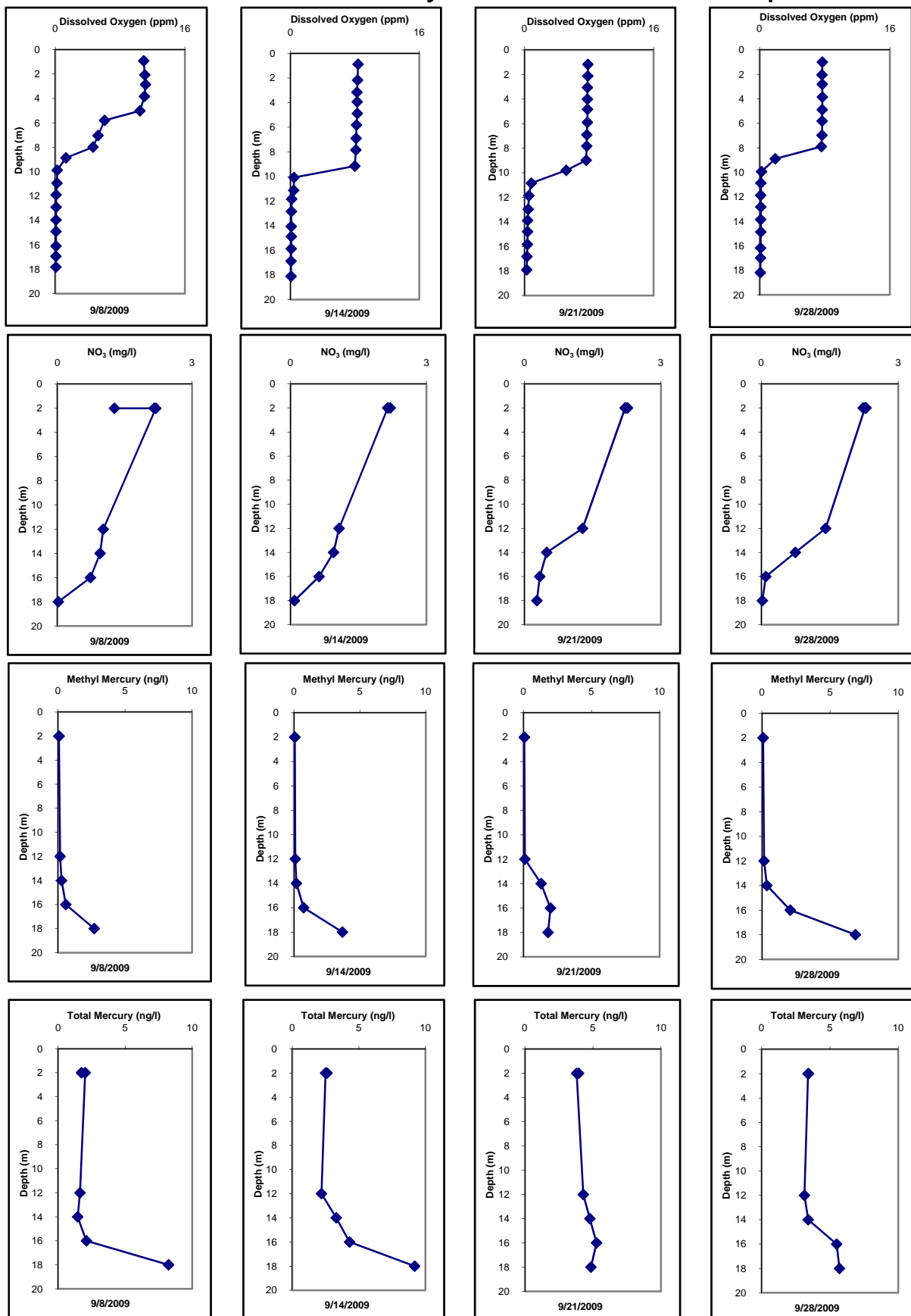
2009 Water Quality Results: South Deep



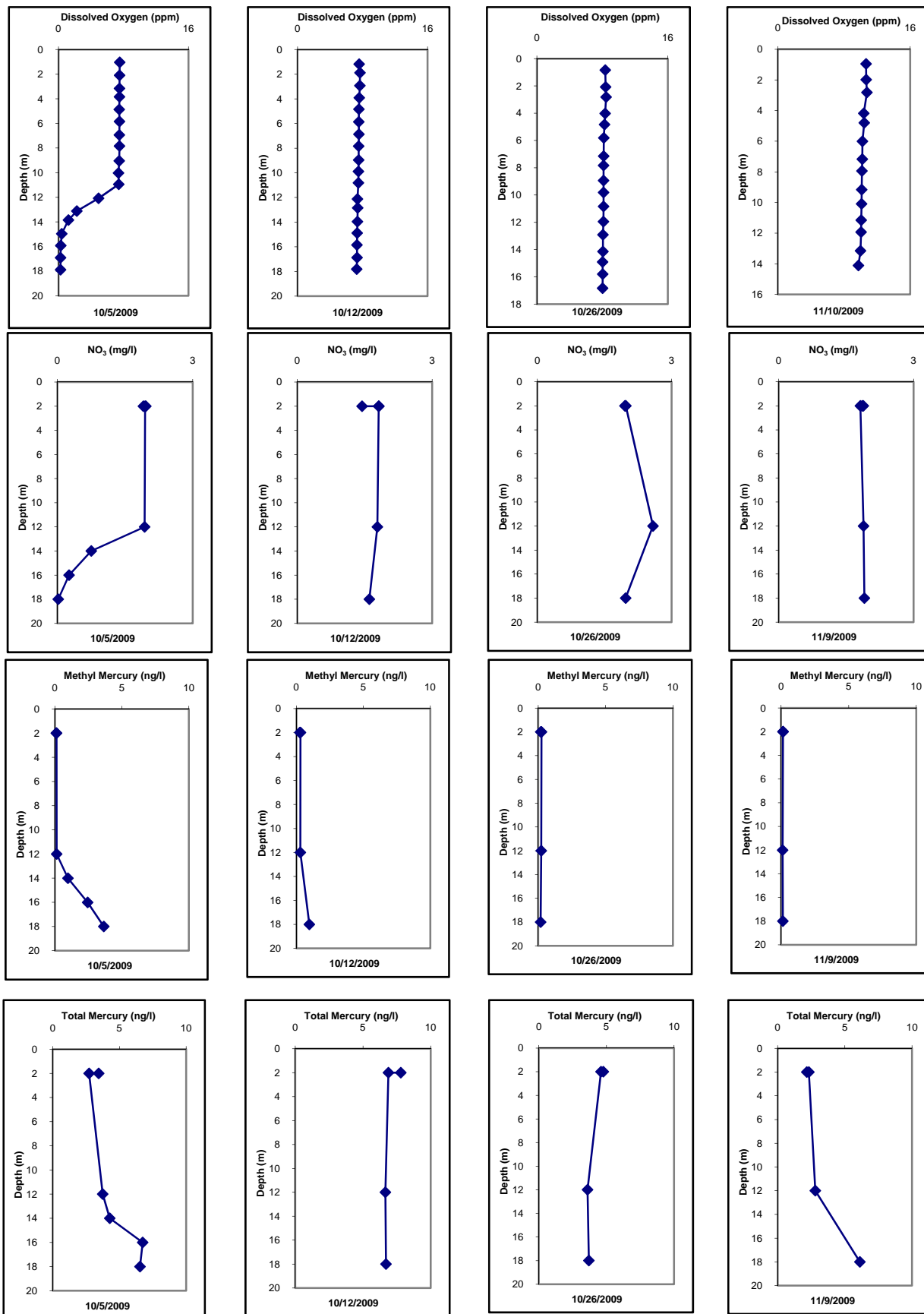
2009 Water Quality Results: South Deep



2009 Water Quality Results: South Deep



2009 Water Quality Results: South Deep



2009 Water Quality Results: South Deep

