
ONONDAGA LAKE BASELINE MONITORING REPORT FOR 2011

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LIST OF ACRONYMS

CPUE	Catch (of fish) per unit of effort
DDT	Dichloro Diphenyl Trichloroethane
DO	Dissolved Oxygen
DUSR	Data Usability and Summary Report
GPS	global positioning system
ISUS	<i>in situ</i> ultraviolet spectroradiometer
mg/kg	milligrams per kilogram (or parts per million in water)
NYSDEC	New York State Department of Environmental Conservation
OCDWEP	Onondaga County Department of Water Environment Protection
PCBs	Polychlorinated Biphenyls
PHM	Permanent Habitat Module
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
TSS	Total Suspended Solids
UFI	Upstate Freshwater Institute
USEPA	United States Environmental Protection Agency

DEFINITIONS

Benthic	Bottom dwelling (<i>i.e.</i> , in sediment)
Epilimnion	During summer stratification, the upper portion of the thermally-stratified water column located between the 0- and 30-ft. (0- and 9-meter) water depth in Onondaga Lake. The epilimnion is warmer than the underlying stratified layers and relatively well-mixed by wind and waves.
Hypolimnion	The lower portion of the water column during summer stratification where water temperatures are cooler than upper waters (typically in the portion of Onondaga Lake where water depths exceed 30 ft. [9 meters]). Mixing levels are diminished in the hypolimnion relative to the epilimnion.
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. 1 ng/L is the same as 0.000001 milligram per liter (mg/L) or part per million.
Profundal	Offshore zone within a water body where water depths are greater than the depth to which sunlight can penetrate to support aquatic plants, in contrast with the littoral zone closer to shore. In Onondaga Lake, the profundal zone stratifies each year from May to October based on water temperature. The profundal zone of Onondaga Lake occupies 64 percent of the lake surface area based on a minimum water depth of 30 ft. (9 meters).
Seston	A collective term for all particulate matter present in the water column which consists of living, biological material (plankton) and nonliving particulate material.
Thermocline	Located within the interval of water between the epilimnion and hypolimnion corresponding to the water depth of the maximum rate of decrease in temperature with respect to depth.

EXECUTIVE SUMMARY

The objectives of baseline monitoring conducted on behalf of Honeywell were to document conditions in Onondaga Lake prior to initiating the remedial action and to provide data for future evaluation of the effectiveness of the lake bottom remedy. This report includes results from the 2011 Onondaga Lake baseline monitoring efforts which was the final year of the baseline monitoring program that began in 2008. Baseline monitoring associated with remedial construction was initiated on behalf of Honeywell as a separate effort late in 2010 and was conducted and reported separately. Dredging of lake sediment is scheduled to begin in mid-2012.

Baseline monitoring in Onondaga Lake included sampling media for which preliminary remediation goals were 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.

Honeywell's baseline monitoring in 2011 consisted of three distinct types of efforts (called books), each of which was conducted based on a work plan addendum approved by the NYSDEC prior to monitoring:

- Book 1 work included collection and mercury analysis of deep basin water and zooplankton samples from two locations in Onondaga Lake at South Deep and North Deep. The deep basin water samples were also analyzed for other parameters including nitrate, nitrite and ammonia in conjunction with the first year of the nitrate addition pilot test reported separately (Parsons and UFI, in preparation). Sediment trap samples were collected at South Deep and analyzed for mercury and solids content.
- Book 2 work included collection and chemical analysis of 100 adult sport fish and 40 composited samples of prey fish, fish community assessments, fish population surveys, an evaluation of fish diet, an evaluation of walleye and smallmouth bass movements, and an evaluation of the phytophilous macroinvertebrate community in Onondaga Lake.
- Book 3 work included collection and mercury analysis of surface water samples from the two lake tributaries that provide the largest tributary inflows to Onondaga Lake—Onondaga Creek and Ninemile Creek. The Book 3 effort included baseline surface water samples and surface water samples collected during two runoff events.

Reports on the 2008, 2009, and 2010 Onondaga Lake baseline monitoring efforts conducted on behalf of Honeywell were completed previously.

SECTION 1

INTRODUCTION

Baseline monitoring in Onondaga Lake was conducted on behalf of Honeywell from 2008 through 2011 to document lake conditions before dredging and capping of lake sediment is initiated in 2012. This baseline monitoring lays the groundwork for evaluating the effectiveness of the lake bottom remedy identified in the ROD issued by the NYSDEC and the USEPA (NYSDEC and USEPA, 2005) and described in the *Remedial Design Work Plan for the Lake Bottom* (Parsons, 2009).

The program objectives for baseline monitoring were presented in the *Baseline Monitoring Scoping Document* (Parsons, Exponent, and Anchor QEA, 2010a) 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 on behalf of Honeywell and by other entities such as the Onondaga County Department of Water Environment Protection (OCDWEP), Upstate Freshwater Institute (UFI), the State University of New York College of Environmental Science and Forestry (SUNY-ESF), and the United States Geological Survey.

As in previous years, the 2011 work scopes for baseline monitoring efforts were submitted as addenda to the original Book 1, Book 2, and Book 3 work plans approved by NYSDEC.

- Addendum 3 to the 2008 Book 1 Work Plan includes water quality, zooplankton and sediment trap monitoring in the deep basins of Onondaga Lake where water depths exceed 30 ft. (Parsons and Exponent, 2011a).
- Addendum 3 to the 2008 Book 2 Work Plan includes fish sampling for chemical analyses, fish population and community assessments and fish diet analysis as well as fish telemetry work (Parsons, Exponent and Anchor QEA, 2011a).
- Addendum 1 to the 2009 Book 3 Work Plan includes tributary water sampling and analysis during baseline flow and runoff flow events (Parsons and Exponent, 2011b)

These work plan addenda were approved by NYSDEC and 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. Baseline monitoring in Onondaga Lake associated with remedial construction was initiated as a separate effort in late 2010 and

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continued during 2011. Results from monitoring efforts associated with remedial construction are being documented separately (see Parsons and Anchor QEA, 2011 for the late 2010 results).

This fourth and final yearly baseline monitoring report describes results from the 2011 Onondaga Lake baseline monitoring program. The report follows the same format applied in the Baseline Monitoring Reports for 2008, 2009 and 2010 (Parsons, Exponent, and Anchor QEA, 2011c, 2011b and 2011d respectively). Section 1 provides an introduction. Section 2 presents a summary of the sampling and analytical work. Section 3 provides a summary of data management and data validation. Section 4 presents a brief assessment of the 2011 data. Appendices A, B, and C respectively, provide the 2011 Data Usability and Summary Reports (DUSR) for Books 1, 2 and 3. The three DUSRs follow the format from prior baseline monitoring years including laboratory data verification, data validation, and data usability. Appendix D presents detailed data plots from the 2011 Book 1 work.

SECTION 2**SAMPLING AND ANALYSIS SUMMARY FOR 2011**

Sample collection, sample management, equipment decontamination, and other baseline monitoring field procedures were conducted in accordance with work plan addenda for Book 1, Book 2, and Book 3 approved in advance by NYSDEC (Parsons and Exponent, 2011a for Book 1; Parsons, Exponent and Anchor QEA, 2011a for Book 2; and Parsons and Exponent, 2011b for Book 3). In addition, surface water and zooplankton monitoring completed as part of the work scope for the 2011 portion of the nitrate addition pilot test (Parsons and UFI, 2011) are also summarized herein. Table 2 summarizes the media, sampling locations, and primary activities completed for the 2011 baseline monitoring and nitrate addition work efforts.

2.1 BOOK 1: DEEP BASIN WATER ZOOPLANKTON AND SEDIMENT TRAP SAMPLING

Book 1 field efforts consisted of deep basin water and zooplankton sampling and sediment trap deployment and retrieval completed by UFI. The following types of samples were collected (Table 3):

- Water column samples from South Deep and North Deep at multiple depths and times from May 23 through November 21.
- Water samples from a water depth near the lake bottom at 10 locations monthly from July through October while nitrate was being added to the lake.
- Vertically-detailed *in situ* water quality measurements at 30 locations throughout the North and South Basins using a rapid profiling instrument *in situ* ultraviolet spectroradiometer (ISUS).
- Zooplankton samples at South Deep and North Deep at a frequency ranging from weekly to monthly. UFI also attempted to collect samples of large *Daphnia* zooplankton (at least 1 millimeter in length), however unlike during 2009, quantities of *Daphnia* large enough for chemical analysis were not found during any of these sampling events in Onondaga Lake during 2011.
- Sediment traps deployed for one-week periods from May through November 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.

2011 laboratory analytical results related to Book 1 and to the nitrate addition pilot test are all summarized in this report for ease of use.

2.2 BOOK 2: FISH SAMPLING

Book 2 work included adult sport fish, prey fish, and phytophilous macroinvertebrate sample collection throughout the lake (Figures 1, 2, and 3). Fish sampling for tissue chemical analyses was conducted primarily by Anchor QEA. Fish population, community assessments (including lake sturgeon), telemetry, and gut content analysis as well as phytophilous macroinvertebrate community sampling were conducted during 2011 primarily by SUNY-ESF under the supervision of Dr. Neil Ringler with support and oversight by Anchor QEA.

Sampling locations for fish tissue chemical analyses were the same as those sampled during 2008 through 2010, coinciding with historical tissue sampling locations occupied during the remedial investigation for Onondaga Lake (TAMS Consultants, 2002), 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 May 25 through June 8, 2011 and June 28 through July 6, 2011. Prey fish sampling for tissue chemical analyses was conducted during late May and also from August 1 through August 4, 2011. Fish samples for tissue analyses were collected and analyzed using the same methods employed during 2008 through 2010, except that 25 individuals of each adult sport fish species were sampled instead of 50. Fish sampling methods consisted of electrofishing, gill netting, trap netting, and seining. Electrofishing was the preferred method for sampling bullhead and pumpkinseed, because both species tend to move inshore during the night and are susceptible to capture. Trap nets were a secondary source for collection of pumpkinseed and bullhead which may be captured in these passive nets while moving along the shoreline. Walleye and smallmouth bass were primarily captured in gill nets set at the 13- to 23-ft. (4 to 7 meter) water depth also during the night time when they are more active. Occasionally walleye or smallmouth bass were captured by electroshocking. Prey fish were captured during seining events along the shoreline where they typically congregate during the day.

Samples from four adult sport fish species and two prey fish families were collected for tissue chemical analysis. As in previous years, the four adult sport fish species were smallmouth bass (*Micropterus dolomieu*), brown bullhead (*Ameiurus nebulosus*), walleye (*Sander vitreus*), pumpkinseed sunfish (*Lepomis gibbosus*). Prey fish samples collected for tissue chemical analysis were from the minnow and topminnow families (Cyprinidae and Fundulidae), excluding carp (*Cyprinus carpio*) and goldfish (*Carassius auratus*) due to their large size. Species of prey fish were determined based on availability and included 24 banded killifish (*Fundulus diaphanus*) composites and 16 small alewife (*Alosa pseudoharengus*) composites. Alewife were collected by gill netting as part of the sport fish sampling in late-May 2011, because alewife move into shallower waters during the spring and early summer allowing for easier capture at that time.

For adult sport fish, 25 individuals from each of the four species were collected from eight locations (based on a target of three to four individual fish from each species at each location) for a total of 100 samples. The number of fish samples collected and analyzed for tissue chemical

concentrations was modified for 2011 to address concerns with impacting the population sizes of the fish species being sampled.

Fillet samples (NYSDEC standard fish fillet based on NYSDEC 2000; skin-on except for brown bullhead) were collected from each adult sport fish for mercury analysis. In addition to mercury, polychlorinated biphenyls (PCBs), dichloro diphenyl trichlorethane (DDT) and metabolites, hexachlorobenzene, and lipids were analyzed in 12 samples, and dioxins and furans were analyzed in five samples from each of the four species of adult sport fish.

Scales from each adult pumpkinseed, a pectoral spine from each adult brown bullhead, and otoliths (small ear bones) from each smallmouth bass and walleye were collected to assess fish age. Total length and weight of each sample were recorded as well.

For prey fish, three composite samples were collected by seining at each of the eight locations, for a total of 24 composite samples submitted for mercury analysis. Composite samples included 10 to 15 prey fish per sample, depending on weight. In addition, 16 composite samples of 5 alewife individuals per sample were collected by gill netting and submitted to the laboratory (TestAmerica) for mercury analysis. Alewife samples also were submitted to Cornell University for analysis of ¹⁵N and ¹³C stable isotopes, as a follow up to prior stable isotope analyses conducted by Cornell in 2009 and 2010.

Fish population and community composition were assessed as part of the Onondaga Lake baseline fish monitoring effort. In addition to the smaller mesh gillnet used during community surveys, a larger sized gill net was used to better understand lake sturgeon abundance and distribution. Community sampling was conducted with 5.9-inch stretch mesh netting, and sturgeon gillnetting was conducted with an eight panel experimental gillnet with two panels each of 6, 8, 10, and 12-inch stretch mesh in sequence for two series.

Tracking of fish movements started in 2010 continued in 2011. The focus for fish tracking work was on smallmouth bass and walleye, because these two sport fish have been analyzed for chemical content in tissue since 2008, they represent top predators in the lake food web, and as a result, they are the fish most likely to show high mercury concentrations. Fish tagged during 2010 continued to be monitored, and an additional 13 walleye and 5 smallmouth bass were tagged and monitored. Passive receivers were placed at the lake outlet and at the mouths of Onondaga Creek and Nine Mile Creek by attaching the receiver to a cinder block using a chain and clasp and then attaching the chain to a permanent structure in each area (e.g., a pier or bridge support).

Fish gut contents were checked in the four adult sport fish species collected for tissue chemical analysis (smallmouth bass, walleye, pumpkinseed, and brown bullhead). Gut contents from each of the fish types were identified to the lowest taxonomic order reasonably achievable and abundance of each reported. No additional fish gut content sampling occurred in 2011 due to the large data set collected since 2008 on the target species.

The density and distribution of adult sport fish were assessed monthly from May through October at 10 locations around 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 visible marks. Similar to 2008 through 2010, multiple fish population and fish community sampling efforts were completed with each month representing one sampling period extending over approximately two weeks. A population estimate for largemouth bass was calculated using the modified Schnabel estimator (Ricker, 1975), as described in the *Book 2 Work Plan for 2008* (Parsons, Exponent, and QEA, 2008). Sample size was not sufficient to conduct smallmouth bass, bluegill, or pumpkinseed sunfish population estimates. These species were assessed based on their dominance over the years in the lake and the likelihood of obtaining enough samples to calculate a population estimate.

2.3 BOOK 2: PHYTOPHILOUS MACROINVERTEBRATE COMMUNITY SAMPLING

Samples of macroinvertebrates that live on aquatic vegetation (called phytophilous macroinvertebrates) were collected on August 3 and assessed for community composition and abundance. Three samples of phytophilous macroinvertebrates were collected from aquatic vascular plants located adjacent to each of the nine benthic macroinvertebrate locations sampled in 2010. Samples were sorted and macroinvertebrate taxa were identified in a laboratory.

2.4 BOOK 3 FOR 2011: TRIBUTARY WATER SAMPLING

Book 3 tributary surface water sampling was conducted in Ninemile Creek and Onondaga Creek because 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). Figure 4 shows the 2011 tributary sampling locations that were also sampled in 2009 as part of the Book 3 effort.

Surface water samples were collected manually as grab samples from three locations – two in Ninemile Creek (upstream at Amboy Dam and downstream at State Fair Boulevard) and one in Onondaga Creek (downstream at Spencer Street just upstream of Syracuse Harbor). Surface water base flow samples were collected on 13 dates every other week from June 15 through November 29. Stormwater was also sampled from six different stages of two significant storm events on August 28 and 29 and on September 7 through 9. In addition, continuous turbidity data were collected from Ninemile Creek at State Fair Boulevard (Route 48) near the creek mouth.

Surface water samples were collected from Ley Creek at Park Street on 12 different dates and also during the two monitored storm events for analysis of PCBs and total suspended solids. Park Street is located near the mouth of Ley Creek.

2.5 ANALYTICAL WORK SCOPE

Surface water samples collected at South Deep on 18 different dates from late May to late November were analyzed for numerous water quality parameters including low-level total mercury and methylmercury consistent with annual baseline monitoring efforts that began in 2008. Selected surface water samples from the 2-meter water depth at South Deep were also analyzed for filtered (i.e., dissolved) total mercury. Surface water samples collected weekly at South Deep and North Deep from June 30 to October 10 (while nitrate was being added to the lake) were analyzed for total mercury, methylmercury, nitrogen forms, and calcium (and in waters 14 meters and deeper for sulfide and ferrous iron). Surface water samples collected monthly from July through October at 12 locations deep near the lake bottom (including South Deep and North Deep) were analyzed for total mercury, methylmercury, nitrate and nitrite. In addition, surface water samples were collected on September 21 and October 13, 2011 at two other locations near the lake bottom and analyzed for total mercury, methylmercury, nitrate and nitrite.

Zooplankton samples collected at South Deep and North Deep were analyzed for total mercury and methylmercury.

Sediment trap solids (slurry) samples collected at South Deep from April through November were analyzed for total suspended solids (TSS), fixed and volatile suspended solids, inorganic carbon, calcium, and total mercury. Solids from one of the sediment trap samples collected in triplicate were analyzed for total mercury while samples from the two other sediment traps collected on the same date were archived for potential future analyses.

Adult sport fish samples included 25 samples each of smallmouth bass, walleye, pumpkinseed, and brown bullhead processed and subsequently analyzed for mercury in fillets. Prey fish samples consisted of 40 composite samples that also were analyzed for mercury.

In addition to being analyzed for mercury, a subset of adult sport fish fillet samples (12 per species for a total of 48 samples) were analyzed for PCBs, DDT and its metabolites, hexachlorobenzene, and lipids. Dioxins/furans also were analyzed in five fillet samples from each of the species of adult sport fish for a total of 20 samples. Samples selected for analysis of PCBs, DDT and its metabolites, hexachlorobenzene, lipid content and dioxins/furans were representative of the various locations in the lake and were similar to samples selected during 2008 and 2010 for the same chemical analyses. Six adult sport fish samples (two pumpkinseed, three bullhead, and one smallmouth bass) were inadvertently omitted from hexachlorobenzene analysis at the laboratory. Therefore, results are available for hexachlorobenzene for ten pumpkinseed, nine bullhead, eleven smallmouth bass, and twelve walleye collected during 2011 instead of the target of 12 samples for each sport fish species.

Three samples of alewife prey fish collected during 2011 were analyzed for stable isotopic ratios of carbon (13C/12C) and nitrogen (15N/14N) by Cornell University's stable isotope laboratory.

Samples of phytophilous invertebrates contained insufficient quantities of biomass for mercury analyses.

Each of the tributary water samples collected as part of the Book 3 work were analyzed for unfiltered total mercury, unfiltered methylmercury and total suspended solids. In addition, three or four base flow water samples and one storm event water sample from each of the three tributary sampling locations were analyzed for dissolved total mercury following filtration in the laboratory. In addition after sampling work began USEPA requested that surface water samples be collected from Ley Creek near the creek mouth and analyzed for PCBs and total suspended solids.

SECTION 3

DATA MANAGEMENT AND VALIDATION SUMMARY

3.1 DATABASE

Validated results from each of the 2011 baseline monitoring efforts have been stored and accounted for in Honeywell's Locus Focus data management system for Onondaga Lake.

3.2 QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

Sample identification, QA/QC procedures, sample collection, data entry, and data validation were conducted in accordance with the three agency-approved work plan addenda. 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.

TestAmerica Laboratories and UFI's laboratory in Syracuse, NY conducted the 2011 baseline monitoring laboratory analyses on behalf of Honeywell. TestAmerica's laboratory in North Canton, Ohio conducted the analyses for low-level mercury and low-level methylmercury. TestAmerica's laboratory in Knoxville, Tennessee conducted the analyses for dioxins and furans. Other analyses performed by TestAmerica were performed in their Pittsburgh, PA laboratory.

An additional Book 1 effort during 2011 was a round-robin assessment of low-level mercury water and zooplankton analyses performed by two different laboratories – TestAmerica Laboratories in North Canton, Ohio and Brooks Rand Laboratories in Seattle, Washington. Results from this round-robin assessment are included in Appendix A.

High reporting limits originally reported by TestAmerica Laboratories for percent lipids in 2011 fish tissue samples were later modified. TestAmerica Laboratories revised the 2011 lipid results reported for 19 of the 48 fish samples analyzed for lipid content due to originally reporting a reporting limit of 1.0 percent instead of 0.1 percent. The laboratory also correspondingly lowered its detection limit for 2011 lipid determinations from 0.3 percent to 0.03 percent. Lipid content affects reporting of results for organic compounds on a lipid-normalized basis. Reporting of organic concentrations on a wet-weight basis or in any manner other than lipid-normalized is not affected by lipid content, because extract used to determine lipid content is not the same extract used to analyze for organic compounds.

3.3 DATA VALIDATION

Chemical analytical data generated by TestAmerica and UFI were reviewed and validated by Parsons for usability in accordance with data validation procedures described in the DUSRs that are presented as Appendices A, B, and C to this report. Results presented in Appendices A through C have been incorporated into the Locus Focus database.

SECTION 4**DATA ASSESSMENT****4.1 BOOK 1 RESULTS FOR 2011****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 can accumulate in the hypolimnion during stratification, bioaccumulate when released from the hypolimnion, and thereby pose potential risks to human health and the environment if fish are consumed.

Other water quality parameters were monitored to provide insight into lake stratification and mercury cycling. Dissolved oxygen (DO) and nitrate are particularly important parameters because methylmercury production occurs in the absence of DO and only at low concentrations of nitrate. A three-year nitrate addition pilot test began in 2011 based on a work plan approved by the agencies (Parsons and UFI, 2011). Nitrate was added in liquid form from a barge moved from day to day among three locations in the middle of the lake. Nitrate was added to the lower waters during 40 daily applications from June 30 through October 10, 2011.

Figures 5 through 8 present the DO, nitrate-nitrogen, unfiltered methylmercury and unfiltered total mercury results measured at South Deep and at North Deep over time at water depths of 2 meters (epilimnion), 12 meters (near the top of the hypolimnion), and 16 meters (mid-to-lower hypolimnion). The same parameters were also measured at a water depth of 18 meters (bottom of the hypolimnion) at South Deep where total water depths are greater than at North Deep.

DO concentrations in the lower hypolimnion declined to zero by early July. Nitrate concentrations in the hypolimnion remained at or above 1 mg/L throughout the monitoring period unlike prior years when nitrate was not applied. Methylmercury was not significantly released from underlying sediment to lower hypolimnion waters during stratification (Figures 5 through 7). The peak methylmercury concentration (0.44 nanograms per liter or ng/L) in the hypolimnion was observed in late August following a 17-day period when nitrate could not be applied due to contamination issues on the application barge. Vertical stratification of the lake ceased and DO levels increased throughout all lake water depths when the lake turned over during the week of November 3. Plots of DO, nitrate-nitrogen, methylmercury, and total mercury by depth for each sampling date are provided in Appendix D.

At the 2-meter water depth, a depth which likely reflects water quality conditions to which biota are primarily exposed, methylmercury concentrations were 0.3 ng/L or less and relatively constant throughout the summer and fall. Similarly, total mercury concentrations throughout the water column were generally less than 2 ng/L throughout the same time period.

Dissolved total mercury concentrations at the 2-meter water depth are presented in Tables 4A and 4B.

Total mercury and methylmercury concentrations analyzed in water collected near the lake bottom at profundal zone locations are summarized in Table 4C.

4.1.2 Zooplankton Mercury Concentrations

Table 5 and Figures 9A and 10A present total mercury and methylmercury concentrations measured in zooplankton collected at South Deep and North Deep. Figures 9B and 10B present methylmercury as a percentage of total mercury for these samples. Total mercury concentrations in zooplankton were less than 0.4 milligrams per kilogram (or parts per million) (mg/kg) on a wet-weight basis, and the highest concentrations were observed in mid-October prior to fall turnover. Methylmercury concentrations in zooplankton were less than 0.015 mg/kg throughout the May through November sampling period. Methylmercury as a percentage of total mercury was 10 percent or less until fall turnover when the percentage of methylmercury increased to 13 to 19 percent.

4.1.3 Zooplankton Community Composition

The zooplankton community was primarily composed of cladocerans (Figure 11). The largest zooplankton biomass quantities were observed in July. Large Daphnia were not observed throughout the entire sampling period in sufficient quantities to sample and conduct chemical analyses.

4.1.4 Sediment Trap Solids and Mercury

Table 6 presents mercury in slurry, triplicate total suspended solids results, and calculated mercury on slurry solids collected from sediment traps. Average suspended solids contents in these samples ranged from 719 to 3,788 mg/l. Mercury concentrations on sediment trap solids ranged from 0.38 to 0.98 mg/kg. The arithmetic average mercury content of sediment trap solids was 0.7 mg/kg. Mercury deposition rates based on sediment trap results averaged 5.2 micrograms per square meter per day.

4.2 BOOK 2 RESULTS FOR 2011

4.2.1 Adult Sport Fish and Prey Fish Tissue Chemical Results

Mercury was detected in each of the 100 samples from adult sport fish fillets (0.021 to 4.1 milligram per kilogram or mg/kg [approximately the same as one part per million]), and 40 whole-body prey fish composite samples (0.095 to 0.96 mg/kg) including 16 alewife composite samples (0.17 to 0.27 mg/kg) (Table 7). Mercury 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, while no trend is apparent for brown bullhead (Figure 12).

Polychlorinated biphenyls (PCBs) were detected in 11 of 12 smallmouth bass, 12 of 12 walleye, 11 of 12 brown bullhead, and six of 12 pumpkinseed (0.220 to 1.2 mg/kg in smallmouth bass; 0.12 to 3.2 mg/kg in walleye; 0.020 to 0.12 mg/kg in brown bullhead; 0.011 to 0.037 mg/kg in pumpkinseed; Table 7).

DDT and metabolites were detected in 11 of 12 pumpkinseed samples (0.017U to 0.0216 mg/kg), 10 of 12 brown bullhead samples (0.0017U to 0.0483 mg/kg), 12 of 12 smallmouth bass samples (0.0081 to 0.114 mg/kg), and 12 of 12 walleye samples (0.0094 to 0.2982 mg/kg; Table 7).

Hexachlorobenzene was detected in 12 of 12 walleye samples (0.0034 to 0.044 mg/kg), eight of nine brown bullhead samples (0.0019 to 0.03 mg/kg), 8 of 10 pumpkinseed samples (0.0003 to 0.0031 mg/kg), and 11 of 11 smallmouth bass (0.0007 to 0.23 mg/kg; Table 7).

Lipid contents ranged from 0.07 to 0.77 percent in brown bullhead fillets, 0.079 to 1.2 percent in pumpkinseed fillets, non-detect to 10 percent in smallmouth bass fillets, and 0.78 to 5.1 percent in walleye fillets (Table 7). Two of the lipid content results for smallmouth bass fillets (reported as less than 0.099 percent and 10 percent) appear to be anomalies and will not be used to quantify lipid-normalized organic chemical concentrations. Usability of the 2011 lipid determinations continues to be reviewed. At the same time, representative 2011 fish fillet samples are being reanalyzed for lipid content.

Dioxins were detected in each of the five smallmouth bass, and in four of the five brown bullhead and walleye fillet samples and in three of the five pumpkinseed samples analyzed. Detections of dioxins and furans are reported in Table 7A as toxicity equivalents on a nanogram per kilogram basis. One ng/kg is the same as one part per trillion or 0.000001 part per million.

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 delta (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 with relatively low $\delta^{15}\text{N}$ values representing lower trophic level consumers. Figures 13 and 14 show

the 2011 (alewife only) and prior stable isotope results. Alewife feed on zooplankton and fish larvae, which is consistent with the results presented in Figure 13.

Patterns in $\delta^{13}\text{C}$ provide insight about diet of various lake organisms. Distinct $\delta^{13}\text{C}$ clusters that represent different food sources are evident in organisms from Onondaga Lake. One cluster represents a benthic food source and includes amphipods, chironomids, golden shiners, and minnows and crayfish. The other cluster represents a water column food source which includes zebra mussels, zooplankton, alewife, smallmouth bass, and walleye.

4.2.3 Fish Diet

Fish diets, as determined by SUNY-ESF based on gut content analysis, are presented in Table 8. The majority of stomachs from fish collected for tissue analysis were empty when pumped following electroshocking; a few fish and fish parts were noted from walleye and smallmouth bass guts during processing.

The majority of bass sampled to assess fish diet (20 out of 25) had empty stomachs. The only contents found in any of the bass stomachs were fish or fish parts. The majority of walleye sampled to assess fish diet (21 out of 25) had empty stomachs. The only contents found in the four walleye stomachs were fish, three with alewife and one with unidentified fish parts (Table 8).

4.2.4 Fish Community Assessment

Fish representing 42 species were captured or observed in Onondaga Lake during fish community sampling at 10 locations from May through October. Fish representing 36 species were captured with trapnets, 15 species with gill nets, nine species with a boat electroshocker, and 19 species with seines (Table 9).

During trap net sampling, nets were set at each location once per month during the late afternoon/evening and checked the following morning. Trap net locations were sampled from June through October; trap net sampling was not conducted in May due to high water levels. A total of 6,295 fish representing 36 species were captured during 49 nights of trap netting during 2011 (Table 10). The fish community was dominated by gizzard shad (24.6 percent of the total catch) with 70 percent of the gizzard shad captured at the Metro location. Alewife made up 24 percent of the community followed by bluegill (14 percent), banded killifish (7.4 percent), and largemouth bass (6.8 percent). Ten species made up between one and six percent of the catch and 21 species contributed less than one percent of the total catch. The number of species captured at each site varied from 17 species at the Iron Bridge and Rte. 690 locations to 26 species at the Maple Bay location (Table 10).

Fifty-five gill nets were set for approximately two hours between May 24, 2011 and October 13 at 10 different locations throughout Onondaga Lake (Table 11). A total of 626 fish and 15 species were captured during sampling. The most common fish captured were walleye (34 percent of the total catch), gizzard shad (16 percent), and channel catfish (14 percent; Table 12). Two lake sturgeon were captured, each of which was captured at a different gill-net site. Nine brown trout also were captured during May, June, and July. Species richness per site

varied between four species at Harbor Brook and ten species at both the Ninemile and Wastebeds 1 through 8 locations (Table 12).

Forty-five sturgeon gill nets were set at 8 locations from May 30 through October 13. They were fished for an average of four hours per net. Twelve lake sturgeon were captured with a catch per unit of effort (CPUE) (fish per hour) of 0.07 (excluding two sturgeon captured during community sampling). Eleven lake sturgeon were tagged in 2011 with Carlin dangler tags with two of these also recaptured at a later date (Table 13). Mean total length was 50.6 in. (1285 mm) with a range from 38.4 to 58.3 in. (975 mm to 1480 mm). Six lake sturgeon were weighed during sampling with a mean of 40.5 pounds (18.4 kg) and a range of 18.7 to 49.6 pounds (8.5 kg to 22.5 kg). Lake sturgeon were captured at six locations during targeted sampling: four at the outlet, three at Hiawatha Point, two at the Wastebeds 1 through 8 location, one at the Causeway location, one at the Marina location, and one at the Iron Bridge location (Table 13). In addition, two lake sturgeon were captured during regular gillnetting one from the Permanent Habitat Module (PHM) and one from the Causeway location (Table 13).

Seining was conducted during the week of August 15 at ten locations (Figure 1 and Table 14). Two thousand five hundred and thirty fish from 19 species were captured. Fish catch was dominated by banded killifish (42 percent) and largemouth bass (40 percent). Yellow perch (4 percent), tessellated darter (4 percent), pumpkinseed (2.5 percent), and bluegill sunfish (2 percent) made up the majority of the other species caught. All other species contributed less than 1 percent of the total catch. The number of species captured at each location ranged from five at both the Wastebeds 1 through 8 and Marina locations to 14 at the Maple Bay location (Table 14).

4.2.5 Fish Population Assessment for Adult Pumpkinseed, Bluegill and Largemouth Bass

A total of 1,515 adult pumpkinseed fish with total lengths of 100 mm [3.9 in.] or more were captured and marked from May to November, with three recaptures, during seven sampling events. Due to the limited number of recaptures, a population estimate for pumpkinseed could not be calculated.

A total of 461 adult bluegill fish with total lengths of 100 mm [3.9 in.] or more were captured and marked from May to November, with one recapture during seven sampling events. Due to the limited number of recaptures, a population estimate for bluegill could not be calculated.

A total of 231 adult largemouth bass fish with total lengths of 300 mm [11.8 in.] or more were captured during seven sampling efforts with five recaptures. The lakewide largemouth bass population for 2011 was estimated at 5,492 with a 95 percent confidence interval of 3,051 to 27,481.

4.2.6 Assessment of Walleye and Smallmouth Bass Movement Using Telemetry

Telemetry data were collected beginning in 2010 and continued in 2011 to assess the amount of time individual fish are in Onondaga Lake throughout the season and to assess

movements of fish within the lake. Eighteen fish (13 walleye and five smallmouth bass) were captured and tagged with sonic telemetry tags during the summer and fall of 2011 (Table 15). Fish that were tagged were captured using short gill net sets to reduce stress to the fish. Fish that were deemed suitable for tagging were held in a net pen near the marina for up to 24 hours to assess condition prior to tagging. Thirteen walleye were tagged on May 11-12 and five smallmouth bass were tagged on June 27.

Use of the lake by individual fish was assessed with manual and passive tracking techniques. Manual tracking was conducted by boat using a hydrophone lowered over the side of the boat and a receiver to locate tagged fish in real time throughout the lake. Manual tracking of fish was conducted for one to two days approximately every other week (May 13 to October 24) with 8 hour and 24-hour surveys. During the 8-hour surveys attempts were made to identify as many tagged fish as possible and record fish location at least once during this time period, while 24-hour surveys tracked the same two fish every hour for 24 hours to gather data on short-term movements. During each survey, locations and depths of each fish being tracked were recorded. During each tracking event, fish location was determined and global positioning system (GPS) coordinates recorded, as well as the temperature of the fish (used to estimate depth of the fish in the water column based on temperature profiles). Passive tracking was conducted by installing automated underwater receivers at the Onondaga Lake outlet, at the mouth of Nine Mile Creek, and at the Inner Harbor of Onondaga Creek to assess fish movements. These receivers recorded data on fish movement into or out of the lake and can record up to 210,000 detections.

4.2.6.1 Eight-Hour Fish Trackings

Twelve eight-hour fish tracking surveys were conducted from May 13 to October 17, 2011. All except one fish (Fish ID 123) tagged in 2011 were located at least two times after being tagged and released. One smallmouth bass tagged in 2011 was assumed dead due to a lack of movement (Table 15). Tags were detected a total of 183 times during the eight hour surveys. The majority of tag detections were found in sediment management unit (SMU) 8 (i.e., within the pelagic zone) for both walleye and smallmouth bass (Table 16). Walleye and smallmouth bass also were located in SMUs 4, 5, and 6. Only walleye were located in SMU 3 and only smallmouth bass were located in SMUs 1, 2, and 7.

4.2.6.2 Twenty-Four Hour Fish Trackings

Walleye were tracked 18 times on 10 different occasions between May 24 and October 24. During these tracking events, 13 individual fish were tracked; one fish was tracked three times, four fish were tracked two times, and eight fish were each tracked once (Figure 15a to 15j). Smallmouth bass were tracked five times between July 11 and October 10. One smallmouth bass was tracked three times and the other two smallmouth bass were each tracked once (Figure 16a and 16b). Fish were tracked for 24 hours on six dates; sampling was ended prior to the end of 24 hours on three dates because of extreme weather conditions and one date due to inability to find the targeted fish.

The sonic tags used to track fish also recorded fish temperature which provides an estimate of water temperature where the fish is located. Based on temperature, the depth of the fish may

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be approximated based on the lake temperature profile available from UFI's robotic buoy located at South Deep. Throughout the 2011 fish trackings, the maximum temperature recorded for walleye was 28.0 degrees Celsius and 27.5 degrees Celsius for smallmouth bass both observed in late July, while the minimum temperature of 11.5 degrees Celsius for walleye and 16.5 degrees Celsius for smallmouth bass was observed during October (Table 17). This temperature range is consistent with known temperature preferences for walleye and smallmouth bass.

Walleye and smallmouth bass stayed within the lake boundaries during 2011 tracking events. Walleye movement in 24 hours varied between 1.11 miles (1,782 m) on August, 8 and 7.92 miles (12,750 meters) on October 10 with an average distance of 3.70 miles (5,953 meters) travelled. Smallmouth bass movement in 24 hours varied between (0.66 miles (1,063 meters) and 4.94 miles (7,951 meters) both on July 7. The average distance travelled during 24 hours was 1.78 miles (2,869 meters).

On average, walleye were observed during 2011 to be suspended over water with depths greater than 23 ft. or 7 meters, while smallmouth bass were suspended over shallower water on average (Table 17). During the warmer summer months (July and August) walleye were located over shallower water (water depths less than 10 meters) than they were over the early summer (June) and fall months (September, October, November) (water depths greater than 33 ft. or 10 meters: Table 17). Smallmouth bass were recorded over the shallowest water depths during early July with observations over deeper water in late July and October.

4.2.6.3 Passive Receivers

Passive sonic receivers were deployed at three locations in June to record movements of tagged fish in and out of the lake. Data were downloaded on October 6 and receivers were subsequently returned to each location to continue monitoring fish movements throughout the winter; receivers will be retrieved following ice-out in 2012.

Fish detected with passive receivers during 2011 are summarized in Tables 18 and 19. The outlet receiver had 2,567 detections from 16 walleye and 1 smallmouth bass between June 7, 2011 and October 6 (Table 18). The Onondaga Creek receiver had 9,836 detections from seven walleye between July 8 and October 6 (Table 19), while the Nine Mile Creek receiver had 21 detections from one walleye between September 8 and September 29. At the outlet, the one smallmouth bass (ID 143) had the greatest number of detections (67 percent) of any fish detected at that location. The total number of detections in the outlet steadily increased during summer months, with the greatest activity occurring in September. At the Onondaga Creek location, one walleye (ID 115) had the greatest number of detections with 92 percent of total detections for that location. The number of detections at Onondaga Creek was greatest in August.

Several walleye were tracked traversing the length of the lake with detections at both the lake outlet and Onondaga Creek. Walleye ID 66 was detected in the outlet in June and Onondaga Creek in July. Walleye ID 114 was detected in Onondaga Creek in July and August; on August 31, it was detected in the outlet and then in Onondaga Creek. It subsequently traveled north back to the outlet where it was detected in September and October. This fish had the most number of detections of any other fish in the outlet for those months. Walleye ID 115 was

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detected in Onondaga Creek from July through September 10; one week later it was detected in the outlet. Walleye ID 131 appeared to travel considerably during the summer months with tag detections found in both the outlet and Onondaga Creek in July, August, and September.

4.2.7 Phytophilous Invertebrate Survey Results

Nine locations were selected throughout the lake in 2011 for assessing phytophilous macroinvertebrates. Identification of types of phytophilous invertebrates showed a dominance of bivalves (mean of 27 percent with a range from 1 to 73 percent by location) and gastropods (mean 38 percent; range of 9 to 80 per location) living on the plants (Figure 17). Taxon richness (number of different taxa) was highest among the chironomids. Number of taxa varied among stations with the highest number (23 different taxa) from Willow Bay (Station ID 50062) and the lowest number (seven taxa) from the Wastebeds 1 through 8 location (Station ID 30095).

4.3 BOOK 3 RESULTS FOR 2011

Table 20 presents unfiltered total mercury and methylmercury concentrations measured in tributary surface water samples. The highest total mercury concentrations observed in water samples from Onondaga Creek and Ninemile Creek were 42 and 79 ng/L respectively. The highest methylmercury concentrations observed in water samples from Onondaga Creek and Ninemile Creek were 0.45 and 0.54 ng/L respectively. Three of the nine samples from Ninemile Creek and none of the four samples from Onondaga Creek analyzed for dissolved total mercury exceeded the NYSDEC surface water quality standard (Table 21).

PCB aroclor concentrations measured in Ley Creek surface water at Park Street near the creek mouth varied from none detected to 0.087 ug/L during periodic sampling and from none detected to 0.23 ug/L during the two 2011 storm events when surface water samples were collected.

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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 2011**

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

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

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

PRG - preliminary remediation goal

TABLE 2
SUMMARY OF BASELINE MONITORING WORK COMPLETED DURING 2011 AS BOOKS 1, 2 AND 3

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 as well as monthly water samples near the lake bottom for mercury analyses.
Zooplankton	South Deep and North Deep	Monthly to biweekly sampling and analyses for total mercury and methylmercury. In addition, identified taxa for zooplankton sampled at South Deep.
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 100 adult fish during June from four fish species (25 brown bullhead, 25 walleye, 25 pumpkinseed, and 25 smallmouth bass). Assessed fish age, population, and community composition, including fish gut content. Also assessed fish movements using telemetry.
Prey (forage) Fish	SMUs 2 through 7 (same 8 locations as for adult sport fish)	Collected and analyzed three composites of prey fish collected during August from each of eight locations (24 composites) and 16 composites of alewife collected in May (40 prey fish composites total).
Phytophilous invertebrates	SMUs 2 through 7 (8 locations)	Identified taxa in three replicate samples of phytophilous macroinvertebrates collected in August from each of eight locations.
BOOK 3 Tributary Monitoring		
Surface Water	Onondaga Creek and Ninemile Creek (3 locations)	Biweekly sampling and storm event sampling at two locations along Ninemile Creek and at one location along Onondaga Creek from June through November.

Note: Fall turnover occurred in Onondaga Lake during 2011 on or about November 3.

TABLE 3
2011 ONONDAGA LAKE BOOK 1 WATER COLUMN WORK SUMMARY

Date	Water column		Zooplankton: South Deep and North Deep	Sediment Trap Mercury South Deep (10- meter water depth)	Dissolved Gas Measurements
	South Deep and North Deep	ISUS profiling 10 locations			
May 23	3 depths	◊	□	○	
June 6	3 depths	◊	□	○	◎
June 20	3 depths	◊	□	○	
June 22	1 depth	◊			
June 27	6 depths				
July 5	6 depths	◊	□	○	◎
July 11	6 depths				
July 18	6 depths		□	○	
July 20	1 depth	◊			
July 26	6 depths				
August 1	6 depths	◊	□	○	◎
August 8	6 depths	◊			
August 15	6 depths	◊	□	○	
August 17	1 depth	◊			
August 22	6 depths				
August 29	6 depths		□	○	
September 6	6 depths	◊	□	○	◎
September 12	6 depths	◊	□	○	
September 19	6 depths	◊	□	○	
September 21	1 depth	12 locations			
September 26	6 depths	◊	□	○	
October 3	6 depths		□	○	◎
October 10	6 depths		□	○	
October 13	1 depth	12 locations			
October 17	6 depths	◊	□	○	
October 24	6 depths	◊	□	○	
October 31	4 depths	◊	□		
November 7	3 depths	◊	□	○	◎
November 21	3 depths	◊	□	○	

Sediment traps were deployed for seven days. Trap recovery dates are shown in this table.

Nitrate addition also included ISUS monitoring at approximately 20 additional profundal zone locations.

Lake turnover occurred on or about November 3.

TABLE 4A**2011 DISSOLVED MERCURY WATER
CONCENTRATIONS: SOUTH DEEP
AT 2-METER DEPTH**

Sample Date	DISSOLVED MERCURY ng/L (average of field duplicates)	Data Qualifier
5/23/2011	0.52	
6/6/2011	0.50	U
6/20/2011	0.58	
7/5/2011	0.62 ^(a)	
7/18/2011	0.52	J
8/1/2011	0.54	J
8/15/2011	0.88*	
8/29/2011	0.63	
9/6/2011	0.73*	
9/12/2011	0.48	
9/19/2011	0.76*	
9/26/2011	0.35	J
10/3/2011	0.37	J
10/10/2011	0.20	J
10/17/2011	0.19	J
10/24/2011	0.17	J
10/31/2011	0.26	J
11/7/2011	0.26	J
11/21/2011	0.51	J

* Exceeds New York State surface water quality
Nondetects at half

(a) Sample collected at the 1 meter water depth.

J - estimated value

TABLE 4B**2011 DISSOLVED MERCURY WATER
CONCENTRATIONS: NORTH DEEP
AT 2-METER DEPTH**

Sample Date	DISSOLVED MERCURY ng/L	Data Qualifier
5/23/2011	0.34	J
6/6/2011	0.49	U
6/20/2011	0.25	U
7/5/2011	0.35	J
7/18/2011	0.38	J
8/1/2011	0.12	U
8/15/2011	0.64	
8/29/2011	0.61	
9/6/2011	0.45	J
9/12/2011	0.37	J
9/19/2011	0.81*	
9/26/2011	0.24	J
10/3/2011	0.26	J
10/10/2011	0.17	J
10/17/2011	0.28	J
10/24/2011	0.21	J
10/31/2011	0.06	UJ
11/7/2011	0.52	
11/21/2011	0.49	J

* Exceeds New York State surface water quality
Nondetects at half
J - estimated value

Table 4C
Mercury Concentrations in Surface Water Near the Lake Bottom at 12 Locations
(Concentration (ng/l) One Meter Above Lake Bottom)

2011 Date	North Deep ISUS-27	South Deep ISUS-11	ISUS-5	ISUS-9	ISUS-14	ISUS-18	ISUS-21	ISUS-22	ISUS-23	ISUS-26	ISUS-29	ISUS-32	Average Concentrations at 10 Locations ¹	Range at 10 Locations ¹ Min	Range at 10 Locations ¹ Max
Total Mercury															
6/22/11	1.1	1.4	1.8	1.3	1.8	1.6	2	1.2	1.8	1.6	1.4	1.2	1.57	1.2	2
7/20/11	0.43	0.87	2.2	1.5	0.61	0.48	0.38	0.49	0.33	0.32	0.52	0.68	0.75	0.32	2.2
8/17/11	1	1.3	2.8	1.4	4.4	0.87	0.91	1.2	1.1	0.87	0.78	1.4	1.57	0.78	4.4
9/21/11	1	1.2	4.8	5.3	1.7	1.3	2	1.2	1.2	0.89	1.3	0.68	2.04	0.68	5.3
10/13/11	0.59	0.95	1.4	0.71	0.5	0.85	0.66	0.54	0.66	0.51	0.6	0.51	0.69	0.5	1.4
Methyl Mercury															
6/22/11	0.063	0.067	0.064	0.061	0.067	0.12	0.086	0.063	0.05	0.058	0.045	0.046	0.07	0.045	0.12
7/20/11	0.13	0.14	0.06	0.071	0.08	0.11	0.068	0.1	0.082	0.09	0.078	0.074	0.08	0.06	0.11
8/17/11	0.23	0.16	0.086	0.079	0.14	0.14	0.084	0.22	0.13	0.26	0.12	0.11	0.14	0.079	0.26
9/21/11	0.1	0.12	0.11	0.044	0.09	0.17	0.12	0.14	0.11	0.088	0.074	0.064	0.10	0.044	0.17
10/13/11	0.085	0.063	0.027	0.042	0.034	0.091	0.085	0.078	0.07	0.087	0.076	0.063	0.07	0.027	0.091

¹ These 10 locations are all of the locations listed above except South Deep and North Deep.

Note: Total mercury and methylmercury analyses were also conducted for samples from two other ISUS locations (ISUS-19 and ISUS-45) collected on September 21 and October 13. Those results are as follows for one meter above the lake bottom:

	ISUS-19	ISUS-45
Total Mercury		
9/21/2011	1.3	0.97
10/13/2011	0.65	0.69
Methylmercury		
9/21/2011	0.082	0.054
10/13/2011	0.06	0.071

TABLE 5**MERCURY CONCENTRATIONS IN ZOOPLANKTON SAMPLES COLLECTED AT
SOUTH DEEP AND NORTH DEEP IN 2011**

Field Sample ID	Date	Total mercury (mg/kg wet weight)	Methylmercury (mg/kg wet weight)	Methylmercury (Percent of Total Mercury)
<u>South Deep Results</u>				
OL-1410-01	5/23/11	0.13	0.0012	0.9%
OL-1415-01	6/6/11	0.25	0.0032	1.35
OL-1424-01	6/20/11	0.07	0.0008	1.1%
OL-1436-01	7/5/11	0.055	0.0017	3.1%
OL-1447-01	7/18/11	0.24	0.0021	0.9%
OL-1460-01	8/1/11	0.28	0.0098	3.5%
OL-1470-01	8/15/11	0.14	0.0034	2.4%
OL-1472-01	8/15/11	0.118	0.0065	5.5%
OL-1484-01	8/29/11	0.17	0.0065	3.8%
OL-1491-01	9/6/11	0.11	0.0035	3.2%
OL-1604-01	9/12/11	0.1	0.007	7.0%
OL-1608-01	9/19/11	0.22	0.0078	3.5%
OL-1617-01	9/26/11	0.18	0.0056	3.1%
OL-1619-01	9/26/11	0.0875	0.0052	5.9%
OL-1624-01	10/3/11	0.14	0.0095	6.8%
OL-1631-01	10/10/11	0.13	0.013	10%
OL-1637-01	10/18/11	0.35	0.0069	2.0%
OL-1644-01	10/24/11	0.085	0.0083	9.8%
OL-1649-01	10/31/11	0.1	0.0073	7.3%
OL-1656-01	11/7/11	0.082	0.011	13%
OL-1664-01	11/21/11	0.052	0.01	19%

TABLE 5 (CONTINUED)**MERCURY CONCENTRATIONS IN ZOOPLANKTON SAMPLES COLLECTED AT
SOUTH DEEP AND NORTH DEEP IN 2011**

Field Sample ID	Date	Total mercury (mg/kg wet weight)	Methylmercury (mg/kg wet weight)	Methylmercury (Percent of Total Mercury)
<u>North Deep Results</u>				
OL-1410-02	5/23/11	0.054	0.00036	0.7%
OL-1415-02	6/6/11	0.13	0.0026	2.0%
OL-1424-02	6/20/11	0.19	0.00085	0.4%
OL-1436-02	7/5/11	0.11	0.0031	2.8%
OL-1447-02	7/18/11	0.13	0.0037	2.8%
OL-1460-02	8/1/11	0.18	0.0088	4.9%
OL-1470-02	8/15/11	0.1	0.0033	3.3%
OL-1484-02	8/29/11	0.17	0.0053	3.1%
OL-1491-02	9/6/11	0.1	0.004	4.0%
OL-1604-02	9/12/11	0.079	0.0045	5.7%
OL-1608-02	9/19/11	0.23	0.0044	1.9%
OL-1617-02	9/26/11	0.17	0.0071	4.2%
OL-1624-02	10/3/11	0.19	0.0081	4.3%
OL-1631-02	10/10/11	0.25	0.0056	2.2%
OL-1637-02	10/18/11	0.25	0.003	1.2%
OL-1644-02	10/24/11	0.15	0.0068	4.5%
OL-1649-02	10/31/11	0.28	0.012	4.3%
OL-1656-02	11/7/11	0.049	0.0088	18%
OL-1664-02	11/21/11	0.056	0.0094	17%

TABLE 6
2011 SEDIMENT TRAP MERCURY AND CORRESPONDING TOTAL SUSPENDED SOLIDS RESULTS
(Traps set at 33 ft (10-meter water depth))

Location	Trap Deploy Date	Trap Recover Date	Deployment Duration (Days)	Sample Volume (ml)	Slurry Mercury Results ($\mu\text{g}/\text{L}$)	Mercury Average ($\mu\text{g}/\text{L}$)	Triplicate TSS Results (mg/L)	TSS Average (mg/L)	TSS Deposition (mg per m ² per day)	Mercury Concentration (mg/kg)	Mercury Deposition ($\mu\text{g}/\text{m}^2 \text{ per day}$)
SD	05/16/11	05/23/11	7	144	0.69	0.69	1172 / 760 / 1276	1069	4760	0.65	3.14
SD	05/31/11	06/06/11	6	146	1.40	1.40	3240 / 3184 / 3152	3192	16493	0.44	7.51
SD	06/13/11	06/20/11	7	141	0.92	0.92	1264 / 1556 / 2272	1697	7359	0.54	4.10
SD	06/27/11	07/05/11	8	138	1.60	1.60	2168 / 2116 / 1780	2021	7554	0.79	6.01
SD	07/11/11	07/18/11	7	144	3.50	3.50	3704 / 3588 / 4072	3788	16730	0.92	15.80
SD	07/25/11	08/01/11	7	136	1.40	1.40	1924 / 1764 / 2843	2177	9426	0.64	6.00
SD	08/08/11	08/15/11	7	153	0.92	0.92	1096 / 1020 / 1236	1117	5294	0.82	4.45
SD	08/22/11	08/29/11	7	134	1.30	1.30	1080 / 1172 / 1716	1323	5659	0.98	5.47
SD	08/29/11	09/06/11	8	140	1.20	1.20	1668 / 1284 / 1360	1437	5462	0.83	4.64
SD	09/06/11	09/12/11	6	140	0.78	0.78	1836 / 2144 / 2164	2048	10853	0.38	4.01
SD	09/12/11	09/19/11	7	140	0.84	0.84	1208 / 1184 / 1200	1197	5235	0.70	3.70
SD	09/19/11	09/26/11	7	152	0.78	0.78	804 / 1068 / 992	955	4312	0.82	3.74
SD	09/26/11	10/03/11	7	146	0.53	0.53	648 / 752 / 756	719	3154	0.74	2.42
SD	10/03/11	10/10/11	7	136	1.00	1.00	1084 / 956 / 1112	1051	4506	0.95	4.30
SD	10/10/11	10/17/11	7	133	0.62	0.62	1600 / 1320 / 1304	1408	5987	0.44	2.56
SD	10/17/11	10/24/11	7	133	1.20	1.20	1756 / 1660 / 1780	1732	7683	0.69	5.10
SD	10/31/11	11/07/11	7	144	0.65	0.65	1600 / 1844 / 1584	1676	7552	0.39	2.95
SD	11/14/11	11/21/11	7	137	2.00	2.00	3092 / 3132 / 2976	3067	13042	0.65	8.48
Arithmetic Mean			-	-	-	-	-	-	7840	0.7	5.2

SD - South Deep

TSS - total suspended solids.

Mercury concentration = Mercury average divided by TSS average times a units conversion of 1,000. Concentrations are based on dry weight.

Calculations of TSS and mercury deposition include the surface area of the sediment traps (45 square centimeters).

Table 7
Summary of Book 2 2011 Fish Tissue Chemical Concentrations Measured in Onondaga Lake (wet weight basis)

Parameter	Prep	Species	Sample Size	Number of Detections	Arithmetic Mean ¹	Min	Max	Standard Deviation ²	Standard Error ³
Mercury (mg/kg)	whole body	Prey fish	40	40	0.2809	0.095 ⁴	0.96 ⁴	0.1786	0.0282
	fillet	Brown bullhead	25	25	0.3212	0.11	0.59	0.1344	0.0269
	fillet	Pumpkinseed	25	25	0.2542	0.021	0.67	0.1524	0.0305
	fillet	Smallmouth bass	25	25	1.3444	0.26	2.8	0.6827	0.1365
	fillet	Walleye	25	25	1.8308	0.3	4.1	1.0155	0.2031
Total PCBs (mg/kg)	fillet	Brown bullhead	12	11	0.0589	0.016 U	0.12	0.0329	0.0095
	fillet	Pumpkinseed	12	6	0.0416	0.011	0.170U	0.0326	0.0094
	fillet	Smallmouth bass	12	11	0.5942	0.16 U	1.2	0.3126	0.0902
	fillet	Walleye	12	12	1.3775	0.12	3.2	0.817	0.2359
Sum of DDT and metabolites (mg/kg)	fillet	Brown bullhead	12	10	0.0074	0.0017 U	0.0483	0.0133	0.0038
	fillet	Pumpkinseed	12	11	0.0075	0.017 U	0.0216	0.0078	0.0023
	fillet	Smallmouth bass	12	12	0.0535	0.0081	0.114	0.0277	0.008
	fillet	Walleye	12	12	0.074	0.0094	0.2982	0.0814	0.0235
Hexachlorobenzene (mg/kg)	fillet	Brown bullhead	9	8	0.0071	0.0017 U	0.03	0.0091	0.003
	fillet	Pumpkinseed	10	8	0.0012	0.0003 U	0.0031	0.0009	0.0003
	fillet	Smallmouth bass	11	11	0.0091	0.0007	0.023	0.0071	0.0021
	fillet	Walleye	12	12	0.0229	0.0034	0.044	0.0112	0.0032
Percent Lipid (% by weight)	fillet	Brown bullhead	12	12	0.3467	0.07	0.77	0.2618	0.0756
	fillet	Pumpkinseed	12	12	0.4758	0.079	1.2	0.3957	0.1142
	fillet	Smallmouth bass	12	11	1.995	0.099 U ⁵	10 ⁵	2.6861	0.7754
	fillet	Walleye	12	12	2.99	0.78	5.1	1.4807	0.4274

1. U = non-detect (1/2 laboratory reporting limit was used to calculate the mean)

2. Standard Deviation is an estimate of the spread or variability of the data

3. Standard Error is the standard deviation divided by the square root of the sample size

4. The minimum and maximum mercury concentrations for alewife (a prey fish subset) were 0.17 and 0.27 mg/kg respectively.

Alewife made up 16 of the 40 prey fish composite samples collected and analyzed.

5. The min and max percent lipid results for smallmouth bass appear to be anomalies and will not be used when quantifying lipid-normalized organic chemical concentrations.

TABLE 7A
CALCULATED DIOXIN/FURAN HUMAN/MAMMALIAN TEQs IN 2011 BOOK 2 FISH TISSUE SAMPLES

Location ID	Field Sample ID	Fish Type	Date Sampled	TEQ (full dl) (ng/kg)	TEQ (half dl) (ng/kg)	TEQ (ND=0) (ng/kg)
OL-STA-20158	OL-1503-03F	Walleye	6/1/2011	7.4	5.9	4.3
OL-STA-20158	OL-1504-19F	Brown bullhead	6/8/2011	7.9	6.2	4.5
OL-STA-20158	OL-1506-01F	Smallmouth bass	6/28/2011	6.4	4.3	2.2
OL-STA-20158	OL-1507-01F	Smallmouth bass	6/29/2011	9.7	8.1	6.4
OL-STA-40212	OL-1500-02F	Pumpkinseed	5/25/2011	13.8	6.9	0.02
OL-STA-40212	OL-1501-03F	Walleye	5/25/2011	13.5	12.2	10.8
OL-STA-40212	OL-1501-05F	Walleye	5/25/2011	6.1	4.0	1.8
OL-STA-50057	OL-1500-09F	Pumpkinseed	5/25/2011	11.1	5.6	0.15
OL-STA-50057	OL-1500-13F	Brown bullhead	5/25/2011	8.8	4.7	0.52
OL-STA-50057	OL-1500-18F	Smallmouth bass	5/25/2011	6.0	4.4	2.7
OL-STA-50057	OL-1501-01F	Walleye	5/25/2011	9.7	5.0	0.38
OL-STA-50058	OL-1502-06F	Pumpkinseed	5/26/2011	15.6	7.8	0.07
OL-STA-50058	OL-1502-09F	Brown bullhead	5/26/2011	10.0	5.1	0.20
OL-STA-50058	OL-1502-20F	Smallmouth bass	5/26/2011	5.9	3.8	1.6
OL-STA-50059	OL-1503-02F	Walleye	6/1/2011	9.0	6.8	4.7
OL-STA-50059	OL-1506-04F	Smallmouth bass	6/28/2011	10.2	8.4	6.6
OL-STA-60225	OL-1502-01F	Pumpkinseed	5/26/2011	27.4	13.7	0.00
OL-STA-60225	OL-1502-03F	Brown bullhead	5/26/2011	9.9	5.1	0.20
OL-STA-70124	OL-1504-10F	Brown bullhead	6/8/2011	9.9	5.4	0.91
OL-STA-70124	OL-1504-13F	Pumpkinseed	6/8/2011	10.0	5.1	0.18

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 8. Summary of Fish Gut Contents in Onondaga Lake - 2011.

Species/Taxa	Count	
	Smallmouth bass (N=25)	Walleye (N=25)
Amphipoda		
Fish		
Alewife		3
Unidentified	5	1
Number Empty	20	21

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.

Table 9

Summary Of Species Collected By Gear Type - May - October 2011

	Common Name	Scientific Name	Trap Net	Gill Net	Electroshocker	Seining
1	Alewife	<i>Alosa pseudoharengus</i>	x			
2	Banded killifish	<i>Fundulus diaphanus</i>	x			x
3	Black crappie	<i>Pomoxis nigromaculatus</i>	x			
4	Bluegill	<i>Lepomis macrochirus</i>	x		x	x
5	Bluntnose minnow	<i>Pimephales notatus</i>	x			x
6	Bowfin	<i>Amia calva</i>	x			
7	Brook silverside	<i>Labidesthes sicculus</i>				x
8	Brook stickleback	<i>Culaea inconstans</i>	x			
9	Brown bullhead	<i>Ameiurus nebulosus</i>	x			x
10	Brown trout	<i>Salmo trutta</i>		x		
11	Chain pickerel	<i>Esox niger</i>	x		x	
12	Channel catfish	<i>Ictalurus punctatus</i>	x	x		
13	Common carp	<i>Cyprinus carpio</i>	x	x		x
14	Creek chub	<i>Semotilus atromaculatus</i>	x			
15	Emerald shiner	<i>Notropis atherinoides</i>	x			
16	Fathead minnow	<i>Pimephales promelas</i>	x			
17	Freshwater drum	<i>Aplodinotus grunniens</i>	x	x		
18	Gizzard shad	<i>Dorosoma cepedianum</i>	x	x		
19	Golden shiner	<i>Notemigonus crysoleucas</i>	x			x
20	Goldfish	<i>Carassius auratus</i>	x			
21	Green sunfish	<i>Lepomis cyanellus</i>	x		x	x
22	Lake sturgeon	<i>Acipenser fulvescens</i>		x		
23	Largemouth bass	<i>Micropterus salmoides</i>	x		x	x
24	Logperch	<i>Percina caprodes</i>	x			x
25	Longnose gar	<i>Lepisosteus osseus</i>	x	x		
26	Northern pike	<i>Esox lucius</i>	x	x	x	x
27	Pumpkinseed	<i>Lepomis gibbosus</i>	x		x	x
28	Quillback	<i>Carpioles cyprinus</i>		x		
29	Rock bass	<i>Ambloplites rupestris</i>	x			x
30	Round goby	<i>Neogobius melanostomus</i>	x			x
31	Rudd	<i>Scardinius erythrophthalmus</i>	x			
32	Shorthead redhorse	<i>macrolepidotum</i>	x	x		
33	Silver redhorse sucker	<i>Moxostoma anisurum</i>		x		
34	Smallmouth bass	<i>Micropterus dolomieu</i>	x	x	x	x
35	Tadpole madtom	<i>Noturus gyrinus</i>				x
36	Tesselated darter	<i>Etheostoma olmstedi</i>	x			x
37	Tiger muskellunge	<i>masquinongy</i>	x		x	
38	Walleye	<i>Sander vitreus</i>	x	x	x	
39	White perch	<i>Morone americana</i>	x	x		
40	White sucker	<i>Catostomus commersoni</i>	x	x		x
41	Yellow bullhead	<i>Ameiurus natalis</i>	x			
42	Yellow perch	<i>Perca flavescens</i>	x			x
Total Number of Species			36	15	9	19

Table 10
Summary of Number of Individuals Per Species Captured in Trap Nets June-October 2011

Station Description (Station Identifier OL-STA)												
Common Name	Scientific Name	Metro (70124)	Harbor Brook (70124)	Rte 690 (20158)	Wastebeds 1-8 (30093)	Ninemile (40212)	Permanent Habitat Module (50057)	Maple Bay (50057)	Willow Bay (50057)	Marina (50058)	Iron Bridge (50059)	Total Fish Captured
Alewife	<i>Alosa pseudoharengus</i>	329	18	15	826	4	124	24	29	40	80	1489
Banded killifish	<i>Fundulus diaphanus</i>	51	83	10	68	85	17	38	3	108		463
Black crappie	<i>Pomoxis nigromaculatus</i>					2		1		1	1	5
Bluegill	<i>Lepomis macrochirus</i>	29	207	120	5	73	206	42	43	47	80	852
Bluntnose minnow	<i>Pimephales notatus</i>	6	6		1		1	2				16
Bowfin	<i>Amia calva</i>	10	11	11	15	2	8	33	3	2	5	100
Brook stickleback	<i>Culaea inconstans</i>	1					1					2
Brown bullhead	<i>Ameiurus nebulosus</i>	8	38	6	5	7	21	11	50	18	13	177
Chain pickerel	<i>Esox niger</i>								1			1
Channel catfish	<i>Ictalurus punctatus</i>		11	1	4	3			2			21
Common carp	<i>Cyprinus carpio</i>	2	6	9	3		7	2	15	1	18	63
Creek chub	<i>Semotilus atromaculatus</i>							1				1
Emerald shiner	<i>Notropis atherinoides</i>	4										4
Fathead minnow	<i>Pimephales promelas</i>	1		3				1				5
Freshwater drum	<i>Aplodinotus grunniens</i>	4	2		3		1	1	1			13
Gizzard shad	<i>Dorosoma cepedianum</i>	1082	53	4	390	9	3	1	2	3	3	1550
Golden shiner	<i>Notemigonus crysoleucas</i>	11	8	3	1	2	6	20	8	7	9	75
Goldfish	<i>Carassius auratus</i>									1		1
Green sunfish	<i>Lepomis cyanellus</i>									1		1
Largemouth bass	<i>Micropterus salmoides</i>	11	8	22	10	144	29	10	26	100	66	426
Logperch	<i>Percina caprodes</i>				1	1						2
Longnose gar	<i>Lepisosteus osseus</i>	3	24	1			80	8		3	5	124
Northern pike	<i>Esox lucius</i>					1		2				3
Pumpkinseed	<i>Lepomis gibbosus</i>	27	36	49	12	24	78	13	37	50	29	355
Rockbass	<i>Ambloplites rupestris</i>	1	1			1	4	4	3	1		15
Round goby	<i>Neogobius melanostomus</i>						1	1		1		3
Rudd	<i>Scardinius erythrophthalmus</i>	79	6	5		18	1					23
Shorthead redhorse	<i>Moxostoma macrolepidotum</i>	2									1	3
Smallmouth bass	<i>Micropterus dolomieu</i>				1	1					1	3
Tesselated darter	<i>Etheostoma olmstedi</i>								1			1
Tiger muskellunge	<i>Esox lucius x Esox masquinongy</i>			1				1				2
Walleye	<i>Sander vitreus</i>							1				1
White perch	<i>Morone americana</i>	21	4	16	18	4	15	60	3	32	17	190
White sucker	<i>Catostomus commersoni</i>	3	4		2	6	6	41	12		2	76
Yellow bullhead	<i>Ameiurus natalis</i>					1	3	3	1			8
Yellow perch	<i>Perca flavescens</i>			2	10	1	10	13	7	17	10	42
Total Fish Captured		1685	528	286	1366	398	625	329	256	427	395	6295
Species Richness		21	19	17	18	20	21	26	18	19	17	36

Table 11
2011 Gill Net Sampling Locations in Onondaga Lake

Location Name	Sampling Date	Set Time	End Time	Water Depth (m)		Number Times Sampled
				Shallow	Deep	
Harbor Brook (OL-STA-70124)	7/19/2011	11:05:00 AM	12:05:00 PM	3.7	3.4	4
	8/23/2011	12:00:00 PM	1:10:00 AM	5.94	6.89	
	10/12/2011	8:55:00 PM	9:55:00 PM	6.7	7.16	
	10/12/2011	10:25:00 PM	11:25:00 PM	7.22	7.16	
Route 690 Point (OL-STA-20158)	5/24/2011	3:05:00 AM	4:25:00 AM	3.66	8.41	6
	6/21/2011	10:45:00 PM	12:02:00 AM	3.6	7.16	
	7/19/2011	10:05:00 AM	11:15:00 AM	2.6	6.6	
	8/24/2011	11:00:00 PM	12:00:00 AM	2.34	7.49	
	9/13/2011	8:20:00 PM	9:30:00 PM	4.08	7.65	
	10/12/2011	7:00:00 PM	8:06:00 PM	3.38	8.14	
Causeway (OL-STA-20158)	5/31/2011	8:45:00 PM	9:45:00 PM	3.66	8.2	6
	6/27/2011	8:50:00 PM	9:50:00 PM	2.71	6.4	
	7/19/2011	12:00:00 PM	1:00:00 AM	3.3	6.9	
	8/23/2011	11:00:00 PM	12:00:00 PM	3.2	7.86	
	9/13/2011	9:50:00 PM	10:50:00 PM	4.63	8.93	
	10/12/2011	9:20:00 PM	10:20:00 PM	4.24	8.14	
Wastebeds 1-8 (OL-STA-30093)	5/24/2011	2:40:00 AM	3:40:00 AM	3.11	8.11	6
	6/21/2011	10:13:00 PM	11:13:00 PM	3.99	8.2	
	7/19/2011	8:45:00 AM	9:45:00 AM	1.6	7.6	
	8/23/2011	10:41:00 PM	11:41:00 PM	4.14	7.99	
	9/13/2011	8:00:00 PM	9:00:00 PM	4.54	8.38	
	10/13/2011	10:00:00 PM	11:00:00 PM	3.63	8.26	
Ninemile (OL-STA-40212)	6/21/2011	9:15:00 PM	10:20:00 PM	3.47	8.72	5
	7/18/2011	10:18:00 AM	11:22:00 AM	4	8.7	
	8/24/2011	10:20:00 PM	11:20:00 PM	4.97	8.9	
	9/12/2011	7:30:00 PM	8:30:00 PM	3.32	8.78	
	10/13/2011	6:58:00 PM	8:20:00 PM	3.99	8.99	
Permanent Habitat Module (OL-STA-50057)	6/20/2011	9:15:00 PM	10:40:00 PM	2.93	8.87	5
	7/18/2011	9:18:00 AM	10:24:00 AM	2.5	8.4	
	8/24/2011	8:45:00 PM	9:45:00 PM	2.07	8.9	
	9/12/2011	9:00:00 PM	10:05:00 PM	3.23	8.9	
	10/13/2011	9:18:00 PM	10:19:00 PM	3.54	9.02	
Outlet (OL-STA-50057)	6/20/2011	8:45:00 PM	9:45:00 PM	2.04	6.95	5
	7/18/2011	8:47:00 AM	9:45:00 AM	3.6	7.1	
	8/24/2011	8:25:00 PM	9:25:00 PM	2.68	6.4	
	9/12/2011	9:33:00 PM	10:35:00 PM	2.47	6.74	
	10/13/2011	8:15:00 PM	9:20:00 PM	3.63	6.68	
Hiawatha (OL-STA-50057)	6/20/2011	10:35:00 PM	11:45:00 PM	2.44	6.13	6
	6/28/2011	8:15:00 PM	9:15:00 PM	2.13	6.13	
	7/18/2011	11:03:00 AM	12:03:00 PM	2.6	6.2	
	8/24/2011	9:15:00 PM	10:30:00 PM	3.29	10.49	
	9/12/2011	7:50:00 PM	9:10:00 PM	3.66	5.24	
	10/13/2011	6:40:00 PM	7:38:00 PM	3.87	5.33	
Marina (OL-STA-50058)	5/24/2011	4:20:00 AM	5:30:00 AM	3.81	5.67	6
	6/21/2011	8:45:00 PM	9:45:00 PM	3.66	8.84	
	7/18/2011	11:50:00 AM	12:35:00 PM	3.7	9.6	
	8/23/2011	8:55:00 PM	10:10:00 PM	4.54	11.63	
	9/12/2011	10:15:00 PM	11:16:00 PM	3.23	11.06	
	10/12/2011	6:40:00 PM	7:40:00 PM	4.45	8.47	
Iron Bridge (OL-STA-50059)	5/31/2011	8:20:00 PM	9:20:00 PM	3.38	10.55	6
	6/27/2011	8:15:00 PM	8:55:00 PM	2.53	8.9	
	7/19/2011	9:20:00 AM	10:20:00 AM	2.6	8.8	
	8/23/2011	9:20:00 AM	10:45:00 AM	4.57	10.36	
	9/13/2011	9:20:00 PM	10:20:00 PM	4.3	9.69	
	10/12/2011	8:05:00 PM	9:05:00 PM	3.69	10.27	

Total Number of Gill Net sets 55

Table 12
Summary of Number of Individuals Per Species Captured in Gill Nets May-October 2011

Common Name	Scientific Name	Station Description (Station Identifier: OL-STA)										Total Fish Captured
		Harbor Brook (70124)	Causeway (20158)	Route 690 Point (20158)	Wastebeds 1-8 (30093)	Ninemile (40212)	Permanent Habitat Module (50057)	Outlet (50057)	Hiawatha Point (50057)	Marina (50058)	Iron Bridge (50059)	
Brown trout	<i>Salmo trutta</i>			1	5	2	1					9
Channel catfish	<i>Ictalurus punctatus</i>	4	9	12	4	16	1	13	9	8	12	88
Common carp	<i>Cyprinus carpio</i>	5	9	13	8	7	2	6	7	7	3	67
Freshwater drum	<i>Aplodinotus grunniens</i>	2	36	13	6	3	2	7	3	1	6	79
Gizzard shad	<i>Dorosoma cepedianum</i>	4	10	16	13	20		13	12	8	9	105
Lake sturgeon	<i>Acipenser fulvescens</i>				1		1					2
Longnose gar	<i>Lepisosteus osseus</i>							1				1
Northern pike	<i>Esox lucius</i>		2	1	1					1		5
Quillback	<i>Carpioles cyprinus</i>					1						1
Shorthead redhorse	<i>Moxostoma macrolepidotum</i>		2	2	5	1		4	2	2	3	21
Silver redhorse sucker	<i>Moxostoma anisurum</i>							1				1
Smallmouth bass	<i>Micropterus dolomieu</i>		2	2					2		5	11
Walleye	<i>Sander vitreus</i>		56	24	14	14	11	34	34	12	15	214
White perch	<i>Morone americana</i>					1						1
White sucker	<i>Catostomus commersoni</i>		8		1	3	3	1		2	3	21
Total Fish Captured		15	134	84	58	68	21	80	69	41	56	626
Species Richness		4	9	9	10	10	7	9	7	8	8	15

Table 13
Lake Sturgeon Catch and Tag Information - 2011

Site Name	Sampling Date	Coordinates	Total Length (mm)	Weight (kg)	Carlin Tag	Pit Tag	Notes
Permanent Habitat Module	5/11/2011	398818 N 4773657 W	1480		10		Captured in regular net and stressed
Lake Outlet	6/1/2011	430651 N 761425 W	1400	19.25	11	20555326	
Lake Outlet	6/1/2011	430651 N 761425 W	1310	22.45	12	20472600	
Lake Outlet	6/1/2011	430651 N 761425 W	1005	8.5	13	20559667	
Causeway	6/29/2011	402655 N 4769197 W	1470	21.9	14	20435350	Captured #14 in three gill net sets on 6/29/2011
Lake Outlet	6/29/2011	430651 N 761425 W	1450	21.2	15	20481711	
Wastebeds 1-8	6/29/2011	430521 N 761320 W	1190	20.9	16	20480422	
Causeway	6/30/2011	402655 N 4769197 W	NA	NA	17		Captured in regular net, fish stressed, tagged and released. No length data recorded.
Hiawatha Pt.	8/26/2011	430310 N 761259 W	NA	NA	16	20480422	Recapture
Hiawatha Pt.	8/26/2011	430310 N 761259 W	975	9.05	18	20477894	
Wastebeds	8/29/2011	430521 N 761320 W	1150	20.08		5587A13	Recapture (outside tag)
Iron Bridge	8/29/2011	430524 N 761139 W	1380	21.97	19	20431126	
Marina	10/24/2011	430515 N 761232 W	1320		20		
Hiawatha Pt.	10/25/2011	430310 N 761259 W			12	20472600	Recapture

Table 14

Summary of Number of Individuals per Species Captured by Seining - August 2011

Common Name	Scientific Name	Metro (70124)	Rte 690 (20158)	Wastebeds 1-8 (30093)	Ninemile (40212)	Permanent Habitat Module (50057)	Maple Bay (50057)	Willow Bay (50057)	Marina (50058)	Iron Bridge (50059)	Total Fish Captured
Banded killifish	<i>Fundulus diaphanus</i>	61	104	237	185	30	156	111	15	173	1072
Bluegill	<i>Lepomis macrochirus</i>	2	3		5	26	1	6		5	48
Bluntnose minnow	<i>Pimephales notatus</i>	1					2				3
Brook silverside	<i>Labidesthes sicculus</i>			1		1					2
Brown bullhead	<i>Ameiurus nebulosus</i>		4		10				2		16
Common carp	<i>Cyprinus carpio</i>	1				9	6		1	2	19
Golden shiner	<i>Notemigonus crysoleucas</i>	11	1				2	1			15
Green sunfish	<i>Lepomis cyanellus</i>						1				1
Lepomis YOY	<i>Lepomis spp.</i>	1					1			2	4
Largemouth bass	<i>Micropterus salmoides</i>	63	332		101	46	206	68	62	125	1003
Log perch	<i>Percina caprodes</i>	6		9		2	1				18
Northern pike	<i>Esox lucius</i>					1		1			2
Pumpkinseed	<i>Lepomis gibbosus</i>	10	16		15	8	3	1		10	63
Rock bass	<i>Ambloplites rupestris</i>	1	1		7	5	1				15
Round goby	<i>Neogobius melanostomus</i>				1	6	13				20
Smallmouth bass	<i>Micropterus dolomieu</i>	1	1	2						1	5
Tadpole madtom	<i>Noturus gyrinus</i>				1						1
Tessellated darter	<i>Etheostoma olmstedi</i>	4	5	4	5	6	51	6	10	19	110
White sucker	<i>Catostomus commersoni</i>			1							1
Yellow perch	<i>Perca flavescens</i>	4	22		9	3	13	10		51	112
Total Fish Captured		166	490	253	339	143	457	204	90	388	2530
Species Richness		13	11	5	10	12	14	8	5	9	19

Table 15
Fish Tag Information For Sonic Telemetry 2010 and 2011

Tag Date	Fish ID	Species	Total Length (mm)	Capture Location	Dead or Alive (date)
2010					
5/24/2010	62	walleye	580	Hiawatha	Dead (2010)
5/24/2010	63	walleye	465	Wastebeds 1-8	Alive
5/24/2010	64	walleye	527	Hiawatha	Alive
5/25/2010	65	walleye	501	Iron Bridge	Dead (2011)
5/24/2010	66	walleye	546	Wastebeds 1-8	Alive
5/25/2010	68	walleye	507	PHM	Alive
5/25/2010	69	walleye	644	Iron Bridge	Alive
5/24/2010	70	walleye	534	Wastebeds 1-8	Alive
5/25/2010	71	walleye	622	Marina	Alive
5/25/2010	77	walleye	523	PHM	Dead (2010)
5/24/2010	78	walleye	540	Hiawatha	Alive
5/25/2010	79	walleye	573	Marina	Dead (2010)
5/25/2010	81	walleye	556	Iron Bridge	Alive
7/19/2010	105	walleye	548	Marina	Dead (2010)
7/19/2010	97	walleye	520	Marina	Dead (2010)
7/19/2010	103	walleye	579	Wastebeds 1-8	Alive
10/14/2010	119	walleye	510	Nine Mile	Alive
10/14/2010	132	smallmouth bass	442	Outlet	Alive
10/14/2010	143	smallmouth bass	489	Outlet	Alive
2011					
5/11/2011	131	walleye	515	Wastebeds 1-8	Alive
5/11/2011	123	walleye	509	Wastebeds 1-8	Alive
5/11/2011	142	walleye	548	Wastebeds 1-8	Alive
5/11/2011	126	walleye	552	Wastebeds 1-8	Alive
5/11/2011	124	walleye	525	Wastebeds 1-8	Alive
5/11/2011	125	walleye	575	Wastebeds 1-8	Alive
5/12/2011	115	walleye	531	Wastebeds 1-8	Alive
5/12/2011	102	walleye	703	Wastebeds 1-8	Alive
5/12/2011	129	walleye	516	Wastebeds 1-8	Alive
5/12/2011	114	walleye	528	Wastebeds 1-8	Alive
5/12/2011	111	walleye	522	PHM	Alive
5/12/2011	112	walleye	534	PHM	Alive
5/12/2011	109	walleye	556	PHM	Alive
6/27/2011	133	smallmouth bass	432	Parsons	Alive
6/27/2011	134	smallmouth bass	446	Parsons	Dead (2011)
6/27/2011	127	smallmouth bass	480	Parsons	Alive
6/27/2011	139	smallmouth bass	461	Parsons	Alive
6/27/2011	135	smallmouth bass	381	Parsons	Alive

PHM = Permanent Habitat Module

Table 16
Tag Detections and Location During 8-hr Sonic Telemetry Surveys May-October 2011

Date	Fish ID and Species																									Total Detections		
	63 W	65 W	66 W	68 W	70 W	71 W	78 W	81 W	102 W	109 W	111 W	112 W	114 W	115 W	119 W	124 W	125 W	126 W	127 S	129 W	131 W	133 S	134 S	135 S	139 S	142 W	143 S	
5/13/2011	5	5			8					5									8		8	5					7	
5/27/2011		5		8	5					5	5	5	8		8		6	4								4	11	
6/17/2011	8		5			8	8	8	8		5	8	8		3	8	8		5	5					8	8	17	
6/27/2011	8	3	8		8	6		5	8	5	8	5	8	8		8	8	8		8	3					8	18	
7/8/2011	8	3	8	8	8	8		8		5	8	8	8	5		8	8		8		1		2		5		18	
7/20/2011	8	8	8	8	8	6		8		8		3	8	8	5	8	8	8		7	8	1	6		8	20		
8/5/2011	8		8	8	8		8		8			8		8	4	8		8	8	8	5	8	8	8	8	8	18	
8/20/2011	8		8	5	8			8	8	5	5	8	8		8	5	8		8		1	8	8	8		8	19	
9/14/2011			8			6		5	8	8			8	8			8		8		4		6	8			12	
9/26/2011	8		8	8	8		8	8		8	8		8	8		8	8		8	8	8		1	8			18	
10/6/2011			8		8	8			8					8			8		8	8	8	8	8	8	5	11		
10/17/2011			8		8	8			5	8		8	8	8	8	8		8	8		8					13		
Total number of times located	8	5	10	6	10	8	2	7	7	8	7	6	7	8	7	5	11	8	2	10	5	8	4	7	6	5	5	182

Number = SMU where fish found

W = Walleye; S = Smallmouth bass

blanks indicate fish not detected during survey

Table 17
Temperature and Depth of Water Where Fish Were Located During 24-Hour Sonic Telemetry Tracking

Date	Walleye						Smallmouth Bass					
	Mean temperature (°C)	Minimum temperature (°C)	Maximum temperature (°C)	Mean water depth of fish (m)	Minimum water depth of fish (m)	Maximum water depth of fish (m)	Mean temperature (°C)	Minimum temperature (°C)	Maximum temperature (°C)	Mean water depth of fish (m)	Minimum water depth of fish (m)	Maximum water depth of fish (m)
5/20/2011	15.1	14.5	16.5	9.1	7.0	18.3				NA		
6/6/2011	18.2	16.0	22.0	6.4	3.5	16.8				NA		
6/20/2011	21.8	19.5	23.0	12.3	3.5	18.0				NA		
7/11/2011	24.3	23.5	25.0	5.5	4.7	10.7	24.9	24.0	26.5	4.0	1.3	8.1
7/25/2011	25.6	25.0	28.0	8.1	26.7	8.1	26.4	26.0	27.5		NA	
8/8/2011	22.6	20.0	24.5	7.6	8.9	17.3	23.7	23.5	24.5	5.9	2.0	16.9
8/28/2011	23.1	22.0	24.5	10.0	8.9	16.2				NA		
9/21/2011	17.4	16.0	18.0	8.2	2.6	18.9				NA		
10/10/2011	14.9	14.0	16.0	12.3	28.1	17.3	18.0	16.5	19.5	5.6	2.0	11.2
10/24/2011	11.8	11.5	12.5	11.8	27.3	17.9				NA		

Notes:

1. Water depths indicate the depth of water and not the depth of fish
2. Walleye and smallmouth bass that were tagged were tracked for 12 to 24 hours numerous times during 2011 (Figures 12a through 12i; 13a and 13b).

NA = none located

Table 18
Number of Passive Receiver Detections Within The Onondaga Lake Outlet

Date	Fish ID (See Table 15)															Total		
	63 W	65 W	66 W	68 W	78 W	81 W	111 W	112 W	114 W	115 W	119 W	124 W	125 W	126 W	131 W	142 W	143 S	
9/17/2011									6								6	
9/18/2011										14							14	
9/19/2011							29										29	
9/20/2011								7	13			4				156	180	
9/21/2011								10	11				52		24		97	
9/22/2011													31				31	
9/23/2011									19								19	
9/24/2011					9							4					13	
9/25/2011								61		9					3		73	
9/26/2011								15		14							29	
9/27/2011								3							3		6	
9/28/2011	5							5							2		12	
9/29/2011	4														4		8	
9/30/2011								5									5	
10/1/2011	4							5							2		11	
10/2/2011									4								4	
10/3/2011									1								1	
10/4/2011	2								3	1							6	
10/5/2011															8		8	
10/6/2011									1								1	
Number of detections	55	1	12	103	82	9	31	10	275	31	68	9	1	20	128	6	1726	2567

W = Walleye; S = Smallmouth bass

Table 19
Number of Passive Receiver Detections Within Onondaga Creek (at Inner Harbor)

Date	Fish ID and Species (See Table 15)							Total
	66 W	97 W	2 W	114 W	115 W	129 W	131 W	
7/8/2011	23							23
7/11/2011							22	23
7/22/2011				109				109
7/23/2011			1	327				328
7/24/2011				55				55
7/25/2011				195				195
7/26/2011				399				399
7/27/2011				327				327
7/28/2011			1	445				446
7/29/2011				15				15
7/30/2011				268				268
7/31/2011				100				100
8/2/2011				112				112
8/3/2011				324				324
8/4/2011				455				456
8/5/2011				316				316
8/6/2011			1	174		35		212
8/7/2011				401		17		418
8/8/2011				66				66
8/9/2011				163				163
8/10/2011				152				152
8/11/2011			1	257				258
8/12/2011			1	307				308
8/13/2011						15		15
8/14/2011	1			1	134			137
8/15/2011				79				79
8/16/2011				302				302
8/17/2011			1	361				362
8/18/2011				21				21
8/19/2011				197				197
8/20/2011				137				137
8/21/2011				322				322
8/22/2011				423				423
8/23/2011				65				65
8/24/2011				348				348
8/25/2011				334				334
8/26/2011				335				335
8/27/2011				209				209
8/28/2011				36				36
8/30/2011				14				14
8/31/2011		1		226				227
9/1/2011				107		1		108
9/2/2011				78				78
9/3/2011				52				52
9/4/2011				125				125
9/5/2011						24		25
9/6/2011				271				271
9/7/2011				21				21
9/10/2011				4				4
10/1/2011		4						4
10/4/2011		76						76
10/5/2011		236						236
10/6/2011		206						206
Number of Detections	23	1	522	7	9035	134	114	9836

W= Walleye

TABLE 20

2011 BOOK 3 TRIBUTARY SAMPLING
TOTAL MERCURY AND METHYLMERCURY SURFACE WATER CONCENTRATIONS

Tributary	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])
Onondaga Creek	ONCK-Spencer	25	0.6 to 42	0.03 to 0.45	Y
Ninemile Creek	NMCK-Amboy	25	0.7 to 29	0.05 to 0.45	Y
Ninemile Creek	NMCK-Rte48	38	0.3 to 79	0.03 to 0.54	Y

Notes:

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 a typical reporting limit for methylmercury non-detects was 0.02 ng/L.

TABLE 21
2011 BOOK 3 TRIBUTARY SAMPLING
DISSOLVED MERCURY SURFACE WATER CONCENTRATIONS

Tributary	Location ID	2011 Sample Date	Dissolved (Filtered) Mercury, ng/L (average of field duplicates) <i>where applicable</i>	Data Qualifier
Onondaga Creek	ONCK-Spencer	June 29	0.47	J
Onondaga Creek	ONCK-Spencer	July 12	0.42	J
Onondaga Creek	ONCK-Spencer	September 7	0.64	J
Onondaga Creek	ONCK-Spencer	September 20	0.17	J
Ninemile Creek	NMCK-Amboy	June 29	0.47	J
Ninemile Creek	NMCK-Amboy	July 12	0.36	J
Ninemile Creek	NMCK-Amboy	August 9	0.39	J
Ninemile Creek	NMCK-Amboy	September 7	0.71*	J
Ninemile Creek	NMCK-Amboy	September 20	0.27	J
Ninemile Creek	NMCK-Rte48	June 29	0.24	J
Ninemile Creek	NMCK-Rte48	July 12	0.55	J
Ninemile Creek	NMCK-Rte48	September 7	1.1*	J
Ninemile Creek	NMCK-Rte48	September 20	0.17	J

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

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

J - estimated value

FIGURES



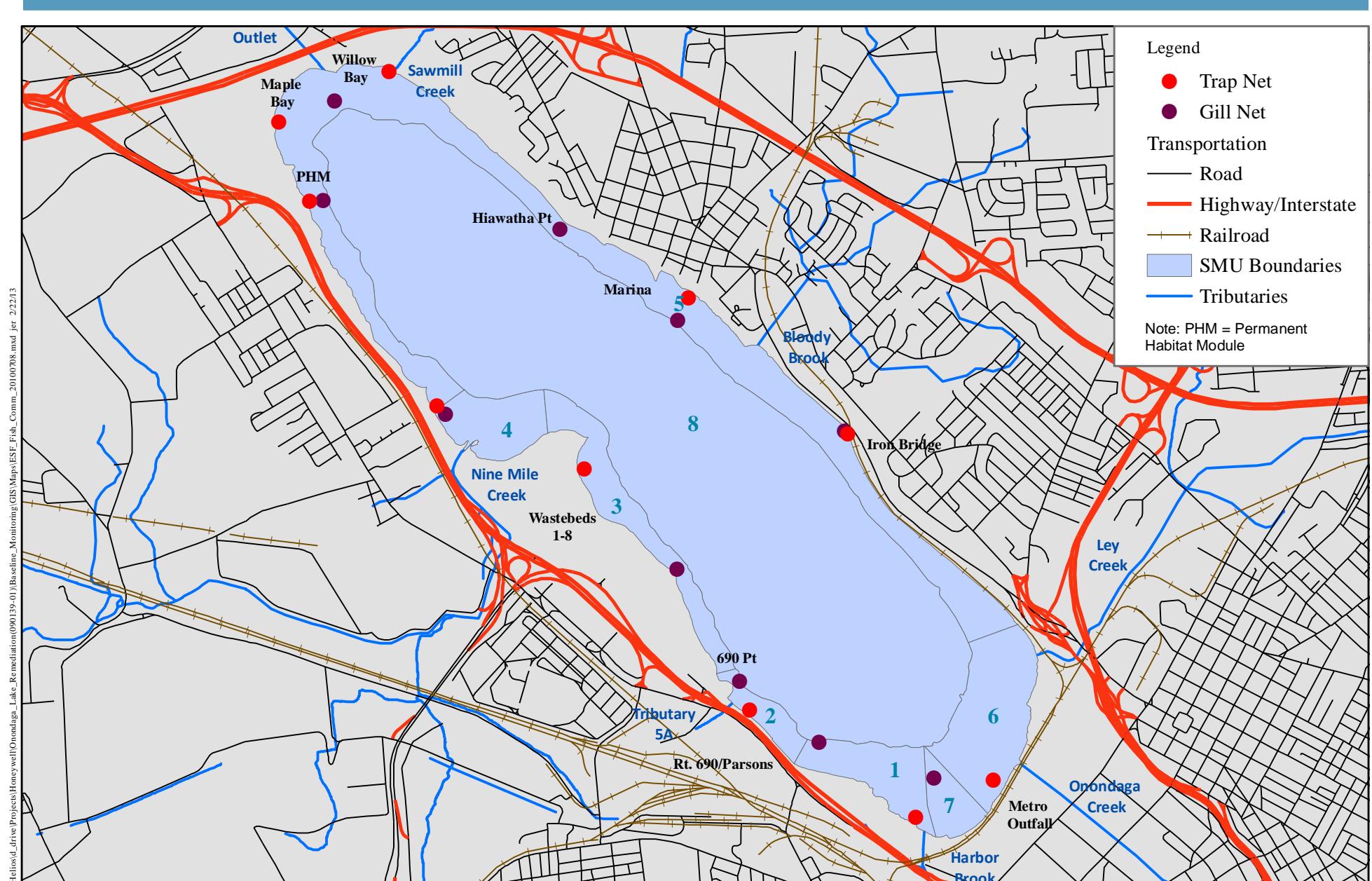


Figure 2

Sampling locations for 2011 fish community assessment.

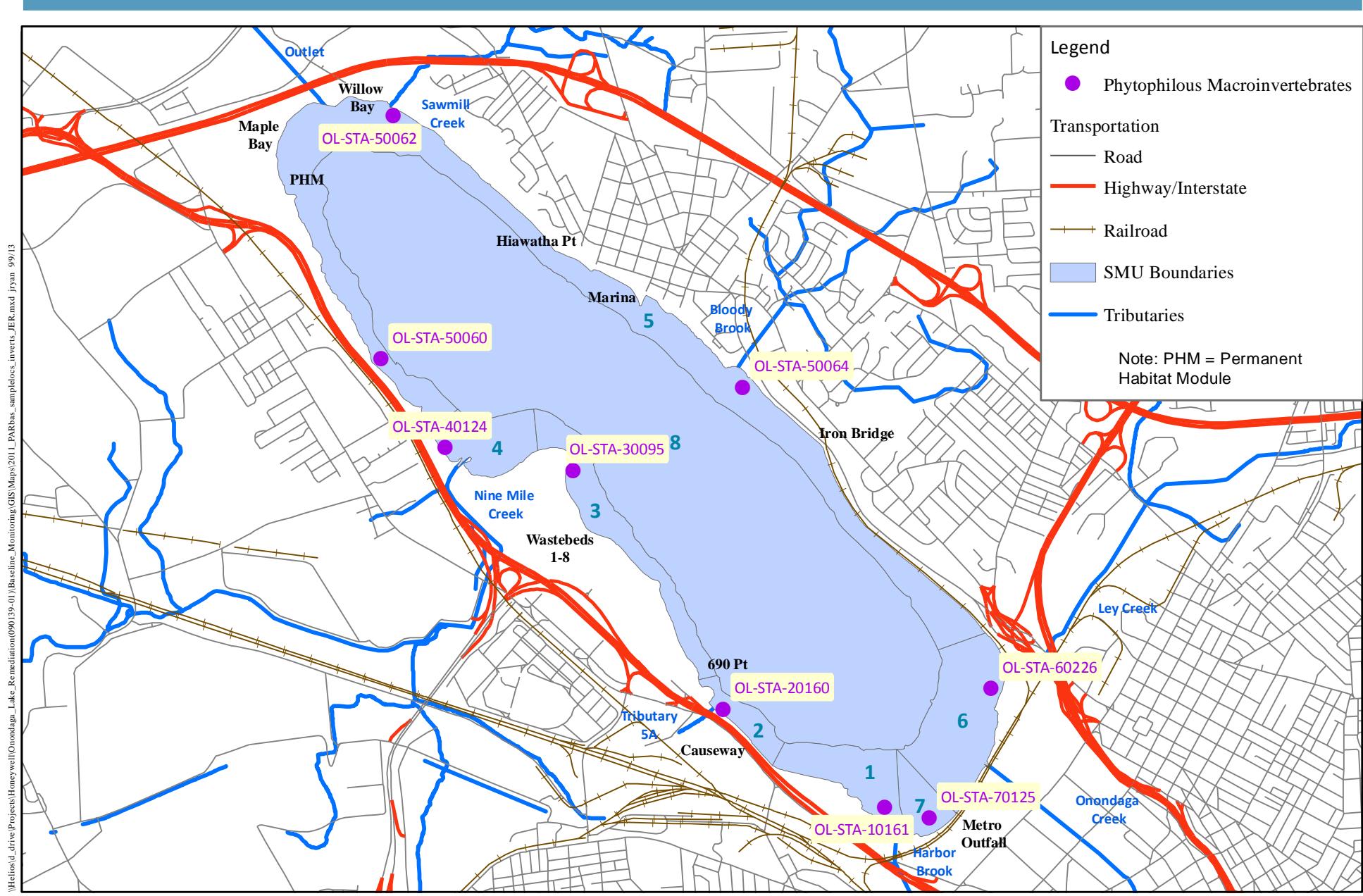
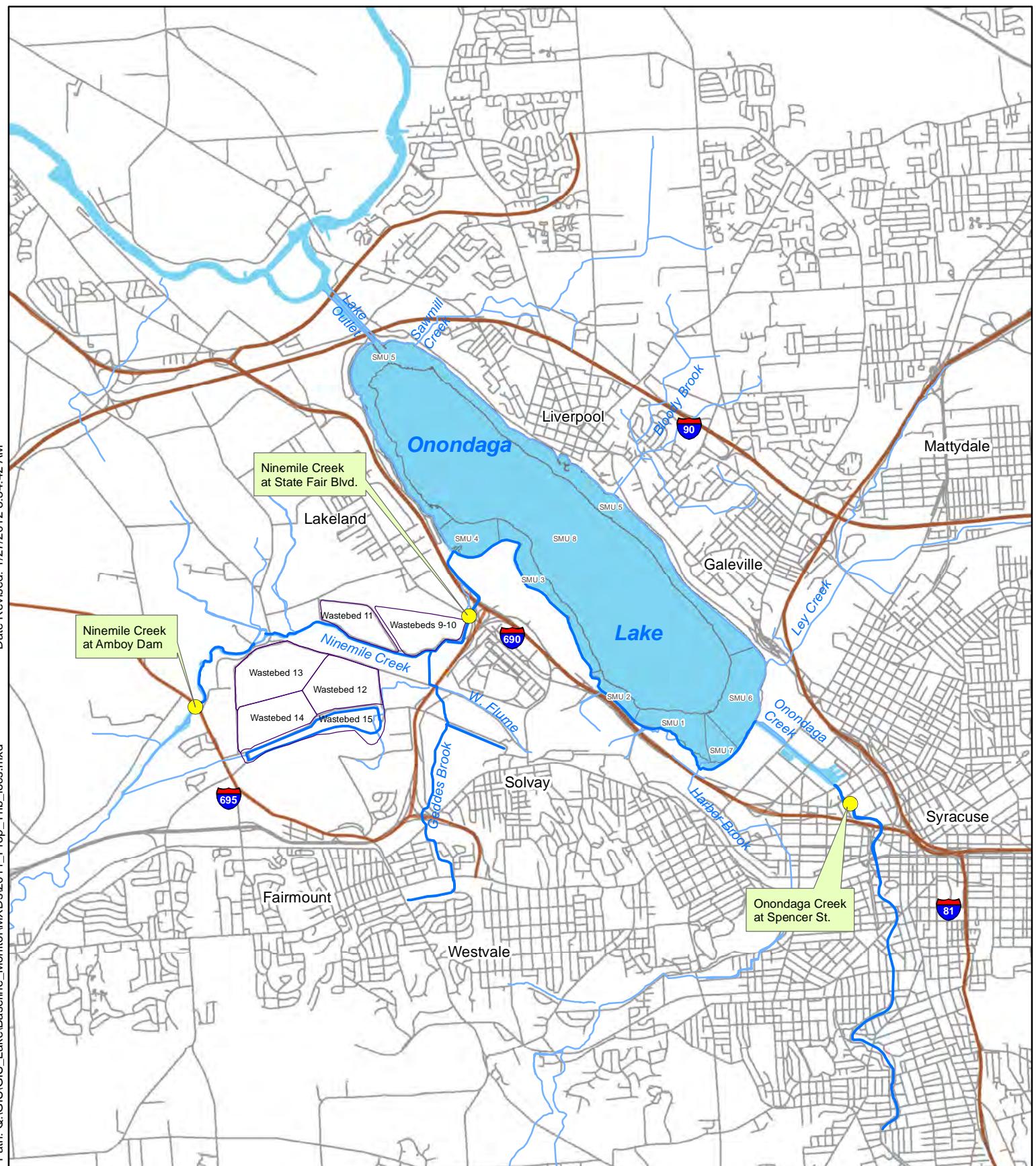


Figure 3
Baseline monitoring Phytophilous macroinvertebrate community sampling locations for 2011.

Date Revised: 1/27/2012 8:34:42 AM

Path: Q:\GIS\GIS_LakeBaseline_Monitor\MXDs\2011_Prop_Trib_locs.mxd



Tributary Surface Water Sampling Location

River or Brook

Major Road

Minor Road

SMU Boundaries

0 2,000 4,000 8,000 12,000 Feet



Figure 4

Honeywell Onondaga Lake
Syracuse, New York

2011 Baseline Monitoring
Tributary Sampling Locations

PARSONS

301 Plainfield Road, Suite 350; Syracuse, NY 13212 Phone:(315)451-9560

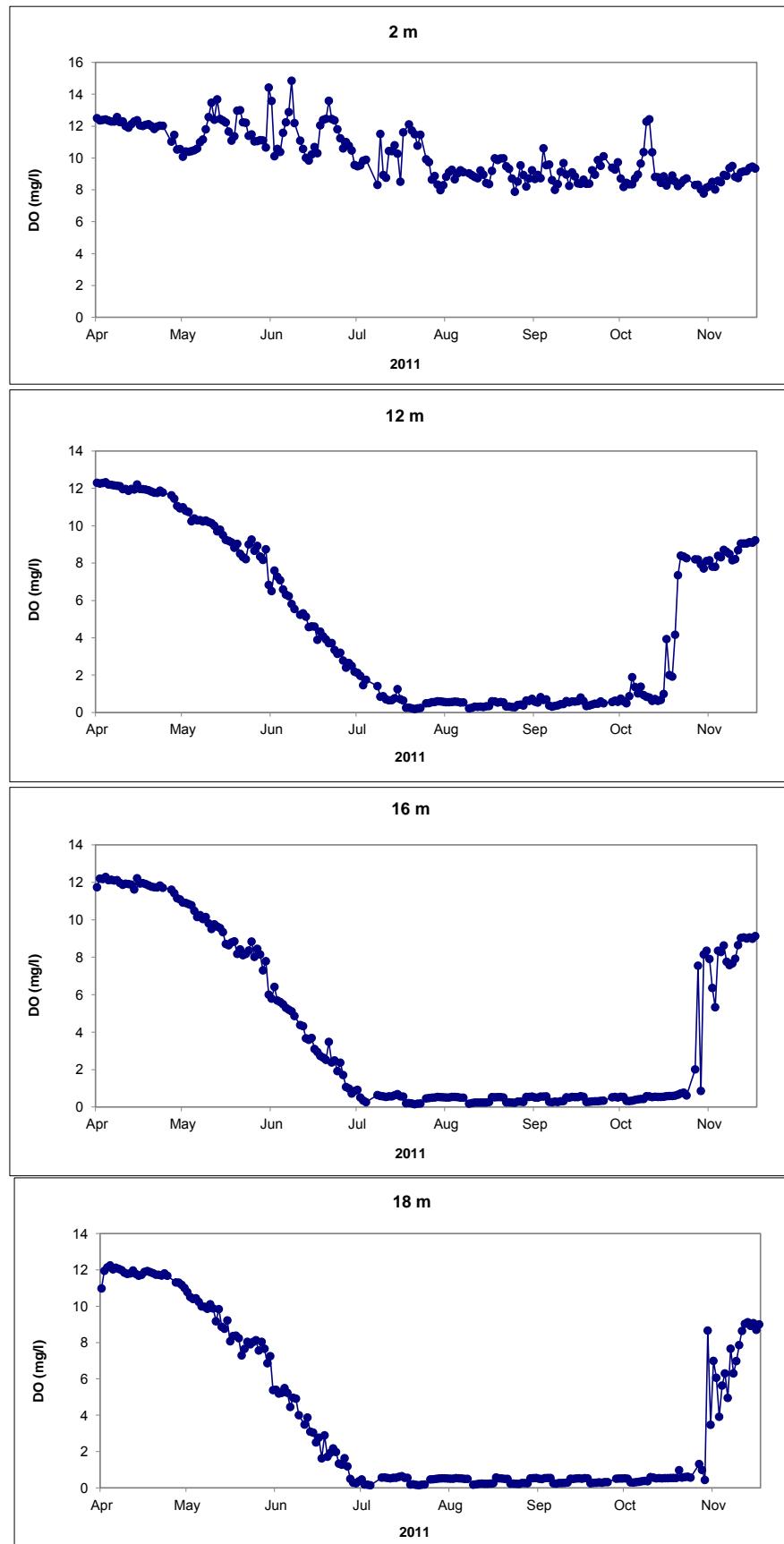


Figure 5 Dissolved Oxygen Concentrations at 2, 12, 16 and 18 m Water Depths at South Deep in 2011

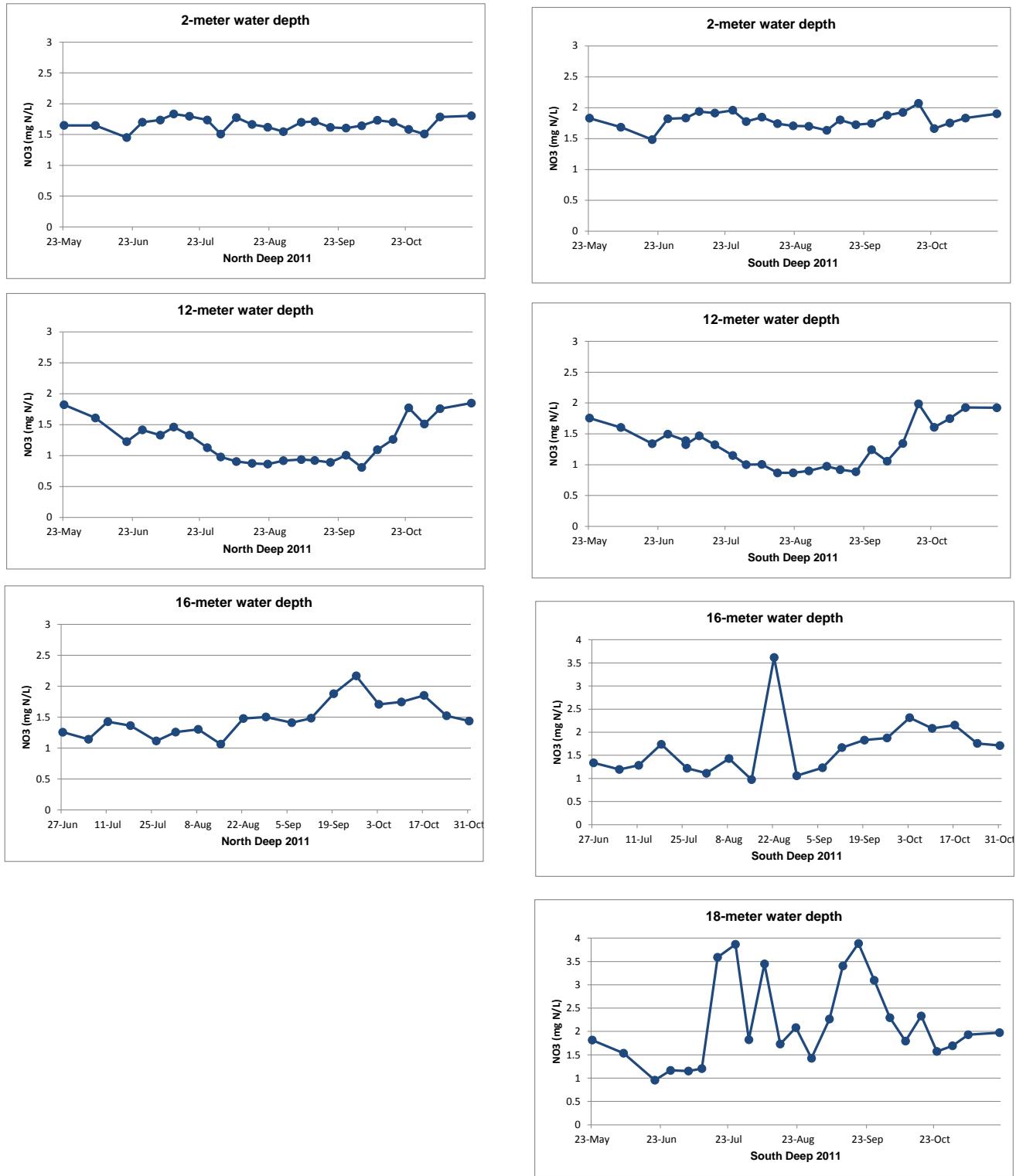


Figure 6 Nitrate Concentrations in Water at 2, 12, 16 and 18 -meter Water Depths at North Deep and South Deep in 2011

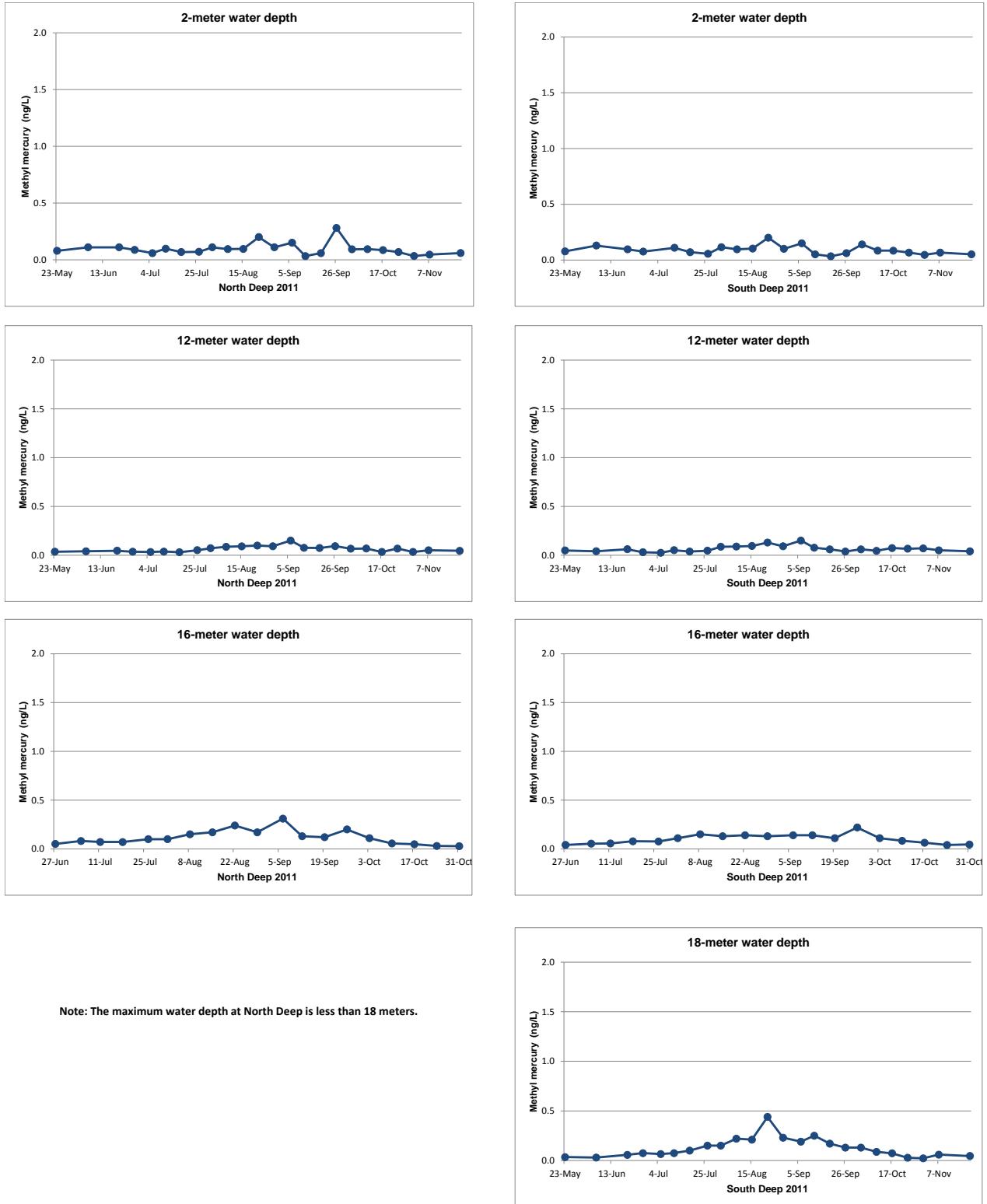


Figure 7 Methylmercury Concentrations at 2, 12, 16, and 18-meter Water Depths at North Deep and South Deep in 2011

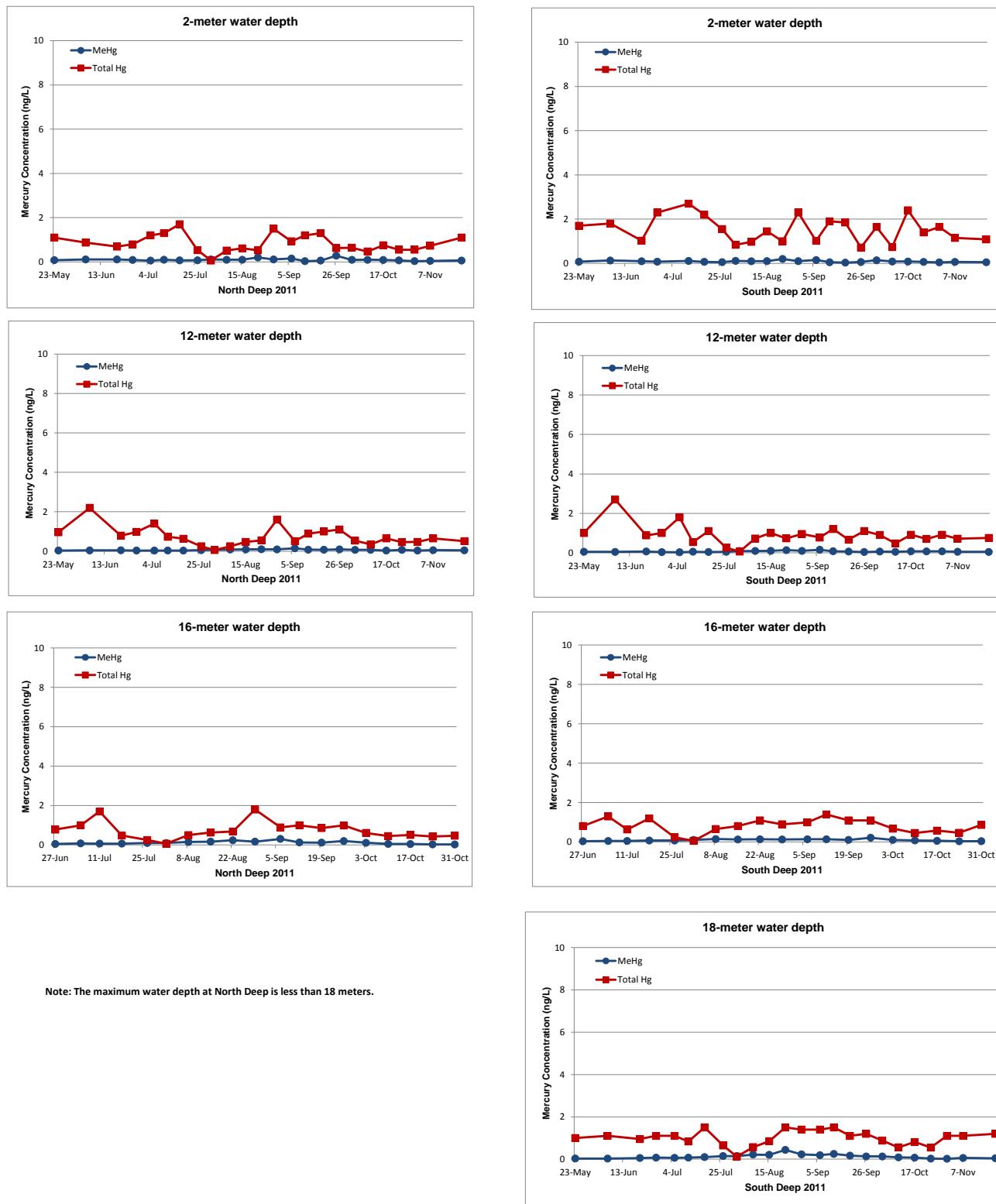


Figure 8 Total and Methylmercury Water Concentrations at 2, 12, 16, and 18-meter Water Depths at North Deep and South Deep in 2011

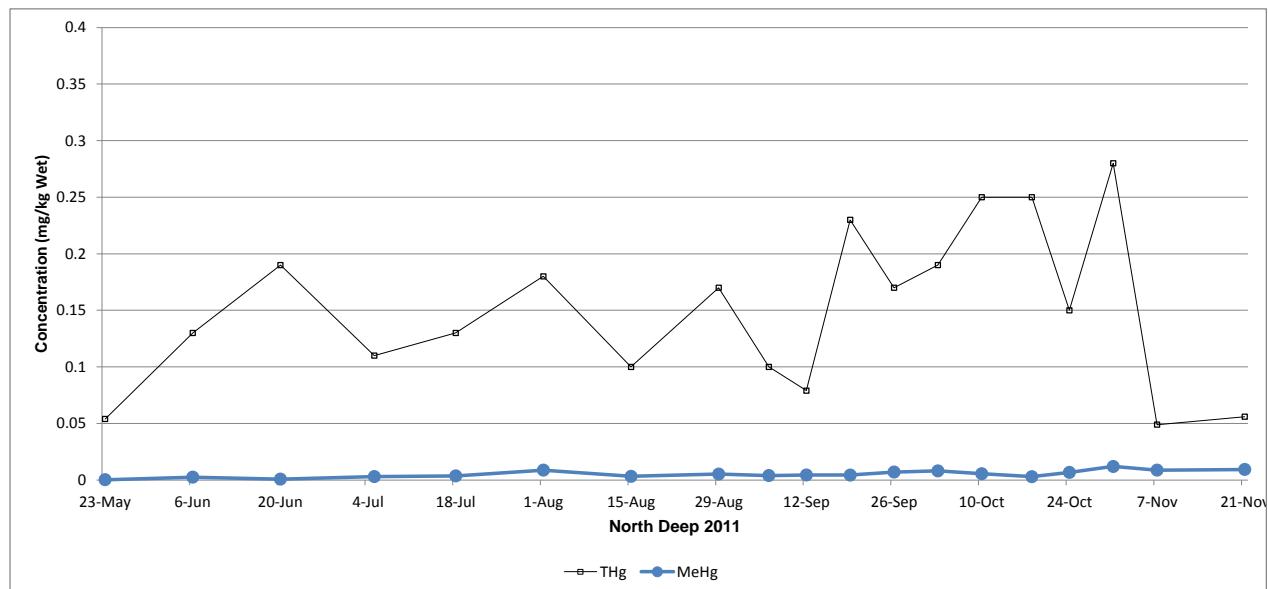


Figure 9A Total Mercury and Methylmercury in Zooplankton at North Deep During 2011

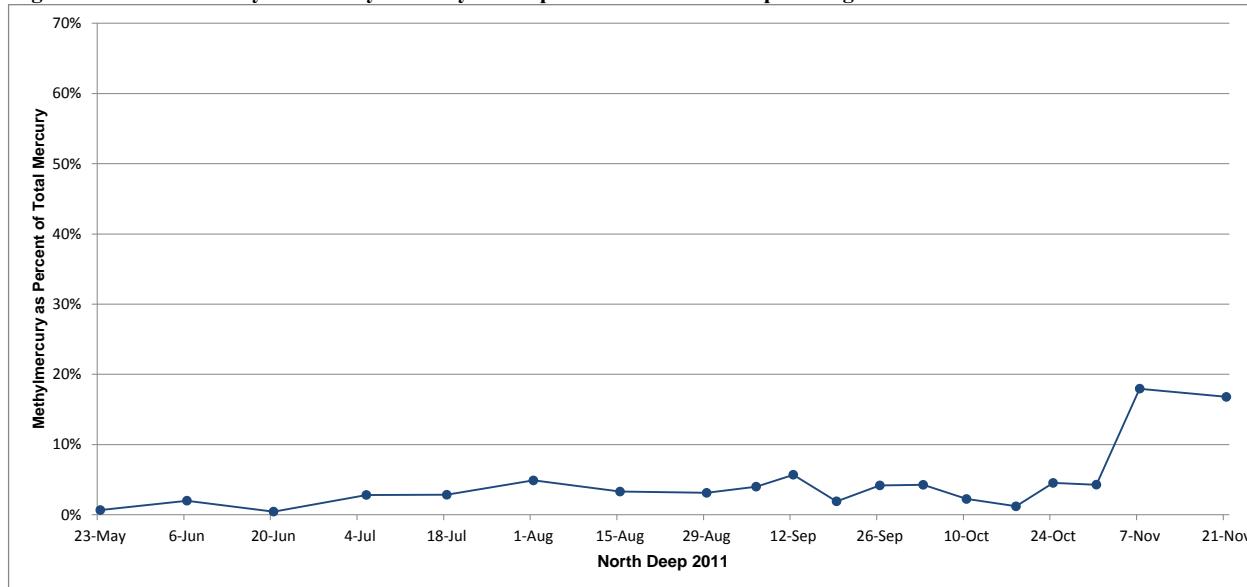


Figure 9B Methylmercury as a Percent of Total Mercury in Zooplankton at North Deep During 2011

Notes:

1. These results are for zooplankton assemblages.
2. These results are based on validated mercury data from laboratory analyses conducted by Test America (North Canton, OH).

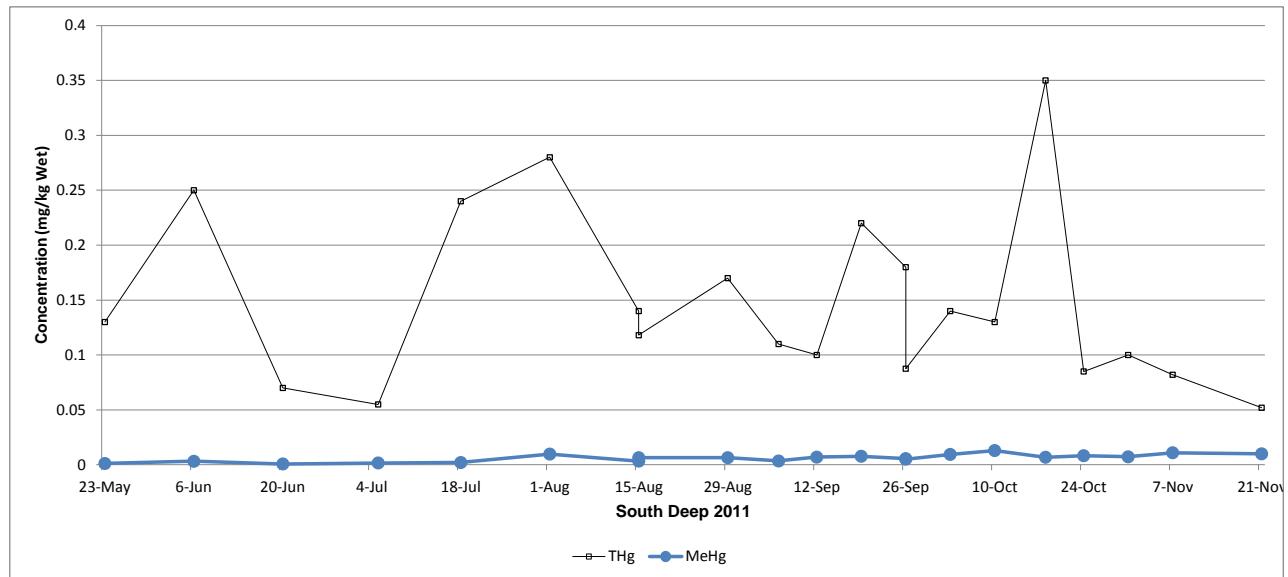


Figure 10A Total Mercury and Methylmercury in Zooplankton at South Deep During 2011

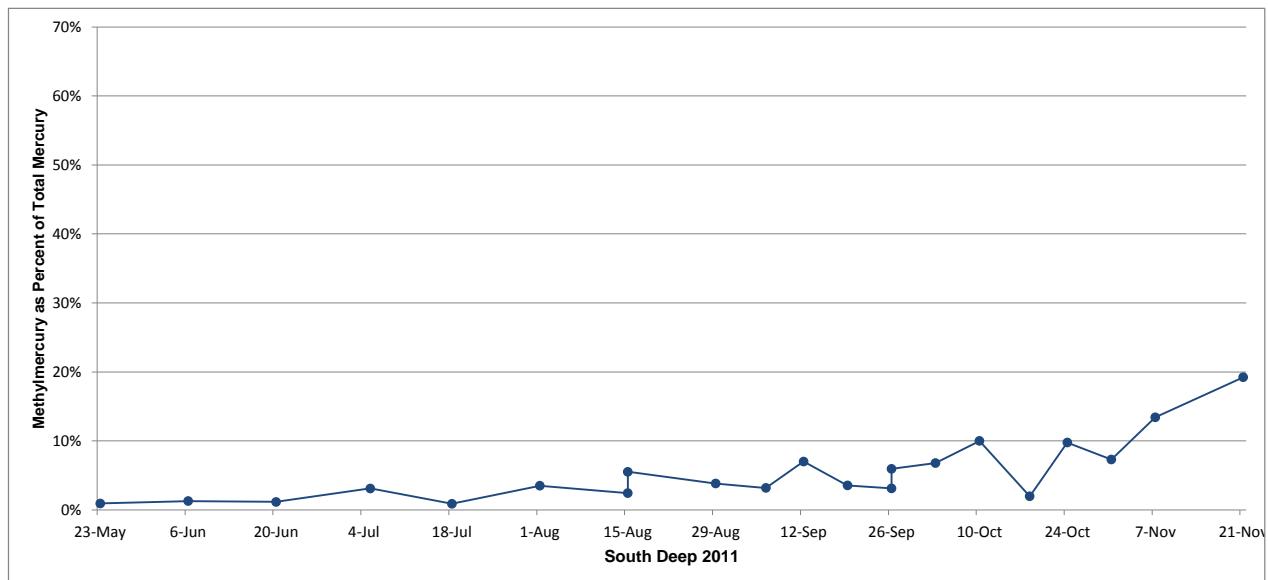
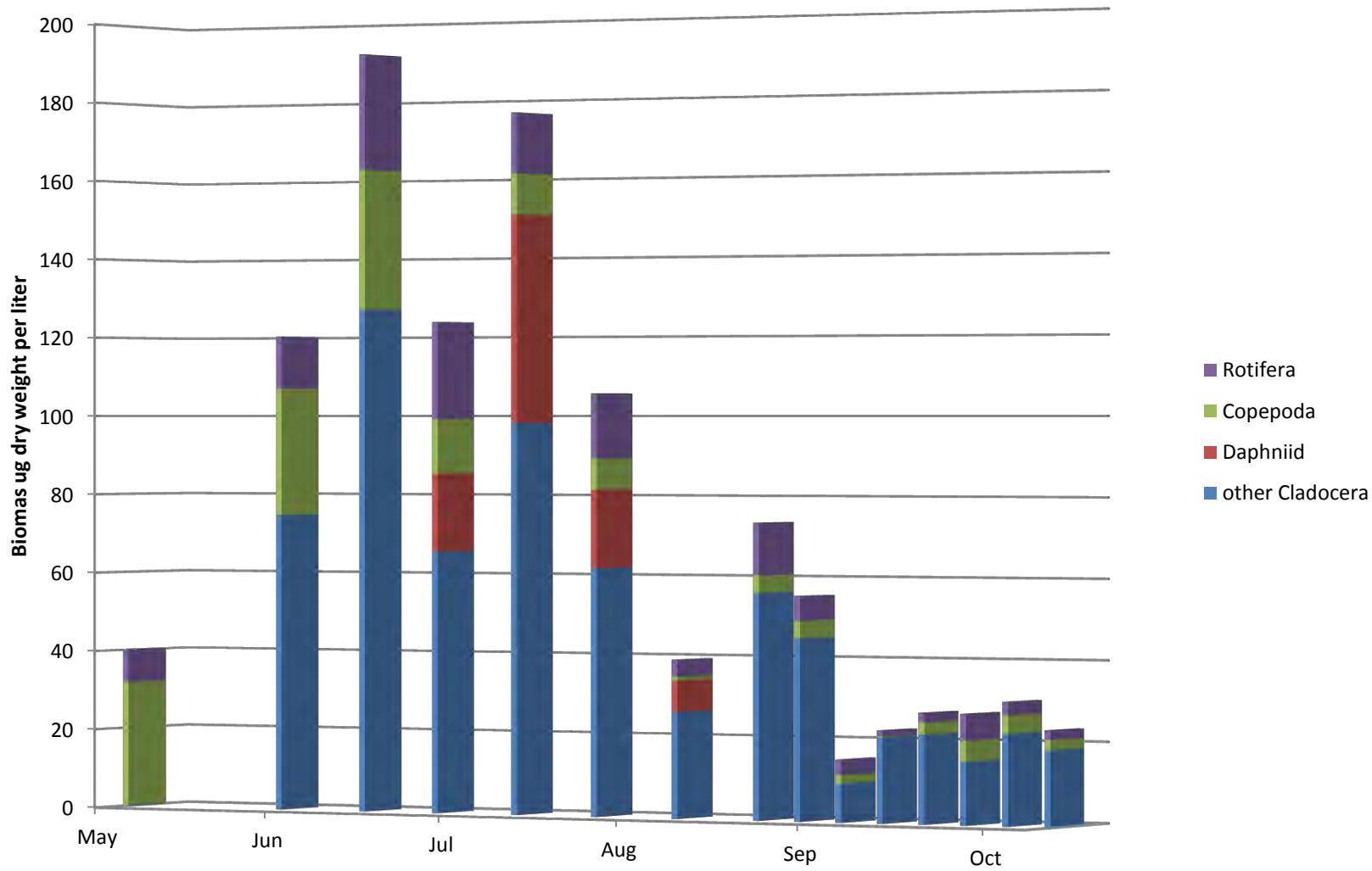


Figure 10B Methylmercury as a Percent of Total Mercury in Zooplankton at South Deep During 2011

Notes:

1. These results are for zooplankton assemblages.
2. These results are based on validated mercury data from laboratory analyses conducted by Test America (North Canton, OH).

Figure 11 Zooplankton Community Composition in 2011
Onondaga Lake at South Deep



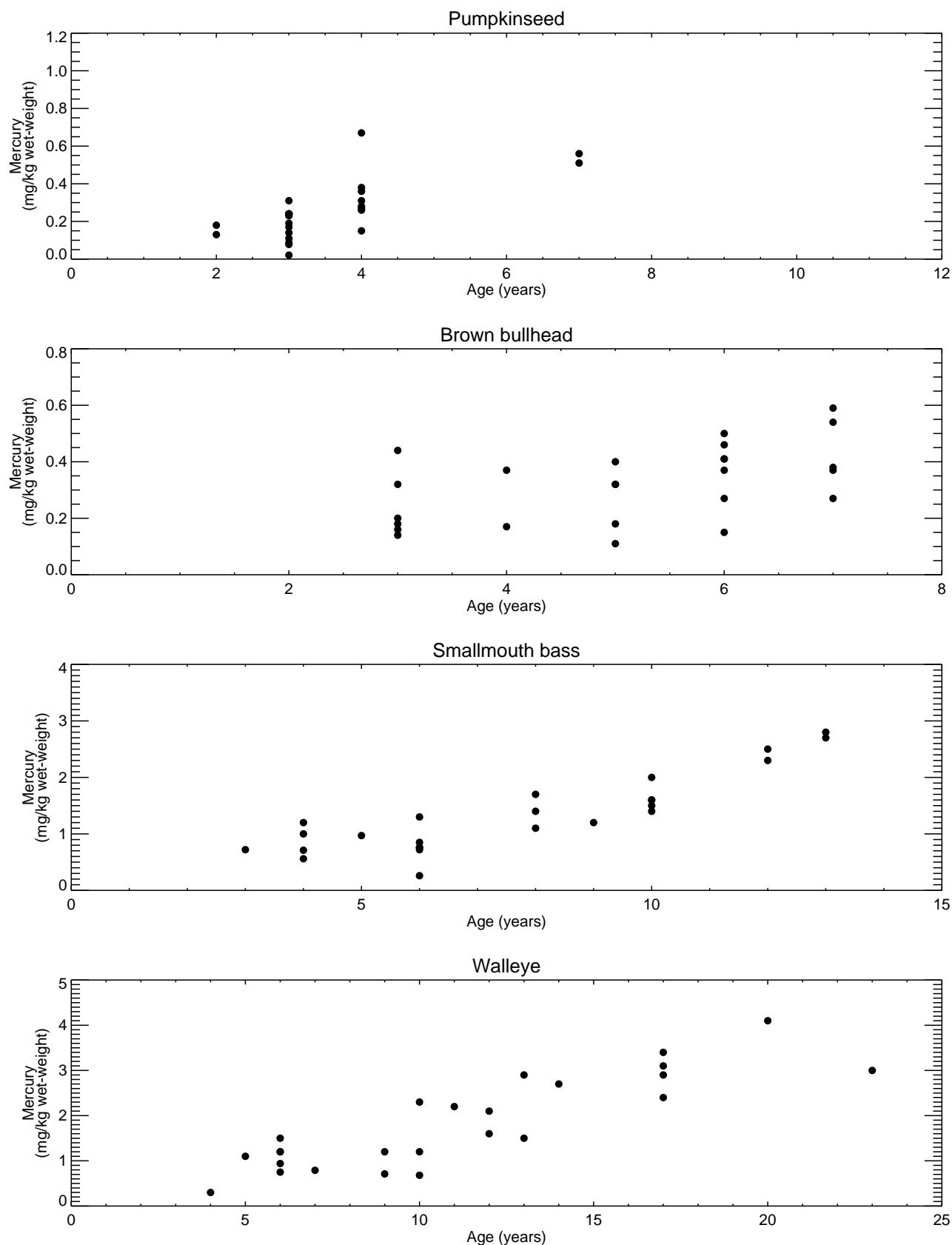


Figure 12
Mercury vs. Age in Onondaga Lake Fish Sampled in 2011.

Data source: 2011 Baseline Monitoring Program(BLM)

Figure 13 Carbon and Nitrogen Stable Isotope Results Reflective of Trophic Level

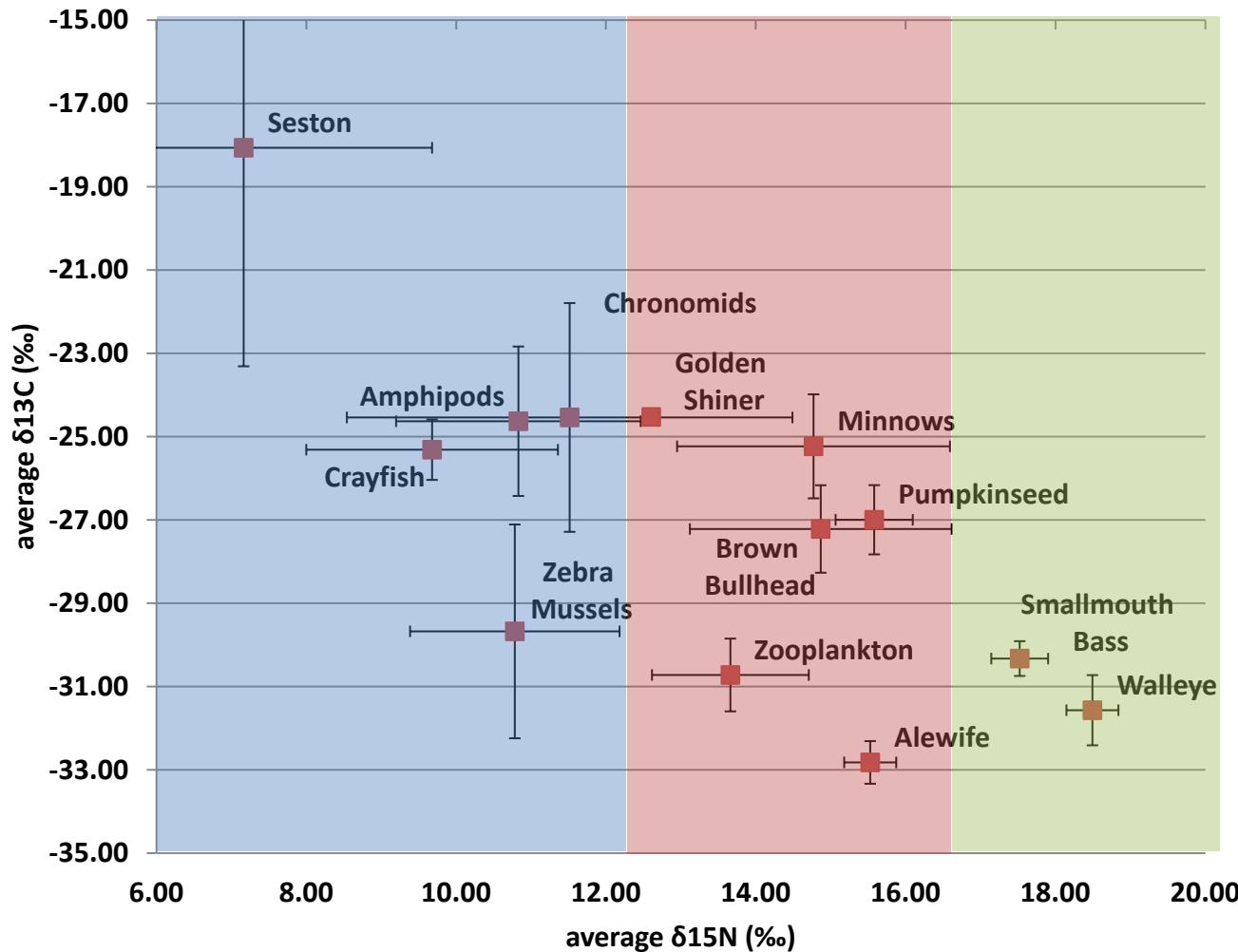
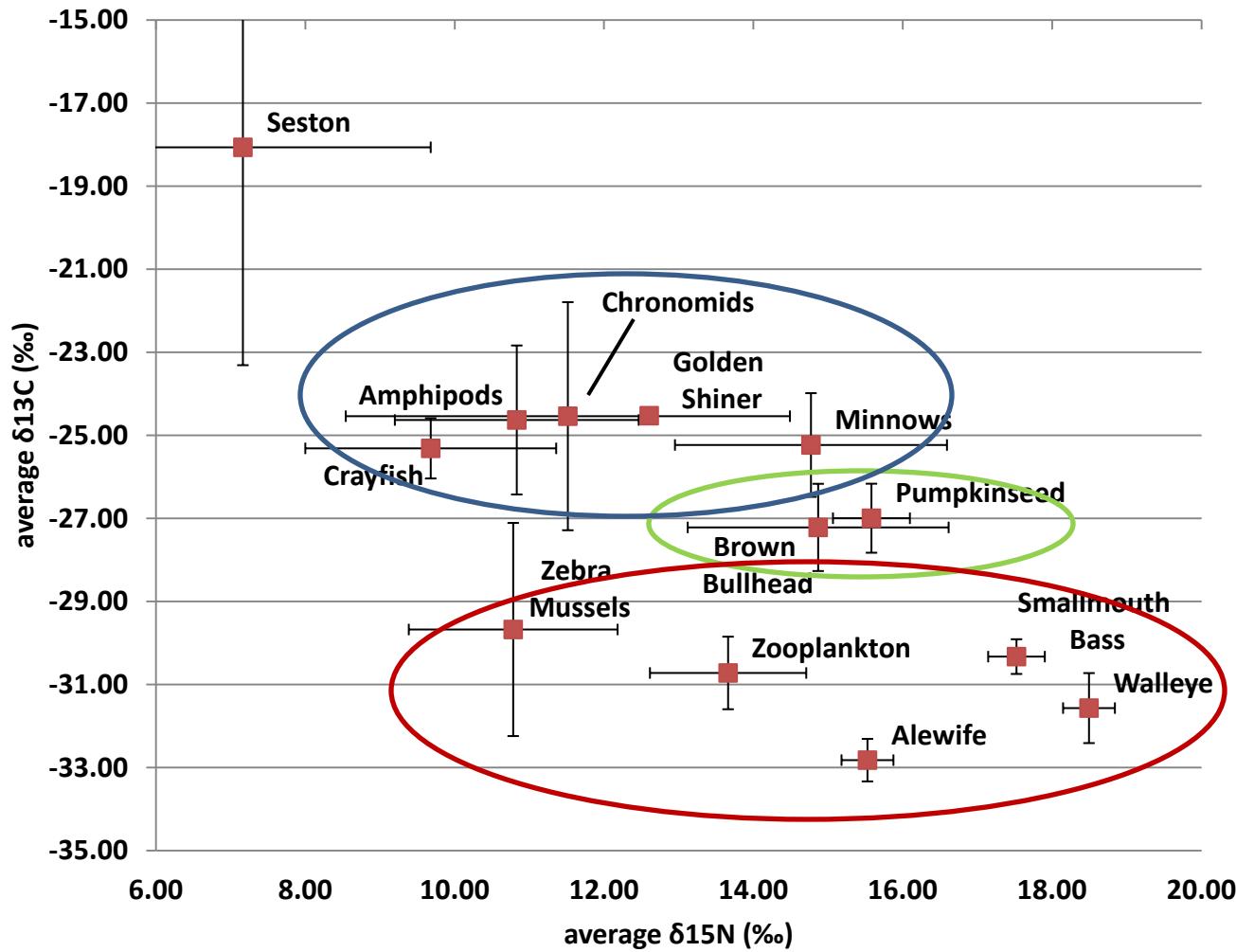
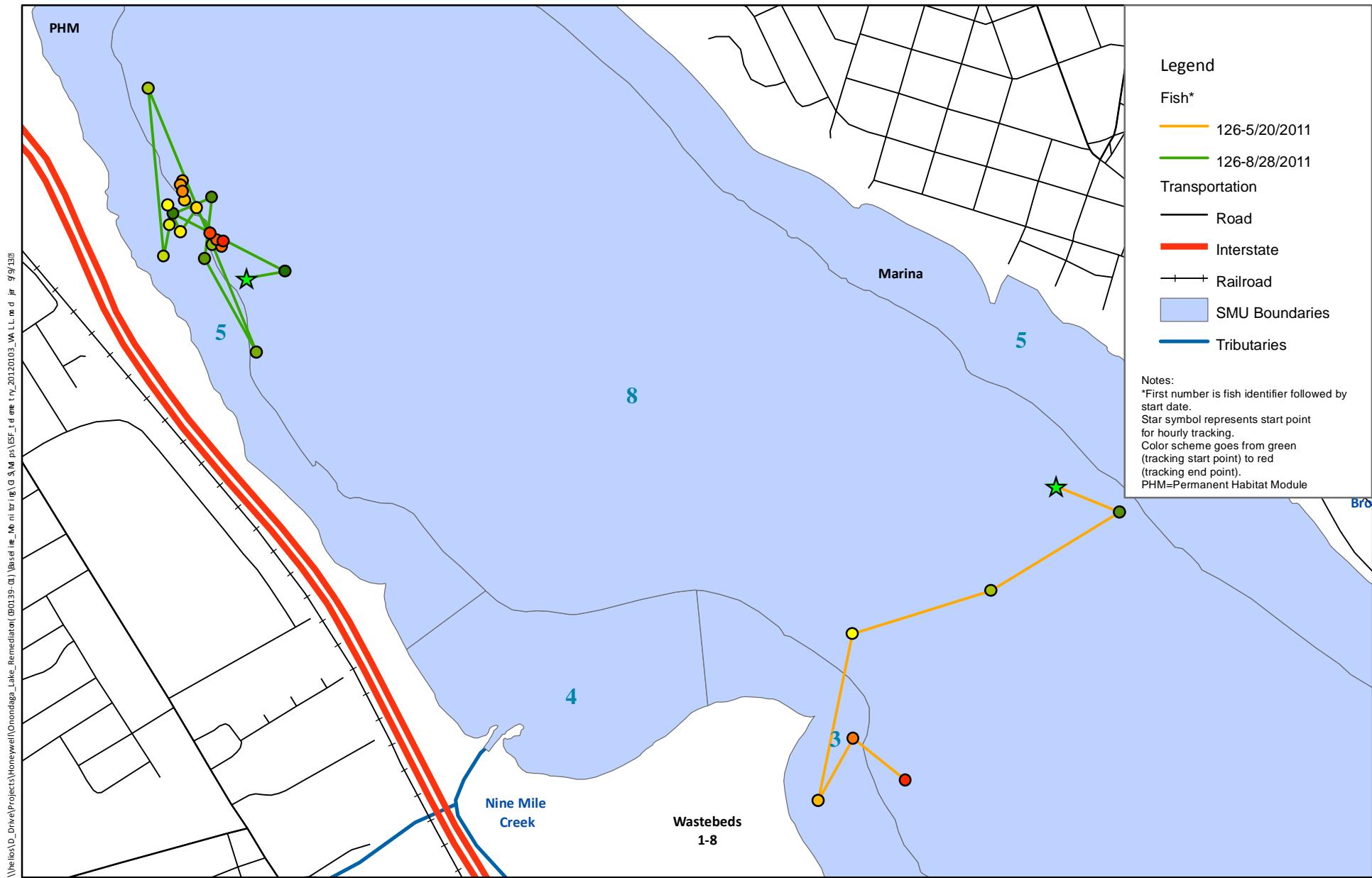


Figure 14 Carbon and Nitrogen Stable Isotope Results Reflective of Carbon Source





0 1,300 2,600
Feet

Figure 15a
Walleye movement
during 2011 based on
hourly tracking.

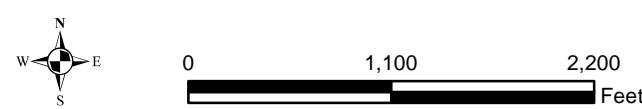
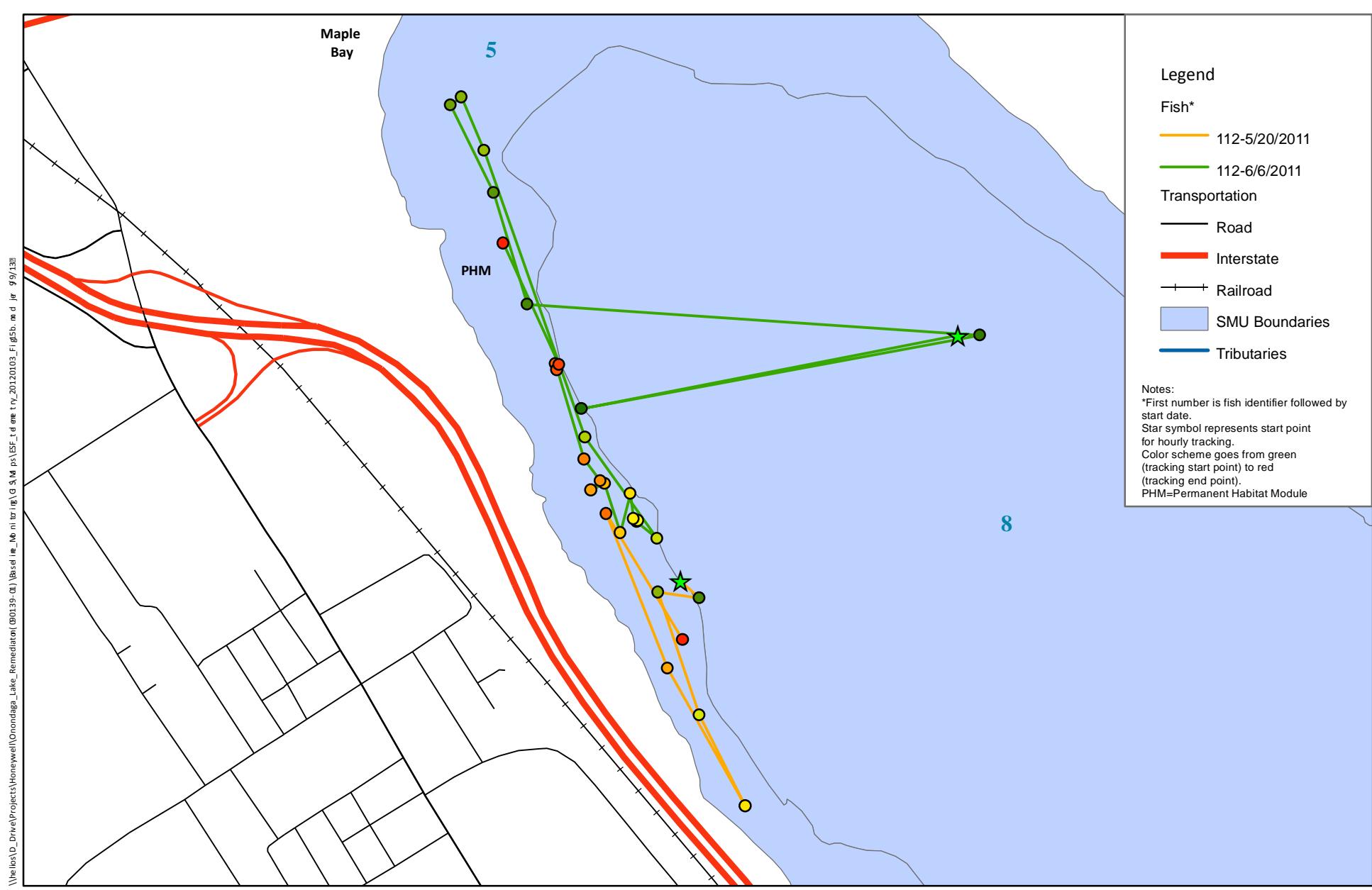
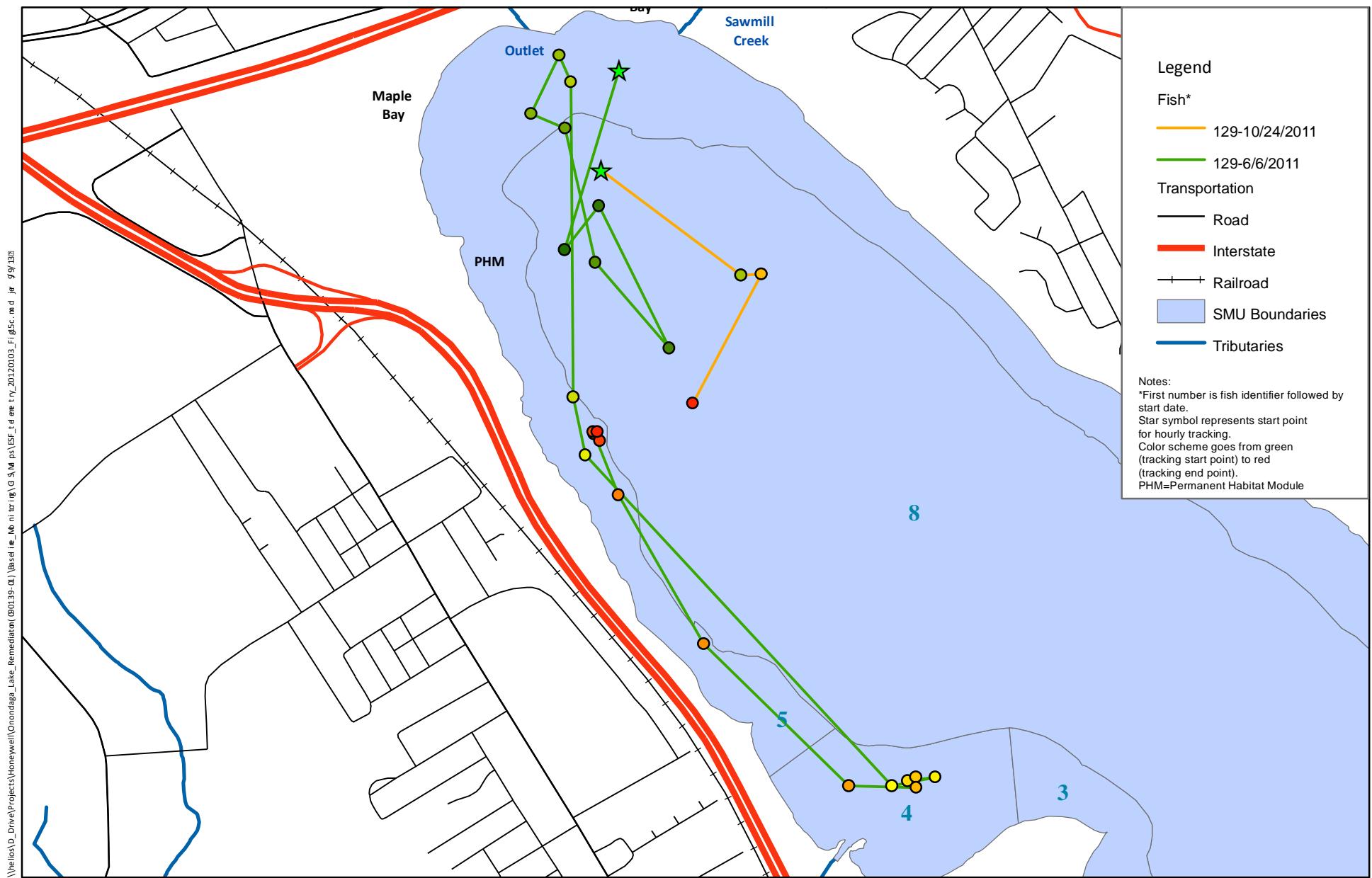


Figure 15b
Walleye movement during 2011 based on hourly tracking.



0 1,600 3,200
Feet

Figure 15c
Walleye movement
during 2011 based on
hourly tracking.

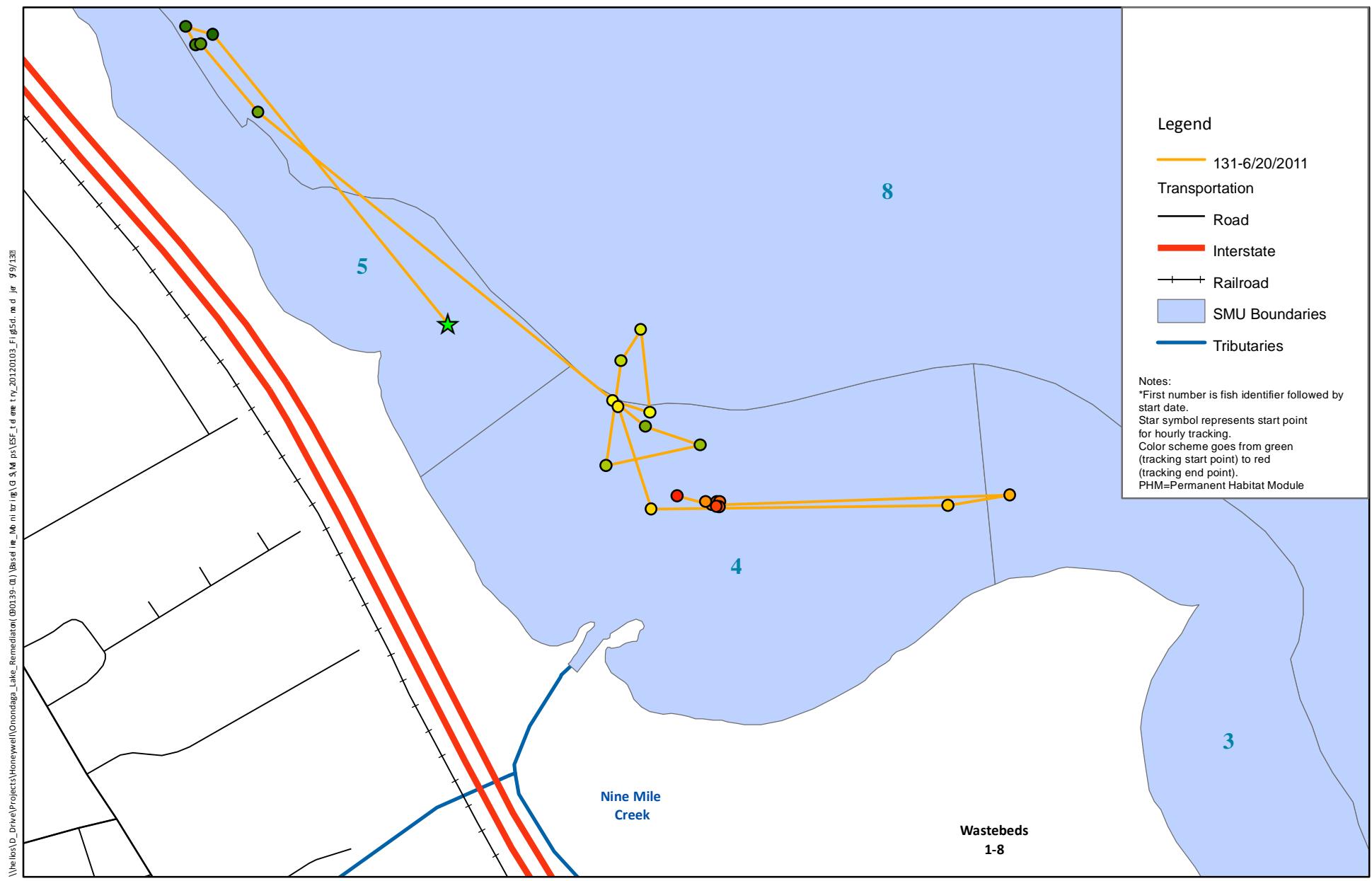
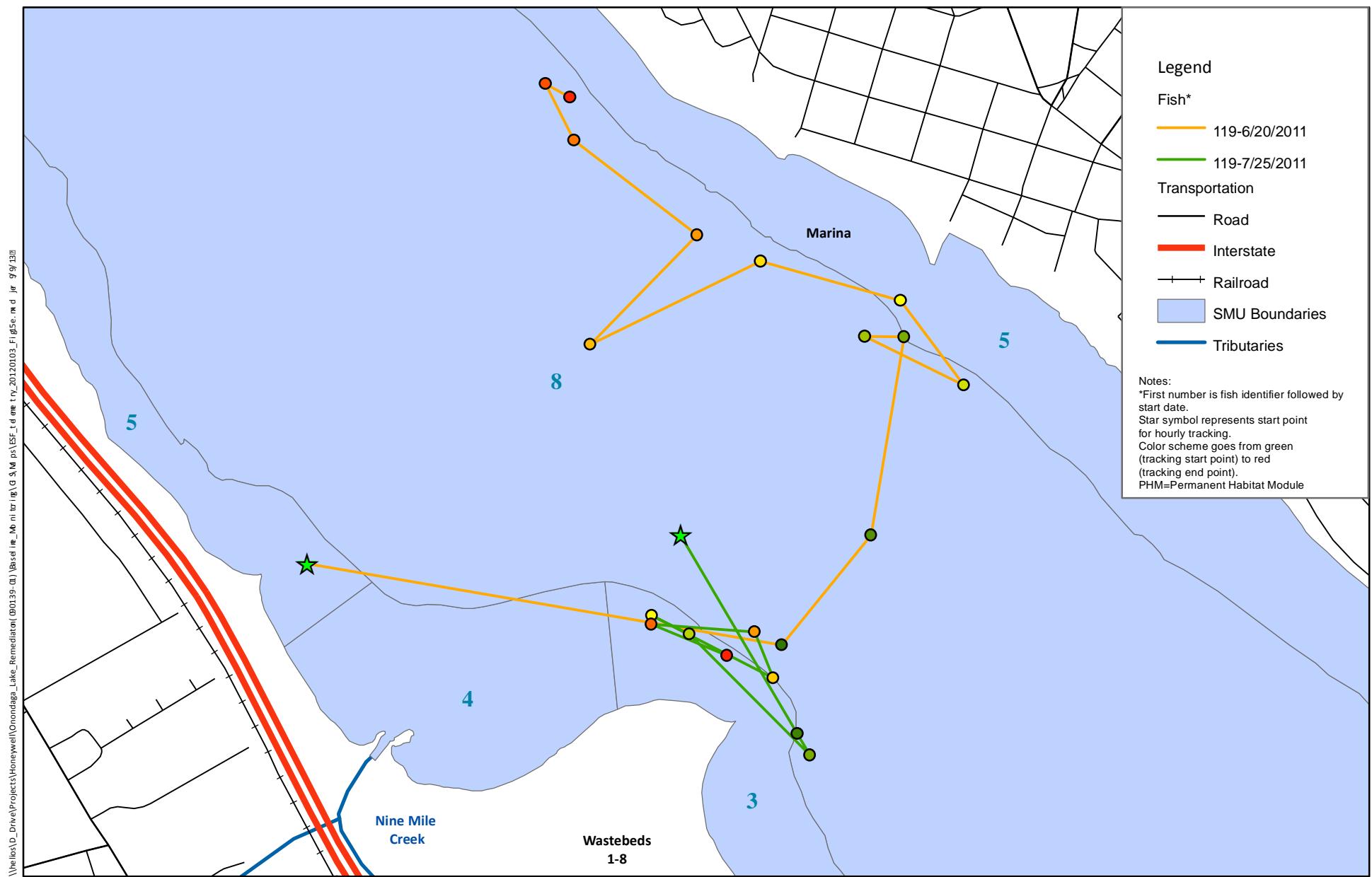
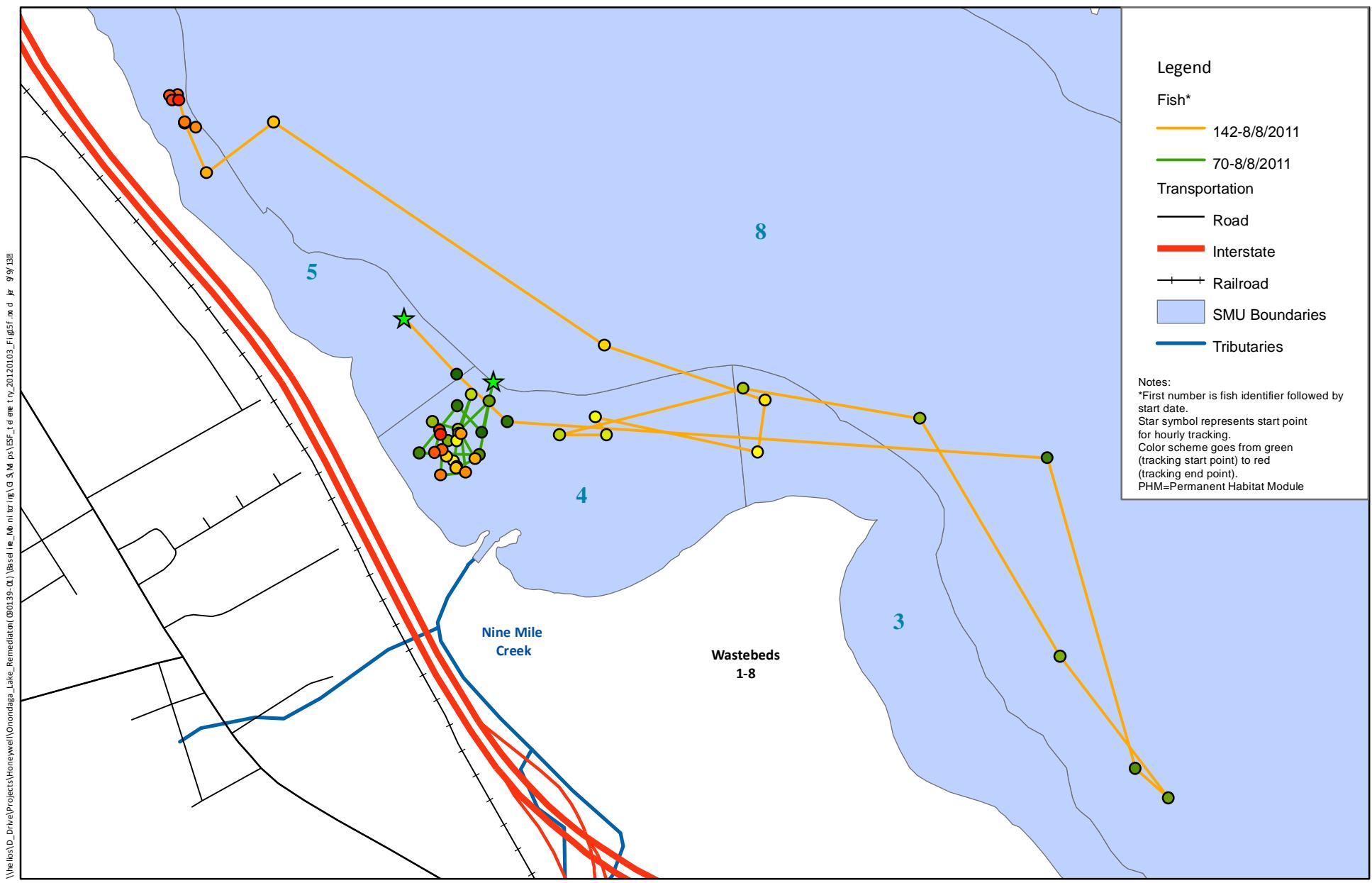


Figure 15d
Walleye movement
during 2011 based on
hourly tracking.



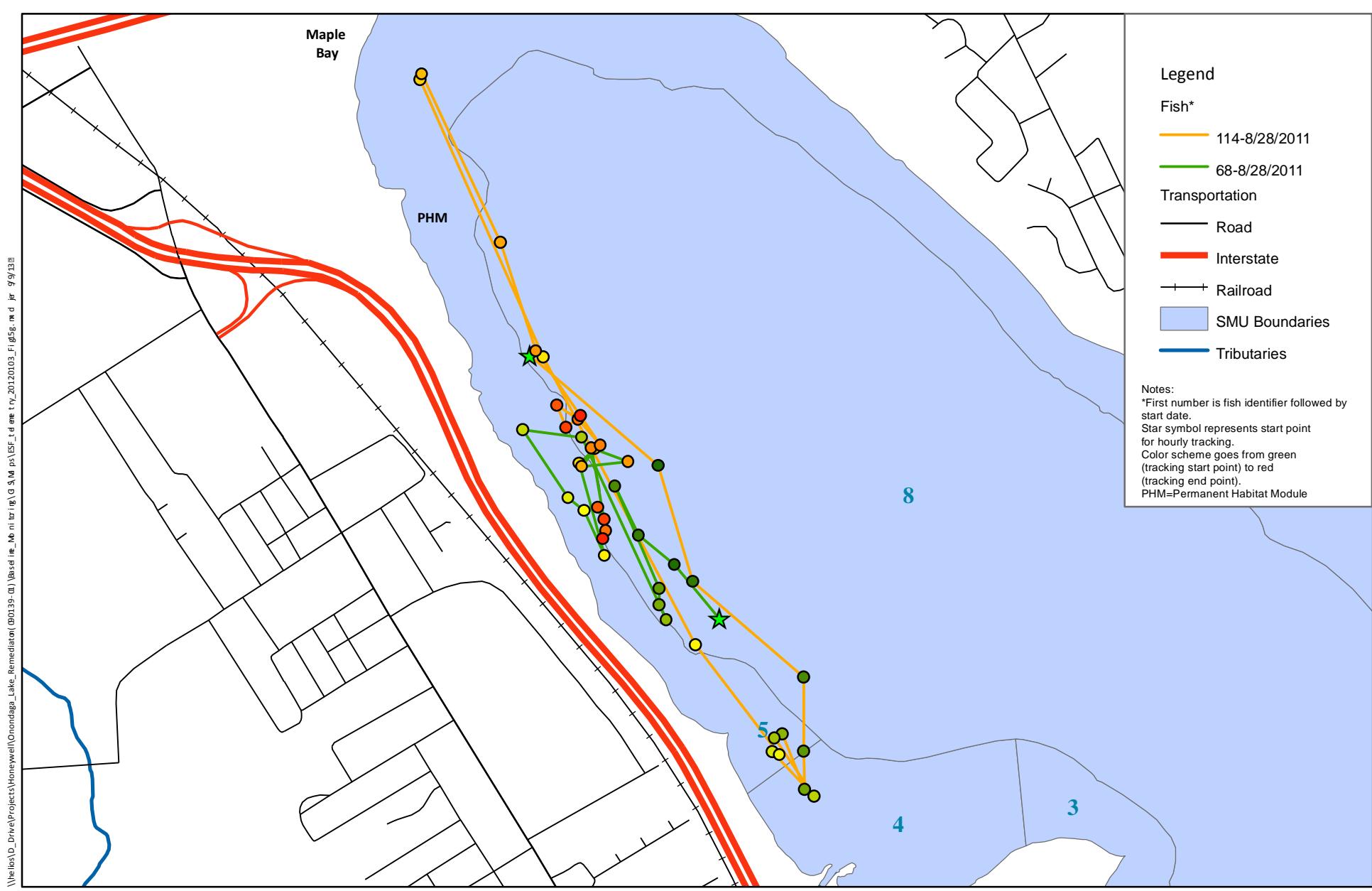
0 1,200 2,400
Feet

Figure 15e
Walleye movement
during 2011 based on
hourly tracking.



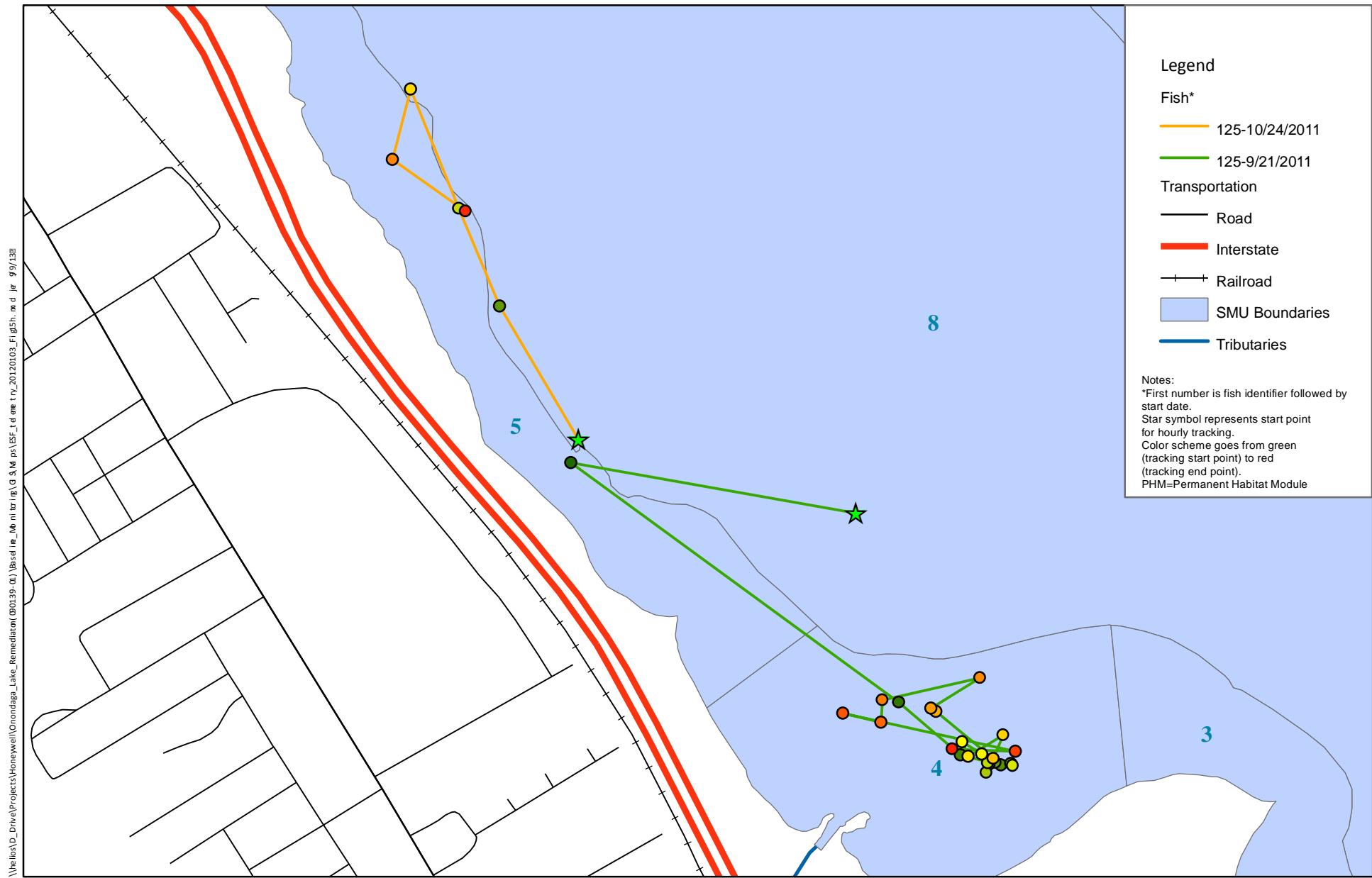
0 1,100 2,200
Feet

Figure 15f
Walleye movement
during 2011 based on
hourly tracking.



0 1,400 2,800
Feet

Figure 15g
Walleye movement
during 2011 based on
hourly tracking.



0 940 1,880
Feet

Figure 15h
Walleye movement
during 2011 based on
hourly tracking.

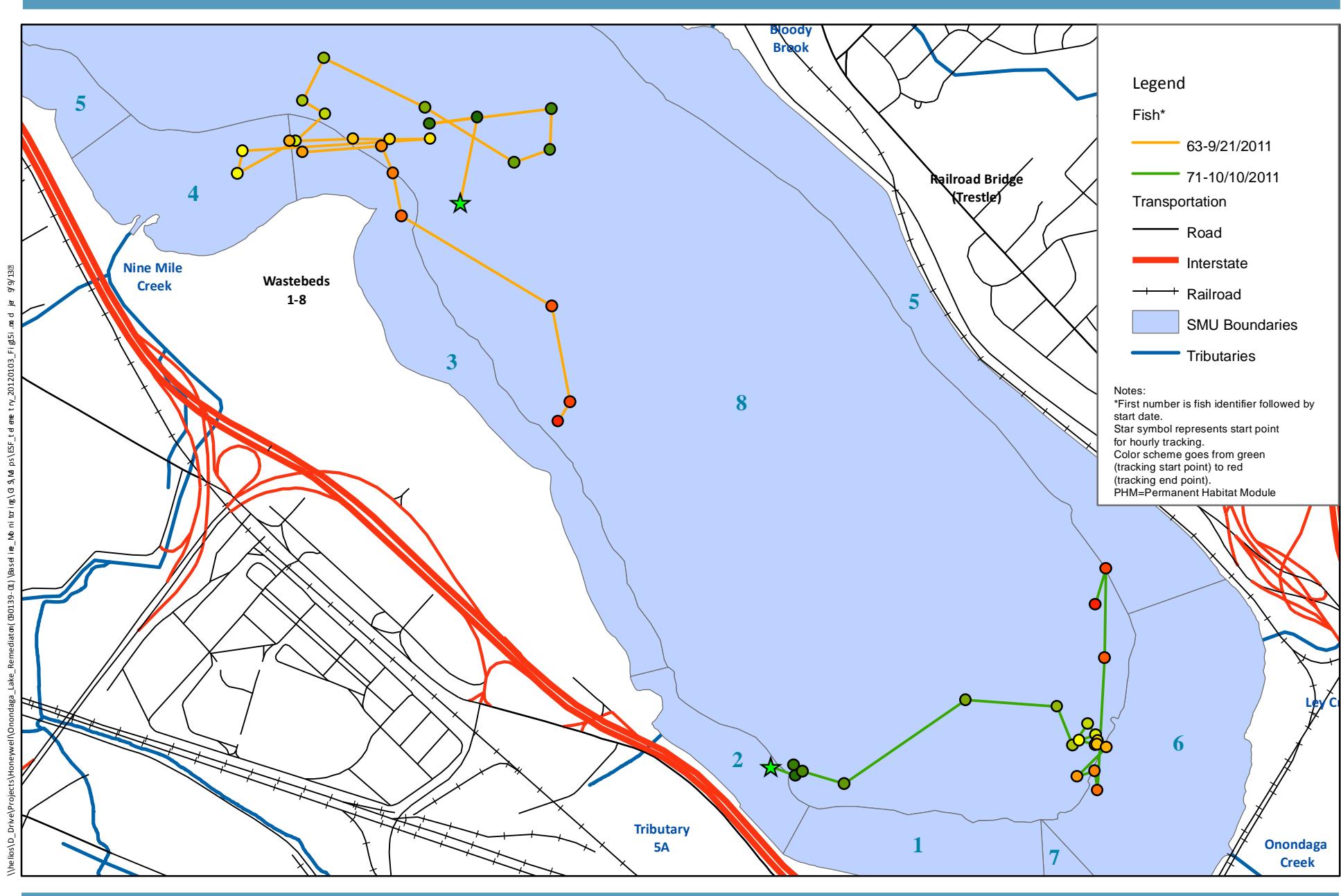


Figure 15i
Walleye movement
during 2011 based on
hourly tracking.

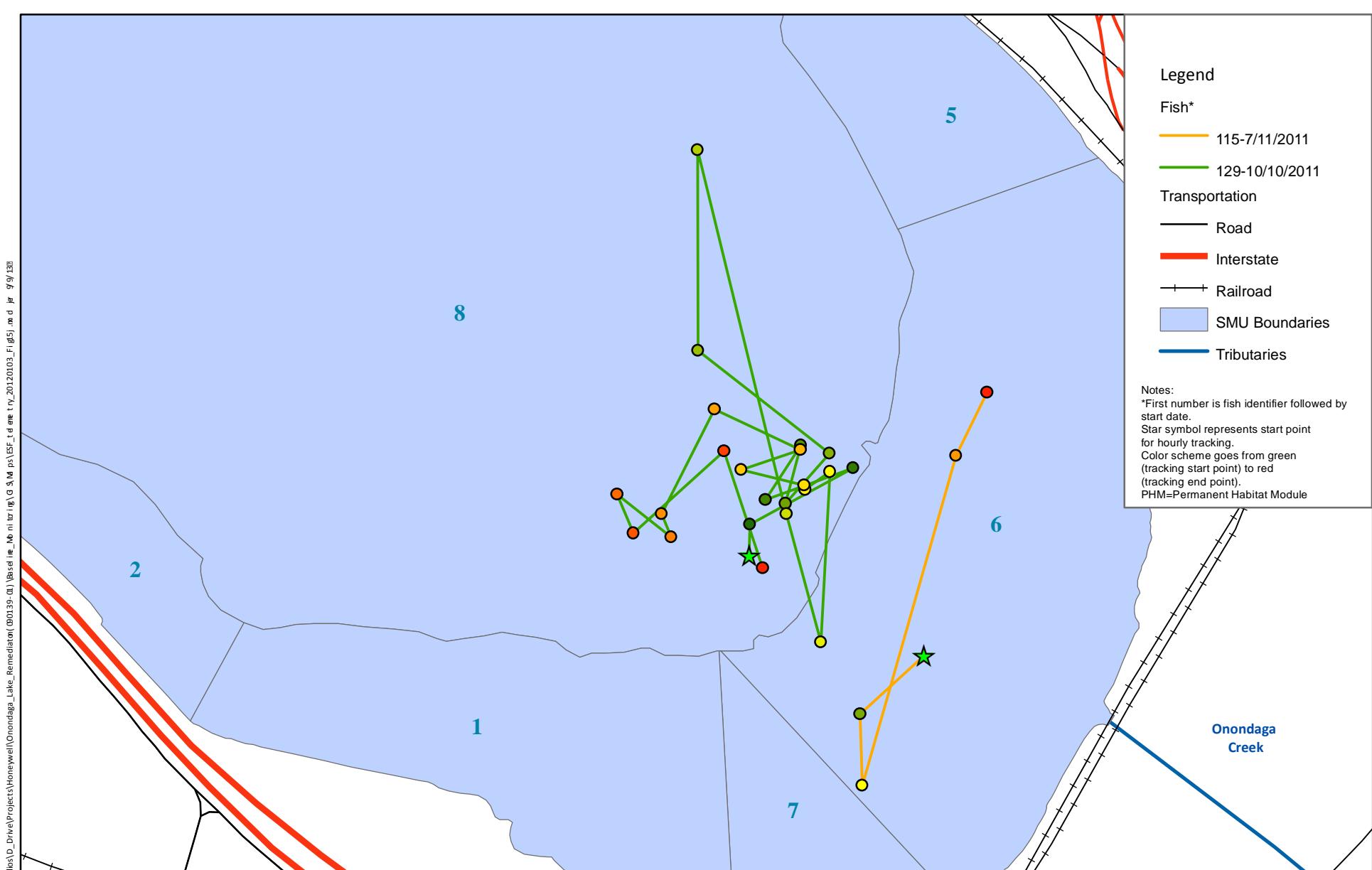


Figure 15j
Walleye movement
during 2011 based on
hourly tracking.

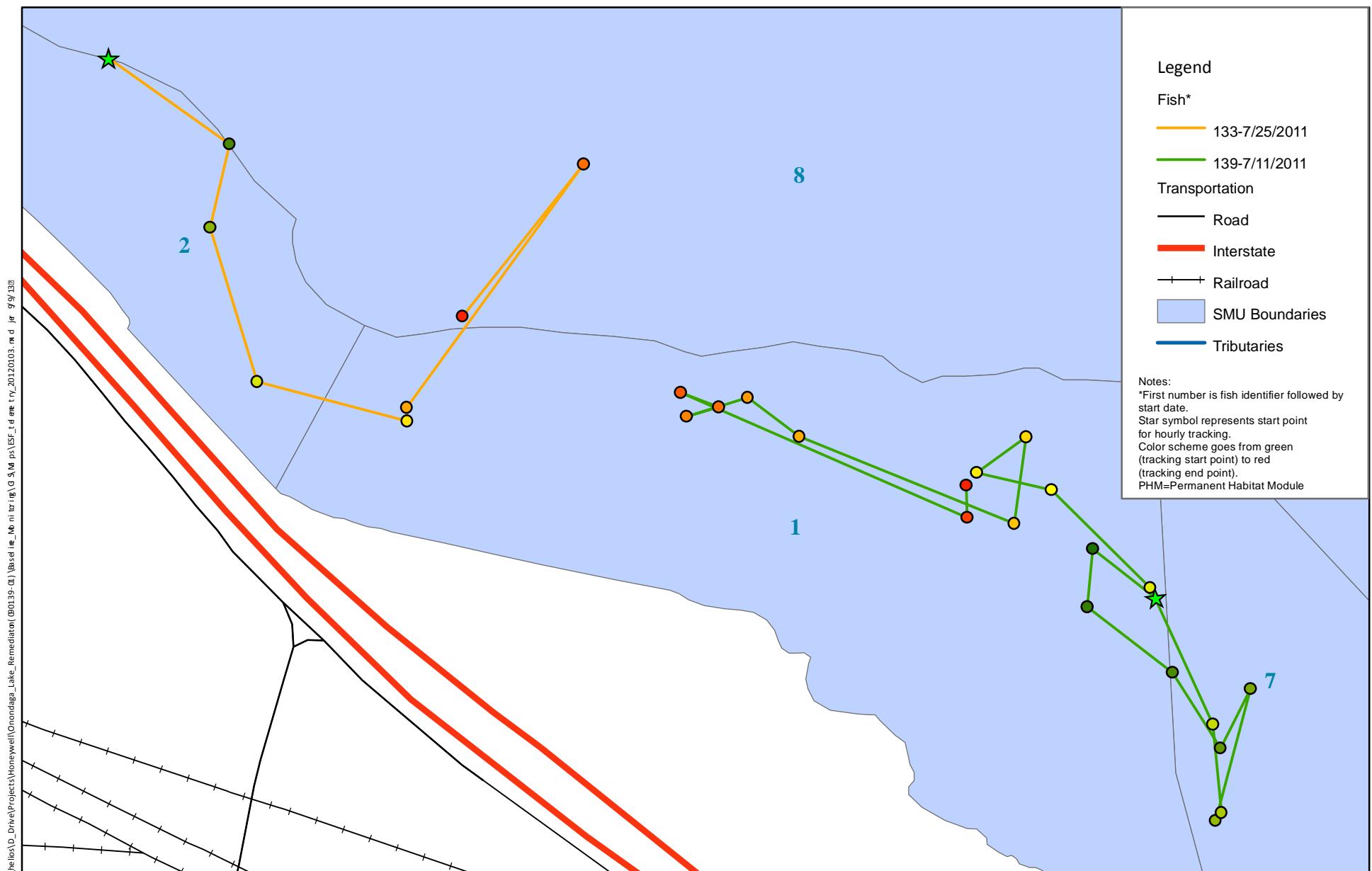


Figure 16a
Smallmouth Bass Movement
During 2011 Based on
Hourly Tracking.

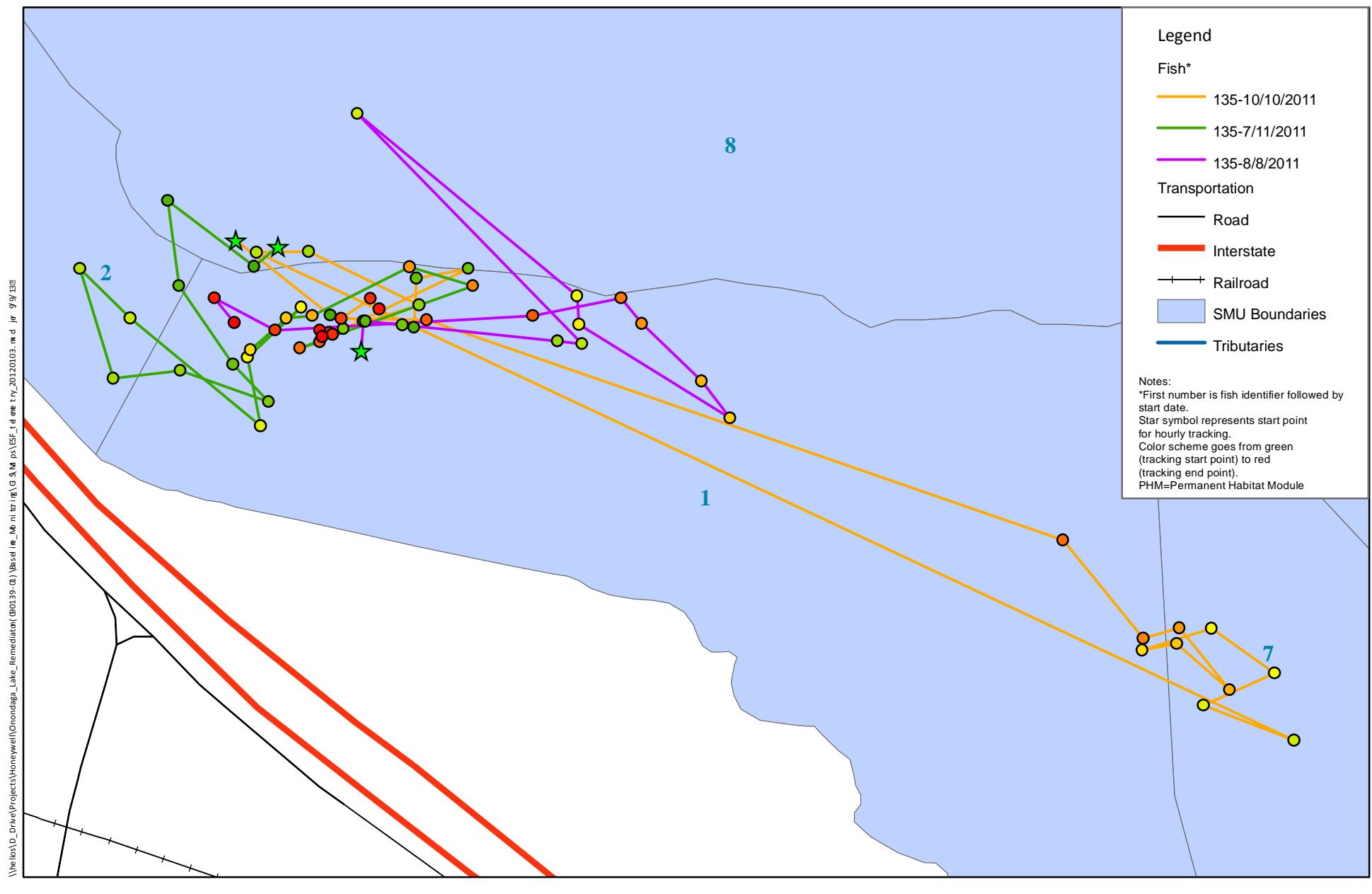


Figure 16b
Smallmouth Bass Movement
During 2011 Based on
Hourly Tracking.

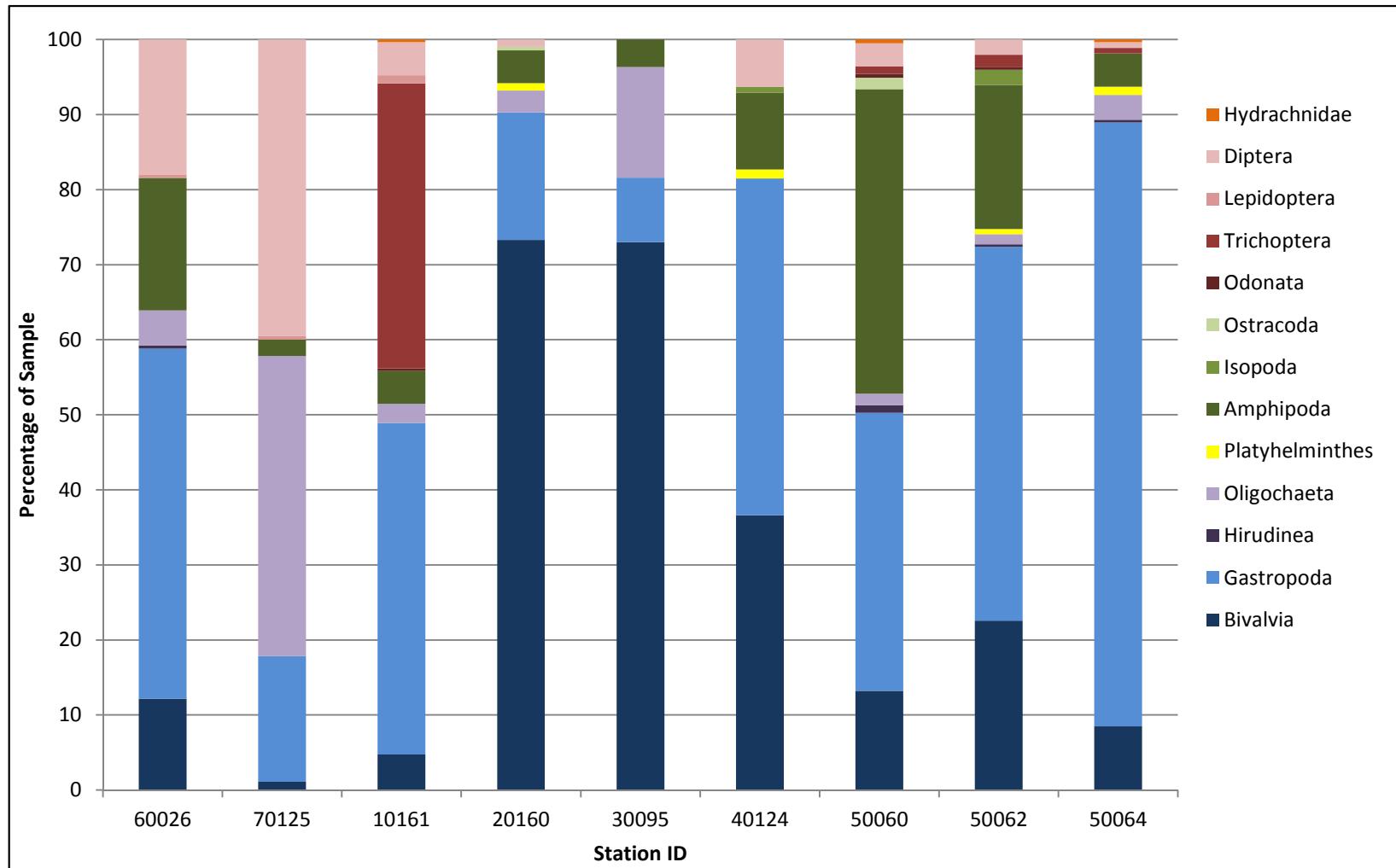


Figure 17.
Phytophilous Macroinvertebrate Community from Locations in Onondaga Lake - August 2011.

Note: data based on the sum of three replicates at each location, except OL-STA-50060 which had two replicates.

APPENDIX A**DATA USABILITY SUMMARY REPORT, ONONDAGA LAKE BASELINE
MONITORING BOOK 1 ADDENDUM 3 (2011):
DEEP BASIN WATER AND ZOOPLANKTON MONITORING**

APPENDIX A:

DATA USABILITY SUMMARY REPORT

ONONDAGA LAKE BASELINE MONITORING BOOK 1 FOR 2011: DEEP BASIN WATER AND ZOOPLANKTON MONITORING

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SEPTEMBER 2013

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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**
- ATTACHMENT A-4 VALIDATED SPLIT 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 May 23, 2011 through November 21, 2011. 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)
- USEPA Region II Standard Operating Procedures (SOPs) for inorganic data review

Upstate Freshwater Institute (UFI) in Syracuse, New York collected all of the Book 1 samples during 2011.

The analytical laboratories for this project were Test America Laboratories (TAL) and UFI. 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) and the New State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP).

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 9 to 107 days 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 chain-of-custody (COC) record, and received at the laboratories within one day of sampling. All samples were received intact and in good condition at the laboratories.

A1.3 LABORATORY ANALYTICAL METHODS

The surface water and water column samples were collected from the site and analyzed for total and/or dissolved low level mercury, methylmercury, dissolved organic carbon (DOC), total inorganic carbon (TIC), TOC, total carbon, TSS, total fixed solids, chlorophyll, chloride, sulfide, methane, ferrous iron, total calcium, nitrite, nitrate-nitrite, and/or ammonia. Zooplankton samples were collected from the site and analyzed for low level mercury and methylmercury. Weekly sediment trap samples were collected from the site and analyzed for total calcium, total organic carbon (TOC), total carbon, total suspended solids (TSS), and total fixed solids, while sediment trap samples were analyzed for low level mercury on a monthly to weekly basis. 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
- "R" - unusable value

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

An additional Book 1 split sampling effort was conducted for the analysis of low-level mercury and methylmercury at two different laboratories – TAL in North Canton, Ohio and Brooks Rand Laboratories (BRL) in Seattle, Washington. Results from this round-robin assessment are included in Subsection A2.4 and Attachment A-4.

A1.3.1 Low Level Mercury Analysis

Surface water, zooplankton, sediment trap, and water column samples collected from the site were analyzed by TAL 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 and field duplicate precision. The reported low level mercury analytical results were considered 100% complete (i.e., usable) for the data presented by TAL. PARCC requirements were met.

A1.3.2 Methylmercury Analysis

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

A1.3.3 Other Sediment Trap Analyses

Sediment trap samples collected from the site following a 7-day deployment in the lake were also analyzed by UFI using analytical SOPs for total calcium, TOC, total carbon, TSS, and total fixed solids. Sample results for these parameters did not require qualification resulting from data validation. 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 Surface Water and Water Column Analyses

Surface water and water column samples collected from the site were analyzed by UFI using analytical SOPs for DOC, TIC, TOC, total carbon, TSS, total fixed solids, chlorophyll, chloride, sulfide, methane, ferrous iron, total calcium, nitrite, nitrate-nitrite, and/or ammonia. Certain reported results were qualified as estimated based upon holding times, matrix spike recoveries, laboratory duplicate precision, sample triplicate precision, 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 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 blank contamination
- Matrix spike / matrix spike duplicate (MS/MSD) recoveries
- Laboratory duplicate precision
- 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 blank contamination, MS/MSD recoveries, and field duplicate precision as discussed below.

Blank Contamination

Initial and continuing calibration blanks and laboratory preparation blanks associated with project samples contained total mercury at a concentration below the reporting limit ranging from 0.129 to 0.318 ng/L and dissolved mercury at a concentration ranging from 0.139 to 1.15 ng/L. Field blanks associated with project samples contained total mercury at a concentration below the reporting limit ranging from 0.12 to 0.72 ng/L and dissolved mercury at a concentration below the reporting limit ranging from 0.12 to 0.45 ng/L. Therefore, associated sample results less than validation action concentrations were considered not detected and qualified "U" for the associated samples.

It was noted that field blank OL-1630-01 associated with samples within sample delivery group (SDG) 240-4727-1 contained total mercury at a concentration of 0.62 ng/L; the field blank OL-1632-01 associated with samples within SDG 240-4870-1 contained total mercury at a concentration at 0.85 ng/L; and the field blank OL-1648-01 associated with samples in SDG 240-5421-1 contained total mercury at a concentration of 0.69 ng/L. Since the contamination of the field blank water from the laboratory is suspected for these field blank samples, the contamination detected in these blanks was not used to evaluate project samples.

MS/MSD Recoveries

All MS/MSD mercury recoveries were considered acceptable and within the 71-125%R QC limit with the exception of the high total mercury MS recovery (128%R) associated with samples in sample delivery group (SDG) 240-394-1; the low dissolved mercury MS recovery (61%R) associated with samples in SDG 240-2041-1; the low total mercury MS/MSD recoveries (68%R/69%R) associated with samples in SDG 240-2107-1; the low total mercury MS recovery (69%R) associated with samples in SDG 240-2265-1; the low total mercury MS/MSD recoveries (67%R/62%R) associated with samples in SDG 240-3088-1; the low total mercury MSD recovery (62%R) associated with samples in SDG 240-4464-1; the low dissolved mercury MS/MSD recoveries (47%R/43%R) and the low total mercury MSD recovery (68%R) associated with samples in SDG 240-4727-1; the low total mercury MS recovery (68%R) associated with samples in SDG 240-4870-1; the low dissolved mercury MS recovery (64%R) associated with samples in SDG 240-5210-1; the low dissolved mercury MS/MSD recoveries (63%R/68%R) associated with samples in SDG 240-5421-1; and the low total mercury MS/MSD recoveries (62%R/69%R) associated with samples in SDG 240-4088-1. Therefore, positive mercury results for those samples where the associated spiked recoveries exceeded the QC limit were considered estimated, possibly biased high, and qualified "J" for the affected sample. Mercury results for those samples where the associated spiked recoveries fell below the QC limit 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 were considered acceptable with the exception of the precision of total mercury for the field duplicate pairs OL-1630-02/-03 (50%RPD) and OL-1648-02/-03 (79%RPD). Therefore, the total mercury results for these samples were considered estimated and qualified "J".

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

A2.1.2 Methylmercury

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

- Custody documentation
- Holding times
- Surrogate recoveries
- Initial and continuing calibration verifications
- Initial and continuing calibration, laboratory preparation blank, and field blank contamination
- Matrix spike / matrix spike duplicate (MS/MSD) recoveries
- Laboratory duplicate precision
- 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 surrogate recoveries, continuing calibration verifications, blank contamination, MS/MSD recoveries, LCS recoveries, and field duplicate precision as discussed below.

Surrogate Recoveries

All n-propyl mercury chloride sample surrogate recoveries were considered acceptable and within the 50-150%R QC limit with the exception of the low surrogate recovery in samples OL-1414-05 (47%R), OL-1425-07 (46%R), -13 (46%R), OL-1428-10 (29%R), -11 (38%R), -14 (46%R), OL-1446-02 (43%R), OL-1451-07 (49%R), -08 (47%R), OL-1483-04 (27%R), -05 (44%R), -06 (49%R), -07 (49%R), -10 (35%R), -11 (35%R), -12 (46%R), -13 (46%R), OL-1490-08 (49%R), OL-1603-02 (26%R), -03 (15%R), -04 (13%R), -05 (32%R), -06 (24%R), -09 (12%R), -10 (15%R), -11 (34%R), OL-1607-02 (8%R), -03 (14%R), -04 (25%R), -05 (32%R), -06 (38%R), -07 (41%R), -09 (23%R), -10 (7%R), -11 (32%R), -12 (29%R), -14 (13%R), OL-1616-02 (39%R), -03 (42%R), -04 (17%R), -05 (23%R), -06 (48%R), -07 (15%R), -08 (47%R), -10 (39%R), -12 (12%R), -13 (16%R), -14 (38%R), OL-1623-02 (12%R), -03 (46%R), -04 (2%R), -05 (2%R), -06 (3%R), OL-1632-02 (48%R), -04 (41%R), OL-1643-13 (45%R), -14 (43%R), OL-1648-06 (44%R), -09 (39%R), -10 (39%R), OL-1612-02 (48%R), -03 (13%R), -05 (46%R), -06 (49%R), -08 (38%R), -09 (44%R), -10 (20%R), -11 (28%R), -12 (17%R), -13 (19%R), -14 (18%R), and -15 (15%R). Therefore, methylmercury results associated with these samples were considered estimated, possibly biased low, with positive results qualified "J" and nondetected results qualified "UJ" for the affected samples.

Continuing Calibration Verifications

All continuing calibration verifications were considered acceptable and within the $\pm 33\%$ D QC limit with the exception of the continuing calibration verification for methylmercury (-42.3%D) associated with sample OL-1414-02. The methylmercury result for this sample was considered estimated and qualified "J".

Blank Contamination

Initial and continuing calibration blanks and laboratory preparation blanks associated with project samples contained methylmercury at a concentration below the reporting limit ranging from 0.0101 to 0.0486 ng/L. Field blanks associated with project samples contained methylmercury at a concentration below the reporting limit ranging from 0.011 to 0.032 ng/L. Therefore, associated sample results less than validation action concentrations were considered not detected and qualified "U" for the associated samples.

It was noted that field blank OL-1463-01 associated with SDG 240-2655-1 contained methylmercury mercury at a concentration of 0.095 ng/L; the field blank OL-1477-01 associated

with samples within SDG 240-3088-1 contained methylmercury at a concentration at 0.15 ng/L; and the field blank OL-1623-01 associated with samples in SDG 240-4464-1 contained methylmercury at a concentration of 0.26 ng/L. Since contamination of the field blank water from the laboratory is suspected for these field blank samples, the contamination detected in these blanks was not used to evaluate project samples.

MS/MSD Recoveries

All MS/MSD methylmercury recoveries for designated spiked project samples were considered acceptable and within the 65-135%R QC limit with the exception of the low MS/MSD methylmercury recoveries (46%R/40%R) associated with samples in SDG 240-2041-1; the low MS/MSD recoveries (59%R/59%R) associated with samples in SDG 240-2265-1; the low MS/MSD recoveries (50%R/57%R) associated with samples in SDG 240-1706-1; the low MS recovery (56%R) associated with samples OL-1477-01, -02, -03, -04, and -09; the low MS/MSD recoveries (46%R/40%R) associated with samples in SDG 240-3757-1; the low MS/MSD recoveries (32%R/22%R) associated with samples in SDG 240-4004-1; the low MS/MSD recoveries (50%R/65%R) associated with samples in SDG 240-4233-1; the low MS/MSD recoveries (28%R/26%R) associated with samples in SDG 240-4464-1; and the low MS/MSD recoveries (52%R/56%R and 59%R/52%R) associated with samples in SDG 240-4870-1. The methylmercury results associated with these samples were considered estimated, possibly biased low, with positive results qualified "J" and nondetected results qualified "UJ" for the affected samples.

LCS Recoveries

All LCS methylmercury recoveries were considered acceptable and within the 67-133%R QC limit with the exception of the low methylmercury LCS recovery (66%R) associated with samples in SDGs 240-5210-1, 240-5421-1, and 240-4675-1. Therefore, the methylmercury results associated with 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 were considered acceptable with the exception of the methylmercury precision result for the field duplicate pairs OL-1446-02/-03 (74%RPD) and OL-1623-02/-03 (144%RPD). Therefore, the methylmercury results for these samples were considered estimated and qualified "J".

Usability

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

A2.1.3 DOC, TIC, TOC, Total Carbon, TSS, Total Fixed Solids, Chlorophyll, Chloride, Sulfide, Methane, Total Calcium, 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 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 ammonia results for samples OL-1421-01, -02, -06, OL-1433-01, -15, OL-1444-01, -02, -03, -12, -18, OL-1449-18, OL-1467-18, OL-1628-18, OL-1488-18 were considered not detected and qualified "U" based upon similar concentrations detected in the associated laboratory blanks.
- The sulfide results for samples OL-1421-09, -10, and -11 were considered estimated, possibly biased low, and qualified "UJ" based upon an exceedance of the 7-day analytical holding time by two days.
- The total inorganic carbon results for samples OL-1467-01, -02, -03, -05, -07, -08, and -18 were considered estimated, possibly biased low, and qualified "J" or "UJ" based upon an exceedance of the 48-hour analytical holding time by six days.
- The total carbon results for samples OL-1462-01, -02, and -03 were considered estimated, possibly biased low, and qualified "J" based upon an exceedance of the 28 day analytical holding time by two days.
- The nitrate-nitrite results for samples in SDGs CHM 2011-052 and CHM 2011-043; and the ammonia results for samples in SDG CHM 2011-043 were considered estimated, possibly biased low, and qualified "J" or "UJ" based upon low matrix spike recoveries.
- The ferrous iron results for samples in SDG CHM 2011-023 were considered estimated, possibly biased low, and qualified "J" or "UJ" based upon low matrix spike recoveries.

- The ammonia results for samples OL-1433-01, -02, -03, -04, -05, -07, -09, -11, -15, -16, -17, -18, OL-1457-06, -07, -08, -12, -13, -14, -15, OL-1646-01, -02, -03, -04, -05, -06, -10, -11, and -14; and the sulfide results for samples OL-1433-05, -06, -07, -08, -09, -10, -12, -13, -14, -17, -18, -19, and -20 were considered estimated, possibly biased low, and qualified “J” or “UJ” based upon the associated continuing calibration verification recovery falling below the QC limit.
- The ammonia result for sample OL-1444-16 and the nitrate-nitrite result for sample OL-1628-03 were considered estimated and qualified “J” based upon an exceedance in instrument calibration ranges.
- The positive ammonia results for samples in SDG CHM 2011-063 were considered estimated, possibly biased high, and qualified “J” based upon an exceedance in matrix spike recoveries.
- The ferrous iron results for samples OL-1437-09, -10, -11, OL-1467-09, -10, and -11; the TOC results for samples OL-1602-01, -02, and -03; and the total fixed solids results for samples OL-1458-01, -02, and -03 were considered estimated and qualified “J” based upon an exceedance in triplicate precision.
- The DOC results for samples OL-1467-05, -07, -08, and -18 and the nitrate-nitrite result for sample OL-1633-01 were considered not detected and qualified “U” based upon similar concentrations detected in the associated laboratory blanks.
- The chlorophyll results for samples in SDG CHM 2011-074 were considered estimated and qualified “J” or “UJ” based upon a laboratory duplicate precision exceedance.

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 TAL 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 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.

A2.2.1 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) recoveries
- 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

Initial and continuing calibration blanks and laboratory preparation blanks contained low level mercury below the reporting limit associated with project samples at a concentration ranging from 0.153 to 0.309 ug/kg. Validation qualification of the project samples was not required since the samples were not affected by the contamination detected in these blanks.

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 TAL were 100% complete (i.e., usable). The validated low level mercury laboratory data are tabulated and presented in Attachment A-2.

A2.2.2 Methylmercury

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

- Custody documentation
- Holding times
- Surrogate recoveries
- 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) recoveries
- 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 LCS recoveries and blank contamination as discussed below.

LCS Recoveries

All LCS recoveries for methylmercury were considered acceptable and within the 40-145%R QC limit with the exception of the low methylmercury LCS recovery (20%R) associated with zooplankton samples OL-1664-01 and -02. The methylmercury results for these samples were considered estimated, possibly biased low, and qualified "J".

Blank Contamination

Initial and continuing calibration blanks and laboratory preparation blanks contained methylmercury below the reporting limit associated with project samples at a concentration ranging from 0.0644 to 0.169 ug/kg. The methylmercury sample results did not require qualification since sample concentrations were not affected by the contamination in these blanks.

Usability

All methylmercury 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 methylmercury data presented by TAL were 100% complete (i.e., usable). The validated methylmercury laboratory data are tabulated and presented in Attachment A-2.

A2.3 SEDIMENT TRAP SAMPLES

Data review has been completed for data packages generated by TAL 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) recoveries
- 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

Initial and continuing calibration blanks and laboratory method blanks associated with project samples contained low level mercury below the reporting limit at a concentration ranging from 0.120 to 0.313 ng/L. The low level mercury sample results were not affected by the contamination in these blanks and validation qualification was not required for the project samples.

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 TAL 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 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, 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 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.

A2.4 SPLIT SAMPLES

An additional Book 1 split sampling effort was conducted for the analysis of low level mercury and methylmercury analyses for surface water, zooplankton, water column, and sediment trap samples. This round robin analysis was performed between TAL in North Canton, Ohio and Brooks Rand Laboratories (BRL) in Seattle, Washington.

Data review has been completed for data packages generated by TAL and BRL containing split 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 laboratories.

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". The data usability summaries for the samples analyzed by TAL were presented in Subsections A2.1, A2.2, and A2.3. For the low level mercury and methylmercury data presented by BRL, all custody documentation, holding times, matrix spike recoveries, laboratory duplicate precision, laboratory control sample recoveries, laboratory method blank contamination, initial and continuing calibration verifications, field duplicate precision, and quantitation limits were reviewed for compliance. Validation qualification of the split sample results for these parameters was not required with the exception of the total low level mercury results for the surface water field duplicate pair OL-1471-02/-03 based upon a high field duplicate precision (60%RPD). These results were considered estimated and qualified "J".

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The data for these parameters presented by BRL were 100% complete (i.e., usable). The validated laboratory data for the split samples are tabulated and presented in Attachment A-4. This table presents round robin precision between the Book 1 surface water, zooplankton, and sediment trap results analyzed by TAL and the associated split sample results analyzed by BRL. Overall, the precision results indicate good comparability.

ATTACHMENT A

VALIDATED LABORATORY DATA

PARSONS

ATTACHMENT A-1**VALIDATED LABORATORY DATA FOR
SURFACE WATER AND WATER COLUMN SAMPLES**

PARSONS

Validated Book 1 Surface Water and Water Column Samples

		Field Sample ID	OL-1407-06	OL-1407-07	OL-1407-08	OL-1409-06	OL-1409-07	OL-1409-08	OL-1412-06	OL-1412-07
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	6.6-6.6 Ft	39.6-39.6 Ft	56.1-56.1 Ft	6.6-6.6 Ft	39.6-39.6 Ft	56.1-56.1 Ft	6.6-6.6 FT	39.6-39.6 FT	
	Sample Date	5/23/2011	5/23/2011	5/23/2011	5/23/2011	5/23/2011	5/23/2011	5/23/2011	6/6/2011	6/6/2011
	SDG	UFICHM2011-013	UFICHM2011-013	UFICHM2011-013	UFICHM2011-013	240-394-1	240-394-1	240-394-1	UFICHM2011-015	UFICHM2011-015
	Matrix	WATER	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N			0.000079	0.000036 J	0.000044 J		
E1631	MERCURY	ug/L	N			0.0011 J	0.00096 J	0.0011 J		
E1631	MERCURY	ug/L	Y			0.00034 J				
UFI SOP	CALCIUM	mg/L	N							
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.019	0.017	0.017			0.021	0.017
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.022 J	0.193	0.309			0.016 J	0.217
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.668	1.839	1.811			1.668	1.625
UFI SOP	SULFIDE	mg/L	N							
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

Validated Book 1 Surface Water and Water Column Samples

		Field Sample ID	OL-1412-08	OL-1414-06	OL-1414-07	OL-1414-08	OL-1421-06	OL-1421-07	OL-1421-08	OL-1423-06
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	56.1-56.1 FT	6.6-6.6 FT	39.6-39.6 FT	56.1-56.1 FT	6.6-6.6 FT	39.6-39.6 FT	56.1-56.1 FT	6.6-6.6 FT	
	Sample Date	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/20/2011	6/20/2011	6/20/2011
	SDG	UFICHM2011-015	240-912-1	240-912-1	240-912-1	240-912-1	UFICHM2011-022	UFICHM2011-022	UFICHM2011-022	240-1292-1
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N		0.00011	0.00004 J	0.000033 J			0.00011
E1631	MERCURY	ug/L	N		0.00087	0.0022	0.0019			0.00069
E1631	MERCURY	ug/L	Y		0.00097 U					0.0005 U
UFI SOP	CALCIUM	mg/L	N							
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.02				0.028	0.03	0.033
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.36				0.04 U	0.293	0.486
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.517				1.479	1.255	1.136
UFI SOP	SULFIDE	mg/L	N							
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

Validated Book 1 Surface Water and Water Column Samples

		Field Sample ID	OL-1423-07	OL-1423-08	OL-1426-12	OL-1426-13	OL-1426-14	OL-1426-15	OL-1426-16	OL-1426-17
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	39.6-39.6 FT	56.1-56.1 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	56.1-56.1 FT	
	Sample Date	6/20/2011	6/20/2011	6/27/2011	6/27/2011	6/27/2011	6/27/2011	6/27/2011	6/27/2011	6/27/2011
	SDG	240-1292-1	240-1292-1	UFICHM2011-023						
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	0.000047 J	0.000053					
E1631	MERCURY	ug/L	N	0.00079	0.00065					
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N		130.1	126.9	125.9	125.7	123.8	122.7
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N					5 UJ	5 UJ	5 UJ
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N		0.031	0.045	0.053	0.051	0.048	0.051
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N		0.033 J	0.258	0.316	0.397	0.541	0.553
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N		1.731	1.453	1.468	1.47	1.303	1.251
UFI SOP	SULFIDE	mg/L	N					0.056 U	0.056 U	0.056 U
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

Validated Book 1 Surface Water and Water Column Samples

		Field Sample ID	OL-1428-09	OL-1428-10	OL-1428-11	OL-1428-12	OL-1428-13	OL-1428-14	OL-1433-15	OL-1433-16
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	56.1-56.1 FT	6.6-6.6 FT	33-33 FT	
	Sample Date	6/27/2011	6/27/2011	6/27/2011	6/27/2011	6/27/2011	6/27/2011	6/27/2011	7/5/2011	7/5/2011
	SDG	240-1516-1	240-1516-1	240-1516-1	240-1516-1	240-1516-1	240-1516-1	240-1516-1	UFICHM2011-026	UFICHM2011-026
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	0.000087	0.000028 J	0.000036 J	0.000045 J	0.000051	0.000043 J	
E1631	MERCURY	ug/L	N	0.00079	0.00094	0.00098	0.00081	0.00078	0.00088	
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N							134.2
UFI SOP	CHLORIDE	mg/L	N							126.2
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N						0.028	0.12
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N						0.04 UJ	0.184 J
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N						1.763	1.517
UFI SOP	SULFIDE	mg/L	N							
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

Validated Book 1 Surface Water and Water Column Samples

		Field Sample ID	OL-1433-17	OL-1433-18	OL-1433-19	OL-1433-20	OL-1435-09	OL-1435-10	OL-1435-11	OL-1435-12
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	56.1-56.1 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	
	Sample Date	7/5/2011	7/5/2011	7/5/2011	7/5/2011	7/5/2011	7/5/2011	7/5/2011	7/5/2011	7/5/2011
	SDG	UFICHM2011-026	UFICHM2011-026	UFICHM2011-026	UFICHM2011-026	UFICHM2011-026	240-1706-1	240-1706-1	240-1706-1	240-1706-1
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N				0.000058 J	0.00003 J	0.000033 J	0.000071 J
E1631	MERCURY	ug/L	N				0.0012	0.0014	0.0014	0.0012
E1631	MERCURY	ug/L	Y				0.00035 J			
UFI SOP	CALCIUM	mg/L	N	124.2	123.2	123.9	123			
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N	10 U	10 U	10 U	10 U			
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.094	0.078	0.081	0.072			
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.248 J	0.345 J	0.413	0.51			
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.424	1.29	1.222	1.163			
UFI SOP	SULFIDE	mg/L	N	0.056 UJ	0.056 UJ	0.056 UJ	0.056 UJ			
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1435-13	OL-1435-14	OL-1437-12	OL-1437-13	OL-1437-14	OL-1437-15	OL-1437-16	OL-1437-17
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	52.8-52.8 FT	56.1-56.1 FT	6.6-6.6 Ft	33-33 Ft	39.6-39.6 Ft	46.2-46.2 FT	52.8-52.8 FT	56.1-56.1 FT	
	Sample Date	7/5/2011	7/5/2011	7/11/2011	7/11/2011	7/11/2011	7/11/2011	7/11/2011	7/11/2011	7/11/2011
	SDG	240-1706-1	240-1706-1	UFICHM2011-027						
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	0.000081 J	0.000086 J					
E1631	MERCURY	ug/L	N	0.001	0.0094					
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N		134.7	127.4	123.5	121.6	123	125.1
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N					5 U	5 U	5 U
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N		0.03	0.159	0.114	0.097	0.085	0.093
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N		0.038 J	0.125	0.155	0.311	0.515	0.549
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N		1.864	1.627	1.575	1.485	1.51	1.739
UFI SOP	SULFIDE	mg/L	N					0.056 U	0.056 U	0.056 U
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1439-09	OL-1439-10	OL-1439-11	OL-1439-12	OL-1439-13	OL-1439-14	OL-1444-12	OL-1444-13
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	56.1-56.1 FT	6.6-6.6 FT	33-33 FT	
	Sample Date	7/11/2011	7/11/2011	7/11/2011	7/11/2011	7/11/2011	7/11/2011	7/11/2011	7/18/2011	7/18/2011
	SDG	240-1847-1	240-1847-1	240-1847-1	240-1847-1	240-1847-1	240-1847-1	240-1847-1	UFICHM2011-030	UFICHM2011-030
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	0.000097	0.00004 J	0.000037 J	0.000049 J	0.000071	0.000056	
E1631	MERCURY	ug/L	N	0.0013	0.00078	0.00073	0.00079	0.0017	0.00093	
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N							131.9
UFI SOP	CHLORIDE	mg/L	N							127.7
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N						0.035	0.197
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N						0.04 U	0.133
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N						1.832	1.505
UFI SOP	SULFIDE	mg/L	N							
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1444-14	OL-1444-15	OL-1444-16	OL-1444-17	OL-1446-09	OL-1446-10	OL-1446-11	OL-1446-12
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	56.1-56.1 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	
	Sample Date	7/18/2011	7/18/2011	7/18/2011	7/18/2011	7/18/2011	7/18/2011	7/18/2011	7/18/2011	7/18/2011
	SDG	UFICHM2011-030	UFICHM2011-030	UFICHM2011-030	UFICHM2011-030	UFICHM2011-030	240-2041-1	240-2041-1	240-2041-1	240-2041-1
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N				0.000068 J	0.00004 J	0.000031 J	0.000057 J
E1631	MERCURY	ug/L	N				0.0017	0.00053	0.00063	0.0006
E1631	MERCURY	ug/L	Y				0.00038 J			
UFI SOP	CALCIUM	mg/L	N	124.6	122.4	121.8	123.3			
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N		10 U	4 J	10 U			
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.125	0.088	0.085	0.091			
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.168	0.412	0.504 J	0.545			
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.454	1.347	1.447	1.367			
UFI SOP	SULFIDE	mg/L	N		0.056 U	0.056 U	0.056 U			
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1446-13	OL-1446-14	OL-1449-12	OL-1449-13	OL-1449-14	OL-1449-15	OL-1449-16	OL-1449-17
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	52.8-52.8 FT	56.1-56.1 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	56.1-56.1 FT	
	Sample Date	7/18/2011	7/18/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011
	SDG	240-2041-1	240-2041-1	UFICHM2011-032						
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	0.00007 J	0.000054 J					
E1631	MERCURY	ug/L	N	0.00048 J	0.00052					
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N		126.7	128.1	123.2	120	120.3	120.3
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N					3 J	4 J	3 J
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N		0.034	0.154	0.122	0.101	0.071	0.065
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N		0.029 J	0.175	0.175	0.219	0.388	0.658
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N		1.77	1.132	1.249	1.258	1.185	1.359
UFI SOP	SULFIDE	mg/L	N					0.056 U	0.056 U	0.056 U
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1451-09	OL-1451-10	OL-1451-11	OL-1451-12	OL-1451-13	OL-1451-14	OL-1457-12	OL-1457-13
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	56.1-56.1 FT	6.6-6.6 FT	33-33 FT	
	Sample Date	7/26/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011	8/1/2011	8/1/2011
	SDG	240-2265-1	240-2265-1	240-2265-1	240-2265-1	240-2265-1	240-2265-1	240-2265-1	UFICHM2011-037	UFICHM2011-037
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	0.00007 J	0.000052 J	0.000052 J	0.000067 J	0.0001 J	0.00007 J	
E1631	MERCURY	ug/L	N	0.00053 J	0.0005 UJ					
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N						119.8	121.2
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N						0.046	0.122
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N						0.042	0.226 J
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N						1.554	1.101
UFI SOP	SULFIDE	mg/L	N							
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1457-14	OL-1457-15	OL-1457-16	OL-1457-17	OL-1459-09	OL-1459-10	OL-1459-11	OL-1459-12
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	56.1-56.1 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	
	Sample Date	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011
	SDG	UFICHM2011-037	UFICHM2011-037	UFICHM2011-037	UFICHM2011-037	UFICHM2011-037	240-2405-1	240-2405-1	240-2405-1	240-2405-1
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N				0.00011	0.000083	0.000072	0.000099
E1631	MERCURY	ug/L	N				0.00012 U	0.00012 U	0.00012 U	0.00012 U
E1631	MERCURY	ug/L	Y				0.00012 U			
UFI SOP	CALCIUM	mg/L	N	120.3	118.7	120.7	121.2			
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N		3 J	7 J	5 J			
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.104	0.096	0.079	0.073			
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.299 J	0.378 J	0.619	0.683			
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.081	1.083	1.336	1.537			
UFI SOP	SULFIDE	mg/L	N		0.056 U	0.056 U	0.056 U			
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1459-13	OL-1459-14	OL-1461-12	OL-1461-13	OL-1461-14	OL-1461-15	OL-1461-16	OL-1461-17
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	52.8-52.8 FT	56.1-56.1 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	56.1-56.1 FT	
	Sample Date	8/1/2011	8/1/2011	8/8/2011	8/8/2011	8/8/2011	8/8/2011	8/8/2011	8/8/2011	8/8/2011
	SDG	240-2405-1	240-2405-1	UFICHM2011-038						
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	0.0001	0.00015					
E1631	MERCURY	ug/L	N	0.00012	U	0.00012	U			
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N			130.8	124.9	122.2	124.4	123.1
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N						5 U	5 U
UFI SOP	METHANE	ug/L	N							6 J
UFI SOP	NITRITE	mg/l	N			0.053	0.076	0.1	0.099	0.085
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N			0.01 U	0.215	0.305	0.478	0.684
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N			1.828	1.015	1.003	1.255	1.387
UFI SOP	SULFIDE	mg/L	N						0.056 U	0.056 U
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1463-09	OL-1463-10	OL-1463-11	OL-1463-12	OL-1463-13	OL-1463-14	OL-1467-12	OL-1467-13
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	56.1-56.1 FT	6.6-6.6 FT	33-33 FT	
	Sample Date	8/8/2011	8/8/2011	8/8/2011	8/8/2011	8/8/2011	8/8/2011	8/8/2011	8/15/2011	8/15/2011
	SDG	240-2655-1	240-2655-1	240-2655-1	240-2655-1	240-2655-1	240-2655-1	240-2655-1	UFICHM2011-041	UFICHM2011-041
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	0.000094	0.000079	0.000086	0.0001	0.00015	0.00025	
E1631	MERCURY	ug/L	N	0.00051	0.00061	0.0005 U	0.00057	0.0005	0.0005 U	
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N							131.7
UFI SOP	CHLORIDE	mg/L	N							126.4
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N							0.052
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N							0.032 J
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N							0.332
UFI SOP	SULFIDE	mg/L	N							1.716
UFI SOP	TOTAL CARBON	mg/l	N							0.96
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1467-14	OL-1467-15	OL-1467-16	OL-1467-17	OL-1469-09	OL-1469-10	OL-1469-11	OL-1469-12
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	56.1-56.1 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	
	Sample Date	8/15/2011	8/15/2011	8/15/2011	8/15/2011	8/15/2011	8/15/2011	8/15/2011	8/15/2011	8/15/2011
	SDG	UFICHM2011-041	UFICHM2011-041	UFICHM2011-041	UFICHM2011-041	UFICHM2011-041	240-2881-1	240-2881-1	240-2881-1	240-2881-1
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N				0.000095	0.000074	0.000091	0.00013
E1631	MERCURY	ug/L	N				0.00061	0.00046 J	0.00047 J	0.00066
E1631	MERCURY	ug/L	Y				0.00064			
UFI SOP	CALCIUM	mg/L	N	123.8	124.6	124.4	127.5			
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N		10 U	10 U	5 J			
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.089	0.09	0.077	0.075			
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.498	0.666	0.879	0.997			
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	0.963	1.089	1.139	1.077			
UFI SOP	SULFIDE	mg/L	N		0.056 U	0.056 U	0.056 U			
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1469-13	OL-1469-14	OL-1475-12	OL-1475-13	OL-1475-14	OL-1475-15	OL-1475-16
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	52.8-52.8 FT	56.1-56.1 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	
	Sample Date	8/15/2011	8/15/2011	8/22/2011	8/22/2011	8/22/2011	8/22/2011	8/22/2011	8/22/2011
	SDG	240-2881-1	240-2881-1	UFICHM2011-043	UFICHM2011-043	UFICHM2011-043	UFICHM2011-043	UFICHM2011-043	UFICHM2011-043
	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N	0.00017	0.0002				
E1631	MERCURY	ug/L	N	0.00063	0.00063				
E1631	MERCURY	ug/L	Y						
UFI SOP	CALCIUM	mg/L	N		134.3	133.3	125.6	127.8	127.8
UFI SOP	CHLORIDE	mg/L	N						
UFI SOP	CHLOROPHYLL-A	ug/L	N						
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y						
UFI SOP	FERROUS IRON (II)	ug/l	N					3 J	5 J
UFI SOP	METHANE	ug/L	N						
UFI SOP	NITRITE	mg/l	N		0.051	0.008 J	0.059	0.081	0.08
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N		0.039 J	0.318 J	0.417 J	0.633 J	0.871 J
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N		1.669 J	0.87 J	0.921 J	1.643 J	1.557 J
UFI SOP	SULFIDE	mg/L	N					0.056 U	0.056 U
UFI SOP	TOTAL CARBON	mg/l	N						
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N						
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N						
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N						
UFI SOP	Total Suspended Solids	mg/l	N						

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		Field Sample ID	OL-1475-17	OL-1477-09	OL-1477-10	OL-1477-11	OL-1477-12	OL-1477-13	OL-1477-14	OL-1481-12
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	56.1-56.1 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	56.1-56.1 FT	6.6-6.6 FT	
	Sample Date	8/22/2011	8/22/2011	8/22/2011	8/22/2011	8/22/2011	8/22/2011	8/22/2011	8/22/2011	8/29/2011
	SDG	UFICHM2011-043	240-3088-1	240-3088-1	240-3088-1	240-3088-1	240-3088-1	240-3088-1	240-3088-1	UFICHM2011-047
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N		0.0002 J	0.00011	0.000099	0.00015	0.00024	0.00026
E1631	MERCURY	ug/L	N		0.00052 J	0.00092 J	0.00055 J	0.00046 J	0.00068 J	0.00081 J
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N	129.7						135.3
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N	5 U						
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.085						0.046
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.801 J						0.08
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.57 J						1.593
UFI SOP	SULFIDE	mg/L	N	0.056 U						
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1481-13	OL-1481-14	OL-1481-15	OL-1481-16	OL-1481-17	OL-1483-09	OL-1483-10	OL-1483-11
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	56.1-56.1 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	
	Sample Date	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011
	SDG	UFICHM2011-047	UFICHM2011-047	UFICHM2011-047	UFICHM2011-047	UFICHM2011-047	UFICHM2011-047	240-3323-1	240-3323-1	240-3323-1
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N					0.00011	0.000067 J	0.000092 J
E1631	MERCURY	ug/L	N					0.0015	0.0013	0.0016
E1631	MERCURY	ug/L	Y					0.00061		
UFI SOP	CALCIUM	mg/L	N	131.4	129.5	127.1	154.8	129.5		
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N			10 U	10 U	10 U		
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.004 J	0.029	0.07	0.07	0.076		
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.359	0.587	0.988	1.02	1.043		
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	0.873	0.946	1.491	1.572	1.586		
UFI SOP	SULFIDE	mg/L	N			0.056 U	0.056 U	0.056 U		
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1483-12	OL-1483-13	OL-1483-14	OL-1488-12	OL-1488-13	OL-1488-14	OL-1488-15	OL-1488-16
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	46.2-46.2 FT	52.8-52.8 FT	56.1-56.1 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	
	Sample Date	8/29/2011	8/29/2011	8/29/2011	9/6/2011	9/6/2011	9/6/2011	9/6/2011	9/6/2011	9/6/2011
	SDG	240-3323-1	240-3323-1	240-3323-1	UFICHM2011-049	UFICHM2011-049	UFICHM2011-049	UFICHM2011-049	UFICHM2011-049	UFICHM2011-049
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	0.00017 J	0.00017 J	0.00019				
E1631	MERCURY	ug/L	N	0.0017	0.0018	0.0019				
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N			140.8	155.8	138.9	128.5	129.5
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N						10 U	10 U
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N			0.046	0.009	0.004	0.057	0.06
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N			0.06	0.345	0.558	0.887	1.043
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N			1.745	0.975	0.939	1.301	1.469
UFI SOP	SULFIDE	mg/L	N						0.056 U	0.056 U
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1488-17	OL-1490-09	OL-1490-10	OL-1490-11	OL-1490-12	OL-1490-13	OL-1490-14	OL-1601-12
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	56.1-56.1 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	56.1-56.1 FT	6.6-6.6 FT	
	Sample Date	9/6/2011	9/6/2011	9/6/2011	9/6/2011	9/6/2011	9/6/2011	9/6/2011	9/6/2011	9/12/2011
	SDG	UFICHM2011-049	240-3546-1	240-3546-1	240-3546-1	240-3546-1	240-3546-1	240-3546-1	240-3546-1	UFICHM2011-052
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N		0.0003	U	0.0003	U	0.0003	0.0003
E1631	MERCURY	ug/L	N		0.00093		0.00067		0.00051	0.00079
E1631	MERCURY	ug/L	Y		0.00045	J				
UFI SOP	CALCIUM	mg/L	N	129						134.1
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N	3	J					
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.071						0.045
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	1.102						0.023
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.8						1.757
UFI SOP	SULFIDE	mg/L	N	0.056	U					
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1601-13	OL-1601-14	OL-1601-15	OL-1601-16	OL-1601-17	OL-1603-09	OL-1603-10	OL-1603-11
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	56.1-56.1 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	
	Sample Date	9/12/2011	9/12/2011	9/12/2011	9/12/2011	9/12/2011	9/12/2011	9/12/2011	9/12/2011	9/12/2011
	SDG	UFICHM2011-052	UFICHM2011-052	UFICHM2011-052	UFICHM2011-052	UFICHM2011-052	UFICHM2011-052	240-3757-1	240-3757-1	240-3757-1
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N					0.000032 J	0.000029 J	0.000076 J
E1631	MERCURY	ug/L	N					0.0012	0.00078	0.00089
E1631	MERCURY	ug/L	Y					0.00037 J		
UFI SOP	CALCIUM	mg/L	N	138.9	129.7	130.2	136.5	131.7		
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N			10 U	10 U	10 U		
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.016	0.011 J	0.032	0.052	0.064		
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.354	0.643	0.727	0.925	1.149		
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.001 J	0.931 J	1.144 J	1.534 J	2.223 J		
UFI SOP	SULFIDE	mg/L	N			0.056 U	0.056 U	0.056 U		
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1603-12	OL-1603-13	OL-1603-14	OL-1605-12	OL-1605-13	OL-1605-14	OL-1605-15	OL-1605-16
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	46.2-46.2 FT	52.8-52.8 FT	56.1-56.1 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	
	Sample Date	9/12/2011	9/12/2011	9/12/2011	9/19/2011	9/19/2011	9/19/2011	9/19/2011	9/19/2011	9/19/2011
	SDG	240-3757-1	240-3757-1	240-3757-1	UFICHM2011-057	UFICHM2011-057	UFICHM2011-057	UFICHM2011-057	UFICHM2011-057	UFICHM2011-057
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	0.00012 J	0.00013 J	0.00016 J				
E1631	MERCURY	ug/L	N	0.00099	0.001	0.0013				
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N			128.4	145.9	125.1	125.7	124.2
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N						10 U	4 J
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N			0.044	0.03	0.015 U	0.011 J	0.04
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N			0.065	0.26	0.595	0.743	1.091
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N			1.66	1.097	0.897	1.019	1.918
UFI SOP	SULFIDE	mg/L	N						0.056 U	0.056 U
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1605-17	OL-1607-09	OL-1607-10	OL-1607-11	OL-1607-12	OL-1607-13	OL-1607-14	OL-1614-12
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	56.1-56.1 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	56.1-56.1 FT	6.6-6.6 FT	
	Sample Date	9/19/2011	9/19/2011	9/19/2011	9/19/2011	9/19/2011	9/19/2011	9/19/2011	9/19/2011	9/26/2011
	SDG	UFICHM2011-057	240-4004-1	240-4004-1	240-4004-1	240-4004-1	240-4004-1	240-4004-1	240-4004-1	UFICHM2011-060
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N		0.000058 J	0.000041 J	0.000074 J	0.000077 J	0.00012 J	0.000086 J
E1631	MERCURY	ug/L	N		0.0013	0.0013	0.001	0.0008	0.00086	0.00085
E1631	MERCURY	ug/L	Y		0.00081					
UFI SOP	CALCIUM	mg/L	N	124.9						126.9
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N	10 U						
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.046						0.04
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	1.141						0.016 J
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	2.009						1.645
UFI SOP	SULFIDE	mg/L	N	0.056 U						
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1614-13	OL-1614-14	OL-1614-15	OL-1614-16	OL-1614-17	OL-1616-09	OL-1616-10	OL-1616-11
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	56.1-56.1 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	
	Sample Date	9/26/2011	9/26/2011	9/26/2011	9/26/2011	9/26/2011	9/26/2011	9/26/2011	9/26/2011	9/26/2011
	SDG	UFICHM2011-060	UFICHM2011-060	UFICHM2011-060	UFICHM2011-060	UFICHM2011-060	UFICHM2011-060	240-4233-1	240-4233-1	240-4233-1
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N					0.00028 J	0.00018 J	0.000093 J
E1631	MERCURY	ug/L	N					0.00062	0.0012	0.0011
E1631	MERCURY	ug/L	Y					0.00024 J		
UFI SOP	CALCIUM	mg/L	N	134.2	127.8	128.3	129	129.2		
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N			3 J	10 U	10 U		
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.031	0.005 J	0.024	0.031	0.038		
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.373	0.68	1.492	1.308	1.374		
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.143	1.01	1.869	2.198	2.61		
UFI SOP	SULFIDE	mg/L	N			0.056 U	0.056 U	0.056 U		
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1616-12	OL-1616-13	OL-1616-14	OL-1621-12	OL-1621-13	OL-1621-14	OL-1621-15	OL-1621-16
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	46.2-46.2 FT	52.8-52.8 FT	56.1-56.1 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	
	Sample Date	9/26/2011	9/26/2011	9/26/2011	10/3/2011	10/3/2011	10/3/2011	10/3/2011	10/3/2011	10/3/2011
	SDG	240-4233-1	240-4233-1	240-4233-1	UFICHM2011-061	UFICHM2011-061	UFICHM2011-061	UFICHM2011-061	UFICHM2011-061	UFICHM2011-061
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	0.00015 J	0.0002 J	0.00032 J				
E1631	MERCURY	ug/L	N	0.0011	0.00099	0.001				
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N			132.3	134.4	131.3	127.3	126.4
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N						10 U	10 U
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N			0.047	0.068	0.013 J	0.01 J	0.016
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N			0.109	0.266	0.537	0.961	1.171
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N			1.689	1.446	0.821	1.324	1.722
UFI SOP	SULFIDE	mg/L	N						0.056 U	0.056 U
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1621-17	OL-1623-09	OL-1623-10	OL-1623-11	OL-1623-12	OL-1623-13	OL-1623-14	OL-1628-12
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	56.1-56.1 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	56.1-56.1 FT	6.6-6.6 ft	
	Sample Date	10/3/2011	10/3/2011	10/3/2011	10/3/2011	10/3/2011	10/3/2011	10/3/2011	10/3/2011	10/10/2011
	SDG	UFICHM2011-061	240-4464-1	240-4464-1	240-4464-1	240-4464-1	240-4464-1	240-4464-1	240-4464-1	UFICHM2011-063
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N		0.000092 J	0.000062 J	0.000067 J	0.000095 J	0.00011 J	0.00011 J
E1631	MERCURY	ug/L	N		0.00064 J	0.00064 J	0.00054 J	0.00066 J	0.00061 J	0.00061 J
E1631	MERCURY	ug/L	Y		0.00026 J					
UFI SOP	CALCIUM	mg/L	N	128.3						126.5
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N	4 J						
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.02						0.045
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	1.315						0.04 UJ
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	2.137						1.777
UFI SOP	SULFIDE	mg/L	N	0.056 U						
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1628-13	OL-1628-14	OL-1628-15	OL-1628-16	OL-1628-17	OL-1630-09	OL-1630-10	OL-1630-11
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	33-33 ft	39.6-39.6 ft	46.2-46.2 ft	52.8-52.8 ft	56.1-56.1 ft	6.6-6.6 ft	33-33 ft	39.6-39.6 ft	
	Sample Date	10/10/2011	10/10/2011	10/10/2011	10/10/2011	10/10/2011	10/10/2011	10/10/2011	10/10/2011	10/10/2011
	SDG	UFICHM2011-063	UFICHM2011-063	UFICHM2011-063	UFICHM2011-063	UFICHM2011-063	UFICHM2011-063	240-4727-1	240-4727-1	240-4727-1
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N					0.000093	0.000017 J	0.000069
E1631	MERCURY	ug/L	N					0.00047 J	0.00045 J	0.00034 J
E1631	MERCURY	ug/L	Y					0.00017 J		
UFI SOP	CALCIUM	mg/L	N	129.3	127.9	124.9	125.5	125.9		
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N			3 J	10 U	10 U		
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.064	0.029	0.008 J	0.01 J	0.011 J		
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.273 J	0.627 J	1.023 J	1.223 J	1.262 J		
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.397	1.123	1.462	1.754	2.005		
UFI SOP	SULFIDE	mg/L	N			0.056 U	0.056 U	0.056 U		
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1630-12	OL-1630-13	OL-1630-14	OL-1634-12	OL-1634-13	OL-1634-14	OL-1634-15	OL-1634-16
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	46.2-46.2 ft	52.8-52.8 ft	56.1-56.1 ft	6.6-6.6 ft	33-33 ft	39.6-39.6 ft	46.2-46.2 ft	52.8-52.8 ft	
	Sample Date	10/10/2011	10/10/2011	10/10/2011	10/17/2011	10/17/2011	10/17/2011	10/17/2011	10/17/2011	10/17/2011
	SDG	240-4727-1	240-4727-1	240-4727-1	UFICHM2011-066	UFICHM2011-066	UFICHM2011-066	UFICHM2011-066	UFICHM2011-066	UFICHM2011-066
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	0.000045 J	0.000056	0.000043 J				
E1631	MERCURY	ug/L	N	0.00044 J	0.00045 J	0.00042 J				
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N			130.5	133.5	126.1	125.9	126.7
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N						10 J	10 U
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N			0.061	0.045	0.017	0.007 J	0.008 J
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N			0.118	0.149	0.644	0.942	1.111
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N			1.761	1.456	1.278	1.441	1.859
UFI SOP	SULFIDE	mg/L	N						0.056 U	0.056 U
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1634-17	OL-1636-09	OL-1636-10	OL-1636-11	OL-1636-12	OL-1636-13	OL-1636-14	OL-1641-12
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	56.1-56.1 ft	6.6-6.6 ft	33-33 ft	39.6-39.6 ft	46.2-46.2 ft	52.8-52.8 ft	56.1-56.1 ft	6.6-6.6 ft	
	Sample Date	10/17/2011	10/17/2011	10/17/2011	10/17/2011	10/17/2011	10/17/2011	10/17/2011	10/17/2011	10/24/2011
	SDG	UFICHM2011-066	240-4950-1	240-4950-1	240-4950-1	240-4950-1	240-4950-1	240-4950-1	240-4950-1	UFICHM2011-069
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N		0.000085	0.000077	0.000034 J	0.000038 J	0.000048 J	0.000066
E1631	MERCURY	ug/L	N		0.00075	0.00083	0.00065	0.00064	0.00051	0.00065
E1631	MERCURY	ug/L	Y		0.00028 J					
UFI SOP	CALCIUM	mg/L	N	127.3						136.5
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N	3 J						
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.007 J						0.041
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	1.216						0.149
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	2.078						1.625
UFI SOP	SULFIDE	mg/L	N	0.056 U						
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1641-13	OL-1641-14	OL-1641-15	OL-1641-16	OL-1641-17	OL-1643-09	OL-1643-10	OL-1643-11
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	33-33 ft	39.6-39.6 ft	46.2-46.2 ft	52.8-52.8 ft	56.1-56.1 ft	6.6-6.6 ft	33-33 ft	39.6-39.6 ft	
	Sample Date	10/24/2011	10/24/2011	10/24/2011	10/24/2011	10/24/2011	10/24/2011	10/24/2011	10/24/2011	10/24/2011
	SDG	UFICHM2011-069	UFICHM2011-069	UFICHM2011-069	UFICHM2011-069	UFICHM2011-069	UFICHM2011-069	240-5210-1	240-5210-1	240-5210-1
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N					0.000068 J	0.000058 J	0.000068 J
E1631	MERCURY	ug/L	N					0.00055	0.00053	0.00046 J
E1631	MERCURY	ug/L	Y					0.00021 J		
UFI SOP	CALCIUM	mg/L	N	135.3	136.2	133.8	136.2	132.4		
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N			10 U	4 J	7 J		
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.041	0.039	0.015 U	0.015 U	0.015 U		
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.157	0.161	0.806	1.051	1.261		
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.647	1.811	1.241	1.529	1.54		
UFI SOP	SULFIDE	mg/L	N			0.056 U	0.056 U	0.056 U		
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1643-12	OL-1643-13	OL-1643-14	OL-1646-10	OL-1646-11	OL-1646-12	OL-1646-13	OL-1648-07
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	46.2-46.2 ft	52.8-52.8 ft	56.1-56.1 ft	6.6-6.6 ft	39.6-39.6 ft	52.8-52.8 ft	56.1-56.1 ft	6.6-6.6 ft	
	Sample Date	10/24/2011	10/24/2011	10/24/2011	10/31/2011	10/31/2011	10/31/2011	10/31/2011	10/31/2011	10/31/2011
	SDG	240-5210-1	240-5210-1	240-5210-1	UFICHM2011-070	UFICHM2011-070	UFICHM2011-070	UFICHM2011-070	UFICHM2011-070	240-5421-1
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	0.000034 J	0.00003 J	0.000026 J				0.000033 J
E1631	MERCURY	ug/L	N	0.00055	0.00043 J	0.00046 J				0.00055
E1631	MERCURY	ug/L	Y							0.0012 UJ
UFI SOP	CALCIUM	mg/L	N			136	135.3	134.4	133.5	
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N					10 U	13	
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N			0.039	0.039	0.013 J	0.014 J	
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N			0.263 J	0.27 J	1.158	0.974	
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N			1.548	1.549	1.449	1.426	
UFI SOP	SULFIDE	mg/L	N					0.056 U	0.056 U	
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1648-08
		Location	DEEP_N
		Sample Depth	39.6-39.6 ft
		Sample Date	10/31/2011
		SDG	240-5421-1
		Matrix	Water
		Sample Purpose	Regular sample
		Sample Type	Surface water
Method	Parameter Name	Units	Filtered
E1630	METHYL MERCURY	ug/L	N 0.000034 J
E1631	MERCURY	ug/L	N 0.00047 J
E1631	MERCURY	ug/L	Y
UFI SOP	CALCIUM	mg/L	N
UFI SOP	CHLORIDE	mg/L	N
UFI SOP	CHLOROPHYLL-A	ug/L	N
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y
UFI SOP	FERROUS IRON (II)	ug/l	N
UFI SOP	METHANE	ug/L	N
UFI SOP	NITRITE	mg/l	N
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N
UFI SOP	SULFIDE	mg/L	N
UFI SOP	TOTAL CARBON	mg/l	N
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N
UFI SOP	Total Suspended Solids	mg/l	N

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		Field Sample ID	OL-1648-09	OL-1648-10	OL-1653-06	OL-1653-07	OL-1653-08	OL-1655-06	OL-1655-07	OL-1655-08
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N
	Sample Depth	52.8-52.8 ft	56.1-56.1 ft	6.6-6.6 ft	39.6-39.6 ft	56.1-56.1 ft	6.6-6.6 ft	39.6-39.6 ft	56.1-56.1 ft	56.1-56.1 ft
	Sample Date	10/31/2011	10/31/2011	11/7/2011	11/7/2011	11/7/2011	11/7/2011	11/7/2011	11/7/2011	11/7/2011
	SDG	240-5421-1	240-5421-1	UFICHM2011-074	UFICHM2011-074	UFICHM2011-074	UFICHM2011-074	240-5675-1	240-5675-1	240-5675-1
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	2.80E-05 J	2.10E-05 J			4.50E-05 J	5.10E-05 J	4.30E-05 J
E1631	MERCURY	ug/L	N	0.00047 J	0.00049 J			0.00073	0.00065	0.00083
E1631	MERCURY	ug/L	Y					0.00052		
UFI SOP	CALCIUM	mg/l	N			136	134	151.6		
UFI SOP	CHLORIDE	mg/l	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N			0.043	0.043	0.036		
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N			0.274	0.301	0.425		
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N			1.829	1.801	1.396		
UFI SOP	SULFIDE	mg/L	N							
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1661-06	OL-1661-07	OL-1661-08	OL-1663-06	OL-1663-07	OL-1663-08	OL-1407-01	OL-1407-02
	Location	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_N	DEEP_S	DEEP_S
	Sample Depth	6.6-6.6 FT	39.6-39.6 FT	56.1-56.1 FT	6.6-6.6 ft	39.6-39.6 ft	56.1-56.1 ft	6.6-6.6 FT	6.6-6.6 FT	
	Sample Date	11/21/2011	11/21/2011	11/21/2011	11/21/2011	11/21/2011	11/21/2011	11/21/2011	5/23/2011	5/23/2011
	SDG	UFICHM2011-077	UFICHM2011-077	UFICHM2011-077	240-6181-1	240-6181-1	240-6181-1	240-6181-1	UFICHM2011-013	UFICHM2011-013
	Matrix	WATER	WATER	WATER	Water	Water	Water	Water	Water	Water
	Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Field duplicate	Specified
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N			5.90E-05	4.50E-05 J	5.20E-05		
E1631	MERCURY	ug/L	N			0.0011	0.00051	0.00054		
E1631	MERCURY	ug/L	Y			0.00049 J				
UFI SOP	CALCIUM	mg/l	N	132.9	133.5	134.2				
UFI SOP	CHLORIDE	mg/l	N						281.9	281.9
UFI SOP	CHLOROPHYLL-A	ug/L	N						16.7	17
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y						3.7	4.3
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.057	0.057	0.057			0.019	0.021
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.315	0.354	0.342			0.028 J	0.029 J
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.862	1.905	1.927			1.844	1.825
UFI SOP	SULFIDE	mg/L	N							
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N						46.8	48.4
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1407-03	OL-1407-04	OL-1407-05	OL-1409-02	OL-1409-03	OL-1409-04	OL-1409-05	OL-1412-01
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	6.6-6.6 FT	39.6-39.6 FT	59.4-59.4 FT	6.6-6.6 FT	6.6-6.6 FT	39.6-39.6 FT	59.4-59.4 FT	6.6-6.6 FT	
	Sample Date	5/23/2011	5/23/2011	5/23/2011	5/23/2011	5/23/2011	5/23/2011	5/23/2011	5/23/2011	6/6/2011
	SDG	UFICHM2011-013	UFICHM2011-013	UFICHM2011-013	240-394-1	240-394-1	240-394-1	240-394-1	240-394-1	UFICHM2011-015
	Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water
	Sample Purpose	Second field duplicate	Regular sample	Regular sample	Regular sample	Field duplicate	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	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N			8.10E-05	7.40E-05	4.90E-05 J	3.40E-05 J	
E1631	MERCURY	ug/L	N			0.0017 J	0.0017 J	0.001 J	0.001 J	
E1631	MERCURY	ug/L	Y			0.00057	0.00046 J			
UFI SOP	CALCIUM	mg/l	N							
UFI SOP	CHLORIDE	mg/l	N	281.9	292	322.2				305.9
UFI SOP	CHLOROPHYLL-A	ug/L	N	16.6	5.4					10.5
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y	3.3	3.1	2.9				3.2
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.019	0.017	0.018				0.023
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.026 J	0.183	0.366				0.04 U
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.881	1.773	1.834				1.725
UFI SOP	SULFIDE	mg/L	N							
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N	48.5	47.3	48.9				43.4
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1412-02	OL-1412-03	OL-1412-04	OL-1412-05	OL-1414-02	OL-1414-03	OL-1414-04	OL-1414-05
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	6.6-6.6 FT	6.6-6.6 FT	39.6-39.6 FT	59.4-59.4 FT	6.6-6.6 FT	6.6-6.6 FT	39.6-39.6 FT	59.4-59.4 FT	
	Sample Date	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011
	SDG	UFICHM2011-015	UFICHM2011-015	UFICHM2011-015	UFICHM2011-015	UFICHM2011-015	240-912-1	240-912-1	240-912-1	240-912-1
	Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water
	Sample Purpose	Field duplicate	Second field duplicate	Regular sample	Regular sample	Regular sample	Field duplicate	Regular sample	Regular sample	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N				1.30E-04	1.30E-04	4.10E-05 J	3.00E-05 J
E1631	MERCURY	ug/L	N				0.0023	0.0013	0.0027	0.0011
E1631	MERCURY	ug/L	Y				0.00091 U	0.0011 U		
UFI SOP	CALCIUM	mg/l	N							
UFI SOP	CHLORIDE	mg/l	N	305.9	305.9	286.2	305.9			
UFI SOP	CHLOROPHYLL-A	ug/L	N	11.3	11.7	8.9				
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y	3.3	3.3	3.1	3			
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.023	0.023	0.018	0.018			
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.04 U	0.04 U	0.229	0.369			
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.691	1.704	1.622	1.552			
UFI SOP	SULFIDE	mg/L	N							
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N	43.5	42.9	48.1	49.6			
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1421-01	OL-1421-02	OL-1421-03	OL-1421-04	OL-1421-05	OL-1421-09	OL-1421-10	OL-1421-11
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	6.6-6.6 FT	6.6-6.6 FT	6.6-6.6 FT	39.6-39.6 FT	59.4-59.4 FT	59.4-59.4 Ft	59.4-59.4 Ft	59.4-59.4 Ft	59.4-59.4 Ft
	Sample Date	6/20/2011	6/20/2011	6/20/2011	6/20/2011	6/20/2011	6/20/2011	6/20/2011	6/20/2011	6/20/2011
	SDG	UFICHM2011-022	UFICHM2011-022	UFICHM2011-022	UFICHM2011-022	UFICHM2011-022	UFICHM2011-022	UFICHM2011-022	UFICHM2011-022	UFICHM2011-022
	Matrix	Water	Water	Water	Water	Water	Water	WATER	WATER	WATER
	Sample Purpose	Regular sample	Field duplicate	Second field duplicate	Regular sample	Regular sample	Regular sample	Field duplicate	Second field duplicate	
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N							
E1631	MERCURY	ug/L	N							
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/l	N							
UFI SOP	CHLORIDE	mg/l	N	335.6	335.6	325.7	305.9	305.9		
UFI SOP	CHLOROPHYLL-A	ug/L	N	9.4	9.2	7.3	4.3			
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y	3.4	3.4	3.4	3.3	3		
UFI SOP	FERROUS IRON (II)	ug/l	N						5 U	5 U
UFI SOP	METHANE	ug/L	N						500 U	500 U
UFI SOP	NITRITE	mg/l	N	0.028	0.029	0.028	0.029	0.028		
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.04 U	0.04 U	0.04 U	0.271	0.649		
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.507	1.483	1.545	1.369	0.984		
UFI SOP	SULFIDE	mg/L	N						0.056 UJ	0.056 UJ
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N	39.3	38.7	39.7	47	48.4		
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1423-02	OL-1423-03	OL-1423-04	OL-1423-05	OL-1426-01	OL-1426-02	OL-1426-03	OL-1426-04
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	6.6-6.6 FT	6.6-6.6 FT	39.6-39.6 FT	59.4-59.4 FT	6.6-6.6 FT	6.6-6.6 FT	6.6-6.6 FT	33-33 FT	
	Sample Date	6/20/2011	6/20/2011	6/20/2011	6/20/2011	6/27/2011	6/27/2011	6/27/2011	6/27/2011	6/27/2011
	SDG	240-1292-1	240-1292-1	240-1292-1	240-1292-1	UFICHM2011-023	UFICHM2011-023	UFICHM2011-023	UFICHM2011-023	UFICHM2011-023
	Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water
	Sample Purpose	Regular sample	Field duplicate	Regular sample	Regular sample	Regular sample	Field duplicate	second field duplicate	Regular sample	
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	9.20E-05	1.00E-04	6.20E-05	5.70E-05			
E1631	MERCURY	ug/L	N	0.00095	0.0011	0.00088	0.00095			
E1631	MERCURY	ug/L	Y	0.00069	0.00046 J					
UFI SOP	CALCIUM	mg/l	N				125.9	125.5	125.3	125.5
UFI SOP	CHLORIDE	mg/l	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N				0.03	0.031	0.03	0.041
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N				0.033 J	0.032 J	0.039 J	0.243
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N				1.83	1.865	1.859	1.636
UFI SOP	SULFIDE	mg/L	N							
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1426-05	OL-1426-06	OL-1426-07	OL-1426-08	OL-1426-09	OL-1426-10	OL-1426-11	OL-1428-02
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	59.4-59.4 FT	59.4-59.4 Ft	59.4-59.4 Ft	59.4-59.4 Ft	59.4-59.4 Ft	6.6-6.6 FT
	Sample Date	6/27/2011	6/27/2011	6/27/2011	6/27/2011	6/27/2011	6/27/2011	6/27/2011	6/27/2011	6/27/2011
	SDG	UFICHM2011-023	UFICHM2011-023	UFICHM2011-023	UFICHM2011-023	UFICHM2011-023	UFICHM2011-023	UFICHM2011-023	UFICHM2011-023	240-1516-1
	Matrix	Water	Water	Water	Water	WATER	WATER	WATER	WATER	Water
	Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Field duplicate	second field duplicate		Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N							8.20E-05
E1631	MERCURY	ug/L	N							0.0024
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/l	N	122.7	121.5	126.1	126.7			
UFI SOP	CHLORIDE	mg/l	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N		3 J	5 UJ		5 UJ	5 UJ	5 UJ
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.05	0.05	0.054	0.045			
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.289	0.347	0.468	0.608			
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.545	1.491	1.392	1.21			
UFI SOP	SULFIDE	mg/L	N		0.056 U	0.056 U		0.056 U	0.056 U	0.056 U
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1428-03	OL-1428-04	OL-1428-05	OL-1428-06	OL-1428-07	OL-1428-08	OL-1433-01	OL-1433-02
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	59.4-59.4 FT	6.6-6.6 FT	6.6-6.6 FT	6.6-6.6 FT
	Sample Date	6/27/2011	6/27/2011	6/27/2011	6/27/2011	6/27/2011	6/27/2011	6/27/2011	7/5/2011	7/5/2011
	SDG	240-1516-1	240-1516-1	240-1516-1	240-1516-1	240-1516-1	240-1516-1	240-1516-1	UFICHM2011-026	UFICHM2011-026
	Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water
	Sample Purpose	Field duplicate	Regular sample	Field duplicate	Field duplicate					
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	6.90E-05	4.40E-05 J	3.10E-05 J	4.10E-05 J	7.40E-05		
E1631	MERCURY	ug/L	N	0.0022	0.00087	0.001	0.00098	0.00081	0.0011	
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/l	N						131.9	132.6
UFI SOP	CHLORIDE	mg/l	N						336.6	336.6
UFI SOP	CHLOROPHYLL-A	ug/L	N						4.8	6.3
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y						3.5	3.9
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N						0.028	0.029
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N						0.04 UJ	0.04 UJ
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N						1.859	1.852
UFI SOP	SULFIDE	mg/L	N							
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N						37.9	36.7
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1433-03	OL-1433-04	OL-1433-05	OL-1433-06	OL-1433-07	OL-1433-08	OL-1433-09	OL-1433-10
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	42.9-42.9 FT	39.6-39.6 FT	49.5-49.5 FT	52.8-52.8 FT	56.1-56.1 FT	
	Sample Date	7/5/2011	7/5/2011	7/5/2011	7/5/2011	7/5/2011	7/5/2011	7/5/2011	7/5/2011	7/5/2011
	SDG	UFICHM2011-026	UFICHM2011-026	UFICHM2011-026	UFICHM2011-026	UFICHM2011-026	UFICHM2011-026	UFICHM2011-026	UFICHM2011-026	UFICHM2011-026
	Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water
	Sample Purpose	Second field duplicate	Regular sample							
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N							
E1631	MERCURY	ug/L	N							
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/l	N	130.8	129.2	125.1		124.2		125.1
UFI SOP	CHLORIDE	mg/l	N	336.6		307.8				307.8
UFI SOP	CHLOROPHYLL-A	ug/L	N	5.8		1				
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y	4.1		3.1				3.1
UFI SOP	FERROUS IRON (II)	ug/l	N			10 U				9 J
UFI SOP	METHANE	ug/L	N			500 U				500 U
UFI SOP	NITRITE	mg/l	N	0.028	0.102	0.115		0.073		0.082
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.04	UJ	0.18 J	0.187 J		0.264 J	0.375 J
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.872		1.549	1.504		1.398	1.277
UFI SOP	SULFIDE	mg/L	N			0.056	UJ	0.056	UJ	0.056
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N	38.5		50				52
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1433-11	OL-1433-12	OL-1433-13	OL-1433-14	OL-1435-02	OL-1435-03
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	59.4-59.4 Ft	59.4-59.4 Ft	59.4-59.4 FT	59.4-59.4 Ft	3.3-3.3 FT	3.3-3.3 FT	
	Sample Date	7/5/2011	7/5/2011	7/5/2011	7/5/2011	7/5/2011	7/5/2011	7/5/2011
	SDG	UFICHM2011-026	UFICHM2011-026	UFICHM2011-026	UFICHM2011-026	240-1706-1	240-1706-1	
	Matrix	WATER	WATER	Water	WATER	WATER	WATER	
	Sample Purpose	Regular sample	Regular sample	Field duplicate	second field duplicate	Regular sample	Field duplicate	
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	
Method	Parameter Name	Units	Filtered					
E1630	METHYL MERCURY	ug/L	N				5.10E-05 J	6.20E-05 J
E1631	MERCURY	ug/L	N				0.0019	0.0021
E1631	MERCURY	ug/L	Y				0.00061	0.00062
UFI SOP	CALCIUM	mg/l	N	126				
UFI SOP	CHLORIDE	mg/l	N	298.2				
UFI SOP	CHLOROPHYLL-A	ug/L	N					
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y	2.9				
UFI SOP	FERROUS IRON (II)	ug/l	N		10 U	8 J	10 U	
UFI SOP	METHANE	ug/L	N		500 U	500 U	500 U	
UFI SOP	NITRITE	mg/l	N	0.077				
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.415 J				
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.229				
UFI SOP	SULFIDE	mg/L	N		0.056 UJ	0.056 UJ	0.056 UJ	
UFI SOP	TOTAL CARBON	mg/l	N					
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N					
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N	52.2				
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N					
UFI SOP	Total Suspended Solids	mg/l	N					

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		Field Sample ID	OL-1435-04	OL-1435-05	OL-1435-06	OL-1435-07	OL-1435-08	OL-1437-01	OL-1437-02	OL-1437-03
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	33.3-33.3 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	59.4-59.4 FT	6.6-6.6 FT	6.6-6.6 FT	6.6-6.6 FT	6.6-6.6 FT
	Sample Date	7/5/2011	7/5/2011	7/5/2011	7/5/2011	7/5/2011	7/11/2011	7/11/2011	7/11/2011	7/11/2011
	SDG	240-1706-1	240-1706-1	240-1706-1	240-1706-1	240-1706-1	UFICHM2011-027	UFICHM2011-027	UFICHM2011-027	UFICHM2011-027
	Matrix	WATER	WATER	WATER	Water	Water	Water	Water	Water	Water
	Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Field duplicate	Second field duplicate
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	3.20E-05 J	5.00E-05 UJ	3.90E-05 J	5.40E-05 J	6.50E-05 J		
E1631	MERCURY	ug/L	N	0.0016	0.0018	0.0014	0.0013	0.0011		
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N						128.7	130.3
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N					0.031	0.032	0.033
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N					0.048	0.052	0.05
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N					1.981	1.955	1.975
UFI SOP	SULFIDE	mg/L	N							
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1437-04	OL-1437-05	OL-1437-06	OL-1437-07	OL-1437-08	OL-1437-09	OL-1437-10	OL-1437-11
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	59.4-59.4 FT	59.4-59.4 Ft	59.4-59.4 Ft	59.4-59.4 Ft	59.4-59.4 Ft
	Sample Date	7/11/2011	7/11/2011	7/11/2011	7/11/2011	7/11/2011	7/11/2011	7/11/2011	7/11/2011	7/11/2011
	SDG	UFICHM2011-027	UFICHM2011-027	UFICHM2011-027	UFICHM2011-027	UFICHM2011-027	UFICHM2011-027	UFICHM2011-027	UFICHM2011-027	UFICHM2011-027
	Matrix	Water	Water	Water	Water	Water	Water	WATER	WATER	WATER
	Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Field duplicate	Second field duplicate
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N							
E1631	MERCURY	ug/L	N							
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N	129	124.4	124.2	124.4	123.2		
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N			6 J	5 U		5 UJ	30 J
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.164	0.107	0.101	0.096	0.1		
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.112	0.178	0.342	0.359	0.519		
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.603	1.574	1.392	1.38	1.304		
UFI SOP	SULFIDE	mg/L	N			0.056 U	0.056 U		0.056 U	0.056 U
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1439-02	OL-1439-03	OL-1439-04	OL-1439-05	OL-1439-06	OL-1439-07	OL-1439-08	OL-1444-01
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	6.6-6.6 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	59.4-59.4 FT	6.6-6.6 FT	
	Sample Date	7/11/2011	7/11/2011	7/11/2011	7/11/2011	7/11/2011	7/11/2011	7/11/2011	7/11/2011	7/18/2011
	SDG	240-1847-1	240-1847-1	240-1847-1	240-1847-1	240-1847-1	240-1847-1	240-1847-1	240-1847-1	UFICHM2011-030
	Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water
	Sample Purpose	Regular sample	Field duplicate	Regular sample						
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	1.10E-04	1.10E-04	5.40E-05	5.20E-05	5.00E-05	5.60E-05	7.40E-05
E1631	MERCURY	ug/L	N	0.0026	0.0028	0.00078	0.00054	0.00064	0.00064	0.00084
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N							127.1
UFI SOP	CHLORIDE	mg/L	N							377.5
UFI SOP	CHLOROPHYLL-A	ug/L	N							7.7
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							3.6
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N							0.035
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N							0.04 U
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N							1.962
UFI SOP	SULFIDE	mg/L	N							
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							33.2
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1444-02	OL-1444-03	OL-1444-04	OL-1444-05	OL-1444-06	OL-1444-07	OL-1444-08	OL-1444-09
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	6.6-6.6 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	59.4-59.4 FT	59.4-59.4 Ft	
	Sample Date	7/18/2011	7/18/2011	7/18/2011	7/18/2011	7/18/2011	7/18/2011	7/18/2011	7/18/2011	7/18/2011
	SDG	UFICHM2011-030	UFICHM2011-030	UFICHM2011-030	UFICHM2011-030	UFICHM2011-030	UFICHM2011-030	UFICHM2011-030	UFICHM2011-030	UFICHM2011-030
	Matrix	Water	Water	Water	Water	Water	Water	Water	Water	WATER
	Sample Purpose	Field duplicate	Second field duplicate	Regular sample						
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N							
E1631	MERCURY	ug/L	N							
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N	126.2	126.4	124.2	123.1	123.8	122.9	129.9
UFI SOP	CHLORIDE	mg/L	N	358.1	367.8		300		300	309.7
UFI SOP	CHLOROPHYLL-A	ug/L	N	12.3	11.2		3.1			
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y	3.5	3.5		2.7		2.8	3.1
UFI SOP	FERROUS IRON (II)	ug/l	N					3 J	10 U	
UFI SOP	METHANE	ug/L	N			500 U	500 U	500 U	500 U	400 J
UFI SOP	NITRITE	mg/l	N	0.035	0.035	0.122	0.103	0.082	0.086	0.092
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.04 U	0.04 U	0.166	0.249	0.48	0.645	1.008
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.921	1.961	1.433	1.426	1.484	1.824	3.682
UFI SOP	SULFIDE	mg/L	N					0.056 U	0.056 U	0.056 U
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N	32.9	32.8		50.3		52.4	53.1
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1444-10	OL-1444-11	OL-1446-02	OL-1446-03	OL-1446-04	OL-1446-05	OL-1446-06	OL-1446-07	
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	
	Sample Depth	59.4-59.4 Ft	59.4-59.4 Ft	6.6-6.6 FT	6.6-6.6 FT	33.3-33.3 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT		
	Sample Date	7/18/2011	7/18/2011	7/18/2011	7/18/2011	7/18/2011	7/18/2011	7/18/2011	7/18/2011	7/18/2011	
	SDG	UFICHM2011-030	UFICHM2011-030	240-2041-1	240-2041-1	240-2041-1	240-2041-1	240-2041-1	240-2041-1	240-2041-1	
	Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	Water	
	Sample Purpose	Field duplicate	Second field duplicate	Regular sample	Field duplicate	Regular sample					
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	
Method	Parameter Name	Units	Filtered								
E1630	METHYL MERCURY	ug/L	N			4.40E-05 J	9.60E-05 J	3.90E-05 J	3.80E-05 J	5.80E-05 J	7.80E-05 J
E1631	MERCURY	ug/L	N			0.0022	0.0022	0.0009	0.0011	0.0013	0.0012
E1631	MERCURY	ug/L	Y			0.00056 J	0.00047 J				
UFI SOP	CALCIUM	mg/L	N								
UFI SOP	CHLORIDE	mg/L	N								
UFI SOP	CHLOROPHYLL-A	ug/L	N								
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y								
UFI SOP	FERROUS IRON (II)	ug/l	N		7 J	4 J					
UFI SOP	METHANE	ug/L	N		300 J	400 J					
UFI SOP	NITRITE	mg/l	N								
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N								
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N								
UFI SOP	SULFIDE	mg/L	N		0.056 U	0.056 U					
UFI SOP	TOTAL CARBON	mg/l	N								
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N								
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N								
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N								
UFI SOP	Total Suspended Solids	mg/l	N								

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		Field Sample ID	OL-1446-08	OL-1449-01	OL-1449-02	OL-1449-03	OL-1449-04	OL-1449-05	OL-1449-06	OL-1449-07
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	59.4-59.4 FT	6.6-6.6 FT	6.6-6.6 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	
	Sample Date	7/18/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011
	SDG	240-2041-1	UFICHM2011-032	UFICHM2011-032	UFICHM2011-032	UFICHM2011-032	UFICHM2011-032	UFICHM2011-032	UFICHM2011-032	UFICHM2011-032
	Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water
	Sample Purpose	Regular sample	Regular sample	Field duplicate	second field duplicate	Regular sample				
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	1.00E-04	J					
E1631	MERCURY	ug/L	N	0.0015						
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N		126.5	126.5	129	128.5	123.7	122.8
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N							4 J
UFI SOP	METHANE	ug/L	N							3 J
UFI SOP	NITRITE	mg/l	N		0.036	0.035	0.036	0.161	0.1	0.067
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N		0.037	J	0.036	J	0.03	0.251
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N		2.003	2	1.979	1.285	1.249	1.335
UFI SOP	SULFIDE	mg/L	N							0.056 U
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1449-08	OL-1449-09	OL-1449-10	OL-1449-11	OL-1451-02	OL-1451-03	OL-1451-04	OL-1451-05
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	59.4-59.4 FT	59.4-59.4 Ft	59.4-59.4 Ft	59.4-59.4 Ft	6.6-6.6 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	
	Sample Date	7/26/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011
	SDG	UFICHM2011-032	UFICHM2011-032	UFICHM2011-032	UFICHM2011-032	240-2265-1	240-2265-1	240-2265-1	240-2265-1	240-2265-1
	Matrix	Water	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Regular sample	Regular sample	Field duplicate	second field duplicate	Regular sample	Field duplicate	Regular sample	Regular sample	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N					4.60E-05 J	6.60E-05 J	3.80E-05 J
E1631	MERCURY	ug/L	N					0.0016 J	0.0015 J	0.0005 UJ
E1631	MERCURY	ug/L	Y							0.0005 UJ
UFI SOP	CALCIUM	mg/L	N	127.1						
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N		3 J	3 J	6 J			
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.053						
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	1.191						
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	3.921						
UFI SOP	SULFIDE	mg/L	N		0.056 U	0.056 U	0.056 U			
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1451-06	OL-1451-07	OL-1451-08	OL-1457-01	OL-1457-02	OL-1457-03	OL-1457-04	OL-1457-05
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	46.2-46.2 FT	52.8-52.8 FT	59.4-59.4 FT	6.6-6.6 FT	6.6-6.6 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	
	Sample Date	7/26/2011	7/26/2011	7/26/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011
	SDG	240-2265-1	240-2265-1	240-2265-1	UFICHM2011-037	UFICHM2011-037	UFICHM2011-037	UFICHM2011-037	UFICHM2011-037	UFICHM2011-037
	Matrix	WATER	Water	Water	Water	Water	Water	Water	Water	Water
	Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Field duplicate	second field duplicate	Regular sample	Regular sample	
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	9.20E-05	J	7.60E-05	J	1.50E-04	J	
E1631	MERCURY	ug/L	N	0.0005	UJ	0.0005	UJ	0.00065	J	
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N			131.3	127.8	129.4	128.1	121.6
UFI SOP	CHLORIDE	mg/L	N			396.8	396.8	387.1		319.4
UFI SOP	CHLOROPHYLL-A	ug/L	N			7.5	7.6	7.5		0.9
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y			3.5	3.7	3.6		2.7
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N						500 U	500 U
UFI SOP	NITRITE	mg/l	N			0.046	0.046	0.046	0.147	0.108
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N			0.056	0.053	0.054	0.218	0.333
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N			1.829	1.831	1.805	1.087	1.108
UFI SOP	SULFIDE	mg/L	N							
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N			35.1	34.1	34.4		51.9
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1457-06	OL-1457-07	OL-1457-08	OL-1457-09	OL-1457-10	OL-1457-11	OL-1459-02	OL-1459-03
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	46.2-46.2 FT	52.8-52.8 FT	59.4-59.4 FT	59.4-59.4 Ft	59.4-59.4 Ft	59.4-59.4 Ft	59.4-59.4 Ft	6.6-6.6 FT	6.6-6.6 FT
	Sample Date	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011
	SDG	UFICHM2011-037	UFICHM2011-037	UFICHM2011-037	UFICHM2011-037	UFICHM2011-037	UFICHM2011-037	UFICHM2011-037	240-2405-1	240-2405-1
	Matrix	Water	Water	Water	WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Field duplicate	second field duplicate	Regular sample	Field duplicate	
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N						1.10E-04	1.20E-04
E1631	MERCURY	ug/L	N						0.00099	0.00069
E1631	MERCURY	ug/L	Y						0.00061	0.00047 J
UFI SOP	CALCIUM	mg/L	N	120.5	118.7	121.4				
UFI SOP	CHLORIDE	mg/L	N		309.7	300				
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y		2.8	3				
UFI SOP	FERROUS IRON (II)	ug/l	N	10 U	6 J		4 J	4 J	4 J	
UFI SOP	METHANE	ug/L	N	500 U	500 U		500 U	500 U	400 J	
UFI SOP	NITRITE	mg/l	N	0.079	0.079	0.072				
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.623 J	0.594 J	0.749 J				
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.192	1.191	1.895				
UFI SOP	SULFIDE	mg/L	N	0.056 U	0.056 U		0.056 U	0.056 U	0.056 U	
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N		52.1	52.5				
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1459-04	OL-1459-05	OL-1459-06	OL-1459-07	OL-1459-08	OL-1461-01	OL-1461-02	OL-1461-03
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	59.4-59.4 FT	6.6-6.6 FT	6.6-6.6 FT	6.6-6.6 FT	6.6-6.6 FT
	Sample Date	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/8/2011	8/8/2011	8/8/2011	8/8/2011
	SDG	240-2405-1	240-2405-1	240-2405-1	240-2405-1	240-2405-1	UFICHM2011-038	UFICHM2011-038	UFICHM2011-038	UFICHM2011-038
	Matrix	WATER	WATER	WATER	Water	Water	Water	Water	Water	Water
	Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Field duplicate	Second field duplicate
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	8.10E-05	8.70E-05	1.20E-04	1.10E-04	1.50E-04		
E1631	MERCURY	ug/L	N	0.00024 J	0.00012 U	0.00012 U	0.00012 U	0.00012 J		
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N						130.6	130.8
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N					0.053	0.054	0.054
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N					0.015 J	0.014 J	0.016 J
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N					1.904	1.89	1.906
UFI SOP	SULFIDE	mg/L	N							
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1461-04	OL-1461-05	OL-1461-06	OL-1461-07	OL-1461-08	OL-1461-09	OL-1461-10	OL-1461-11
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	59.4-59.4 FT	59.4-59.4 Ft	59.4-59.4 Ft	59.4-59.4 Ft	59.4-59.4 Ft
	Sample Date	8/8/2011	8/8/2011	8/8/2011	8/8/2011	8/8/2011	8/8/2011	8/8/2011	8/8/2011	8/8/2011
	SDG	UFICHM2011-038	UFICHM2011-038	UFICHM2011-038	UFICHM2011-038	UFICHM2011-038	UFICHM2011-038	UFICHM2011-038	UFICHM2011-038	UFICHM2011-038
	Matrix	Water	Water	Water	Water	Water	Water	WATER	WATER	WATER
	Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Field duplicate	Second field duplicate
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N							
E1631	MERCURY	ug/L	N							
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N	128.4	125.3	122.4	124.2	126		
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N			4 J	5 U		6 J	5 U
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.094	0.112	0.099	0.086	0.074		
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.236	0.374	0.564	0.678	1.113		
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.045	1.116	1.276	1.517	3.522		
UFI SOP	SULFIDE	mg/L	N			0.056 U	0.056 U		0.056 U	0.056 U
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1463-02	OL-1463-03	OL-1463-04	OL-1463-05	OL-1463-06	OL-1463-07	OL-1463-08	OL-1467-01
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	6.6-6.6 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	59.4-59.4 FT	6.6-6.6 FT	
	Sample Date	8/8/2011	8/8/2011	8/8/2011	8/8/2011	8/8/2011	8/8/2011	8/8/2011	8/8/2011	8/15/2011
	SDG	240-2655-1	240-2655-1	240-2655-1	240-2655-1	240-2655-1	240-2655-1	240-2655-1	240-2655-1	UFICHM2011-041
	Matrix	WATER	WATER	WATER	WATER	WATER	Water	Water	Water	Water
	Sample Purpose	Regular sample	Field duplicate	Regular sample						
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	9.70E-05	9.50E-05	7.90E-05	8.90E-05	1.10E-04	1.50E-04	2.20E-04
E1631	MERCURY	ug/L	N	0.00085	0.0011	0.0011	0.00072	0.00065	0.00066	0.00057
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N							128.8
UFI SOP	CHLORIDE	mg/L	N							377.5
UFI SOP	CHLOROPHYLL-A	ug/L	N							8.9
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							3.4 J
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N							0.055
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N							0.047
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N							1.785
UFI SOP	SULFIDE	mg/L	N							
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							33.3 J
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1467-02	OL-1467-03	OL-1467-04	OL-1467-05	OL-1467-06	OL-1467-07	OL-1467-08	OL-1467-09
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	6.6-6.6 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	59.4-59.4 FT	59.4-59.4 Ft	
	Sample Date	8/15/2011	8/15/2011	8/15/2011	8/15/2011	8/15/2011	8/15/2011	8/15/2011	8/15/2011	8/15/2011
	SDG	UFICHM2011-041	UFICHM2011-041	UFICHM2011-041	UFICHM2011-041	UFICHM2011-041	UFICHM2011-041	UFICHM2011-041	UFICHM2011-041	UFICHM2011-041
	Matrix	Water	Water	Water	Water	Water	Water	Water	Water	WATER
	Sample Purpose	Field duplicate	Second field duplicate	Regular sample						
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N							
E1631	MERCURY	ug/L	N							
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N	130.1	129.7	129.5	124.9	123.5	124.2	129
UFI SOP	CHLORIDE	mg/L	N	377.5	387.2		309.8		300.1	300.1
UFI SOP	CHLOROPHYLL-A	ug/L	N	8.9	8.6		1			
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y	3.4 J	3.4 J		2.6 U		2.7 U	2.8 U
UFI SOP	FERROUS IRON (II)	ug/l	N					10 U	10 U	
UFI SOP	METHANE	ug/L	N			500 U	500 U	500 U	300 J	800
UFI SOP	NITRITE	mg/l	N	0.053	0.053	0.036	0.084	0.096	0.09	0.079
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.04 J	0.049	0.282	0.353	0.47	0.667	1.054
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.751	1.85	0.884	0.95	0.976	1.065	1.81
UFI SOP	SULFIDE	mg/L	N					0.056 U	0.056 U	0.056 U
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N	33.8 J	33.6 J		49.4 J		51.5 J	52.9 J
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1467-10
		Location	DEEP_S
		Sample Depth	59.4-59.4 Ft
		Sample Date	8/15/2011
		SDG	UFICHM2011-041
		Matrix	WATER
		Sample Purpose	Field duplicate
		Sample Type	Surface water
Method	Parameter Name	Units	Filtered
E1630	METHYL MERCURY	ug/L	N
E1631	MERCURY	ug/L	N
E1631	MERCURY	ug/L	Y
UFI SOP	CALCIUM	mg/L	N
UFI SOP	CHLORIDE	mg/L	N
UFI SOP	CHLOROPHYLL-A	ug/L	N
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y
UFI SOP	FERROUS IRON (II)	ug/l	N
			36 J
UFI SOP	METHANE	ug/L	N
			800
UFI SOP	NITRITE	mg/l	N
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N
UFI SOP	SULFIDE	mg/L	N
			0.056 U
UFI SOP	TOTAL CARBON	mg/l	N
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N
UFI SOP	Total Suspended Solids	mg/l	N

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		Field Sample ID	OL-1467-11	OL-1469-02	OL-1469-03	OL-1469-04	OL-1469-05	OL-1469-06
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	59.4-59.4 Ft	6.6-6.6 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	
	Sample Date	8/15/2011	8/15/2011	8/15/2011	8/15/2011	8/15/2011	8/15/2011	8/15/2011
	SDG	UFICHM2011-041	240-2881-1	240-2881-1	240-2881-1	240-2881-1	240-2881-1	240-2881-1
	Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Second field duplicate	Regular sample	Field duplicate	Regular sample	Regular sample	Regular sample	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered					
E1630	METHYL MERCURY	ug/L	N	0.00011	0.000095	0.0001	0.000095	0.000096
E1631	MERCURY	ug/L	N	0.0017	0.0012	0.0009	0.001	0.001
E1631	MERCURY	ug/L	Y	0.00097	0.00078			
UFI SOP	CALCIUM	mg/l	N					
UFI SOP	CHLORIDE	mg/l	N					
UFI SOP	CHLOROPHYLL-A	ug/L	N					
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y					
UFI SOP	FERROUS IRON (II)	ug/l	N	14 J				
UFI SOP	METHANE	ug/L	N	700				
UFI SOP	NITRITE	mg/l	N					
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N					
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N					
UFI SOP	SULFIDE	mg/L	N	0.056 U				
UFI SOP	TOTAL CARBON	mg/l	N					
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N					
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N					
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N					
UFI SOP	Total Suspended Solids	mg/L	N					

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		Field Sample ID	OL-1469-07	OL-1469-08	OL-1475-01	OL-1475-02	OL-1475-03	OL-1475-04
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	52.8-52.8 FT	59.4-59.4 FT	6.6-6.6 FT	6.6-6.6 FT	6.6-6.6 FT	33-33 FT	
	Sample Date	8/15/2011	8/15/2011	8/22/2011	8/22/2011	8/22/2011	8/22/2011	8/22/2011
	SDG	240-2881-1	240-2881-1	UFICHM2011-043	UFICHM2011-043	UFICHM2011-043	UFICHM2011-043	UFICHM2011-043
	Matrix	Water	Water	Water	Water	Water	Water	Water
	Sample Purpose	Regular sample	Regular sample	Regular sample	Field duplicate	Second field duplicate	Regular sample	
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered					
E1630	METHYL MERCURY	ug/L	N	0.00013	0.00021			
E1631	MERCURY	ug/L	N	0.00081	0.00085			
E1631	MERCURY	ug/L	Y					
UFI SOP	CALCIUM	mg/l	N		129.7	130.9	130.2	131.7
UFI SOP	CHLORIDE	mg/l	N					
UFI SOP	CHLOROPHYLL-A	ug/L	N					
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y					
UFI SOP	FERROUS IRON (II)	ug/l	N					
UFI SOP	METHANE	ug/L	N					
UFI SOP	NITRITE	mg/l	N		0.05	0.05	0.051	0.015 U
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N		0.02 J	0.024 J	0.018 J	0.263 J
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N		1.746 J	1.803 J	1.719 J	0.814 J
UFI SOP	SULFIDE	mg/L	N					
UFI SOP	TOTAL CARBON	mg/l	N					
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N					
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N					
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N					
UFI SOP	Total Suspended Solids	mg/L	N					

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		Field Sample ID	OL-1475-05	OL-1475-06	OL-1475-07	OL-1475-08	OL-1475-09	OL-1475-10
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	59.4-59.4 FT	59.4-59.4 Ft	59.4-59.4 Ft	59.4-59.4 Ft
	Sample Date	8/22/2011	8/22/2011	8/22/2011	8/22/2011	8/22/2011	8/22/2011	8/22/2011
	SDG	UFICHM2011-043	UFICHM2011-043	UFICHM2011-043	UFICHM2011-043	UFICHM2011-043	UFICHM2011-043	UFICHM2011-043
	Matrix	Water	Water	Water	Water	Water	WATER	WATER
	Sample Purpose	Regular sample	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	Surface water
Method	Parameter Name	Units	Filtered					
E1630	METHYL MERCURY	ug/L	N					
E1631	MERCURY	ug/L	N					
E1631	MERCURY	ug/L	Y					
UFI SOP	CALCIUM	mg/l	N	126.1	126.8	126.1	126.1	
UFI SOP	CHLORIDE	mg/l	N					
UFI SOP	CHLOROPHYLL-A	ug/L	N					
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y					
UFI SOP	FERROUS IRON (II)	ug/l	N		6 J	5 U		5 U
UFI SOP	METHANE	ug/L	N					
UFI SOP	NITRITE	mg/l	N	0.055	0.069	0.093	0.09	
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.418 J	0.473 J	0.754 J	1.667 J	
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	0.922 J	1.169 J	3.71 J	2.172 J	
UFI SOP	SULFIDE	mg/L	N		0.056 U	0.056 U		0.056 U
UFI SOP	TOTAL CARBON	mg/l	N					
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N					
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N					
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N					
UFI SOP	Total Suspended Solids	mg/L	N					

Validated Book 1 Surface Water and Water Column Samples

		Field Sample ID	OL-1475-11	OL-1477-02	OL-1477-03	OL-1477-04	OL-1477-05	OL-1477-06
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	59.4-59.4 Ft	6.6-6.6 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	
	Sample Date	8/22/2011	8/22/2011	8/22/2011	8/22/2011	8/22/2011	8/22/2011	8/22/2011
	SDG	UFICHM2011-043	240-3088-1	240-3088-1	240-3088-1	240-3088-1	240-3088-1	240-3088-1
	Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Second field duplicate	Regular sample	Field duplicate	Regular sample	Regular sample	Regular sample	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered					
E1630	METHYL MERCURY	ug/L	N		0.0002 J	0.0002 J	0.0002 J	0.00013
E1631	MERCURY	ug/L	N		0.001 J	0.001 J	0.00094 J	0.00073 J
E1631	MERCURY	ug/L	Y					0.0009 J
UFI SOP	CALCIUM	mg/l	N					
UFI SOP	CHLORIDE	mg/l	N					
UFI SOP	CHLOROPHYLL-A	ug/L	N					
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y					
UFI SOP	FERROUS IRON (II)	ug/l	N	3 J				
UFI SOP	METHANE	ug/L	N					
UFI SOP	NITRITE	mg/l	N					
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N					
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N					
UFI SOP	SULFIDE	mg/L	N	0.056 U				
UFI SOP	TOTAL CARBON	mg/l	N					
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N					
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N					
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N					
UFI SOP	Total Suspended Solids	mg/L	N					

Validated Book 1 Surface Water and Water Column Samples

		Field Sample ID	OL-1477-07	OL-1477-08	OL-1481-01	OL-1481-02	OL-1481-03	OL-1481-04
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	52.8-52.8 FT	59.4-59.4 FT	6.6-6.6 FT	6.6-6.6 FT	6.6-6.6 FT	33-33 FT	
	Sample Date	8/22/2011	8/22/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011
	SDG	240-3088-1	240-3088-1	UFICHM2011-047	UFICHM2011-047	UFICHM2011-047	UFICHM2011-047	UFICHM2011-047
	Matrix	Water	Water	Water	Water	Water	Water	Water
	Sample Purpose	Regular sample	Regular sample	Regular sample	Field duplicate	Second field duplicate	Regular sample	
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered					
E1630	METHYL MERCURY	ug/L	N	0.00014	0.00044			
E1631	MERCURY	ug/L	N	0.0011 J	0.0015 J			
E1631	MERCURY	ug/L	Y					
UFI SOP	CALCIUM	mg/l	N		135.5	135.5	134.5	132.6
UFI SOP	CHLORIDE	mg/l	N		406.5	406.5	406.5	
UFI SOP	CHLOROPHYLL-A	ug/L	N		4.5	5.8	5.7	
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y		3.4	3.5	3.5	
UFI SOP	FERROUS IRON (II)	ug/l	N					
UFI SOP	METHANE	ug/L	N				500 U	
UFI SOP	NITRITE	mg/l	N		0.049	0.049	0.05	0.012 J
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N		0.081	0.081	0.084	0.326
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N		1.727	1.766	1.751	0.93
UFI SOP	SULFIDE	mg/L	N					
UFI SOP	TOTAL CARBON	mg/l	N					
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N					
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N		34.7	33.3	33.6	
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N					
UFI SOP	Total Suspended Solids	mg/L	N					

Validated Book 1 Surface Water and Water Column Samples

		Field Sample ID	OL-1481-05	OL-1481-06	OL-1481-07	OL-1481-08	OL-1481-09	OL-1481-10
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	59.4-59.4 FT	59.4-59.4 Ft	59.4-59.4 Ft	59.4-59.4 Ft
	Sample Date	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011
	SDG	UFICHM2011-047	UFICHM2011-047	UFICHM2011-047	UFICHM2011-047	UFICHM2011-047	UFICHM2011-047	UFICHM2011-047
	Matrix	Water	Water	Water	Water	Water	WATER	WATER
	Sample Purpose	Regular sample	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	Surface water
Method	Parameter Name	Units	Filtered					
E1630	METHYL MERCURY	ug/L	N					
E1631	MERCURY	ug/L	N					
E1631	MERCURY	ug/L	Y					
UFI SOP	CALCIUM	mg/l	N	125.6	126.1	125.6	125.6	
UFI SOP	CHLORIDE	mg/l	N	319.4		309.7	319.4	
UFI SOP	CHLOROPHYLL-A	ug/L	N	0.7				
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y	2.9		2.9	2.9	
UFI SOP	FERROUS IRON (II)	ug/l	N		7 J	10 U		4 J
UFI SOP	METHANE	ug/L	N	200	J	500 U	400 J	1000
UFI SOP	NITRITE	mg/l	N	0.025		0.05	0.072	0.109
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.529		0.633	0.788	1.537
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	0.924		1.023	1.13	1.534
UFI SOP	SULFIDE	mg/L	N			0.056 U		0.056 U
UFI SOP	TOTAL CARBON	mg/l	N					
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N					
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N	49.7		53.1	56.3	
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N					
UFI SOP	Total Suspended Solids	mg/L	N					

Validated Book 1 Surface Water and Water Column Samples

		Field Sample ID	OL-1481-11	OL-1483-02	OL-1483-03	OL-1483-04	OL-1483-05	OL-1483-06
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	59.4-59.4 Ft	6.6-6.6 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	
	Sample Date	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011
	SDG	UFICHM2011-047	240-3323-1	240-3323-1	240-3323-1	240-3323-1	240-3323-1	240-3323-1
	Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Second field duplicate	Regular sample	Field duplicate	Regular sample	Regular sample	Regular sample	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered					
E1630	METHYL MERCURY	ug/L	N	0.00011	0.000091	0.000098 J	0.000092 J	0.00012 J
E1631	MERCURY	ug/L	N	0.0024	0.0022	0.0012	0.00095	0.0011
E1631	MERCURY	ug/L	Y	0.00061	0.00064			
UFI SOP	CALCIUM	mg/l	N					
UFI SOP	CHLORIDE	mg/l	N					
UFI SOP	CHLOROPHYLL-A	ug/L	N					
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y					
UFI SOP	FERROUS IRON (II)	ug/l	N	3 J				
UFI SOP	METHANE	ug/L	N	900				
UFI SOP	NITRITE	mg/l	N					
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N					
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N					
UFI SOP	SULFIDE	mg/L	N	0.056 U				
UFI SOP	TOTAL CARBON	mg/l	N					
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N					
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N					
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N					
UFI SOP	Total Suspended Solids	mg/L	N					

Validated Book 1 Surface Water and Water Column Samples

		Field Sample ID	OL-1483-07	OL-1483-08	OL-1488-01	OL-1488-02	OL-1488-03	OL-1488-04
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	52.8-52.8 FT	59.4-59.4 FT	6.6-6.6 FT	6.6-6.6 FT	6.6-6.6 FT	33-33 FT	
	Sample Date	8/29/2011	8/29/2011	9/6/2011	9/6/2011	9/6/2011	9/6/2011	9/6/2011
	SDG	240-3323-1	240-3323-1	UFICHM2011-049	UFICHM2011-049	UFICHM2011-049	UFICHM2011-049	UFICHM2011-049
	Matrix	Water	Water	Water	Water	Water	Water	Water
	Sample Purpose	Regular sample	Regular sample	Regular sample	Field duplicate	Second field duplicate	Regular sample	
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered					
E1630	METHYL MERCURY	ug/L	N	0.00013 J	0.00023			
E1631	MERCURY	ug/L	N	0.0009	0.0014			
E1631	MERCURY	ug/L	Y					
UFI SOP	CALCIUM	mg/l	N		135.3	130.2	132.6	132.4
UFI SOP	CHLORIDE	mg/l	N		402	392.2	392.2	
UFI SOP	CHLOROPHYLL-A	ug/L	N		6.5	8.1	8.2	
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y		3.5	3.5	3.5	
UFI SOP	FERROUS IRON (II)	ug/l	N					
UFI SOP	METHANE	ug/L	N				500 U	
UFI SOP	NITRITE	mg/l	N		0.045	0.044	0.044	0.005
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N		0.054	0.052	0.057	0.412
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N		1.681	1.687	1.667	0.956
UFI SOP	SULFIDE	mg/L	N					
UFI SOP	TOTAL CARBON	mg/l	N					
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N					
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N		35.6	34.7	33.7	
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N					
UFI SOP	Total Suspended Solids	mg/L	N					

Validated Book 1 Surface Water and Water Column Samples

		Field Sample ID	OL-1488-05	OL-1488-06	OL-1488-07	OL-1488-08	OL-1488-09	OL-1488-10
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	59.4-59.4 FT	59.4-59.4 Ft	59.4-59.4 Ft	59.4-59.4 Ft
	Sample Date	9/6/2011	9/6/2011	9/6/2011	9/6/2011	9/6/2011	9/6/2011	9/6/2011
	SDG	UFICHM2011-049	UFICHM2011-049	UFICHM2011-049	UFICHM2011-049	UFICHM2011-049	UFICHM2011-049	UFICHM2011-049
	Matrix	Water	Water	Water	Water	Water	WATER	WATER
	Sample Purpose	Regular sample	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	Surface water
Method	Parameter Name	Units	Filtered					
E1630	METHYL MERCURY	ug/L	N					
E1631	MERCURY	ug/L	N					
E1631	MERCURY	ug/L	Y					
UFI SOP	CALCIUM	mg/l	N	129	128.8	128.5	130.9	
UFI SOP	CHLORIDE	mg/l	N	323.5	323.5	313.7	323.5	
UFI SOP	CHLOROPHYLL-A	ug/L	N	0.6				
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y	2.7	2.7	2.8	3.3	
UFI SOP	FERROUS IRON (II)	ug/l	N		10 U	10 U		
UFI SOP	METHANE	ug/L	N	500 U	500 U	700		1300
UFI SOP	NITRITE	mg/l	N	0.008	0.074	0.078	0.101	
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.616	0.858	1.009	1.44	
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	0.982	1.537	1.31	2.367	
UFI SOP	SULFIDE	mg/L	N		0.056 U	0.056 U		0.056 U
UFI SOP	TOTAL CARBON	mg/l	N					
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N					
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N	52	54.2	53	56.8	
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N					
UFI SOP	Total Suspended Solids	mg/L	N					

Validated Book 1 Surface Water and Water Column Samples

		Field Sample ID	OL-1488-11	OL-1490-02	OL-1490-03	OL-1490-04	OL-1490-05	OL-1490-06
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	59.4-59.4 Ft	6.6-6.6 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	
	Sample Date	9/6/2011	9/6/2011	9/6/2011	9/6/2011	9/6/2011	9/6/2011	9/6/2011
	SDG	UFICHM2011-049	240-3546-1	240-3546-1	240-3546-1	240-3546-1	240-3546-1	240-3546-1
	Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Second field duplicate	Regular sample	Field duplicate	Regular sample	Regular sample	Regular sample	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered					
E1630	METHYL MERCURY	ug/L	N		0.0003 U	0.0003 U	0.0003 U	0.0003 U
E1631	MERCURY	ug/L	N		0.0012	0.00084	0.00093	0.00077
E1631	MERCURY	ug/L	Y		0.00086	0.0006		
UFI SOP	CALCIUM	mg/l	N					
UFI SOP	CHLORIDE	mg/l	N					
UFI SOP	CHLOROPHYLL-A	ug/L	N					
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y					
UFI SOP	FERROUS IRON (II)	ug/l	N	3 J				
UFI SOP	METHANE	ug/L	N	1100				
UFI SOP	NITRITE	mg/l	N					
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N					
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N					
UFI SOP	SULFIDE	mg/L	N	0.056 U				
UFI SOP	TOTAL CARBON	mg/l	N					
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N					
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N					
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N					
UFI SOP	Total Suspended Solids	mg/L	N					

Validated Book 1 Surface Water and Water Column Samples

		Field Sample ID	OL-1490-07	OL-1490-08	OL-1601-01	OL-1601-02	OL-1601-03	OL-1601-04
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	52.8-52.8 FT	59.4-59.4 FT	6.6-6.6 FT	6.6-6.6 FT	6.6-6.6 FT	33-33 FT	
	Sample Date	9/6/2011	9/6/2011	9/12/2011	9/12/2011	9/12/2011	9/12/2011	9/12/2011
	SDG	240-3546-1	240-3546-1	UFICHM2011-052	UFICHM2011-052	UFICHM2011-052	UFICHM2011-052	UFICHM2011-052
	Matrix	Water	Water	Water	Water	Water	Water	Water
	Sample Purpose	Regular sample	Regular sample	Regular sample	Field duplicate	Second field duplicate	Regular sample	
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered					
E1630	METHYL MERCURY	ug/L	N	0.00014	0.00019			
E1631	MERCURY	ug/L	N	0.001	0.0014			
E1631	MERCURY	ug/L	Y					
UFI SOP	CALCIUM	mg/l	N		129.7	132.6	130.2	134.6
UFI SOP	CHLORIDE	mg/l	N		396.9	387.2	396.9	
UFI SOP	CHLOROPHYLL-A	ug/L	N		10.5	8.4	9.5	
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y		3.5	3.5	3.5	
UFI SOP	FERROUS IRON (II)	ug/l	N					
UFI SOP	METHANE	ug/L	N					500 U
UFI SOP	NITRITE	mg/l	N		0.045	0.047	0.044	0.006 J
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N		0.04	0.042	0.037 J	0.368
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N		1.86426 J	1.85128 J	1.828 J	0.962 J
UFI SOP	SULFIDE	mg/L	N					
UFI SOP	TOTAL CARBON	mg/l	N					
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N					
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N		35.1	35.3	34.8	
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N					
UFI SOP	Total Suspended Solids	mg/L	N					

Validated Book 1 Surface Water and Water Column Samples

		Field Sample ID	OL-1601-05	OL-1601-06	OL-1601-07	OL-1601-08	OL-1601-09	OL-1601-10
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	59.4-59.4 FT	59.4-59.4 Ft	59.4-59.4 Ft	59.4-59.4 Ft
	Sample Date	9/12/2011	9/12/2011	9/12/2011	9/12/2011	9/12/2011	9/12/2011	9/12/2011
	SDG	UFICHM2011-052	UFICHM2011-052	UFICHM2011-052	UFICHM2011-052	UFICHM2011-052	UFICHM2011-052	UFICHM2011-052
	Matrix	Water	Water	Water	Water	Water	WATER	WATER
	Sample Purpose	Regular sample	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	Surface water
Method	Parameter Name	Units	Filtered					
E1630	METHYL MERCURY	ug/L	N					
E1631	MERCURY	ug/L	N					
E1631	MERCURY	ug/L	Y					
UFI SOP	CALCIUM	mg/l	N	131.4	134.1	133.3	135	
UFI SOP	CHLORIDE	mg/l	N	358.2	348.5	319.5	319.5	
UFI SOP	CHLOROPHYLL-A	ug/L	N	0.8				
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y	2.7	2.7	2.7	3	
UFI SOP	FERROUS IRON (II)	ug/l	N		10 U	10 U		4 J 10 U
UFI SOP	METHANE	ug/L	N	200 U	500 U	800		1500 1500
UFI SOP	NITRITE	mg/l	N	0.011 J	0.034	0.064	0.086	
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.715	0.705	1.019	1.795	
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	0.929 J	1.183 J	1.732 J	3.49 J	
UFI SOP	SULFIDE	mg/L	N		0.056 U	0.056 U		0.056 U 0.056 U
UFI SOP	TOTAL CARBON	mg/l	N					
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N					
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N	51.4	53.1	53.7	56.7	
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N					
UFI SOP	Total Suspended Solids	mg/L	N					

Validated Book 1 Surface Water and Water Column Samples

		Field Sample ID	OL-1601-11	OL-1603-02	OL-1603-03	OL-1603-04	OL-1603-05	OL-1603-06
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	59.4-59.4 Ft	6.6-6.6 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	
	Sample Date	9/12/2011	9/12/2011	9/12/2011	9/12/2011	9/12/2011	9/12/2011	9/12/2011
	SDG	UFICHM2011-052	240-3757-1	240-3757-1	240-3757-1	240-3757-1	240-3757-1	240-3757-1
	Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Second field duplicate	Regular sample	Field duplicate	Regular sample	Regular sample	Regular sample	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered					
E1630	METHYL MERCURY	ug/L	N		0.000057 J	0.000045 J	0.000045 J	0.000077 J
E1631	MERCURY	ug/L	N		0.0016	0.0022	0.0013	0.0012
E1631	MERCURY	ug/L	Y		0.00055	0.00041 J		
UFI SOP	CALCIUM	mg/l	N					
UFI SOP	CHLORIDE	mg/l	N					
UFI SOP	CHLOROPHYLL-A	ug/L	N					
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y					
UFI SOP	FERROUS IRON (II)	ug/l	N	10 U				
UFI SOP	METHANE	ug/L	N	1300				
UFI SOP	NITRITE	mg/l	N					
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N					
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N					
UFI SOP	SULFIDE	mg/L	N	0.056 U				
UFI SOP	TOTAL CARBON	mg/l	N					
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N					
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N					
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N					
UFI SOP	Total Suspended Solids	mg/L	N					

Validated Book 1 Surface Water and Water Column Samples

		Field Sample ID	OL-1603-07	OL-1603-08	OL-1605-01	OL-1605-02	OL-1605-03	OL-1605-04
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	52.8-52.8 FT	59.4-59.4 FT	6.6-6.6 FT	6.6-6.6 FT	6.6-6.6 FT	33-33 FT	
	Sample Date	9/12/2011	9/12/2011	9/19/2011	9/19/2011	9/19/2011	9/19/2011	9/19/2011
	SDG	240-3757-1	240-3757-1	UFICHM2011-057	UFICHM2011-057	UFICHM2011-057	UFICHM2011-057	UFICHM2011-057
	Matrix	Water	Water	Water	Water	Water	Water	Water
	Sample Purpose	Regular sample	Regular sample	Regular sample	Field duplicate	Second field duplicate	Regular sample	
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered					
E1630	METHYL MERCURY	ug/L	N	0.00014 J	0.00025 J			
E1631	MERCURY	ug/L	N	0.0014	0.0015			
E1631	MERCURY	ug/L	Y					
UFI SOP	CALCIUM	mg/l	N		128.2	127.2	128.7	106.8
UFI SOP	CHLORIDE	mg/l	N		402	392.2	392.2	
UFI SOP	CHLOROPHYLL-A	ug/L	N		6.4	6.2	6.1	
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y		3.7	3.5	3.6	
UFI SOP	FERROUS IRON (II)	ug/l	N					
UFI SOP	METHANE	ug/L	N					500 U
UFI SOP	NITRITE	mg/l	N		0.033	0.032	0.031	0.015 U
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N		0.068	0.067	0.068	0.462
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N		1.771	1.73	1.768	0.847
UFI SOP	SULFIDE	mg/L	N					
UFI SOP	TOTAL CARBON	mg/l	N					
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N					
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N		38.3	39	38.8	
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N					
UFI SOP	Total Suspended Solids	mg/L	N					

Validated Book 1 Surface Water and Water Column Samples

		Field Sample ID	OL-1605-05	OL-1605-06	OL-1605-07	OL-1605-08	OL-1605-09	OL-1605-10
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	39.6-39.6 Ft	46.2-46.2 FT	52.8-52.8 FT	59.4-59.4 FT	59.4-59.4 Ft	59.4-59.4 Ft	59.4-59.4 Ft
	Sample Date	9/19/2011	9/19/2011	9/19/2011	9/19/2011	9/19/2011	9/19/2011	9/19/2011
	SDG	UFICHM2011-057	UFICHM2011-057	UFICHM2011-057	UFICHM2011-057	UFICHM2011-057	UFICHM2011-057	UFICHM2011-057
	Matrix	WATER	Water	Water	Water	Water	WATER	WATER
	Sample Purpose	Regular sample	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	Surface water
Method	Parameter Name	Units	Filtered					
E1630	METHYL MERCURY	ug/L	N					
E1631	MERCURY	ug/L	N					
E1631	MERCURY	ug/L	Y					
UFI SOP	CALCIUM	mg/l	N	123.2	123.8	126.1	130.5	
UFI SOP	CHLORIDE	mg/l	N	352.9	323.5	323.5	323.5	
UFI SOP	CHLOROPHYLL-A	ug/L	N	2.1				
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y	2.9	2.8	2.8	3	
UFI SOP	FERROUS IRON (II)	ug/l	N		10 U	10 U	10 U	6 J
UFI SOP	METHANE	ug/L	N	500 U	700	800	1300	1100
UFI SOP	NITRITE	mg/l	N	0.015 U	0.029	0.051	0.062	
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.601	0.909	1.126	2.014	
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	0.892	1.478	1.88	3.948	
UFI SOP	SULFIDE	mg/L	N		0.056 U	0.056 U	0.056 U	0.056 U
UFI SOP	TOTAL CARBON	mg/l	N					
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N					
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N	58.6	58.3	62.3	62.5	
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N					
UFI SOP	Total Suspended Solids	mg/L	N					

Validated Book 1 Surface Water and Water Column Samples

		Field Sample ID	OL-1605-11	OL-1607-02	OL-1607-03	OL-1607-04	OL-1607-05	OL-1607-06
	Location		DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth		59.4-59.4 Ft	6.6-6.6 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT
	Sample Date		9/19/2011	9/19/2011	9/19/2011	9/19/2011	9/19/2011	9/19/2011
	SDG		UFICHM2011-057	240-4004-1	240-4004-1	240-4004-1	240-4004-1	240-4004-1
	Matrix		WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose		Second field duplicate	Regular sample	Field duplicate	Regular sample	Regular sample	Regular sample
	Sample Type		Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered					
E1630	METHYL MERCURY	ug/L	N		0.000026 J	0.000041 J	0.000059 J	0.00006 J
E1631	MERCURY	ug/L	N		0.002	0.0017	0.0013	0.00066
E1631	MERCURY	ug/L	Y		0.00083	0.00068		0.001
UFI SOP	CALCIUM	mg/l	N					
UFI SOP	CHLORIDE	mg/l	N					
UFI SOP	CHLOROPHYLL-A	ug/L	N					
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y					
UFI SOP	FERROUS IRON (II)	ug/l	N	5 J				
UFI SOP	METHANE	ug/L	N	1800				
UFI SOP	NITRITE	mg/l	N					
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N					
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N					
UFI SOP	SULFIDE	mg/L	N	0.056 U				
UFI SOP	TOTAL CARBON	mg/l	N					
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N					
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N					
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N					
UFI SOP	Total Suspended Solids	mg/L	N					

Validated Book 1 Surface Water and Water Column Samples

		Field Sample ID	OL-1607-07	OL-1607-08	OL-1614-01	OL-1614-02	OL-1614-03	OL-1614-04
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	52.8-52.8 FT	59.4-59.4 FT	6.6-6.6 FT	6.6-6.6 FT	6.6-6.6 FT	33-33 FT	
	Sample Date	9/19/2011	9/19/2011	9/26/2011	9/26/2011	9/26/2011	9/26/2011	9/26/2011
	SDG	240-4004-1	240-4004-1	UFICHM2011-060	UFICHM2011-060	UFICHM2011-060	UFICHM2011-060	UFICHM2011-060
	Matrix	Water	Water	Water	Water	Water	Water	Water
	Sample Purpose	Regular sample	Regular sample	Regular sample	Field duplicate	Second field duplicate	Regular sample	
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered					
E1630	METHYL MERCURY	ug/L	N	0.00011 J	0.00017 J			
E1631	MERCURY	ug/L	N	0.0011	0.0011			
E1631	MERCURY	ug/L	Y					
UFI SOP	CALCIUM	mg/l	N		130.4	129.9	129.7	138.9
UFI SOP	CHLORIDE	mg/l	N		402	392.2	392.2	
UFI SOP	CHLOROPHYLL-A	ug/L	N		11.8	11.2	12.6	
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y		3.6	3.5	3.5	
UFI SOP	FERROUS IRON (II)	ug/l	N					
UFI SOP	METHANE	ug/L	N				500 U	
UFI SOP	NITRITE	mg/l	N		0.043	0.044	0.044	0.042
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N		0.03 J	0.027 J	0.033 J	0.354
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N		1.808	1.786	1.771	1.15
UFI SOP	SULFIDE	mg/L	N					
UFI SOP	TOTAL CARBON	mg/l	N					
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N					
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N		37.1	37	36.8	
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N					
UFI SOP	Total Suspended Solids	mg/L	N					

Validated Book 1 Surface Water and Water Column Samples

		Field Sample ID	OL-1614-05	OL-1614-06	OL-1614-07	OL-1614-08	OL-1614-09	OL-1614-10	OL-1614-11	OL-1616-02
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	59.4-59.4 FT	59.4-59.4 Ft	59.4-59.4 Ft	59.4-59.4 Ft	59.4-59.4 Ft	6.6-6.6 FT
	Sample Date	9/26/2011	9/26/2011	9/26/2011	9/26/2011	9/26/2011	9/26/2011	9/26/2011	9/26/2011	9/26/2011
	SDG	UFICHM2011-060	UFICHM2011-060	UFICHM2011-060	UFICHM2011-060	UFICHM2011-060	UFICHM2011-060	UFICHM2011-060	UFICHM2011-060	240-4233-1
	Matrix	Water	Water	Water	Water	Water	WATER	WATER	WATER	WATER
	Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Field duplicate	Second field duplicate	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N							0.000071 J
E1631	MERCURY	ug/L	N							0.00062
E1631	MERCURY	ug/L	Y							0.00046 J
UFI SOP	CALCIUM	mg/L	N	130.4	127.6	130.2	132.8			
UFI SOP	CHLORIDE	mg/L	N	392.2	362.7	343.1	362.7			
UFI SOP	CHLOROPHYLL-A	ug/L	N	2.2						
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y	2.7	2.7	2.7	2.8			
UFI SOP	FERROUS IRON (II)	ug/l	N		10 U	6 J		4 J	4 J	10 U
UFI SOP	METHANE	ug/L	N	500 U	500	700		1200	1300	1200
UFI SOP	NITRITE	mg/l	N	0.008 J	0.008 J	0.036	0.039			
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.727	0.797	1.09	1.59			
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.25	1.269	1.912	3.136			
UFI SOP	SULFIDE	mg/L	N		0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N	52	51.4	52.3	54.9			
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1616-03	OL-1616-04	OL-1616-05	OL-1616-06	OL-1616-07	OL-1616-08	OL-1621-01	OL-1621-02
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	59.4-59.4 FT	6.6-6.6 FT	6.6-6.6 FT	6.6-6.6 FT
	Sample Date	9/26/2011	9/26/2011	9/26/2011	9/26/2011	9/26/2011	9/26/2011	9/26/2011	10/3/2011	10/3/2011
	SDG	240-4233-1	240-4233-1	240-4233-1	240-4233-1	240-4233-1	240-4233-1	240-4233-1	UFICHM2011-061	UFICHM2011-061
	Matrix	WATER	WATER	WATER	WATER	WATER	Water	Water	Water	Water
	Sample Purpose	Field duplicate	Regular sample	Field duplicate Se						
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	0.000052 J	0.000019 J	0.000038 J	0.000076 J	0.00022 J	0.00013 J	
E1631	MERCURY	ug/L	N	0.00081	0.0015	0.0011	0.00098	0.0011	0.0012	
E1631	MERCURY	ug/L	Y	0.00024 J						
UFI SOP	CALCIUM	mg/L	N							128.8
UFI SOP	CHLORIDE	mg/L	N							129.7
UFI SOP	CHLOROPHYLL-A	ug/L	N							399.4
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							7.8
UFI SOP	FERROUS IRON (II)	ug/l	N							3.5
UFI SOP	METHANE	ug/L	N							3.5
UFI SOP	NITRITE	mg/l	N							0.044
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N							0.107
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N							1.94
UFI SOP	SULFIDE	mg/L	N							1.935
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							38.7
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N							38.9
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1621-03	OL-1621-04	OL-1621-05	OL-1621-06	OL-1621-07	OL-1621-08	OL-1621-09	OL-1621-10
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	59.4-59.4 FT	59.4-59.4 Ft	59.4-59.4 Ft	59.4-59.4 Ft
	Sample Date	10/3/2011	10/3/2011	10/3/2011	10/3/2011	10/3/2011	10/3/2011	10/3/2011	10/3/2011	10/3/2011
	SDG	UFICHM2011-061	UFICHM2011-061	UFICHM2011-061	UFICHM2011-061	UFICHM2011-061	UFICHM2011-061	UFICHM2011-061	UFICHM2011-061	UFICHM2011-061
	Matrix	Water	Water	Water	Water	Water	Water	Water	WATER	WATER
	Sample Purpose	cond field duplicate	Regular sample	Field duplicate Se						
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N							
E1631	MERCURY	ug/L	N							
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N	129.5	129.7	129.2	127.3	128.5	131.1	
UFI SOP	CHLORIDE	mg/L	N	379.9		360.4	350.7	340.9	350.7	
UFI SOP	CHLOROPHYLL-A	ug/L	N	8		1				
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y	3.6		2.7	2.8	2.9	2.9	
UFI SOP	FERROUS IRON (II)	ug/l	N				10 U	10 U		10 U
UFI SOP	METHANE	ug/L	N		500 U	500 U	500	1000		1000
UFI SOP	NITRITE	mg/l	N	0.042	0.02	0.01 J	0.011 J	0.02	0.023	
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.102	0.569	0.865	1.025	1.414	1.556	
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.888	1.169	1.066	1.426	2.335	2.318	
UFI SOP	SULFIDE	mg/L	N				0.056 U	0.056 U		0.056 U
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N	40		54	56.3	57.1	57.5	
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1621-11	OL-1623-02	OL-1623-03	OL-1623-04	OL-1623-05	OL-1623-06	OL-1623-07	OL-1623-08	
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	
	Sample Depth	59.4-59.4 Ft	6.6-6.6 FT	6.6-6.6 FT	33-33 FT	39.6-39.6 FT	46.2-46.2 FT	52.8-52.8 FT	59.4-59.4 FT		
	Sample Date	10/3/2011	10/3/2011	10/3/2011	10/3/2011	10/3/2011	10/3/2011	10/3/2011	10/3/2011	10/3/2011	
	SDG	UFICHM2011-061	240-4464-1	240-4464-1	240-4464-1	240-4464-1	240-4464-1	240-4464-1	240-4464-1	240-4464-1	
	Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER	Water	Water	
	Sample Purpose	cond field duplicate	Regular sample	Field duplicate	Regular sample						
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	
Method	Parameter Name	Units	Filtered								
E1630	METHYL MERCURY	ug/L	N		0.000039 J	0.00024 J	0.000054 J	0.00006 J	0.0001 J	0.00011 J	0.00013 J
E1631	MERCURY	ug/L	N		0.0022 J	0.0011 J	0.00087 J	0.0009 J	0.00074 J	0.00068 J	0.00088 J
E1631	MERCURY	ug/L	Y		0.0004 J	0.00034 J					
UFI SOP	CALCIUM	mg/L	N								
UFI SOP	CHLORIDE	mg/L	N								
UFI SOP	CHLOROPHYLL-A	ug/L	N								
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y								
UFI SOP	FERROUS IRON (II)	ug/l	N	3 J							
UFI SOP	METHANE	ug/L	N	1100							
UFI SOP	NITRITE	mg/l	N								
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N								
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N								
UFI SOP	SULFIDE	mg/L	N	0.056 U							
UFI SOP	TOTAL CARBON	mg/l	N								
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N								
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N								
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N								
UFI SOP	Total Suspended Solids	mg/l	N								

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		Field Sample ID	OL-1628-01	OL-1628-02	OL-1628-03	OL-1628-04	OL-1628-05	OL-1628-06	OL-1628-07	OL-1628-08
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	6.6-6.6 ft	6.6-6.6 ft	6.6-6.6 ft	33-33 ft	39.6-39.6 ft	46.2-46.2 ft	52.8-52.8 ft	59.4-59.4 ft	
	Sample Date	10/10/2011	10/10/2011	10/10/2011	10/10/2011	10/10/2011	10/10/2011	10/10/2011	10/10/2011	10/10/2011
	SDG	UFICHM2011-063	UFICHM2011-063	UFICHM2011-063	UFICHM2011-063	UFICHM2011-063	UFICHM2011-063	UFICHM2011-063	UFICHM2011-063	UFICHM2011-063
	Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water
	Sample Purpose	Regular sample	Field duplicate	Second field duplicate	Regular sample					
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N							
E1631	MERCURY	ug/L	N							
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N	125.7	126.1	127.3	125.5	124.1	124.9	124.7
UFI SOP	CHLORIDE	mg/L	N	409.1	379.9	389.6	379.9	350.7	340.9	350.7
UFI SOP	CHLOROPHYLL-A	ug/L	N	18.1	17.5	18.5	2.1			
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y	3.5	3.7	3.5	3.1	2.8	2.9	2.9
UFI SOP	FERROUS IRON (II)	ug/l	N					3 J	10 U	
UFI SOP	METHANE	ug/L	N				500 U	500 U	900	
UFI SOP	NITRITE	mg/l	N	0.044	0.042	0.042	0.029	0.007 J	0.006 J	0.013 J
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.04 UJ	0.04 UJ	0.04 UJ	0.412 J	0.792 J	1.195 J	1.318 J
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.911	1.906	2.081 J	1.463	1.351	1.637	2.097
UFI SOP	SULFIDE	mg/L	N					0.056 U	0.056 U	
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N	38	38.2	37.1	51.3	54.2	54.4	56.4
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1628-09	OL-1628-10	OL-1628-11	OL-1630-02	OL-1630-03	OL-1630-04	OL-1630-05	OL-1630-06
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	59.4-59.4 Ft	59.4-59.4 Ft	59.4-59.4 Ft	6.6-6.6 ft	6.6-6.6 ft	33-33 ft	39.6-39.6 ft	46.2-46.2 ft	
	Sample Date	10/10/2011	10/10/2011	10/10/2011	10/10/2011	10/10/2011	10/10/2011	10/10/2011	10/10/2011	10/10/2011
	SDG	UFICHM2011-063	UFICHM2011-063	UFICHM2011-063	240-4727-1	240-4727-1	240-4727-1	240-4727-1	240-4727-1	240-4727-1
	Matrix	WATER	WATER	WATER	Water	Water	Water	Water	Water	Water
	Sample Purpose	Regular sample	Field duplicate	Second field duplicate	Regular sample	Field duplicate	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	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N			0.000081	0.000087	0.000051	0.000045 J	0.000046 J
E1631	MERCURY	ug/L	N			0.00092 J	0.00055 J	0.00069 J	0.00047 J	0.00038 J
E1631	MERCURY	ug/L	Y			0.00016 J	0.00023 J			
UFI SOP	CALCIUM	mg/L	N							
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N	10 U	10 U	10 U				
UFI SOP	METHANE	ug/L	N	1000	1000	1100				
UFI SOP	NITRITE	mg/l	N							
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N							
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N							
UFI SOP	SULFIDE	mg/L	N	0.056 U	0.056 U	0.056 U				
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1630-07	OL-1630-08	OL-1634-01	OL-1634-02	OL-1634-03	OL-1634-04	OL-1634-05	OL-1634-06
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	52.8-52.8 ft	59.4-59.4 ft	6.6-6.6 ft	6.6-6.6 ft	6.6-6.6 ft	33-33 ft	39.6-39.6 ft	46.2-46.2 ft	
	Sample Date	10/10/2011	10/10/2011	10/17/2011	10/17/2011	10/17/2011	10/17/2011	10/17/2011	10/17/2011	10/17/2011
	SDG	240-4727-1	240-4727-1	UFICHM2011-066	UFICHM2011-066	UFICHM2011-066	UFICHM2011-066	UFICHM2011-066	UFICHM2011-066	UFICHM2011-066
	Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water
	Sample Purpose	Regular sample	Regular sample	Regular sample	Field duplicate	Second field duplicate	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	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	0.000083	0.000087					
E1631	MERCURY	ug/L	N	0.00046 J	0.00056 J					
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N		128.1	127.9	128.9	130.3	129.3	125.5
UFI SOP	CHLORIDE	mg/L	N		392.2	392.2	392.2		392.2	352.9
UFI SOP	CHLOROPHYLL-A	ug/L	N		12	11.9	10.8		8.6	
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y		3.5	3.5	3.5		3.4	2.8
UFI SOP	FERROUS IRON (II)	ug/l	N							10 U
UFI SOP	METHANE	ug/L	N							800
UFI SOP	NITRITE	mg/l	N		0.06	0.061	0.061	0.061	0.058	0.006 J
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N		0.101	0.102	0.108	0.102	0.125	1.019
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N		2.119	2.143	2.13	2.06	2.045	1.94
UFI SOP	SULFIDE	mg/L	N							0.056 U
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N		41.9	41.7	43.2		43.1	54.7
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1634-07	OL-1634-08	OL-1634-09	OL-1634-10	OL-1634-11	OL-1636-02	OL-1636-03	OL-1636-04
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	52.8-52.8 ft	59.4-59.4 Ft	59.4-59.4 Ft	59.4-59.4 Ft	59.4-59.4 Ft	59.4-59.4 Ft	6.6-6.6 ft	6.6-6.6 ft	33-33 ft
	Sample Date	10/17/2011	10/17/2011	10/17/2011	10/17/2011	10/17/2011	10/17/2011	10/17/2011	10/17/2011	10/17/2011
	SDG	UFICHM2011-066	UFICHM2011-066	UFICHM2011-066	UFICHM2011-066	UFICHM2011-066	UFICHM2011-066	240-4950-1	240-4950-1	240-4950-1
	Matrix	Water	WATER	WATER	WATER	WATER	WATER	Water	Water	Water
	Sample Purpose	Regular sample	Regular sample	Regular sample	Field duplicate	Second field duplicate	Regular sample	Field duplicate	Regular sample	
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N					0.00008	0.000087	0.000067
E1631	MERCURY	ug/L	N					0.0027	0.0021	0.00095
E1631	MERCURY	ug/L	Y					0.00016 J	0.00021 J	
UFI SOP	CALCIUM	mg/L	N	125.3	123.3					
UFI SOP	CHLORIDE	mg/L	N	352.9	421.6					
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y	3	3					
UFI SOP	FERROUS IRON (II)	ug/l	N	10 U		10 U	10 U	3 J		
UFI SOP	METHANE	ug/L	N	800		800	500	900		
UFI SOP	NITRITE	mg/l	N	0.006 J	0.011 J					
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	1.141	1.319					
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	2.16	2.343					
UFI SOP	SULFIDE	mg/L	N	0.056 U		0.056 U	0.056 U	0.056 U		
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N	54.9	55.7					
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1636-05	OL-1636-06	OL-1636-07	OL-1636-08	OL-1641-01	OL-1641-02	OL-1641-03	OL-1641-04
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	39.6-39.6 ft	46.2-46.2 ft	52.8-52.8 ft	59.4-59.4 ft	6.6-6.6 ft	6.6-6.6 ft	6.6-6.6 ft	33-33 ft	
	Sample Date	10/17/2011	10/17/2011	10/17/2011	10/17/2011	10/24/2011	10/24/2011	10/24/2011	10/24/2011	10/24/2011
	SDG	240-4950-1	240-4950-1	240-4950-1	240-4950-1	240-4950-1	UFICHM2011-069	UFICHM2011-069	UFICHM2011-069	UFICHM2011-069
	Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water
	Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Field duplicate	Second field duplicate	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	0.000073	0.000057	0.000063	0.000073			
E1631	MERCURY	ug/L	N	0.00091	0.00058	0.00058	0.00081			
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N					135.3	133.5	134.2
UFI SOP	CHLORIDE	mg/L	N					431.4	402	392.2
UFI SOP	CHLOROPHYLL-A	ug/L	N					10	7.7	10.5
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y					3.2	3.2	3.2
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N					0.046	0.04	0.038
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N					0.177	0.161	0.162
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N					1.735	1.685	1.69
UFI SOP	SULFIDE	mg/L	N							
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N					41.8	42.2	40
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1641-05	OL-1641-06	OL-1641-07	OL-1641-08	OL-1641-09	OL-1641-10	OL-1641-11	OL-1643-02
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	39.6-39.6 ft	46.2-46.2 ft	52.8-52.8 ft	59.4-59.4 Ft	59.4-59.4 Ft	59.4-59.4 ft	59.4-59.4 Ft	59.4-59.4 Ft	6.6-6.6 ft
	Sample Date	10/24/2011	10/24/2011	10/24/2011	10/24/2011	10/24/2011	10/24/2011	10/24/2011	10/24/2011	10/24/2011
	SDG	UFICHM2011-069	UFICHM2011-069	UFICHM2011-069	UFICHM2011-069	UFICHM2011-069	UFICHM2011-069	UFICHM2011-069	UFICHM2011-069	240-5210-1
	Matrix	Water	Water	Water	WATER	WATER	Water	WATER	WATER	Water
	Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Field duplicate	Second field duplicate	Regular sample	
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N							0.000065 J
E1631	MERCURY	ug/L	N							0.0015
E1631	MERCURY	ug/L	Y							0.00014 J
UFI SOP	CALCIUM	mg/L	N	134.9	133.5	133.5	136			
UFI SOP	CHLORIDE	mg/L	N	392.2	402	372.5	421.6			
UFI SOP	CHLOROPHYLL-A	ug/L	N	9.8						
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y	3.2	2.9	2.7	2.8			
UFI SOP	FERROUS IRON (II)	ug/l	N		10 U	7 J		7 J	7 J	5 J
UFI SOP	METHANE	ug/L	N		500 U	900		500	500	700
UFI SOP	NITRITE	mg/l	N	0.04	0.017	0.015 U	0.013 J			
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.162	0.549	1.117	1.129			
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.646	1.506	1.766	1.585			
UFI SOP	SULFIDE	mg/L	N		0.056 U	0.056 U		0.056 U	0.056 U	0.056 U
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N	41.1	50.2	54.2	53.5			
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1643-03	OL-1643-04	OL-1643-05	OL-1643-06	OL-1643-07	OL-1643-08	OL-1646-01	OL-1646-02
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	6.6-6.6 ft	33-33 ft	39.6-39.6 ft	46.2-46.2 ft	52.8-52.8 ft	59.4-59.4 ft	6.6-6.6 ft	6.6-6.6 ft	6.6-6.6 ft
	Sample Date	10/24/2011	10/24/2011	10/24/2011	10/24/2011	10/24/2011	10/24/2011	10/24/2011	10/31/2011	10/31/2011
	SDG	240-5210-1	240-5210-1	240-5210-1	240-5210-1	240-5210-1	240-5210-1	240-5210-1	UFICHM2011-070	UFICHM2011-070
	Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water
	Sample Purpose	Field duplicate	Regular sample	Field duplicate Se						
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	0.000072 J	0.00006 J	0.000067 J	0.000027 J	0.00004 J	0.000028 J	
E1631	MERCURY	ug/L	N	0.0013	0.00069	0.0007	0.00053	0.00047 J	0.00055	
E1631	MERCURY	ug/L	Y	0.00019 J						
UFI SOP	CALCIUM	mg/L	N							133.3
UFI SOP	CHLORIDE	mg/L	N							133.8
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N						0.039	0.04
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N						0.238 J	0.236 J
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N						1.681	1.862
UFI SOP	SULFIDE	mg/L	N							
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1646-03	OL-1646-04	OL-1646-05	OL-1646-06	OL-1648-02	OL-1648-03	OL-1648-04	OL-1648-05
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	6.6-6.6 Ft	39.6-39.6 Ft	52.8-52.8 Ft	59.4-59.4 ft	6.6-6.6 ft	6.6-6.6 ft	39.6-39.6 ft	52.8-52.8 ft	
	Sample Date	10/31/2011	10/31/2011	10/31/2011	10/31/2011	10/31/2011	10/31/2011	10/31/2011	10/31/2011	10/31/2011
	SDG	UFICHM2011-070	UFICHM2011-070	UFICHM2011-070	UFICHM2011-070	UFICHM2011-070	240-5421-1	240-5421-1	240-5421-1	240-5421-1
	Matrix	WATER	WATER	WATER	Water	Water	Water	Water	Water	Water
	Sample Purpose	cond field duplicate	Regular sample	Regular sample	Regular sample	Regular sample	Field duplicate	Regular sample	Regular sample	
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N				0.000067 J	0.000033 J	0.00007 J	0.000045 J
E1631	MERCURY	ug/L	N				0.0023	0.001	0.00091	0.00087
E1631	MERCURY	ug/L	Y				0.00017 J	0.00034 J		
UFI SOP	CALCIUM	mg/L	N	134	133.3	133.3	127.3			
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.039	0.039	0.039	0.028			
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.369 J	0.23 J	0.234 J	0.267 J			
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.831	1.786	1.75	1.721			
UFI SOP	SULFIDE	mg/L	N							
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1648-06	OL-1653-01	OL-1653-02	OL-1653-03	OL-1653-04	OL-1653-05
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	59.4-59.4 ft	6.6-6.6 ft	6.6-6.6 ft	6.6-6.6 ft	39.6-39.6 ft	59.4-59.4 ft	
	Sample Date	10/31/2011	11/7/2011	11/7/2011	11/7/2011	11/7/2011	11/7/2011	11/7/2011
	SDG	240-5421-1	UFICHM2011-074	UFICHM2011-074	UFICHM2011-074	UFICHM2011-074	UFICHM2011-074	UFICHM2011-074
	Matrix	Water	Water	Water	Water	Water	Water	Water
	Sample Purpose	Regular sample	Regular sample	Field duplicate	Second field duplicate	Regular sample	Regular sample	
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered					
E1630	METHYL MERCURY	ug/L	N	0.000022 J				
E1631	MERCURY	ug/L	N	0.0011				
E1631	MERCURY	ug/L	Y					
UFI SOP	CALCIUM	mg/L	N		134.4	133.8	134	132.7
UFI SOP	CHLORIDE	mg/L	N		375	375	375	384.6
UFI SOP	CHLOROPHYLL-A	ug/L	N		5.9 J	6.1 J	3.4 J	6.4 J
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y		3.3	3.3	3.2	3.3
UFI SOP	FERROUS IRON (II)	ug/l	N					
UFI SOP	METHANE	ug/L	N					
UFI SOP	NITRITE	mg/l	N		0.043	0.044	0.044	0.044
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N		0.265	0.278	0.281	0.264
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N		1.839	1.842	1.944	1.97
UFI SOP	SULFIDE	mg/L	N					
UFI SOP	TOTAL CARBON	mg/l	N					
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N					
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N		44.9	45	44.8	44.3
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N					48.4
UFI SOP	Total Suspended Solids	mg/l	N					

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		Field Sample ID	OL-1655-02	OL-1655-03	OL-1655-04	OL-1655-05	OL-1661-01	OL-1661-02	OL-1661-03	OL-1661-04
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	6.6-6.6 ft	6.6-6.6 ft	39.6-39.6 ft	59.4-59.4 ft	6.6-6.6 FT	6.6-6.6 FT	6.6-6.6 FT	39.6-39.6 FT	
	Sample Date	11/7/2011	11/7/2011	11/7/2011	11/7/2011	11/21/2011	11/21/2011	11/21/2011	11/21/2011	11/21/2011
	SDG	240-5675-1	240-5675-1	240-5675-1	240-5675-1	UFICHM2011-077	UFICHM2011-077	UFICHM2011-077	UFICHM2011-077	UFICHM2011-077
	Matrix	Water	Water	Water	Water	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Regular sample	Field duplicate	Regular sample	Regular sample	Regular sample	Field duplicate	second field duplicate	Regular sample	
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	7.10E-05 J	6.20E-05 J	5.00E-05 J	5.90E-05 J			
E1631	MERCURY	ug/L	N	0.0012	0.0011	0.00071	0.0011			
E1631	MERCURY	ug/L	Y	0.00023 J	0.00029 J					
UFI SOP	CALCIUM	mg/L	N					134.2	135.3	135.6
UFI SOP	CHLORIDE	mg/L	N					375	384.9	384.9
UFI SOP	CHLOROPHYLL-A	ug/L	N					2	1.3	2.3
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y					3.1	3.2	3.1
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N					0.059	0.058	0.06
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N					0.327	0.455	0.332
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N					1.951	1.975	1.956
UFI SOP	SULFIDE	mg/L	N							
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N					43.8	45.4	44.8
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N							
UFI SOP	Total Suspended Solids	mg/L	N							

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		Field Sample ID	OL-1661-05	OL-1663-02	OL-1663-03	OL-1663-04	OL-1663-05	OL-1409-01	OL-1414-01	OL-1423-01	
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	FIELD QC	FIELD QC	FIELD QC		
	Sample Depth	59.4-59.4 FT	6.6-6.6 ft	6.6-6.6 ft	39.6-39.6 ft	59.4-59.4 ft					
	Sample Date	11/21/2011	11/21/2011	11/21/2011	11/21/2011	11/21/2011	5/23/2011	6/6/2011	6/6/2011	6/20/2011	
	SDG	UFICHM2011-077	240-6181-1	240-6181-1	240-6181-1	240-6181-1	240-394-1	240-912-1	240-1292-1		
	Matrix	WATER	Water	Water	Water	Water	Water	Water	Water	WATER	
	Sample Purpose	Regular sample	Regular sample	Field duplicate	Regular sample	Regular sample	Field blank	Field blank	Field blank		
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Blank water (field)	Blank water (field)	Blank water (field)		
Method	Parameter Name	Units	Filtered								
E1630	METHYL MERCURY	ug/L	N		4.70E-05 J	5.50E-05	4.00E-05 J	4.60E-05 J	1.00E-05 U	1.00E-05 U	2.20E-05 J
E1631	MERCURY	ug/L	N		0.0013	0.00087	0.00075	0.0012	0.00019 J	0.00072	0.00012 U
E1631	MERCURY	ug/L	Y		0.00054	0.00047 J			0.00045 J	0.0005 U	0.0005 U
UFI SOP	CALCIUM	mg/L	N	133.1							
UFI SOP	CHLORIDE	mg/L	N	394.8							
UFI SOP	CHLOROPHYLL-A	ug/L	N								
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y	3.3							
UFI SOP	FERROUS IRON (II)	ug/l	N								
UFI SOP	METHANE	ug/L	N								
UFI SOP	NITRITE	mg/l	N	0.058							
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.294							
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	2.033							
UFI SOP	SULFIDE	mg/L	N								
UFI SOP	TOTAL CARBON	mg/l	N								
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N								
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N	44.5							
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N								
UFI SOP	Total Suspended Solids	mg/L	N								

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		Field Sample ID	OL-1425-01	OL-1428-01	OL-1435-01	OL-1439-01	OL-1444-18	OL-1446-01	OL-1448-01	OL-1449-18
	Location	FIELD QC								
	Sample Depth									
	Sample Date	6/22/2011	6/27/2011	7/5/2011	7/11/2011	7/18/2011	7/18/2011	7/18/2011	7/20/2011	7/26/2011
	SDG	240-1388-1	240-1516-1	240-1706-1	240-1847-1	UFICHM2011-030	240-2041-1	240-2107-1	UFICHM2011-032	
	Matrix	WATER								
	Sample Purpose	Field blank								
	Sample Type	Blank water (field)								
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	3.10E-05 J	1.50E-05 J	1.10E-05 J	1.70E-05 J	1.50E-05 J	3.20E-05 J	
E1631	MERCURY	ug/L	N	0.00012 U	0.00034 J	0.00022 J	0.00019 J	0.00018 J	0.0005 UJ	
E1631	MERCURY	ug/L	Y			0.00026 J		0.00012 UJ		
UFI SOP	CALCIUM	mg/L	N					1.4 U		1.4 U
UFI SOP	CHLORIDE	mg/L	N					100 U		
UFI SOP	CHLOROPHYLL-A	ug/L	N					0.3 U		
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y					0.9 U		
UFI SOP	FERROUS IRON (II)	ug/l	N					10 U		5 U
UFI SOP	METHANE	ug/L	N					500 U		
UFI SOP	NITRITE	mg/l	N					0.015 U		0.015 U
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N					0.018 J		0.04 U
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N					0.037 U		0.037 U
UFI SOP	SULFIDE	mg/L	N					0.056 U		
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N					6.3 U		
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N							
UFI SOP	Total Suspended Solids	mg/L	N							

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		Field Sample ID	OL-1451-01	OL-1457-18	OL-1459-01	OL-1461-18	OL-1463-01	OL-1467-18	OL-1469-01	OL-1474-01			
	Location	FIELD QC	FIELD QC										
	Sample Depth												
	Sample Date	7/26/2011	8/1/2011	8/1/2011	8/8/2011	8/8/2011	8/15/2011	8/15/2011	8/15/2011	8/17/2011			
	SDG	240-2265-1	UFICHM2011-037	240-2405-1	UFICHM2011-038	240-2655-1	UFICHM2011-041	240-2881-1	240-2961-1				
	Matrix	WATER											
	Sample Purpose	Field blank											
	Sample Type	Blank water (field)											
Method	Parameter Name	Units	Filtered										
E1630	METHYL MERCURY	ug/L	N	5.00E-05	UJ	4.30E-05	J	9.50E-05		5.00E-05	U	5.00E-05	U
E1631	MERCURY	ug/L	N	0.00012	UJ	0.00044	J	0.0005	U	0.00012	U	0.00012	U
E1631	MERCURY	ug/L	Y			0.00041	J			0.0005	U		
UFI SOP	CALCIUM	mg/L	N		1.4	U		1.4	U	1.4	U		
UFI SOP	CHLORIDE	mg/L	N		100	U				100	U		
UFI SOP	CHLOROPHYLL-A	ug/L	N		0.3	U				0.3	U		
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y		0.9	U				0.9	U		
UFI SOP	FERROUS IRON (II)	ug/l	N		10	U		5	U	10	U		
UFI SOP	METHANE	ug/L	N		500	U				500	U		
UFI SOP	NITRITE	mg/l	N		0.015	U		0.015	U	0.015	U		
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N		0.015	J		0.01	U	0.04	U		
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N		0.01	J		0.037	U	0.03	J		
UFI SOP	SULFIDE	mg/L	N		0.056	U		0.056	U	0.056	U		
UFI SOP	TOTAL CARBON	mg/l	N										
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N										
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N		6.3	U				6.3	UJ		
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N										
UFI SOP	Total Suspended Solids	mg/L	N										

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		Field Sample ID	OL-1475-18	OL-1477-01	OL-1481-18	OL-1483-01	OL-1488-18	OL-1490-01	OL-1601-18	OL-1603-01
	Location	FIELD QC								
	Sample Depth									
	Sample Date	8/22/2011	8/22/2011	8/29/2011	8/29/2011	9/6/2011	9/6/2011	9/12/2011	9/12/2011	9/12/2011
	SDG	UFICHM2011-043	240-3088-1	UFICHM2011-047	240-3323-1	UFICHM2011-049	240-3546-1	UFICHM2011-052	240-3757-1	
	Matrix	Water								
	Sample Purpose	Field blank								
	Sample Type	Blank water (field)								
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N		1.50E-04 J		1.00E-05 U		1.20E-05 J	5.00E-05 UJ
E1631	MERCURY	ug/L	N		0.00012 UJ		0.0003 J		0.00023 J	0.00021 J
E1631	MERCURY	ug/L	Y				0.00012 U		0.00014 J	0.00025 J
UFI SOP	CALCIUM	mg/L	N	1.4 U		1.4 U		1.4 U		1.4 U
UFI SOP	CHLORIDE	mg/L	N			100 U		100 U		100 U
UFI SOP	CHLOROPHYLL-A	ug/L	N			0.3 U		0.3 U		0.3 U
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y			0.9 U		0.9 U		0.3 J
UFI SOP	FERROUS IRON (II)	ug/l	N	5 U		10 U		10 U		10 U
UFI SOP	METHANE	ug/L	N			500 U		500 U		500 U
UFI SOP	NITRITE	mg/l	N	0.015 U		0.015 U		0.015 U		0.015 U
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.01 UJ		0.04 U		0.04 U		0.04 U
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	0.037 UJ		0.017 J		0.017 J		0.037 UJ
UFI SOP	SULFIDE	mg/L	N	0.056 U		0.056 U		0.056 U		0.056 U
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N			6.3 U		6.3 U		6.3 U
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N							
UFI SOP	Total Suspended Solids	mg/L	N							

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		Field Sample ID	OL-1605-18	OL-1607-01	OL-1612-01	OL-1613-01	OL-1614-18	OL-1616-01	OL-1621-18	OL-1623-01
	Location	FIELD QC								
	Sample Depth									
	Sample Date	9/19/2011	9/19/2011	9/21/2011	9/21/2011	9/26/2011	9/26/2011	9/26/2011	10/3/2011	10/3/2011
	SDG	UFICHM2011-057	240-4004-1	240-4088-1	UFICHM2011-059	UFICHM2011-060	240-4233-1	UFICHM2011-061		240-4464-1
	Matrix	Water								
	Sample Purpose	Field blank								
	Sample Type	Blank water (field)								
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N		1.00E-05	UJ	5.00E-05			2.60E-04 J
E1631	MERCURY	ug/L	N		0.0005	U	0.00046	J		0.0005 UJ
E1631	MERCURY	ug/L	Y		0.00034	J				0.00041 J
UFI SOP	CALCIUM	mg/L	N	1.4	U			1.4	U	
UFI SOP	CHLORIDE	mg/L	N	100	U			100	U	
UFI SOP	CHLOROPHYLL-A	ug/L	N	0.3	U			0.3	U	
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y	0.9	U			0.9	U	
UFI SOP	FERROUS IRON (II)	ug/l	N	10	U			10	U	10 U
UFI SOP	METHANE	ug/L	N	500	U			500	U	500 U
UFI SOP	NITRITE	mg/l	N	0.015	U		0.015	U	0.015	U
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.04	U			0.011	J	
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	0.037	U		0.037	U	0.037	U
UFI SOP	SULFIDE	mg/L	N	0.056	U			0.056	U	0.056 U
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N	6.3	U			6.3	U	6.3 U
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N							
UFI SOP	Total Suspended Solids	mg/L	N							

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		Field Sample ID	OL-1628-18	OL-1630-01	OL-1632-01	OL-1633-01	OL-1634-18	OL-1636-01	OL-1641-18	OL-1643-01
	Location	FIELD QC								
	Sample Depth									
	Sample Date	10/10/2011	10/10/2011	10/13/2011	10/13/2011	10/17/2011	10/17/2011	10/24/2011	10/24/2011	10/24/2011
	SDG	UFICHM2011-063	240-4727-1	240-4870-1	UFICHM2011-064	UFICHM2011-066	240-4950-1	UFICHM2011-069	240-5210-1	
	Matrix	Water								
	Sample Purpose	Field blank								
	Sample Type	Blank water (field)								
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N		1.00E-05 U	1.00E-05 UJ		1.00E-05 U		1.00E-05 UJ
E1631	MERCURY	ug/L	N		0.00062 J	0.00085 J		0.00029 J		0.00032 J
E1631	MERCURY	ug/L	Y		0.00012 U			0.00013 J		0.00023 J
UFI SOP	CALCIUM	mg/L	N	1.4 U					1.4 U	
UFI SOP	CHLORIDE	mg/L	N	100 U					100 U	
UFI SOP	CHLOROPHYLL-A	ug/L	N	0.3 U					0.3 U	
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y	0.9 U					0.9 U	
UFI SOP	FERROUS IRON (II)	ug/l	N	10 U			10 U		10 U	
UFI SOP	METHANE	ug/L	N	500 U			500 U		500 U	
UFI SOP	NITRITE	mg/l	N	0.015 U		0.015 U			0.015 U	
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.04 UJ					0.04 U	
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	0.037 U		0.037 U			0.037 U	
UFI SOP	SULFIDE	mg/L	N	0.056 U			0.056 U		0.056 U	
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N	6.3 U					6.3 U	
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N							
UFI SOP	Total Suspended Solids	mg/L	N							

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		Field Sample ID	OL-1646-14	OL-1648-01	OL-1653-09	OL-1655-01	OL-1661-09	OL-1663-01	OL-1425-04	OL-1448-04
	Location	FIELD QC	ISUS-11	ISUS-11						
	Sample Depth								59.4-59.4 FT	59.4-59.4 FT
	Sample Date	10/31/2011	10/31/2011	11/7/2011	11/7/2011	11/21/2011	11/21/2011	11/21/2011	6/22/2011	7/20/2011
	SDG	UFICHM2011-070	240-5421-1	UFICHM2011-074	240-5675-1	UFICHM2011-077	240-6181-1	240-1388-1	240-2107-1	
	Matrix	Water	WATER	WATER						
	Sample Purpose	Field blank	Regular sample	Regular sample						
	Sample Type	Blank water (field)	Surface water	Surface water						
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N		1.30E-05	J		1.00E-05	U	6.70E-05
E1631	MERCURY	ug/L	N		0.00069		0.0003	J	U	0.0014
E1631	MERCURY	ug/L	Y		0.0002	J	0.00012	U	0.00012	J
UFI SOP	CALCIUM	mg/L	N	1.4	U		1.4	U		
UFI SOP	CHLORIDE	mg/L	N			100	U	100	U	
UFI SOP	CHLOROPHYLL-A	ug/L	N			0.3	UJ	0.3	U	
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y			0.9	U	0.9	U	
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.015	U	0.015	U	0.015	U	
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N	0.04	UJ	0.021	J	0.02	J	
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	0.037	U	0.037	U	0.012	J	
UFI SOP	SULFIDE	mg/L	N							
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N			6.3	U	6.3	U	
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N							
UFI SOP	Total Suspended Solids	mg/L	N							

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		Field Sample ID	OL-1474-04	OL-1612-04	OL-1613-04	OL-1632-04	OL-1633-04	OL-1425-05	OL-1448-05	OL-1474-05
	Location	ISUS-11	ISUS-11	ISUS-11	ISUS-11	ISUS-11	ISUS-11	ISUS-14	ISUS-14	ISUS-14
	Sample Depth	59.4-59.4 Ft	59.4-59.4 FT	59.4-59.4 FT	59.4-59.4 ft	59.4-59.4 ft	46.2-46.2 FT	46.2-46.2 FT	49.5-49.5 Ft	
	Sample Date	8/17/2011	9/21/2011	9/21/2011	10/13/2011	10/13/2011	6/22/2011	7/20/2011	8/17/2011	
	SDG	240-2961-1	240-4088-1	UFICHM2011-059	240-4870-1	UFICHM2011-064	240-1388-1	240-2107-1	240-2961-1	
	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	
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	1.60E-04	1.20E-04		6.30E-05 J	6.70E-05	8.00E-05	1.40E-04
E1631	MERCURY	ug/L	N	0.0013	0.0012 J		0.00095 J	0.0018	0.00061 J	0.0044
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N							
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N		0.04		0.018			
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N							
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N		1.864		3.423			
UFI SOP	SULFIDE	mg/L	N							
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N							
UFI SOP	Total Suspended Solids	mg/L	N							

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		Field Sample ID	OL-1612-05	OL-1613-05	OL-1632-05	OL-1633-05	OL-1425-06	OL-1448-06	OL-1474-06	OL-1612-06
	Location	ISUS-14	ISUS-14	ISUS-14	ISUS-14	ISUS-18	ISUS-18	ISUS-18	ISUS-18	ISUS-18
	Sample Depth	49.5-49.5 FT	49.5-49.5 FT	49.5-49.5 ft	49.5-49.5 ft	59.4-59.4 FT	59.4-59.4 FT	59.4-59.4 Ft	61.1-61.1 FT	
	Sample Date	9/21/2011	9/21/2011	10/13/2011	10/13/2011	6/22/2011	7/20/2011	8/17/2011	9/21/2011	
	SDG	240-4088-1	UFICHM2011-059	240-4870-1	UFICHM2011-064	240-1388-1	240-2107-1	240-2961-1	240-4088-1	
	Matrix	WATER	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	9.00E-05 J		3.40E-05 J		1.20E-04	1.10E-04	1.40E-04
E1631	MERCURY	ug/L	N	0.0017 J		0.0005 J		0.0016	0.00048 J	0.00087
E1631	MERCURY	ug/L	Y							0.0013 J
UFI SOP	CALCIUM	mg/L	N							
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N		0.038		0.025			
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N							
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N		1.482		1.639			
UFI SOP	SULFIDE	mg/L	N							
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N							
UFI SOP	Total Suspended Solids	mg/L	N							

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		Field Sample ID	OL-1613-06	OL-1632-06	OL-1633-06	OL-1612-14	OL-1613-14	OL-1632-14	OL-1633-14	OL-1425-07
	Location	ISUS-18	ISUS-18	ISUS-18	ISUS-19	ISUS-19	ISUS-19	ISUS-19	ISUS-19	ISUS-21
	Sample Depth	61.1-61.1 FT	61.05-61.05 ft	61.05-61.05 ft	47.9-47.9 FT	47.9-47.9 FT	47.85-47.85 ft	47.85-47.85 ft	29.7-29.7 FT	
	Sample Date	9/21/2011	10/13/2011	10/13/2011	9/21/2011	9/21/2011	10/13/2011	10/13/2011	10/13/2011	6/22/2011
	SDG	UFICHM2011-059	240-4870-1	UFICHM2011-064	240-4088-1	UFICHM2011-059	240-4870-1	UFICHM2011-064	240-4870-1	UFICHM2011-064
	Matrix	WATER	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N		9.10E-05 J		8.20E-05 J		6.00E-05 J	8.60E-05 J
E1631	MERCURY	ug/L	N		0.00085 J		0.0013 J		0.00065 J	0.002
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/L	N							
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.053		0.012 J		0.033		0.009 J
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N							
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	4.223		2.812		1.315		1.715
UFI SOP	SULFIDE	mg/L	N							
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N							
UFI SOP	Total Suspended Solids	mg/L	N							

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		Field Sample ID	OL-1448-07	OL-1474-07	OL-1612-07	OL-1613-07	OL-1632-07	OL-1633-07	OL-1425-08	OL-1448-08	
	Location	ISUS-21	ISUS-21	ISUS-21	ISUS-21	ISUS-21	ISUS-21	ISUS-21	ISUS-22	ISUS-22	
	Sample Depth	29.7-29.7 FT	39.6-39.6 Ft	39.6-39.6 FT	39.6-39.6 FT	39.6-39.6 ft	39.6-39.6 ft	39.6-39.6 ft	51.2-51.2 FT	51.15-51.15 FT	
	Sample Date	7/20/2011	8/17/2011	9/21/2011	9/21/2011	10/13/2011	10/13/2011	10/13/2011	6/22/2011	7/20/2011	
	SDG	240-2107-1	240-2961-1	240-4088-1	UFICHM2011-059	240-4870-1	UFICHM2011-064	240-1388-1	240-2107-1	240-2107-1	
	Matrix	Water	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	Regular sample	
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	
Method	Parameter Name	Units	Filtered								
E1630	METHYL MERCURY	ug/L	N	6.80E-05	8.40E-05	1.20E-04		8.50E-05 J		6.30E-05	1.00E-04
E1631	MERCURY	ug/L	N	0.00038 J	0.00091	0.002 J		0.00066 J		0.0012	0.00049 J
E1631	MERCURY	ug/L	Y								
UFI SOP	CALCIUM	mg/L	N								
UFI SOP	CHLORIDE	mg/L	N								
UFI SOP	CHLOROPHYLL-A	ug/L	N								
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y								
UFI SOP	FERROUS IRON (II)	ug/l	N								
UFI SOP	METHANE	ug/L	N								
UFI SOP	NITRITE	mg/l	N				0.007 J		0.065		
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N								
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N				0.726		1.294		
UFI SOP	SULFIDE	mg/L	N								
UFI SOP	TOTAL CARBON	mg/l	N								
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N								
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N								
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N								
UFI SOP	Total Suspended Solids	mg/L	N								

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		Field Sample ID	OL-1474-08	OL-1612-08	OL-1613-08	OL-1632-08	OL-1633-08	OL-1425-09	OL-1448-09	OL-1474-09		
	Location	ISUS-22	ISUS-22	ISUS-22	ISUS-22	ISUS-22	ISUS-23	ISUS-23	ISUS-23	ISUS-23		
	Sample Depth	52.8-52.8 Ft	52.8-52.8 FT	52.8-52.8 FT	52.8-52.8 ft	52.8-52.8 ft	51.2-51.2 Ft	51.15-51.15 FT	52.8-52.8 Ft	52.8-52.8 Ft		
	Sample Date	8/17/2011	9/21/2011	9/21/2011	10/13/2011	10/13/2011	6/22/2011	7/20/2011	8/17/2011	8/17/2011		
	SDG	240-2961-1	240-4088-1	UFICHM2011-059	240-4870-1	UFICHM2011-064	240-1388-1	240-2107-1	240-2961-1	240-2961-1		
	Matrix	WATER	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	Regular sample		
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water		
Method	Parameter Name	Units	Filtered									
E1630	METHYL MERCURY	ug/L	N	2.20E-04	1.40E-04	J	7.80E-05	J	5.00E-05	8.20E-05	1.30E-04	
E1631	MERCURY	ug/L	N	0.0012	0.0012	J	0.00054	J	0.0018	0.00033	J	0.0011
E1631	MERCURY	ug/L	Y									
UFI SOP	CALCIUM	mg/L	N									
UFI SOP	CHLORIDE	mg/L	N									
UFI SOP	CHLOROPHYLL-A	ug/L	N									
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y									
UFI SOP	FERROUS IRON (II)	ug/l	N									
UFI SOP	METHANE	ug/L	N									
UFI SOP	NITRITE	mg/l	N			0.047			0.012	J		
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N									
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N			2.755			2.493			
UFI SOP	SULFIDE	mg/L	N									
UFI SOP	TOTAL CARBON	mg/l	N									
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N									
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N									
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N									
UFI SOP	Total Suspended Solids	mg/L	N									

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		Field Sample ID	OL-1612-09	OL-1613-09	OL-1632-09	OL-1633-09	OL-1425-10	OL-1448-10	OL-1474-10
	Location	ISUS-23	ISUS-23	ISUS-23	ISUS-23	ISUS-26	ISUS-26	ISUS-26	ISUS-26
	Sample Depth	52.8-52.8 FT	52.8-52.8 FT	52.8-52.8 ft	52.8-52.8 ft	47.9-47.9 FT	46.2-46.2 FT	49.5-49.5 Ft	49.5-49.5 Ft
	Sample Date	9/21/2011	9/21/2011	10/13/2011	10/13/2011	6/22/2011	7/20/2011	8/17/2011	8/17/2011
	SDG	240-4088-1	UFICHM2011-059	240-4870-1	UFICHM2011-064	240-1388-1	240-2107-1	240-2961-1	240-2961-1
	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N	1.10E-04 J		7.00E-05 J		5.80E-05	9.00E-05
E1631	MERCURY	ug/L	N	0.0012 J		0.00066 J		0.0016	0.00032 J
E1631	MERCURY	ug/L	Y						0.00087
UFI SOP	CALCIUM	mg/L	N						
UFI SOP	CHLORIDE	mg/L	N						
UFI SOP	CHLOROPHYLL-A	ug/L	N						
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y						
UFI SOP	FERROUS IRON (II)	ug/l	N						
UFI SOP	METHANE	ug/L	N						
UFI SOP	NITRITE	mg/l	N		0.031		0.009 J		
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N						
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N		1.298		1.825		
UFI SOP	SULFIDE	mg/L	N						
UFI SOP	TOTAL CARBON	mg/l	N						
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N						
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N						
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N						
UFI SOP	Total Suspended Solids	mg/L	N						

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		Field Sample ID	OL-1612-10	OL-1613-10	OL-1632-10	OL-1633-10	OL-1425-11	OL-1448-11	OL-1474-11	OL-1612-11	
	Location	ISUS-26	ISUS-26	ISUS-26	ISUS-26	ISUS-26	ISUS-27	ISUS-27	ISUS-27	ISUS-27	
	Sample Depth	49.5-49.5 FT	49.5-49.5 FT	49.5-49.5 ft	49.5-49.5 ft	56.1-56.1 FT	56.1-56.1 FT	56.1-56.1 Ft	56.1-56.8 FT		
	Sample Date	9/21/2011	9/21/2011	10/13/2011	10/13/2011	6/22/2011	7/20/2011	8/17/2011	9/21/2011		
	SDG	240-4088-1	UFICHM2011-059	240-4870-1	UFICHM2011-064	240-1388-1	240-2107-1	240-2961-1	240-4088-1		
	Matrix	Water	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	Regular sample	
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	
Method	Parameter Name	Units	Filtered								
E1630	METHYL MERCURY	ug/L	N	8.80E-05 J		8.70E-05 J		6.30E-05	1.30E-04	2.30E-04	1.00E-04 J
E1631	MERCURY	ug/L	N	0.00089 J		0.00051 J		0.0011	0.00043 J	0.001	0.001 J
E1631	MERCURY	ug/L	Y								
UFI SOP	CALCIUM	mg/l	N								
UFI SOP	CHLORIDE	mg/L	N								
UFI SOP	CHLOROPHYLL-A	ug/L	N								
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y								
UFI SOP	FERROUS IRON (II)	ug/l	N								
UFI SOP	METHANE	ug/L	N								
UFI SOP	NITRITE	mg/l	N		0.037		0.01 J				
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N								
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N		3.017		1.732				
UFI SOP	SULFIDE	mg/L	N								
UFI SOP	TOTAL CARBON	mg/l	N								
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N								
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N								
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N								
UFI SOP	Total Suspended Solids	mg/l	N								

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		Field Sample ID	OL-1613-11	OL-1632-11	OL-1633-11	OL-1425-12	OL-1448-12	OL-1474-12	OL-1612-12	OL-1613-12
	Location	ISUS-27	ISUS-27	ISUS-27	ISUS-29	ISUS-29	ISUS-29	ISUS-29	ISUS-29	ISUS-29
	Sample Depth	56.8-56.8 FT	56.76-56.76 ft	56.76-56.76 ft	49.5-49.5 FT	47.85-47.85 FT	49.5-49.5 Ft	49.5-49.5 FT	49.5-49.5 FT	49.5-49.5 FT
	Sample Date	9/21/2011	10/13/2011	10/13/2011	6/22/2011	7/20/2011	8/17/2011	9/21/2011	9/21/2011	9/21/2011
	SDG	UFICHM2011-059	240-4870-1	UFICHM2011-064	240-1388-1	240-2107-1	240-2961-1	240-4088-1	UFICHM2011-059	
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N		8.50E-05 J		4.50E-05 J	7.80E-05	1.20E-04	7.40E-05 J
E1631	MERCURY	ug/L	N		0.00059 J		0.0014	0.00052 J	0.00078	0.0013 J
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/l	N							
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N	0.04		0.008 J				0.03
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N							
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	2.123		1.945				1.659
UFI SOP	SULFIDE	mg/L	N							
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1632-12	OL-1633-12	OL-1425-13	OL-1448-13	OL-1474-13	OL-1612-13	OL-1613-13	OL-1632-13
	Location	ISUS-29	ISUS-29	ISUS-32						
	Sample Depth	49.5-49.5 ft	49.5-49.5 ft	42.9-42.9 FT	46.2-46.2 FT	42.9-42.9 Ft	44.6-44.6 FT	44.6-44.6 FT	44.55-44.55 ft	
	Sample Date	10/13/2011	10/13/2011	6/22/2011	7/20/2011	8/17/2011	9/21/2011	9/21/2011	9/21/2011	10/13/2011
	SDG	240-4870-1	UFICHM2011-064	240-1388-1	240-2107-1	240-2961-1	240-4088-1	UFICHM2011-059		240-4870-1
	Matrix	Water	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	7.60E-05 J		7.40E-05	1.10E-04	6.40E-05 J		6.30E-05 J
E1631	MERCURY	ug/L	N	0.0006 J		0.0012	0.00068 J	0.0014	0.00068 J	0.00051 J
E1631	MERCURY	ug/L	Y							
UFI SOP	CALCIUM	mg/l	N							
UFI SOP	CHLORIDE	mg/L	N							
UFI SOP	CHLOROPHYLL-A	ug/L	N							
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y							
UFI SOP	FERROUS IRON (II)	ug/l	N							
UFI SOP	METHANE	ug/L	N							
UFI SOP	NITRITE	mg/l	N		0.008 J				0.011 J	
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N							
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N		1.564				1.059	
UFI SOP	SULFIDE	mg/L	N							
UFI SOP	TOTAL CARBON	mg/l	N							
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N							
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N							
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N							
UFI SOP	Total Suspended Solids	mg/l	N							

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		Field Sample ID	OL-1633-13	OL-1612-15	OL-1613-15	OL-1632-15	OL-1633-15	OL-1425-02	OL-1448-02	OL-1474-02	
	Location	ISUS-32	ISUS-45	ISUS-45	ISUS-45	ISUS-45	ISUS-5	ISUS-5	ISUS-5	ISUS-5	
	Sample Depth	44.55-44.55 ft	46.2-46.2 FT	46.2-46.2 FT	46.2-46.2 ft	46.2-46.2 ft	39.6-39.6 FT	36.3-36.3 FT	39.6-39.6 Ft	39.6-39.6 Ft	
	Sample Date	10/13/2011	9/21/2011	9/21/2011	10/13/2011	10/13/2011	6/22/2011	7/20/2011	8/17/2011		
	SDG	UFICHM2011-064	240-4088-1	UFICHM2011-059	240-4870-1	UFICHM2011-064	240-1388-1	240-2107-1	240-2961-1		
	Matrix	Water	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	Regular sample	
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	
Method	Parameter Name	Units	Filtered								
E1630	METHYL MERCURY	ug/L	N		5.40E-05 J		7.10E-05 J		6.40E-05	6.00E-05	8.60E-05
E1631	MERCURY	ug/L	N		0.00097 J		0.00069 J		0.0018	0.0022 J	0.0028
E1631	MERCURY	ug/L	Y								
UFI SOP	CALCIUM	mg/l	N								
UFI SOP	CHLORIDE	mg/L	N								
UFI SOP	CHLOROPHYLL-A	ug/L	N								
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y								
UFI SOP	FERROUS IRON (II)	ug/l	N								
UFI SOP	METHANE	ug/L	N								
UFI SOP	NITRITE	mg/l	N	0.007 J		0.006 J		0.009 J			
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N								
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.508		1.522		1.886			
UFI SOP	SULFIDE	mg/L	N								
UFI SOP	TOTAL CARBON	mg/l	N								
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N								
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N								
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N								
UFI SOP	Total Suspended Solids	mg/l	N								

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		Field Sample ID	OL-1612-02	OL-1613-02	OL-1632-02	OL-1633-02	OL-1425-03	OL-1448-03	OL-1474-03	OL-1612-03	
	Location	ISUS-5	ISUS-5	ISUS-5	ISUS-5	ISUS-5	ISUS-9	ISUS-9	ISUS-9	ISUS-9	
	Sample Depth	39.6-39.6 FT	39.6-39.6 FT	39.6-39.6 ft	39.6-39.6 ft	38-38 FT	26.4-26.4 FT	33-33 Ft	29.7-29.7 FT		
	Sample Date	9/21/2011	9/21/2011	10/13/2011	10/13/2011	6/22/2011	7/20/2011	8/17/2011	9/21/2011		
	SDG	240-4088-1	UFICHM2011-059	240-4870-1	UFICHM2011-064	240-1388-1	240-2107-1	240-2961-1	240-4088-1		
	Matrix	WATER	WATER	Water	Water	WATER	WATER	WATER	WATER	WATER	
	Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Regular sample	Field duplicate	Regular sample		
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	
Method	Parameter Name	Units	Filtered								
E1630	METHYL MERCURY	ug/L	N	1.10E-04 J		2.70E-05 J		6.10E-05	7.10E-05	7.90E-05	4.40E-05 J
E1631	MERCURY	ug/L	N	0.0048 J		0.0014 J		0.0013	0.0015 J	0.0014	0.0053 J
E1631	MERCURY	ug/L	Y								
UFI SOP	CALCIUM	mg/l	N								
UFI SOP	CHLORIDE	mg/L	N								
UFI SOP	CHLOROPHYLL-A	ug/L	N								
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y								
UFI SOP	FERROUS IRON (II)	ug/l	N								
UFI SOP	METHANE	ug/L	N								
UFI SOP	NITRITE	mg/l	N		0.019		0.039				
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N								
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N		1.269		1.471				
UFI SOP	SULFIDE	mg/L	N								
UFI SOP	TOTAL CARBON	mg/l	N								
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N								
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N								
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N								
UFI SOP	Total Suspended Solids	mg/l	N								

Validated Book 1 Surface Water and Water Column Samples

		Field Sample ID	OL-1613-03	OL-1632-03	OL-1633-03
Method	Parameter Name	Units	Filtered		
E1630	METHYL MERCURY	ug/L	N		4.20E-05 J
E1631	MERCURY	ug/L	N		0.00071 J
E1631	MERCURY	ug/L	Y		
UFI SOP	CALCIUM	mg/l	N		
UFI SOP	CHLORIDE	mg/L	N		
UFI SOP	CHLOROPHYLL-A	ug/L	N		
UFI SOP	DISSOLVED ORGANIC CARBON	mg/L	Y		
UFI SOP	FERROUS IRON (II)	ug/l	N		
UFI SOP	METHANE	ug/L	N		
UFI SOP	NITRITE	mg/l	N	0.044	0.086
UFI SOP	NITROGEN, AMMONIA (AS N)	mg/L	N		
UFI SOP	NITROGEN, NITRATE-NITRITE	mg/L	N	1.497	1.564
UFI SOP	SULFIDE	mg/L	N		
UFI SOP	TOTAL CARBON	mg/l	N		
UFI SOP	TOTAL FIXED SOLIDS	mg/l	N		
UFI SOP	TOTAL INORGANIC CARBON	mg/l	N		
UFI SOP	TOTAL ORGANIC CARBON	mg/l	N		
UFI SOP	Total Suspended Solids	mg/l	N		

ATTACHMENT A-2**VALIDATED LABORATORY DATA FOR ZOOPLANKTON**

PARSONS

Validated Book 1 Zooplankton Samples

		Field Sample ID	OL-1410-01	OL-1415-01	OL-1424-01	OL-1436-01	OL-1447-01	OL-1460-01	OL-1470-01
	Location	South Deep		South Deep					
	Sample Depth								
	Sample Date	5/23/2011		6/6/2011	6/20/2011	7/5/2011	7/18/2011	8/1/2011	8/15/2011
	SDG	240-394-1		240-915-1	240-1300-1	240-1708-1	240-2042-1	240-2410-1	240-2882-1
	Matrix	TISSUE		TISSUE	Tissue	Tissue	Tissue	Tissue	Tissue
	Sample Purpose	Regular sample		Regular sample					
	Sample Type	Tissue - zooplankton		Tissue - zooplankton					
Method	Parameter Name	Units							
E1630	METHYL MERCURY	ng/g	1.2	3.2	0.8	1.7	2.1	9.8	3.4
E1631	MERCURY	mg/kg	0.13	0.25	0.07	0.055	0.24	0.28	0.14

Validated Book 1 Zooplankton Samples

		Field Sample ID	OL-1472-01	OL-1484-01	OL-1491-01	OL-1604-01	OL-1608-01	OL-1617-01	OL-1619-01
	Location	South Deep		South Deep					
	Sample Depth								
	Sample Date	8/15/2011		8/29/2011	9/6/2011	9/12/2011	9/19/2011	9/26/2011	9/26/2011
	SDG	1134020		240-3327-1	240-3547-1	240-3761-1	240-4010-1	240-4231-1	1140009
	Matrix	Tissue		Tissue	Tissue	Tissue	Tissue	Tissue	Tissue
	Sample Purpose	Regular sample		Regular sample					
	Sample Type	Tissue - zooplankton		Tissue - zooplankton					
Method	Parameter Name	Units							
E1630	METHYL MERCURY	ng/g	6.5	6.5	3.5	7	7.8	5.6	5.2
E1631	MERCURY	mg/kg	0.118	0.17	0.11	0.1	0.22	0.18	0.0875

Validated Book 1 Zooplankton Samples

		Field Sample ID	OL-1624-01	OL-1631-01	OL-1637-01	OL-1644-01	OL-1649-01	OL-1656-01	OL-1664-01
	Location	South Deep		South Deep					
	Sample Depth								
	Sample Date	10/3/2011		10/10/2011	10/18/2011	10/24/2011	10/31/2011	11/7/2011	11/21/2011
	SDG	240-4465-1		240-4728-1	240-4951-1	240-5212-1	240-5419-1	240-5673-1	240-6182-1
	Matrix	Tissue		Tissue	Tissue	Tissue	Tissue	TISSUE	Tissue
	Sample Purpose	Regular sample		Regular sample					
	Sample Type	Tissue - zooplankton		Tissue - zooplankton					
Method	Parameter Name	Units							
E1630	METHYL MERCURY	ng/g	9.5	13	6.9	8.3	7.3	11	10
E1631	MERCURY	mg/kg	0.14	0.13	0.35	0.085	0.1	0.082	0.052

Validated Book 1 Zooplankton Samples

		Field Sample ID	OL-1410-02	OL-1415-02	OL-1424-02	OL-1436-02	OL-1447-02	OL-1460-02	OL-1470-02
	Location	North Deep		North Deep					
	Sample Depth								
	Sample Date	5/23/2011		6/6/2011	6/20/2011	7/5/2011	7/18/2011	8/1/2011	8/15/2011
	SDG	240-394-1		240-915-1	240-1300-1	240-1708-1	240-2042-1	240-2410-1	240-2882-1
	Matrix	TISSUE		TISSUE	Tissue	Tissue	Tissue	Tissue	Tissue
	Sample Purpose	Regular sample		Regular sample					
	Sample Type	Tissue - zooplankton		Tissue - zooplankton					
Method	Parameter Name	Units							
E1630	METHYL MERCURY	ng/g	0.36	2.6	0.85	3.1	3.7	8.8	3.3
E1631	MERCURY	mg/kg	0.054	0.13	0.19	0.11	0.13	0.18	0.1

Validated Book 1 Zooplankton Samples

		Field Sample ID	OL-1484-02	OL-1491-02	OL-1604-02	OL-1608-02	OL-1617-02	OL-1624-02	OL-1631-02
	Location	North Deep		North Deep					
	Sample Depth								
	Sample Date	8/29/2011		9/6/2011	9/12/2011	9/19/2011	9/26/2011	10/3/2011	10/10/2011
	SDG	240-3327-1		240-3547-1	240-3761-1	240-4010-1	240-4231-1	240-4465-1	240-4728-1
	Matrix	Tissue		Tissue	Tissue	Tissue	Tissue	Tissue	Tissue
	Sample Purpose	Regular sample		Regular sample					
	Sample Type	Tissue - zooplankton		Tissue - zooplankton					
Method	Parameter Name	Units							
E1630	METHYL MERCURY	ng/g	5.3	4	4.5	4.4	7.1	8.1	5.6
E1631	MERCURY	mg/kg	0.17	0.1	0.079	0.23	0.17	0.19	0.25

Validated Book 1 Zooplankton Samples

	Field Sample ID	OL-1637-02	OL-1644-02	OL-1649-02	OL-1656-02	OL-1664-02
	Location	North Deep				
	Sample Depth					
	Sample Date	10/18/2011	10/24/2011	10/31/2011	11/7/2011	11/21/2011
	SDG	240-4951-1	240-5212-1	240-5419-1	240-5673-1	240-6182-1
	Matrix	Tissue	Tissue	Tissue	TISSUE	Tissue
	Sample Purpose	Regular sample				
	Sample Type	Tissue - zooplankton				
Method	Parameter Name	Units				
E1630	METHYL MERCURY	ng/g	3	6.8	12	8.8
E1631	MERCURY	mg/kg	0.25	0.15	0.28	0.049
						0.056

ATTACHMENT A-3**VALIDATED LABORATORY DATA
FOR SEDIMENT TRAP SAMPLES**

PARSONS

Validated Book 1 Sediment Trap Samples

		Field Sample ID	OL-1408-01	OL-1408-02	OL-1408-03	OL-1456-07	OL-1411-01	OL-1411-02	OL-1411-03	OL-1413-01
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	33-33 FT	33-33 FT	33-33 FT	33-33 Ft	33-33 FT	33-33 FT	33-33 FT	33-33 FT	33-33 FT
	Sample Date	5/23/2011	5/23/2011	5/23/2011	5/23/2011	5/31/2011	5/31/2011	5/31/2011	5/31/2011	6/6/2011
	SDG	UFICHM2011-013	UFICHM2011-013	UFICHM2011-013	UFICHM2011-013	240-2294-1	UFICHM2011-015	UFICHM2011-015	UFICHM2011-015	UFICHM2011-015
	Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Regular sample	Field duplicate	second field duplicate	Regular sample	Regular sample	Field duplicate	second field duplicate	Regular sample	
	Sample Type	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY
Method	Parameter Name	Units	Filtered			0.69				
E1631	MERCURY	ug/L	N							
UFI SOP	CALCIUM	mg/L	N	179.9	148.2	185	586.5	578.2	578.2	678.1
UFI SOP	TOTAL CARBON	mg/l	N	95.4	126.9	118.5	254.3	275.8	273.1	340.1
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N	916	616	1000	2088	2016	2220	2840
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N	77.4	52.2	86.9	103.4	93.9	111.4	119.8
UFI SOP	Total Suspended Solids	mg/L	N	1172	760	1276	2424	2324	2556	3240

Validated Book 1 Sediment Trap Samples

		Field Sample ID	OL-1413-02	OL-1413-03	OL-1456-08	OL-1473-01	OL-1416-01	OL-1416-02	OL-1416-03	OL-1422-01
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	33-33 FT	33-33 FT	33-33 Ft	33-33 Ft	33-33 FT	33-33 FT	33-33 FT	33-33 FT	33-33 Ft
	Sample Date	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/13/2011	6/13/2011	6/13/2011	6/20/2011
	SDG	UFICHM2011-015	UFICHM2011-015	240-2294-1	1134021	UFICHM2011-022	UFICHM2011-022	UFICHM2011-022	UFICHM2011-022	UFICHM2011-022
	Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Field duplicate	Second field duplicate	Regular sample	Regular sample	Regular sample	Field duplicate	Second field duplicate	Regular sample	
	Sample Type	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY
Method	Parameter Name	Units	Filtered							
E1631	MERCURY	ug/L	N		1.4	1.45				
UFI SOP	CALCIUM	mg/L	N	710.3	656.7		748.4	724.6	734.1	402
UFI SOP	TOTAL CARBON	mg/l	N	329.9	326.2		333.1	271.4	302.3	151.2
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N	2804	2780		2384	2588	2320	1072
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N	122	109.9		87.1	73.3	85.8	69
	Total Suspended Solids	mg/L	N	3184	3152		2676	2880	2560	1264

Validated Book 1 Sediment Trap Samples

		Field Sample ID	OL-1422-02	OL-1422-03	OL-1456-09	OL-1427-01	OL-1427-02	OL-1427-03	OL-1434-01	OL-1434-02
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	33-33 Ft	33-33 Ft	33-33 Ft	33-33 Ft	33-33 Ft	33-33 Ft	33-33 Ft	33-33 FT	33-33 FT
	Sample Date	6/20/2011	6/20/2011	6/20/2011	6/20/2011	6/27/2011	6/27/2011	6/27/2011	7/5/2011	7/5/2011
	SDG	UFICHM2011-022	UFICHM2011-022	240-2294-1	UFICHM2011-023	UFICHM2011-023	UFICHM2011-023	UFICHM2011-026	UFICHM2011-026	UFICHM2011-026
	Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Field duplicate	second field duplicate	Regular sample	Regular sample	Field duplicate	second field duplicate	Regular sample	Field duplicate	second field duplicate
	Sample Type	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY
Method	Parameter Name	Units	Filtered							
E1631	MERCURY	ug/L	N		0.92					
UFI SOP	CALCIUM	mg/L	N	410.4	462.7		751.8	859.4	888.5	315.3
UFI SOP	TOTAL CARBON	mg/l	N	141	188.2		275.9	260.1	269.8	110.6
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N	1340	1900		2168	2368	2520	1764
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N	53.8	38		50.9	55.9	65.7	102.7
UFI SOP	Total Suspended Solids	mg/L	N	1556	2272		2348	2600	2732	2168
										2116

Validated Book 1 Sediment Trap Samples

		Field Sample ID	OL-1434-03	OL-1456-10	OL-1438-01	OL-1438-02	OL-1438-03	OL-1445-01	OL-1445-02	OL-1445-03
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	33-33 FT	33-33 Ft	33-33 FT	33-33 FT	33-33 FT	33-33 FT	33-33 FT	33-33 FT	33-33 FT
	Sample Date	7/5/2011	7/5/2011	7/11/2011	7/11/2011	7/11/2011	7/11/2011	7/18/2011	7/18/2011	7/18/2011
	SDG	UFICHM2011-026	240-2294-1	UFICHM2011-027	UFICHM2011-027	UFICHM2011-027	UFICHM2011-030	UFICHM2011-030	UFICHM2011-030	UFICHM2011-030
	Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Second field duplicate	Regular sample	Regular sample	Field duplicate	Second field duplicate	Regular sample	Field duplicate	Second field duplicate	
	Sample Type	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY
Method	Parameter Name	Units	Filtered							
E1631	MERCURY	ug/L	N		1.6					
UFI SOP	CALCIUM	mg/L	N	306.8		445.9	430.2	416.8	1203.7	945.3
UFI SOP	TOTAL CARBON	mg/l	N	148.6		208.2	173.2	161.6	593.7	414.5
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N	1492		1320	1228	1548	3348	3256
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N	90.5		74.6	75.2	65.1	131.9	127.9
UFI SOP	Total Suspended Solids	mg/L	N	1780		1552	1420	1792	3704	3588
										4072

Validated Book 1 Sediment Trap Samples

		Field Sample ID	OL-1456-11	OL-1450-01	OL-1450-02	OL-1450-03	OL-1458-01	OL-1458-02	OL-1458-03	OL-1620-01
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	33-33 Ft	33-33 FT	33-33 FT	33-33 FT	33-33 FT	33-33 FT	33-33 FT	33-33 FT	33-33 FT
	Sample Date	7/18/2011	7/25/2011	7/25/2011	7/25/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011
	SDG	240-2294-1	UFICHM2011-032	UFICHM2011-032	UFICHM2011-032	UFICHM2011-037	UFICHM2011-037	UFICHM2011-037	UFICHM2011-037	240-4372-1
	Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Regular sample	Regular sample	Field duplicate	Second field duplicate	Regular sample	Field duplicate	Second field duplicate	Regular sample	
	Sample Type	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY
Method	Parameter Name	Units	Filtered							
E1631	MERCURY	ug/L	N	3.5						1.4
UFI SOP	CALCIUM	mg/L	N		746.2	764.1	844.4	377.3	390.5	392.9
UFI SOP	TOTAL CARBON	mg/l	N		379.5	312.9	347.3	214.9	205.2	210.9
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N		2228	2412	2292	1564	1392	2438.8 J
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N		105.7	101.5	123.8	111.2	110.4	110.4
UFI SOP	Total Suspended Solids	mg/L	N		2476	2696	2596	1924	1764	2842.8

Validated Book 1 Sediment Trap Samples

		Field Sample ID	OL-1462-01	OL-1462-02	OL-1462-03	OL-1468-01	OL-1468-02	OL-1468-03	OL-1620-02	OL-1476-01
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	33-33 FT	33-33 FT	33-33 FT	33-33 FT	33-33 FT	33-33 FT	33-33 FT	33-33 FT	33-33 FT
	Sample Date	8/8/2011	8/8/2011	8/8/2011	8/15/2011	8/15/2011	8/15/2011	8/15/2011	8/15/2011	8/22/2011
	SDG	UFICHM2011-038	UFICHM2011-038	UFICHM2011-038	UFICHM2011-041	UFICHM2011-041	UFICHM2011-041	UFICHM2011-041	240-4372-1	UFICHM2011-043
	Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Regular sample	Field duplicate	second field duplicate	Regular sample	Field duplicate	second field duplicate	Regular sample	Regular sample	
	Sample Type	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY
Method	Parameter Name	Units	Filtered							
E1631	MERCURY	ug/L	N						0.92	
UFI SOP	CALCIUM	mg/L	N	222.8	225.2	236	218	219.2	294.6	
UFI SOP	TOTAL CARBON	mg/l	N	208.5	J	155.5	J	129.9	J	353.5
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N	804		660		624		116.4
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N	83.8		87.9		84.8		804
UFI SOP	Total Suspended Solids	mg/L	N	1100		952		932		59.1
										1056

Validated Book 1 Sediment Trap Samples

		Field Sample ID	OL-1476-02	OL-1476-03	OL-1482-01	OL-1482-02	OL-1482-03	OL-1620-03	OL-1489-01	OL-1489-02
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	33-33 FT	33-33 FT	33-33 FT	33-33 FT	33-33 FT	33-33 FT	33-33 FT	33-33 Ft	33-33 Ft
	Sample Date	8/22/2011	8/22/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	9/6/2011	9/6/2011
	SDG	UFICHM2011-043	UFICHM2011-043	UFICHM2011-047	UFICHM2011-047	UFICHM2011-047	UFICHM2011-047	240-4372-1	UFICHM2011-049	UFICHM2011-049
	Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Field duplicate	Second field duplicate	Regular sample	Field duplicate	Second field duplicate	Regular sample	Regular sample	Field duplicate	Second field duplicate
	Sample Type	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY
Method	Parameter Name	Units	Filtered							
E1631	MERCURY	ug/L	N					1.3		
UFI SOP	CALCIUM	mg/L	N	352.3	380.6	247.3	267.3	262.6	239	253.2
UFI SOP	TOTAL CARBON	mg/l	N	133.5	127	116.7	118.9	142.8	123.2	143.1
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N	816	848	844	964	1264	1360	1080
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N	59.9	60.4	76	77.7	85.8	81.5	94.4
	Total Suspended Solids	mg/L	N	1088	1180	1080	1172	1716	1668	1284

Validated Book 1 Sediment Trap Samples

		Field Sample ID	OL-1489-03	OL-1620-04	OL-1602-01	OL-1602-02	OL-1602-03	OL-1620-05	OL-1606-01	OL-1606-02
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	33-33 Ft	33-33 FT	33-33 Ft	33-33 Ft	33-33 Ft	33-33 Ft	33-33 FT	33-33 Ft	33-33 Ft
	Sample Date	9/6/2011	9/6/2011	9/12/2011	9/12/2011	9/12/2011	9/12/2011	9/12/2011	9/19/2011	9/19/2011
	SDG	UFICHM2011-049	240-4372-1	UFICHM2011-052	UFICHM2011-052	UFICHM2011-052	UFICHM2011-052	240-4372-1	UFICHM2011-057	UFICHM2011-057
	Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Second field duplicate	Regular sample	Regular sample	Field duplicate	Second field duplicate	Regular sample	Regular sample	Field duplicate	Second field duplicate
	Sample Type	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY
Method	Parameter Name	Units	Filtered							
E1631	MERCURY	ug/L	N		1.2				0.78	
UFI SOP	CALCIUM	mg/L	N	278		229.6	306.3	267.3		168.9
UFI SOP	TOTAL CARBON	mg/l	N	159.7		95.4	125.9	148.3		107.9
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N	1084		1628	1808	1860		916
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N	99.6		63.2 J	139.3 J	113.9 J		85.8
UFI SOP	Total Suspended Solids	mg/L	N	1360		1836	2144	2164		1208
										1184

Validated Book 1 Sediment Trap Samples

		Field Sample ID	OL-1606-03	OL-1620-06	OL-1615-01	OL-1615-02	OL-1615-03	OL-1620-07	OL-1622-01	OL-1622-02
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	33-33 Ft	33-33 FT	33-33 Ft	33-33 Ft	33-33 Ft	33-33 Ft	33-33 FT	33-33 Ft	33-33 Ft
	Sample Date	9/19/2011	9/19/2011	9/26/2011	9/26/2011	9/26/2011	9/26/2011	9/26/2011	10/3/2011	10/3/2011
	SDG	UFICHM2011-057	240-4372-1	UFICHM2011-060	UFICHM2011-060	UFICHM2011-060	UFICHM2011-060	240-4372-1	UFICHM2011-061	UFICHM2011-061
	Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Second field duplicate	Regular sample	Regular sample	Field duplicate	Second field duplicate	Regular sample	Regular sample	Field duplicate	Second field duplicate
	Sample Type	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY
Method	Parameter Name	Units	Filtered							
E1631	MERCURY	ug/L	N		0.84				0.78	
UFI SOP	CALCIUM	mg/L	N	189.1		223.4	187.9	187.9		163.8
UFI SOP	TOTAL CARBON	mg/l	N	152.7		96.1	85.3	105.5		79.1
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N	956		620	820	760		468
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N	78.8		75.3	69.7	73.4		72.2
UFI SOP	Total Suspended Solids	mg/L	N	1200		804	1068	992		648
										752

Validated Book 1 Sediment Trap Samples

		Field Sample ID	OL-1622-03	OL-1629-01	OL-1629-02	OL-1629-03
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	33-33 Ft	33-33 Ft	33-33 Ft	33-33 Ft	33-33 Ft
	Sample Date	10/3/2011	10/10/2011	10/10/2011	10/10/2011	10/10/2011
	SDG	UFICHM2011-061	UFICHM2011-063	UFICHM2011-063	UFICHM2011-063	UFICHM2011-063
	Matrix	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Second field duplicate	Regular sample	Field duplicate	Second field duplicate	
	Sample Type	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY
Method	Parameter Name	Units	Filtered			
E1631	MERCURY	ug/L	N			
UFI SOP	CALCIUM	mg/L	N	173.9	189.1	179
UFI SOP	TOTAL CARBON	mg/l	N	89.3	100.5	82.4
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N	556	860	732
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N	74.4	79	61.8
UFI SOP	Total Suspended Solids	mg/L	N	756	1084	956
						1112

Validated Book 1 Sediment Trap Samples

		Field Sample ID	OL-1635-01	OL-1635-02	OL-1635-03	OL-1668-01	OL-1668-02	OL-1668-03	OL-1642-01	OL-1642-02
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	33-33 Ft	33-33 Ft	33-33 Ft	33-33 Ft	33-33 Ft	33-33 Ft	33-33 Ft	33-33 Ft	33-33 Ft
	Sample Date	10/17/2011	10/17/2011	10/17/2011	10/3/2011	10/10/2011	10/17/2011	10/24/2011	10/24/2011	10/24/2011
	SDG	UFICHM2011-066	UFICHM2011-066	UFICHM2011-066	UFICHM2011-066	240-6363-1	240-6363-1	240-6363-1	UFICHM2011-069	UFICHM2011-069
	Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Regular sample	Field duplicate	Second field duplicate	Regular sample	Field duplicate				
	Sample Type	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY
Method	Parameter Name	Units	Filtered							
E1631	MERCURY	ug/L	N			0.53	1	0.62		
UFI SOP	CALCIUM	mg/L	N	209.1	230.8	194.6			243.8	234.4
UFI SOP	TOTAL CARBON	mg/l	N	151.2	135.6	127.7			163.4	150.8
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N	1224	1032	1000			1468	1380
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N	112.5	108.2	99.4			127.8	114.2
UFI SOP	Total Suspended Solids	mg/L	N	1600	1320	1304			1756	1660

Validated Book 1 Sediment Trap Samples

		Field Sample ID	OL-1642-03	OL-1668-04	OL-1647-01	OL-1647-02	OL-1647-03	OL-1654-01	OL-1654-02	OL-1654-03
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	33-33 Ft	33-33 Ft	33-33 FT	33-33 FT	33-33 FT	33-33 Ft	33-33 Ft	33-33 Ft	33-33 Ft
	Sample Date	10/24/2011	10/24/2011	10/31/2011	10/31/2011	10/31/2011	10/31/2011	11/7/2011	11/7/2011	11/7/2011
	SDG	UFICHM2011-069	240-6363-1	UFICHM2011-070	UFICHM2011-070	UFICHM2011-070	UFICHM2011-074	UFICHM2011-074	UFICHM2011-074	UFICHM2011-074
	Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Second field duplicate	Regular sample	Field duplicate	Second field duplicate					
	Sample Type	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY
Method	Parameter Name	Units	Filtered							
E1631	MERCURY	ug/L	N		1.2					
UFI SOP	CALCIUM	mg/L	N	252.1		301.7	279.3	215.5	206	222.6
UFI SOP	TOTAL CARBON	mg/l	N	177.3		190.9	251	175.5	127.3	138.4
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N	1496		1764	2012	2156	1284	1528
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N	125		156.6	134.9	88.5	114.5	105.2
UFI SOP	Total Suspended Solids	mg/L	N	1780		2176	2476	2548	1600	1844
										1584

Validated Book 1 Sediment Trap Samples

		Field Sample ID	OL-1668-05	OL-1660-01	OL-1660-02	OL-1660-03	OL-1662-01	OL-1662-02	OL-1662-03	OL-1668-06
	Location	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S	DEEP_S
	Sample Depth	33-33 Ft	33-33 Ft	33-33 Ft	33-33 Ft	33-33 FT	33-33 FT	33-33 FT	33-33 FT	33-33 Ft
	Sample Date	11/7/2011	11/14/2011	11/14/2011	11/14/2011	11/21/2011	11/21/2011	11/21/2011	11/21/2011	11/21/2011
	SDG	240-6363-1	UFICHM2011-077	UFICHM2011-077	UFICHM2011-077	UFICHM2011-077	UFICHM2011-077	UFICHM2011-077	UFICHM2011-077	240-6363-1
	Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Regular sample	Regular sample	Field duplicate	Second field duplicate	Regular sample	Field duplicate	Second field duplicate	Regular sample	
	Sample Type	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY	SLURRY
Method	Parameter Name	Units	Filtered							
E1631	MERCURY	ug/L	N	0.65						2
UFI SOP	CALCIUM	mg/L	N		258	263.7	271.5	402.9	373.7	365.9
UFI SOP	TOTAL CARBON	mg/l	N		120.7	124.6	184.6	251	214.1	265.7
UFI SOP	TOTAL FIXED SOLIDS	mg/L	N		1436	1528	1372	2608	2680	
UFI SOP	TOTAL ORGANIC CARBON	mg/L	N		92.4	90.1	93.6	143.5	142.1	141.1
UFI SOP	Total Suspended Solids	mg/L	N		1728	1872	1664	3092	3132	2976

ATTACHMENT A-4**VALIDATED SPLIT SAMPLES**

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Validated Split Sample Results

Location ID	Sample Date	Sample Depth	Matrix	Purpose	Samp Type	Parameter	TAL-NCANT	Brooks Rand	TAL-NCANT	Brooks Rand	
						Units	MERCURY ug/l	MERCURY ug/l	Precision %RPD	MERCYL MERCY ug/l	
DEEP_S	8/15/2011	6.6-6.6 FT	WATER	REG	W-SW	0.0017	0.0014 J	19.35	0.00011	0.000072	41.76
DEEP_S	8/15/2011	6.6-6.6 FT	WATER	FD	W-SW	0.0012	0.00261 J	74.02	0.000095	0.000078	19.65
DEEP_S	8/15/2011	39.6-39.6 FT	WATER	REG	W-SW	0.001	0.00127	23.79	0.000095	0.000068	33.13
DEEP_S	8/15/2011	52.8-52.8 FT	Water	REG	W-SW	0.00081	0.00198	83.87	0.00013	0.000103	23.18
DEEP_S	8/15/2011	59.4-59.4 FT	Water	REG	W-SW	0.00085	0.00181	72.18	0.00021	0.000159	27.64
DEEP_S	9/26/2011	6.6-6.6 FT	WATER	REG	W-SW	0.00062	0.00067	7.75	0.000071 J	0.000083	15.58
DEEP_S	9/26/2011	6.6-6.6 FT	WATER	FD	W-SW	0.00081	0.0009	10.53	0.000052 J	0.000078	40.00
DEEP_S	9/26/2011	39.6-39.6 FT	WATER	REG	W-SW	0.0011	0.00174	45.07	0.000038 J	0.000073	63.06
DEEP_S	9/26/2011	52.8-52.8 FT	Water	REG	W-SW	0.0011	0.00156	34.59	0.00022 J	0.000097	77.60
DEEP_S	9/26/2011	59.4-59.4 FT	Water	REG	W-SW	0.0012	0.00221	59.24	0.00013 J	0.000109	17.57
W1	8/15/2011		Tissue	REG	T-ZP	0.14	0.118	17.05	3.4	6.5	62.63
W1	9/26/2011		Tissue	REG	T-ZP	0.18	0.0875	69.16	5.6	5.2	7.41
DEEP_S	6/6/2011	33 FT	WATER	REG	SLURRY		1.4	1.45	3.51		

APPENDIX B**DATA USABILITY SUMMARY REPORT, ONONDAGA LAKE BASELINE
MONITORING BOOK 2 ADDENDUM 3 (2011): FISH, INVERTEBRATE,
AND LITTORAL SURFACE WATER MONITORING**

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APPENDIX B:

DATA USABILITY SUMMARY REPORT

**ONONDAGA LAKE BASELINE MONITORING
BOOK 2 FOR 2011: FISH**

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LIST OF ATTACHMENTS**ATTACHMENT A – VALIDATED LABORATORY DATA FOR FISH SAMPLES**

SECTION B1**DATA USABILITY SUMMARY**

Fish samples were collected as part of the Book 2 baseline monitoring efforts for Onondaga Lake from May 25, 2011 through August 4, 2011. 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)
- USEPA Region II Standard Operating Procedures (SOPs) for organic and inorganic data review

The Book 2 samples were collected by Anchor QEA with some assistance from Parsons for sample processing.

The analytical laboratory for this project was Test America Laboratories (TAL). This laboratory is certified by the State of New York to conduct laboratory analyses for this project through the National Environmental Laboratory Accreditation Conference (NELAC) and New York Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP).

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 13 to 139 days 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 B2.

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 day of sampling. All samples were received intact and in good condition at TAL.

B1.3 LABORATORY ANALYTICAL METHODS

The fish samples were collected from the site and analyzed for hexachlorobenzene, 4,4'-DDT and metabolites, polychlorinated biphenyls (PCBs), dioxins and furans, mercury, and percent lipids. 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 B1.3.4. 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 matrix in Section B2. The laboratory data were reviewed and may be qualified with the following validation flags:

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- "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
- "R" - unusable value

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

B1.3.1 Mercury Analysis

Fish samples collected from the site were analyzed by TAL for mercury using the USEPA SW846 7471A analytical method. The reported results for the mercury samples did not require qualification resulting from data validation. The reported mercury analytical results were considered 100 percent complete (i.e., usable) for the data presented by TAL. PARCC requirements were met.

B1.3.2 PCB Analysis

Fish samples collected from the site were analyzed by TAL for PCBs using the USEPA SW846 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 percent complete with all data considered usable and valid as reported by TAL. PARCC requirements were met.

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

Fish samples collected from the site were analyzed by TAL for hexachlorobenzene, 4,4'-DDT, and metabolites using the USEPA SW846 8081A analytical method. Certain reported results for these samples were qualified as estimated based upon matrix spike/matrix spike duplicate (MS/MSD) recoveries and sample result identifications. The reported analytical results for these samples were considered 100 percent complete with all data considered usable and valid as reported by TAL. PARCC requirements were met.

B1.3.4 Dioxins and Furans

Fish samples collected from the site were analyzed by TAL for dioxins and furans using the USEPA 1613B analytical method. The reported results for these samples did not require estimation qualification resulting from data validation. 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.

B1.3.5 Percent Lipids

Fish samples collected from the site were analyzed by TAL for percent lipids using the TAL SOP analytical method. The reported results for these samples did not require qualification resulting from data validation. The reported analytical results for these samples were considered 100 percent 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 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; HW-2, Revision 13 "Evaluation of Metals Data for the CLP Program"; and HW-19, Revision 1 "USEPA Region II Data Validation SOP for SW-846 Method 8290 Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) By High-Resolution Gas Chromatography/High-Resolution Mass Spectrometry (HRGC/HRMS)". This data validation and usability report is presented by analysis type.

B2.1.1 Mercury

The following items were reviewed for compliancy in the 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) recoveries
- Interference check sample recoveries
- Sample result verification and identification
- Quantitation limits
- Data completeness

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

Usability

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

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Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The mercury data presented by TAL were 100 percent complete (i.e., usable). The validated mercury 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, MS/MSD precision and accuracy, and LCS recoveries as discussed below.

Surrogate Recoveries

All sample surrogate recoveries were considered acceptable and within QC limits for the project samples with the exception of the high tetrachloro-m-xylene recovery (QC limit 35-140%R) in samples OL-1504-16F (153%R) and OL-1505-01F (153%R). Validation qualification of these samples was not required since only one surrogate exceeded criteria.

MS/MSD Precision and Accuracy

All MS/MSD precision (relative percent differences; RPDs) and accuracy (percent recoveries; %Rs) measurements of spiked compounds were considered acceptable and within QC limits for designated spiked project samples with the exception of the high MS/MSD accuracy for PCB-1016 (131%R/132%R; QC limit 55-130%R) associated with the parent sample OL-1504-09F. Validation qualification of the parent sample was not required since this compound was not detected.

LCS Recoveries

All LCS recoveries were considered acceptable and within QC limits with the exception of the high LCS recovery for PCB-1016 (137%R; QC limit 55-130%R) associated with samples OL-1504-01F, -05F, -09F, -10F, -11F, -12F, -13F, -14F, -15F, -16F, -17F, -19F, -20F, and OL-1505-01F. Validation qualification was not required since this compound was not detected.

Usability

All PCB sample results for the fish were considered usable following data validation. All total PCB sample results were calculated in accordance to the analytical method.

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 percent complete with all data considered usable and valid. The validated data are tabulated and presented in Attachment A.

B2.1.3 Hexachlorobenzene, 4,4'-DDT, and Metabolites

The following items were reviewed for compliancy in the hexachlorobenzene, 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
- 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 surrogate recoveries, MS/MSD precision and accuracy, and sample result identifications as discussed below.

Surrogate Recoveries

All sample surrogate recoveries were considered acceptable and within QC limits with the exception of the low tetrachloro-m-xylene recovery (QC limit 45-130%R) on the primary quantitation column in sample OL-1502-06F (40%R) and the high decachlorobiphenyl recovery (QC limit 45-130%R) on the second confirmatory column in sample OL-1506-04F (147%R). Validation qualification was not required for these samples since only one surrogate was outside criteria.

MS/MSD Precision and Accuracy

All MS/MSD precision and accuracy measurements for spiked compounds were considered acceptable and within QC limits for designated spiked project samples with the exception of the low MSD accuracy result for 4,4'-DDD (65%R; QC limit 70-135%R) and high precision for 4,4'-DDD (34%RPD; QC limit 0-20%RPD) during the spiked analyses of sample OL-1507-02F; and the low MS accuracy result for 4,4'-DDE (28%R; QC limit 70-133%R) and the low MS/MSD accuracy results for 4,4'-DDT (-7%R/7%R; QC limit 61-126%R) and 4,4'-DDD (55%R/0%R; QC limit 70-135%R) during the spiked analyses of sample OL-1508-01F. Validation qualification of the parent sample OL-1507-02F was not required based upon one accuracy result outside the QC limit. However, the positive 4,4'-DDT result and the nondetected 4,4'-DDD result for parent sample OL-1508-01F were considered estimated, possibly biased low, and qualified "J" and "UJ", respectively.

Sample Result Identifications

Positive sample results were verified and confirmed present using dual column confirmation. The precision (%RPD) between the results on the dual columns was less than 25% with the exception of hexachlorobenzene for samples OL-1504-14F (58.1%RPD) and -16F (51.4%RPD); 4,4'-DDE for samples OL-1500-12F (65.8%RPD), OL-1501-05F (30.6%RPD), OL-1502-01F (68.3%RPD), -04F (55.3%RPD), -20F (145.3%RPD), OL-1503-01F (131%RPD), -02F (127.7%RPD), -04F (90.7%RPD), -05F (101.3%RPD), OL-1505-01F (63.5%RPD), OL-1504-01F (112.9%RPD), -09F (67.2%RPD), -10F (72.2%RPD), -11F (74.2%RPD), -12F (68.5%RPD), -13F (71.9%RPD), -15F (44.9%RPD), -16F (57.2%RPD), -19F (66%RPD), -20F (75.2%RPD), OL-1506-01F (50.2%RPD), -03F (34.7%RPD), -04F (28.5%RPD), OL-1507-01F (39.8%RPD), -02F (48.7%RPD), -03F (39.5%RPD), OL-1508-01F (33%RPD), -02F (35.6%RPD), and -03F (34.2%RPD); 4,4'-DDT for samples OL-1500-01F (27.9%RPD), -02F (26.9%RPD), -17F (33.4%RPD), OL-1504-01F (61.5%RPD), OL-1506-01F (94.4%RPD), -03F (91%RPD), -04F (97.4%RPD), OL-1507-01F (93.9%RPD), -02F (92.7%RPD), -03F (91.7%RPD), OL-1508-01F (99.2%RPD), -02F (95%RPD), and -03F (91.8%RPD); and 4,4'-DDD for samples OL-1500-09F (85.1%RPD), -12F (31%RPD), OL-1501-03F (178.4%RPD), -05F (124.6%RPD), -06F (159.1%RPD), -08F (137.2%RPD), -10F (164.8%RPD), OL-1502-01F (150.2%RPD), -04F (122.4%RPD), -06F (66.9%RPD), -09F (28%RPD), -20F (181.9%RPD), OL-1503-01F (173.5%RPD), -02F (162.5%RPD), -05F (182.5%RPD), -06F (180.7%RPD), OL-1505-01F (100.1%RPD), OL-1504-01F (84.7%RPD), -09F (110.1%RPD), -10F (94.8%RPD), -12F (110%RPD), -13F (115.2%RPD), -15F (85.8%RPD), -16F (88.2%RPD), -17F (45.2%RPD),

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-19F (70.7%RPD), OL-1506-01F (149%RPD), -03F (139.4%RPD), -04F (127.2%RPD), OL-1507-02F (153.1%RPD), -03F (181.2%RPD), and OL-1508-02F (164%RPD). These results were considered estimated and qualified "J" for the affected samples. However, for those compounds where the %RPD was greater than 90 percent, the results were considered estimated, tentatively identified, and qualified "JN" for the affected samples.

Usability

All hexachlorobenzene, 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 hexachlorobenzene, 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.

It was noted that hexachlorobenzene was not analyzed for fish samples contained within SDG 180-616-1 because of laboratory error.

B2.1.4 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 contamination
- Initial calibrations
- Verification calibrations
- Internal standard recoveries
- Clean-up recoveries
- 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 laboratory method blank associated with samples contained within sample delivery groups (SDGs) 180-550-1, 180-550-2, 180-616-1, 180-693-1, 180-903-1, 180-1510-1, and 180-1586-1 detected dioxins and furans at concentrations below reporting limits. A summary of these detections is presented in the table below. Therefore, associated sample results less than validation action concentrations were considered not detected and qualified "U" for the affected samples.

<u>Compound</u>	<u>Concentration (pg/g)</u>
1,2,3,7,8-PeCDD	0.13 J
1,2,3,4,7,8-HxCDD	0.21 J
1,2,3,6,7,8-HxCDD	0.16 J
1,2,3,7,8,9-HxCDD	0.29 J
1,2,3,4,6,7,8-HpCDD	0.37 J
OCDD	2.3 J
1,2,3,7,8-PeCDF	0.15 J
1,2,3,4,7,8-HxCDF	0.17 J
1,2,3,6,7,8-HxCDF	0.16 J
2,3,4,6,7,8-HxCDF	0.12 J
1,2,3,7,8,9-HxCDF	0.15 J
1,2,3,4,6,7,8-HpCDF	0.2 J
OCDF	0.44 J

Note: J – Concentration is estimated and detected below the reporting limit.

Usability

All dioxin and furan results for the fish 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 dioxin and furan data presented by TAL were 100 percent complete with all data considered usable and valid. The validated data are tabulated and presented in Attachment A.

B2.1.5 Percent Lipids

The following items were reviewed for compliancy in the percent lipids analysis:

- Custody documentation
- Holding times
- Laboratory blank contamination
- Laboratory duplicate precision
- Sample result verification and identification
- Quantitation limits
- Data completeness

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

Usability

All percent lipids sample results for the fish samples were considered usable following data validation and the laboratory further checking and modifying its reporting and detection limits. Two of the lipid results (less than 0.099 percent and 10 percent, respectively) could not be confirmed based on documentation available at the laboratory when results were further checked and modified, so those results will not be used to quantify lipid-normalized organic chemical concentrations.

Representative 2011 fish fillet samples are being re-analyzed for lipid content to confirm data usability.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The percent lipids data presented by TAL were 100 percent complete (i.e., usable), although two of the results will not be used to quantify lipid-normalized organic chemical concentrations due to the laboratory not being able to reproduce the results. The validated laboratory data are tabulated and presented in Attachment A.

ATTACHMENT A**VALIDATED LABORATORY DATA FOR FISH SAMPLES**

WALL – Walleye (Adult Fish)

SMB – Smallmouth Bass (Adult Fish)

PKSD – Pumpkinseed (Adult Fish)

BB – Brown Bullhead (Adult Fish)

ALE – Alewife (Prey Fish)

MIN – Minnow (Prey Fish)

	Location	OL-STA-20158										
	Field Sample ID	OL-1503-12F	OL-1503-13F	OL-1503-14F	OL-1504-16F	OL-1504-17F	OL-1504-18F	OL-1504-19F	OL-1504-20F			
	SDG	180-693-1	180-693-1	180-693-1	180-903-1	180-903-1	180-903-1	180-903-1	180-903-1	180-903-1	180-903-1	
	Sample Date	6/1/2011	6/1/2011	6/1/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	
	Matrix	TISSUE										
	Sample Purpose	Regular sample										
	Sample Type	Tissue - fish										
	Specimen Age	17 yrs	17 yrs	13 yrs	4 yrs	4+ yrs	4 yrs	4+ yrs	4 yrs	4+ yrs	4 yrs	
	Specimen Length	594 mm	563 mm	458 mm	194 mm	172 mm	188 mm	324 mm	294 mm			
	Sample Type	F	F	F	F	F	F	F	F	F	F	
	Specimen Sex	F	F	M	U	F	F	F	U	U	U	
	Specimen Weight	3048 g	2291 g	1284 g	194 g	139 g	202 g	493 g	385 g			
	Taxon	WALL	WALL	SMB	PKSD	PKSD	PKSD	BB	BB			
Method	Parameter Name	Units										
EPA 1613B	1,2,3,4,6,7,8-HPCDD	ng/kg									5	U
EPA 1613B	1,2,3,4,6,7,8-HPCDF	ng/kg									5	U
EPA 1613B	1,2,3,4,7,8,9-HPCDF	ng/kg									5	U
EPA 1613B	1,2,3,4,7,8-HXCDD	ng/kg									5	U
EPA 1613B	1,2,3,6,7,8-HXCDD	ng/kg									5	U
EPA 1613B	1,2,3,6,7,8-HXCDF	ng/kg									1	J
EPA 1613B	1,2,3,7,8,9-HXCDD	ng/kg									5	U
EPA 1613B	1,2,3,7,8,9-HXCDF	ng/kg									5	U
EPA 1613B	1,2,3,7,8-PECDD	ng/kg									0.76	J
EPA 1613B	1,2,3,7,8-PECDF	ng/kg									5	U
EPA 1613B	2,3,4,6,7,8-HXCDF	ng/kg									5	U
EPA 1613B	2,3,4,7,8-PECDF	ng/kg									11	
EPA 1613B	2,3,7,8-TCDD	ng/kg									0.35	J
EPA 1613B	2,3,7,8-TCDF	ng/kg									0.99	U
EPA 1613B	OCDD	ng/kg									9.9	U
EPA 1613B	OCDF	ng/kg									9.9	U
Percent Lipids	%LIPIDS DETERMINATION	%				0.11	0.079	J			0.39	0.77
SW7471	MERCURY	mg/kg	2.9	3.4	2.7	0.67	0.26		0.38		0.37	0.17
SW8081	4,4'-DDD	ug/kg				1.1	J	1.3	J		1.7	J
SW8081	4,4'-DDE	ug/kg				0.62	J	1.7	U		1.6	J
SW8081	4,4'-DDT	ug/kg				4.1		2.4			7	7.3
SW8081	HEXACHLOROBENZENE	ug/kg				0.64	J	1.7	U		2.1	11
SW8082	AROCLOR-1016	ug/kg				17	U	17	U		16	U
SW8082	AROCLOR-1221	ug/kg				17	U	17	U		16	U
SW8082	AROCLOR-1232	ug/kg				17	U	17	U		16	U
SW8082	AROCLOR-1242	ug/kg				17	U	17	U		16	U
SW8082	AROCLOR-1248	ug/kg				17	U	17	U		16	U
SW8082	AROCLOR-1254	ug/kg				17	U	17	U		16	U
SW8082	AROCLOR-1260	ug/kg				29		14	J		52	80
SW8082	AROCLOR-1262	ug/kg				17	U	17	U		16	U
SW8082	AROCLOR-1268	ug/kg				17	U	17	U		16	U
SW8082	TOTAL PCBs	ug/kg				29		14	J		52	80

	Location	OL-STA-20158												
	Field Sample ID	OL-1505-01F	OL-1506-01F	OL-1506-02F	OL-1507-01F	OL-1507-02F	OL-1507-03F	OL-1508-01F	OL-1508-02F	OL-1508-03F				
	SDG	180-902-1	180-1510-1	180-1510-1	180-1586-1	180-1586-1	180-1586-1	180-1610-1	180-1610-1	180-1610-1				
	Sample Date	6/8/2011	6/28/2011	6/28/2011	6/29/2011	6/29/2011	6/29/2011	6/29/2011	6/29/2011	6/30/2011	6/30/2011	6/30/2011		
	Matrix	TISSUE												
	Sample Purpose	Regular sample												
	Sample Type	Tissue - fish												
	Specimen Age	7 yrs	6 yrs	10 yrs	13 yrs	6 yrs	12 yrs	4+ yrs	10 yrs	8+ yrs				
	Specimen Length	309 mm	394 mm	439 mm	471 mm	385 mm	472 mm	366 mm	441 mm	432 mm				
	Sample Type	F	F	F	F	F	F	F	F	F				
	Specimen Sex	F	U	U	F	U	U	U	U	U				
	Specimen Weight	419 g	991 g	1231 g	1444 g	1048 g	1600 g	851 g	1310 g	1144 g				
	Taxon	BB	SMB											
Method	Parameter Name	Units												
EPA 1613B	1,2,3,4,6,7,8-HPCDD	ng/kg		5 U		5 U								
EPA 1613B	1,2,3,4,6,7,8-HPCDF	ng/kg		5 U		5 U								
EPA 1613B	1,2,3,4,7,8,9-HPCDF	ng/kg		5 U		5 U								
EPA 1613B	1,2,3,4,7,8-HXCD	ng/kg		5 U		5 U								
EPA 1613B	1,2,3,4,7,8-HXCD	ng/kg		5 U		5 U								
EPA 1613B	1,2,3,6,7,8-HXCD	ng/kg		5 U		5 U								
EPA 1613B	1,2,3,6,7,8-HXCDF	ng/kg		0.91 J		5.4 J								
EPA 1613B	1,2,3,7,8,9-HXCD	ng/kg		5 U		5 U								
EPA 1613B	1,2,3,7,8,9-HXCDF	ng/kg		5 U		5 U								
EPA 1613B	1,2,3,7,8-PECDD	ng/kg		0.86 J		2 J								
EPA 1613B	1,2,3,7,8-PECDF	ng/kg		5 U		5 U								
EPA 1613B	2,3,4,6,7,8-HXCD	ng/kg		5 U		5 U								
EPA 1613B	2,3,4,7,8-PECDF	ng/kg		3.4 J		6.3								
EPA 1613B	2,3,7,8-TCDD	ng/kg		0.99 U		1.7 J								
EPA 1613B	2,3,7,8-TCDF	ng/kg		1.8 J		2.7 J								
EPA 1613B	OCDD	ng/kg		9.9 U		9.9 U								
EPA 1613B	OCDF	ng/kg		9.9 U		9.9 U								
Percent Lipids	%LIPIDS DETERMINATION	%	0.18	0.93		0.69	1.2	0.099 U	3.5	0.92	1.1			
SW7471	MERCURY	mg/kg	0.37	0.72	1.6	2.8	0.76	2.3	0.56	1.6	1.1			
SW8081	4,4'-DDD	ug/kg	1.3 J	1.9 J		1.7 U	2.3 J	1.9 J	1.7 UJ	4.4 JN	1.7			
SW8081	4,4'-DDE	ug/kg	0.92 JN	8.1 J		39 J	9 J	31 J	41 J	38 J	43			
SW8081	4,4'-DDT	ug/kg	1.7 U	5.2 JN		20 JN	7 JN	16 JN	18 JN	18 JN	22			
SW8081	HEXAChlorobenzene	ug/kg	1.8	4.6		5.4	7.7	4	23	6.2	7.5			
SW8082	AROCLOR-1016	ug/kg	17 U	17 U		16 U	16 U	16 U	17 U	17 U	17			
SW8082	AROCLOR-1221	ug/kg	17 U	17 U		16 U	16 U	16 U	17 U	17 U	17			
SW8082	AROCLOR-1232	ug/kg	17 U	17 U		16 U	16 U	16 U	17 U	17 U	17			
SW8082	AROCLOR-1242	ug/kg	17 U	17 U		16 U	16 U	16 U	17 U	17 U	17			
SW8082	AROCLOR-1248	ug/kg	17 U	17 U		16 U	16 U	16 U	17 U	17 U	17			
SW8082	AROCLOR-1254	ug/kg	17 U	220		690	280	510	700	640	530			
SW8082	AROCLOR-1260	ug/kg	64	17 U		16 U	16 U	16 U	17 U	17 U	480			
SW8082	AROCLOR-1262	ug/kg	17 U	17 U		16 U	16 U	16 U	17 U	17 U	17			
SW8082	AROCLOR-1268	ug/kg	17 U	17 U		16 U	16 U	16 U	17 U	17 U	17			
SW8082	TOTAL PCBs	ug/kg	64	220		690	280	510	700	640	1000			

	Location	OL-STA-20158	OL-STA-30093								
	Field Sample ID	OL-1509-01F	OL-1509-02F	OL-1509-03F	OL-1509-04F	OL-1509-05F	OL-1509-06F	OL-1509-07F	OL-1509-08F		
	SDG	180-1649-1	180-1649-1	180-1649-1	180-1649-1	180-1649-1	180-1649-1	180-1649-1	180-1649-1		180-550-2
	Sample Date	7/1/2011	7/1/2011	7/1/2011	7/1/2011	7/1/2011	7/1/2011	7/1/2011	7/1/2011	7/1/2011	5/25/2011
	Matrix	TISSUE									
	Sample Purpose	Regular sample									
	Sample Type	Tissue - fish									
	Specimen Age	6+ yrs	10 yrs	9 yrs	3+ yrs	10 yrs	6+ yrs	10 yrs	6 yrs		
	Specimen Length	385 mm	440 mm	444 mm	290 mm	461 mm	386 mm	436 mm	503 mm		
	Sample Type	F	F	F	F	F	F	F	F	F	
	Specimen Sex	F	F	F	U	F	U	U	F		
	Specimen Weight	958 g	1151 g	1272 g	362 g	1387 g	962 g	1064 g	1892 g		
	Taxon	SMB		WALL							
Method	Parameter Name	Units									
EPA 1613B	1,2,3,4,6,7,8-HPCDD	ng/kg									
EPA 1613B	1,2,3,4,6,7,8-HPCDF	ng/kg									
EPA 1613B	1,2,3,4,7,8,9-HPCDF	ng/kg									
EPA 1613B	1,2,3,4,7,8-HXCDD	ng/kg									
EPA 1613B	1,2,3,6,7,8-HXCDD	ng/kg									
EPA 1613B	1,2,3,6,7,8-HXCDF	ng/kg									
EPA 1613B	1,2,3,7,8,9-HXCDD	ng/kg									
EPA 1613B	1,2,3,7,8,9-HXCDF	ng/kg									
EPA 1613B	1,2,3,7,8-PECDD	ng/kg									
EPA 1613B	1,2,3,7,8-PECDF	ng/kg									
EPA 1613B	2,3,4,6,7,8-HXCDF	ng/kg									
EPA 1613B	2,3,4,7,8-PECDF	ng/kg									
EPA 1613B	2,3,7,8-TCDD	ng/kg									
EPA 1613B	2,3,7,8-TCDF	ng/kg									
EPA 1613B	OCDD	ng/kg									
EPA 1613B	OCDF	ng/kg									
Percent Lipids	%LIPIDS DETERMINATION	%									3
SW7471	MERCURY	mg/kg	0.76	1.5	1.2	0.72	1.4	0.85	2	0.94	
SW8081	4,4'-DDD	ug/kg	U								8.7 JN
SW8081	4,4'-DDE	ug/kg	J								25
SW8081	4,4'-DDT	ug/kg	JN								66
SW8081	HEXACHLOROBENZENE	ug/kg									28
SW8082	AROCLOR-1016	ug/kg	U								170 U
SW8082	AROCLOR-1221	ug/kg	U								170 U
SW8082	AROCLOR-1232	ug/kg	U								170 U
SW8082	AROCLOR-1242	ug/kg	U								170 U
SW8082	AROCLOR-1248	ug/kg	U								170 U
SW8082	AROCLOR-1254	ug/kg									940
SW8082	AROCLOR-1260	ug/kg									170 U
SW8082	AROCLOR-1262	ug/kg	U								170 U
SW8082	AROCLOR-1268	ug/kg	U								170 U
SW8082	TOTAL PCBs	ug/kg									940

	Location	OL-STA-30093	OL-STA-30093	OL-STA-30093	OL-STA-30093								
	Field Sample ID	OL-1501-09F	OL-1501-10F	OL-1501-11F	OL-1504-06F	OL-1504-07F	OL-1504-08F	OL-1504-09F	OL-1510-01F	OL-1510-02F			
	SDG	180-550-2	180-550-2	180-550-2	180-903-1	180-903-1	180-903-1	180-903-1	180-1724-1	180-1724-1			
	Sample Date	5/25/2011	5/25/2011	5/25/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	7/6/2011	7/6/2011			
	Matrix	TISSUE											
	Sample Purpose	Regular sample											
	Sample Type	Tissue - fish											
	Specimen Age	6 yrs	14 yrs	6 yrs	3+ yrs	3+ yrs	4+ yrs	6 yrs	5 yrs	3+ yrs			
	Specimen Length	542 mm	561 mm	591 mm	155 mm	148 mm	150 mm	318 mm	312 mm	268 mm			
	Sample Type	F	F	F	F	F	F	F	F	F			
	Specimen Sex	F	F	F	F	F	F	F	U	U			
	Specimen Weight	1896 g	2150 g	2534 g	85 g	72 g	97 g	440 g	380 g	280 g			
	Taxon	WALL	WALL	WALL	PKSD	PKSD	PKSD	BB	BB	BB			
Method	Parameter Name	Units											
EPA 1613B	1,2,3,4,6,7,8-HPCDD	ng/kg											
EPA 1613B	1,2,3,4,6,7,8-HPCDF	ng/kg											
EPA 1613B	1,2,3,4,7,8,9-HPCDF	ng/kg											
EPA 1613B	1,2,3,4,7,8-HX CDDL	ng/kg											
EPA 1613B	1,2,3,4,7,8-HXCDD	ng/kg											
EPA 1613B	1,2,3,6,7,8-HXCDF	ng/kg											
EPA 1613B	1,2,3,7,8,9-HXCDD	ng/kg											
EPA 1613B	1,2,3,7,8,9-HXCDF	ng/kg											
EPA 1613B	1,2,3,7,8,9-HX CDD	ng/kg											
EPA 1613B	1,2,3,7,8,9-HX CDF	ng/kg											
EPA 1613B	1,2,3,7,8-PECDD	ng/kg											
EPA 1613B	1,2,3,7,8-PECDF	ng/kg											
EPA 1613B	2,3,4,6,7,8-HXCDF	ng/kg											
EPA 1613B	2,3,4,7,8-PECDF	ng/kg											
EPA 1613B	2,3,7,8-TCDD	ng/kg											
EPA 1613B	2,3,7,8-TCDF	ng/kg											
EPA 1613B	OCDD	ng/kg											
EPA 1613B	OCDF	ng/kg											
Percent Lipids	%LIPIDS DETERMINATION	%		1.9							0.14		
SW7471	MERCURY	mg/kg	1.2	2.7	1.5	0.17	0.19	0.15	0.41	0.4	0.2		
SW8081	4,4'-DDD	ug/kg			5.4 JN						1.1 JN		
SW8081	4,4'-DDE	ug/kg			32						1.4 J		
SW8081	4,4'-DDT	ug/kg			17 U						1.7 U		
SW8081	HEXA CHLOROBENZENE	ug/kg			16						5.6		
SW8082	AROCLOR-1016	ug/kg			160 U						16 U		
SW8082	AROCLOR-1221	ug/kg			160 U						16 U		
SW8082	AROCLOR-1232	ug/kg			160 U						16 U		
SW8082	AROCLOR-1242	ug/kg			160 U						16 U		
SW8082	AROCLOR-1248	ug/kg			160 U						16 U		
SW8082	AROCLOR-1254	ug/kg			1200						16 U		
SW8082	AROCLOR-1260	ug/kg			920						44		
SW8082	AROCLOR-1262	ug/kg			160 U						16 U		
SW8082	AROCLOR-1268	ug/kg			160 U						16 U		
SW8082	TOTAL PCBs	ug/kg			2100						44		

	Location	OL-STA-40212	OL-STA-40212	OL-STA-40212								
	Field Sample ID	OL-1500-01F	OL-1500-02F	OL-1500-03F	OL-1500-04F	OL-1500-05F	OL-1500-06F	OL-1500-07F	OL-1500-08F			
	SDG	180-550-1	180-550-1	180-550-1	180-550-1	180-550-1	180-550-1	180-550-1	180-550-1			
	Sample Date	5/25/2011	5/25/2011	5/25/2011	5/25/2011	5/25/2011	5/25/2011	5/25/2011	5/25/2011			
	Matrix	TISSUE										
	Sample Purpose	Regular sample										
	Sample Type	Tissue - fish										
	Specimen Age	3+ yrs	3+ yrs	3+ yrs	3+ yrs	5+ yrs	3 yrs	3 yrs	6 yrs			
	Specimen Length	149 mm	164 mm	147 mm	151 mm	311 mm	274 mm	254 mm	300 mm			
	Sample Type	F	F	F	F	F	F	F	F			
	Specimen Sex	M	M	M	M	U	U	U	U			
	Specimen Weight	88 g	124 g	101 g	93 g	399 g	314 g	241 g	443 g			
	Taxon	PKSD	PKSD	PKSD	PKSD	BB	BB	BB	BB			
Method	Parameter Name	Units										
EPA 1613B	1,2,3,4,6,7,8-HPCDD	ng/kg		6.1	U							
EPA 1613B	1,2,3,4,6,7,8-HPCDF	ng/kg		6.1	U							
EPA 1613B	1,2,3,4,7,8,9-HPCDF	ng/kg		6.1	U							
EPA 1613B	1,2,3,4,7,8-HXCDD	ng/kg		6.1	U							
EPA 1613B	1,2,3,6,7,8-HXCDD	ng/kg		6.1	U							
EPA 1613B	1,2,3,6,7,8-HXCDF	ng/kg		6.1	U							
EPA 1613B	1,2,3,7,8,9-HXCDD	ng/kg		6.1	U							
EPA 1613B	1,2,3,7,8,9-HXCDF	ng/kg		6.1	U							
EPA 1613B	1,2,3,7,8-PECDD	ng/kg		6.1	U							
EPA 1613B	1,2,3,7,8-PECDF	ng/kg		6.1	U							
EPA 1613B	2,3,4,6,7,8-HXCDF	ng/kg		6.1	U							
EPA 1613B	2,3,4,7,8-PECDF	ng/kg		6.1	U							
EPA 1613B	2,3,7,8-TCDD	ng/kg		1.2	U							
EPA 1613B	2,3,7,8-TCDF	ng/kg		0.21	J							
EPA 1613B	OCDD	ng/kg		12	U							
EPA 1613B	OCDF	ng/kg		12	U							
Percent Lipids	%LIPIDS DETERMINATION	%	0.78	0.58								
SW7471	MERCURY	mg/kg	0.24	0.14	0.11	0.24	0.11	0.44	0.16	0.15		
SW8081	4,4'-DDD	ug/kg	17	U	17	U						
SW8081	4,4'-DDE	ug/kg		17	U	17	U					
SW8081	4,4'-DDT	ug/kg		18	J	20	J					
SW8081	HEXACHLOROBENZENE	ug/kg		0.85	J	0.88	J					
SW8082	AROCLOR-1016	ug/kg		160	U	170	U					
SW8082	AROCLOR-1221	ug/kg		160	U	170	U					
SW8082	AROCLOR-1232	ug/kg		160	U	170	U					
SW8082	AROCLOR-1242	ug/kg		160	U	170	U					
SW8082	AROCLOR-1248	ug/kg		160	U	170	U					
SW8082	AROCLOR-1254	ug/kg		160	U	170	U					
SW8082	AROCLOR-1260	ug/kg		160	U	170	U					
SW8082	AROCLOR-1262	ug/kg		160	U	170	U					
SW8082	AROCLOR-1268	ug/kg		160	U	170	U					
SW8082	TOTAL PCBs	ug/kg		160	U	170	U					

	Location	OL-STA-40212	OL-STA-40212	OL-STA-40212	OL-STA-40212	OL-STA-40212	OL-STA-50057	OL-STA-50057	OL-STA-50057	OL-STA-50057	OL-STA-50057	OL-STA-50057	
	Field Sample ID	OL-1500-15F	OL-1501-02F	OL-1501-03F	OL-1501-04F	OL-1501-05F	OL-1500-09F	OL-1500-10F	OL-1500-11F	OL-1500-12F			
	SDG	180-550-1	180-550-2	180-550-2	180-550-2	180-550-2	180-550-1	180-550-1	180-550-1	180-550-1	180-550-1	180-550-1	
	Sample Date	5/25/2011	5/25/2011	5/25/2011	5/25/2011	5/25/2011	5/25/2011	5/25/2011	5/25/2011	5/25/2011	5/25/2011	5/25/2011	
	Matrix	TISSUE											
	Sample Purpose	Regular sample											
	Sample Type	Tissue - fish											
	Specimen Age	6 yrs	10 yrs	17 yrs	12 yrs	7 yrs	3+ yrs	3+ yrs	3+ yrs	3+ yrs	3+ yrs	7 yrs	
	Specimen Length	379 mm	585 mm	551 mm	508 mm	467 mm	163 mm	139 mm	143 mm	143 mm	345 mm		
	Specimen Type	F	F	F	F	F	F	F	F	F	F	F	
	Specimen Sex	U	F	F	F	F	M	M	M	M	U		
	Specimen Weight	778 g	2206 g	2042 g	1691 g	1212 g	99 g	76 g	76 g	76 g	636 g		
	Taxon	SMB	WALL	WALL	WALL	WALL	PKSD	PKSD	PKSD	PKSD	BB		
Method	Parameter Name	Units											
EPA 1613B	1,2,3,4,6,7,8-HPCDD	ng/kg			5 U		5 U	5.6 U					
EPA 1613B	1,2,3,4,6,7,8-HPCDF	ng/kg			5 U		5 U	5.6 U					
EPA 1613B	1,2,3,4,7,8,9-HPCDF	ng/kg			5 U		5 U	5.6 U					
EPA 1613B	1,2,3,4,7,8-HX CDDL	ng/kg			5 U		5 U	5.6 U					
EPA 1613B	1,2,3,4,7,8-HXCDD	ng/kg			5 U		5 U	5.6 U					
EPA 1613B	1,2,3,6,7,8-HXCDF	ng/kg			1.4 J		5 U	5.6 U					
EPA 1613B	1,2,3,7,8,9-HXCDD	ng/kg			2.4 J		1.2 J	0.82 J					
EPA 1613B	1,2,3,7,8,9-HX CDDL	ng/kg			5 U		5 U	5.6 U					
EPA 1613B	1,2,3,7,8,9-HXCDF	ng/kg			5 U		5 U	5.6 U					
EPA 1613B	1,2,3,7,8-PECDD	ng/kg			3.4 J		0.88 J	5.6 U					
EPA 1613B	1,2,3,7,8-PECDF	ng/kg			1.4 J		5 U	5.6 U					
EPA 1613B	2,3,4,6,7,8-HXCDF	ng/kg			5 U		5 U	5.6 U					
EPA 1613B	2,3,4,7,8-PECDF	ng/kg			9.4		2.1 J	5.6 U					
EPA 1613B	2,3,7,8-TCDD	ng/kg			3.1 J		1 U	0.039 J					
EPA 1613B	2,3,7,8-TCDF	ng/kg			11 J		1.7 J	0.27 J					
EPA 1613B	OCDD	ng/kg			10 U		10 U	11 U					
EPA 1613B	OCDF	ng/kg			10 U		10 U	11 U					
Percent Lipids	%LIPIDS DETERMINATION	%			2.3		1.4	0.87	0.91				0.75
SW7471	MERCURY	mg/kg	1.3	0.68	3.1	2.1	0.79	0.24	0.078	0.23			0.27
SW8081	4,4'-DDD	ug/kg			8.2 JN		7.2 JN	2.6 J	17 U				13
SW8081	4,4'-DDE	ug/kg			110		19 J	17 U	17 U				7.3
SW8081	4,4'-DDT	ug/kg			180		53	19	17 U				28
SW8081	HEXAChLOROBENZENE	ug/kg			44		13	1.3 J	0.46 J				1.9
SW8082	AROCLOR-1016	ug/kg			160 U		170 U	170 U	170 U				170
SW8082	AROCLOR-1221	ug/kg			160 U		170 U	170 U	170 U				170
SW8082	AROCLOR-1232	ug/kg			160 U		170 U	170 U	170 U				170
SW8082	AROCLOR-1242	ug/kg			160 U		170 U	170 U	170 U				170
SW8082	AROCLOR-1248	ug/kg			160 U		170 U	170 U	170 U				170
SW8082	AROCLOR-1254	ug/kg			3200		570	170 U	170 U				120
SW8082	AROCLOR-1260	ug/kg			160 U		170 U	170 U	170 U				170
SW8082	AROCLOR-1262	ug/kg			160 U		170 U	170 U	170 U				170
SW8082	AROCLOR-1268	ug/kg			160 U		170 U	170 U	170 U				170
SW8082	TOTAL PCBs	ug/kg			3200		570	170 U	170 U				120

	Location	OL-STA-50057												
	Field Sample ID	OL-1500-13F	OL-1500-14F	OL-1500-16F	OL-1500-17F	OL-1500-18F	OL-1500-19F	OL-1500-20F	OL-1500-01F					
	SDG	180-550-1	180-550-1	180-550-1	180-550-1	180-550-1	180-550-1	180-550-1	180-550-1	180-550-1	180-550-1	180-550-1		
	Sample Date	5/25/2011	5/25/2011	5/25/2011	5/25/2011	5/25/2011	5/25/2011	5/25/2011	5/25/2011	5/25/2011	5/25/2011	5/25/2011		
	Matrix	TISSUE												
	Sample Purpose	Regular sample												
	Sample Type	Tissue - fish												
	Specimen Age	6 yrs	3 yrs	6 yrs	4 yrs	4 yrs	4 yrs	4 yrs	6 yrs	4+ yrs				
	Specimen Length	355 mm	279 mm	380 mm	314 mm	338 mm	290 mm	464 mm	406 mm					
	Sample Type	F	F	F	F	F	F	F	F	F	F	F		
	Specimen Sex	U	F	F	M	F	F	F	F	M				
	Specimen Weight	674 g	392 g	905 g	442 g	583 g	352 g	1258 g	845 g					
	Taxon	BB	BB	SMB	SMB	SMB	SMB	SMB	WALL	WALL				
Method	Parameter Name	Units												
EPA 1613B	1,2,3,4,6,7,8-HPCDD	ng/kg		5 U				5 U				5 U		
EPA 1613B	1,2,3,4,6,7,8-HPCDF	ng/kg		5 U				5 U				5 U		
EPA 1613B	1,2,3,4,7,8,9-HPCDF	ng/kg		5 U				5 U				5 U		
EPA 1613B	1,2,3,4,7,8-HXCDDD	ng/kg		5 U				5 U				5 U		
EPA 1613B	1,2,3,4,7,8-HXCDF	ng/kg		5 U				5 U				5 U		
EPA 1613B	1,2,3,6,7,8-HXDDD	ng/kg		5 U				5 U				5 U		
EPA 1613B	1,2,3,6,7,8-HXCDF	ng/kg		1.6 J				1.9 J				0.83 J		
EPA 1613B	1,2,3,7,8,9-HXCDDD	ng/kg		5 U				5 U				5 U		
EPA 1613B	1,2,3,7,8,9-HXCDF	ng/kg		5 U				5 U				5 U		
EPA 1613B	1,2,3,7,8-PECDD	ng/kg		5 U				0.99 J				5 U		
EPA 1613B	1,2,3,7,8-PECDF	ng/kg		5 U				5 U				5 U		
EPA 1613B	2,3,4,6,7,8-HXCDDF	ng/kg		5 U				5 U				5 U		
EPA 1613B	2,3,4,7,8-PECDF	ng/kg		0.72 J				3 J				0.68 J		
EPA 1613B	2,3,7,8-TCDD	ng/kg		0.1 J				0.55 J				1 U		
EPA 1613B	2,3,7,8-TCDF	ng/kg		0.37 J				1.1 J				0.95 J		
EPA 1613B	OCDD	ng/kg		19				10 U				10 U		
EPA 1613B	OCDF	ng/kg		10 U				10 U				1.2 J		
Percent Lipids	%LIPIDS DETERMINATION	%				0.25	1.2					1.4		
SW7471	MERCURY	mg/kg	0.27	0.14	0.26	1	0.71	1.2	0.75	0.3				
SW8081	4,4'-DDD	ug/kg	J			17 U	17 U					17 U		
SW8081	4,4'-DDE	ug/kg	J			17 U	17					17 U		
SW8081	4,4'-DDT	ug/kg				23 J	61					22		
SW8081	HEXACHLOROBENZENE	ug/kg				0.71 J	8.3					3.4		
SW8082	AROCLOR-1016	ug/kg	U			160 U	160 U					170 U		
SW8082	AROCLOR-1221	ug/kg	U			160 U	160 U					170 U		
SW8082	AROCLOR-1232	ug/kg	U			160 U	160 U					170 U		
SW8082	AROCLOR-1242	ug/kg	U			160 U	160 U					170 U		
SW8082	AROCLOR-1248	ug/kg	U			160 U	160 U					170 U		
SW8082	AROCLOR-1254	ug/kg	J			160 U	540					120 J		
SW8082	AROCLOR-1260	ug/kg	U			160 U	160 U					170 U		
SW8082	AROCLOR-1262	ug/kg	U			160 U	160 U					170 U		
SW8082	AROCLOR-1268	ug/kg	U			160 U	160 U					170 U		
SW8082	TOTAL PCBs	ug/kg	J			160 U	540					120 J		

	Location	OL-STA-50058	OL-STA-50058	OL-STA-50058	OL-STA-50058								
	Field Sample ID	OL-1501-06F	OL-1501-07F	OL-1502-06F	OL-1502-07F	OL-1502-08F	OL-1502-09F	OL-1502-10F	OL-1502-11F	OL-1502-20F			
	SDG	180-550-2	180-550-2	180-616-1	180-616-1	180-616-1	180-616-1	180-616-1	180-616-1	180-616-1			180-616-1
	Sample Date	5/25/2011	5/25/2011	5/26/2011	5/26/2011	5/26/2011	5/26/2011	5/26/2011	5/26/2011	5/26/2011			5/26/2011
	Matrix	TISSUE			TISSUE								
	Sample Purpose	Regular sample			Regular sample								
	Sample Type	Tissue - fish			Tissue - fish								
	Specimen Age	10+ yrs	12 yrs	3+ yrs	3+ yrs	3+ yrs	3 yrs	3 yrs	6 yrs	6 yrs			5 yrs
	Specimen Length	548 mm	565 mm	142 mm	132 mm	169 mm	289 mm	325 mm	315 mm	365 mm			
	Sample Type	F	F	F	F	F	F	F	F	F			F
	Specimen Sex	F	F	M	M	M	U	U	F	M			
	Specimen Weight	1904 g	2367 g	74 g	61 g	126 g	368 g	551 g	576 g	711 g			
	Taxon	WALL	WALL	PKSD	PKSD	PKSD	BB	BB	BB	BB			SMB
Method	Parameter Name	Units											
EPA 1613B	1,2,3,4,6,7,8-HPCDD	ng/kg			1.8 J				5 U				5
EPA 1613B	1,2,3,4,6,7,8-HPCDF	ng/kg			6.9 U				5 U				5
EPA 1613B	1,2,3,4,7,8,9-HPCDF	ng/kg			6.9 U				5 U				5
EPA 1613B	1,2,3,4,7,8-HXCDDF	ng/kg			6.9 U				5 U				5
EPA 1613B	1,2,3,4,7,8-HXCDFF	ng/kg			6.9 U				5 U				5
EPA 1613B	1,2,3,6,7,8-HXCDF	ng/kg			6.9 U				5 U				5
EPA 1613B	1,2,3,7,8,9-HXCDDF	ng/kg			6.9 U				5 U				5
EPA 1613B	1,2,3,7,8,9-HXCDFFF	ng/kg			6.9 U				5 U				5
EPA 1613B	1,2,3,7,8-PECDD	ng/kg			6.9 U				5 U				0.84
EPA 1613B	1,2,3,7,8-PECDF	ng/kg			6.9 U				5 U				5
EPA 1613B	2,3,4,6,7,8-HXCDF	ng/kg			6.9 U				5 U				5
EPA 1613B	2,3,4,7,8-PECDF	ng/kg			6.9 U				0.61 J				2
EPA 1613B	2,3,7,8-TCDD	ng/kg			1.4 U				0.99 U				1
EPA 1613B	2,3,7,8-TCDF	ng/kg			0.41 J				0.16 J				0.89
EPA 1613B	OCDD	ng/kg			21				9.9 U				10
EPA 1613B	OCDF	ng/kg			14 U				9.9 U				10
Percent Lipids	%LIPIDS DETERMINATION	%	2.7		0.6				0.64				10
SW7471	MERCURY	mg/kg	1.2	1.6	0.087	0.021 J	0.31	0.18	0.46	0.41			0.97
SW8081	4,4'-DDD	ug/kg	8.1 JN		0.5 J			2.7 J					1.2
SW8081	4,4'-DDE	ug/kg	45		1.7 U			1.7 U					3
SW8081	4,4'-DDT	ug/kg	100		1.7 U			5					35
SW8081	HEXAChlorobENZENE	ug/kg	22										
SW8082	AROCLOR-1016	ug/kg	170 U		17 U			17 U					17
SW8082	AROCLOR-1221	ug/kg	170 U		17 U			17 U					17
SW8082	AROCLOR-1232	ug/kg	170 U		17 U			17 U					17
SW8082	AROCLOR-1242	ug/kg	170 U		17 U			17 U					17
SW8082	AROCLOR-1248	ug/kg	170 U		17 U			17 U					17
SW8082	AROCLOR-1254	ug/kg	1400		17 U				51				400
SW8082	AROCLOR-1260	ug/kg	170 U		17 U				52				280
SW8082	AROCLOR-1262	ug/kg	170 U		17 U				17 U				17
SW8082	AROCLOR-1268	ug/kg	170 U		17 U				17 U				17
SW8082	TOTAL PCBs	ug/kg	1400		17 U				100				680

	Location	OL-STA-50059										
	Field Sample ID	OL-1503-01F	OL-1503-02F	OL-1504-01F	OL-1504-02F	OL-1504-03F	OL-1504-04F	OL-1504-05F	OL-1504-05F	OL-1505-02F		
	SDG	180-693-1	180-693-1	180-903-1	180-903-1	180-903-1	180-903-1	180-903-1	180-903-1	180-902-1		
	Sample Date	6/1/2011	6/1/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	
	Matrix	TISSUE										
	Sample Purpose	Regular sample										
	Sample Type	Tissue - fish										
	Specimen Age	9 yrs	6 yrs	4+ yrs	4 yrs	4+ yrs	4 yrs	7 yrs	5 yrs			
	Specimen Length	492 mm	539 mm	176 mm	172 mm	184 mm	174 mm	318 mm	333 mm			
	Sample Type	F	F	F	F	F	F	F	F	F	F	
	Specimen Sex	F	F	F	F	F	F	U	U			
	Specimen Weight	1685 g	2095 g	130 g	130 g	152 g	128 g	493 g	610 g			
	Taxon	WALL	WALL	PKSD	PKSD	PKSD	PKSD	BB	BB			
Method	Parameter Name	Units										
EPA 1613B	1,2,3,4,6,7,8-HPCDD	ng/kg	U		5 U							
EPA 1613B	1,2,3,4,6,7,8-HPCDF	ng/kg	U		5 U							
EPA 1613B	1,2,3,4,7,8,9-HPCDF	ng/kg	U		5 U							
EPA 1613B	1,2,3,4,7,8-HXCDD	ng/kg	U		5 U							
EPA 1613B	1,2,3,6,7,8-HXCDD	ng/kg	U		5 U							
EPA 1613B	1,2,3,6,7,8-HXCDF	ng/kg	J		6.7 J							
EPA 1613B	1,2,3,7,8,9-HXCDD	ng/kg	U		5 U							
EPA 1613B	1,2,3,7,8,9-HXCDF	ng/kg	U		5 U							
EPA 1613B	1,2,3,7,8-PECDD	ng/kg	J		2.1 J							
EPA 1613B	1,2,3,7,8-PECDF	ng/kg	U		5 U							
EPA 1613B	2,3,4,6,7,8-HXCDF	ng/kg	U		5 U							
EPA 1613B	2,3,4,7,8-PECDF	ng/kg	J		4.8 J							
EPA 1613B	2,3,7,8-TCDD	ng/kg	U		0.99 U							
EPA 1613B	2,3,7,8-TCDF	ng/kg	J		4.5 J							
EPA 1613B	OCDD	ng/kg	U		9.9 U							
EPA 1613B	OCDF	ng/kg	U		9.9 U							
Percent Lipids	%LIPIDS DETERMINATION	%		5.1	3.7	0.21				0.1		
SW7471	MERCURY	mg/kg		1.2	1.2	0.27	0.31	0.36	0.28	0.38	0.32	
SW8081	4,4'-DDD	ug/kg	JN	2.3	JN	3.3	JN	1.1	J		1.7	U
SW8081	4,4'-DDE	ug/kg	JN	6.7	JN	5.5	JN	0.4	JN		1.7	U
SW8081	4,4'-DDT	ug/kg		47		40		1.4	J		1.7	U
SW8081	HEXACHLOROBENZENE	ug/kg		26		26		1.7	U		1.7	U
SW8082	AROCLOR-1016	ug/kg	U	16	U	16	U	17	U		16	U
SW8082	AROCLOR-1221	ug/kg	U	16	U	16	U	17	U		16	U
SW8082	AROCLOR-1232	ug/kg	U	16	U	16	U	17	U		16	U
SW8082	AROCLOR-1242	ug/kg	U	16	U	16	U	17	U		16	U
SW8082	AROCLOR-1248	ug/kg	U	16	U	16	U	17	U		16	U
SW8082	AROCLOR-1254	ug/kg		820		770		17	U		16	U
SW8082	AROCLOR-1260	ug/kg		330		280		11	J		20	
SW8082	AROCLOR-1262	ug/kg	U	16	U	16	U	17	U		16	U
SW8082	AROCLOR-1268	ug/kg	U	16	U	16	U	17	U		16	U
SW8082	TOTAL PCBs	ug/kg		1200		1100		11	J		20	

	Location	OL-STA-70124						
	Field Sample ID	OL-1504-10F	OL-1504-11F	OL-1504-12F	OL-1504-13F	OL-1504-14F	OL-1504-15F	
	SDG	180-903-1	180-903-1	180-903-1	180-903-1	180-903-1	180-903-1	180-903-1
	Sample Date	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011
	Matrix	TISSUE						
	Sample Purpose	Regular sample						
	Sample Type	Tissue - fish						
	Specimen Age	7 yrs	6 yrs	7 yrs	7+ yrs	7 yrs	7 yrs	3+ yrs
	Specimen Length	329 mm	315 mm	341 mm	184 mm	193 mm	145 mm	
	Sample Type	F	F	F	F	F	F	F
	Specimen Sex	U	U	U	U	F	F	U
	Specimen Weight	487 g	415 g	569 g	165 g	163 g	64 g	
	Taxon	BB	BB	BB	PKSD	PKSD	PKSD	
Method	Parameter Name	Units						
EPA 1613B	1,2,3,4,6,7,8-HPCDD	ng/kg	5.1	U		5	U	
EPA 1613B	1,2,3,4,6,7,8-HPCDF	ng/kg	5.1	U		5	U	
EPA 1613B	1,2,3,4,7,8,9-HPCDF	ng/kg	5.1	U		5	U	
EPA 1613B	1,2,3,4,7,8-HXCDDF	ng/kg	5.1	U		5	U	
EPA 1613B	1,2,3,4,7,8-HXCDF	ng/kg	5.1	U		5	U	
EPA 1613B	1,2,3,6,7,8-HXCDD	ng/kg	5.1	U		5	U	
EPA 1613B	1,2,3,6,7,8-HXCDF	ng/kg	5.1	U		5	U	
EPA 1613B	1,2,3,7,8,9-HX CDDL	ng/kg	5.1	U		5	U	
EPA 1613B	1,2,3,7,8,9-HX CDF	ng/kg	5.1	U		5	U	
EPA 1613B	1,2,3,7,8-PECDD	ng/kg	5.1	U		5	U	
EPA 1613B	1,2,3,7,8-PECDF	ng/kg	5.1	U		5	U	
EPA 1613B	2,3,4,6,7,8-HX CDF	ng/kg	5.1	U		5	U	
EPA 1613B	2,3,4,7,8-PECDF	ng/kg	2.6	J		0.36	J	
EPA 1613B	2,3,7,8-TCDD	ng/kg	0.11	J		1	U	
EPA 1613B	2,3,7,8-TCDF	ng/kg	0.18	J		0.75	J	
EPA 1613B	OCDD	ng/kg	10	U		10	U	
EPA 1613B	OCDF	ng/kg	10	U		10	U	
Percent Lipids	%LIPIDS DETERMINATION	%	0.14		0.52	0.32	0.11	0.14
SW7471	MERCURY	mg/kg	0.59		0.5	0.54	0.56	0.51
SW8081	4,4'-DDD	ug/kg	1	JN	1.7	U	1	JN
SW8081	4,4'-DDE	ug/kg	0.92	J	2.4	J	1.4	J
SW8081	4,4'-DDT	ug/kg	1.7	U	1.7	U	1.7	U
SW8081	HEXA CHLOROBENZENE	ug/kg	4.7		30	5.8	2.5	0.32
SW8082	AROCLOR-1016	ug/kg	17	U	16	U	17	U
SW8082	AROCLOR-1221	ug/kg	17	U	16	U	17	U
SW8082	AROCLOR-1232	ug/kg	17	U	16	U	17	U
SW8082	AROCLOR-1242	ug/kg	17	U	16	U	17	U
SW8082	AROCLOR-1248	ug/kg	17	U	16	U	17	U
SW8082	AROCLOR-1254	ug/kg	17	U	16	U	17	U
SW8082	AROCLOR-1260	ug/kg	28		75	44	37	16
SW8082	AROCLOR-1262	ug/kg	17	U	16	U	17	U
SW8082	AROCLOR-1268	ug/kg	17	U	16	U	17	U
SW8082	TOTAL PCBs	ug/kg	28		75	44	37	16
								22

	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	OL-STA-40212		
	Field Sample ID	OL-1527-10	OL-1527-11	OL-1527-12	OL-1527-07	OL-1527-08	OL-1527-09	OL-1527-04	OL-1527-05	OL-1527-06		
	SDG	180-2515-1	180-2515-1	180-2515-1	180-2515-1	180-2515-1	180-2515-1	180-2515-1	180-2515-1	180-2515-1		
	Sample Date	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011		
	Matrix	TISSUE										
	Sample Purpose	Regular sample										
	Sample Type	Tissue - fish										
	Specimen Length	91 mm	85.8 mm	76.1 mm	74.9 mm	70.9 mm	72.9 mm	90.2 mm	73.9 mm	70.7 mm		
	Sample Type	WH										
	Specimen Sex											
	Specimen Weight	7.58 g	6.96 g	4.59 g	4.12 g	3.69 g	3.83 g	8.32 g	4.25 g	3.56 g		
	Taxon	MIN										
Method	Parameter Name	Units										
SW7471	MERCURY	mg/kg	0.89	0.96	0.55	0.25	0.23	0.24	0.4	0.36	0.46	

	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	OL-STA-50059	OL-STA-50059	OL-STA-50059	
	Field Sample ID	OL-1527-01	OL-1527-02	OL-1527-03	OL-1527-13	OL-1527-14	OL-1527-15	OL-1527-16	OL-1527-17	OL-1527-17	OL-1527-18		
	SDG	180-2515-1	180-2515-1	180-2515-1	180-2515-1	180-2515-1	180-2515-1	180-2515-1	180-2515-1	180-2515-1	180-2515-1	180-2515-1	
	Sample Date	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	
	Matrix	TISSUE											
	Sample Purpose	Regular sample											
	Sample Type	Tissue - fish											
	Specimen Length	76.1 mm	87.4 mm	71.3 mm	85.2 mm	78.4 mm	78.4 mm	76.6 mm	90 mm	76.4 mm			
	Sample Type	WH											
	Specimen Sex												
	Specimen Weight	4.58 g	6.92 g	3.83 g	6.72 g	5.58 g	5.62 g	4.7 g	7.42 g	4.46 g			
	Taxon	MIN											
Method	Parameter Name	Units											
SW7471	MERCURY	mg/kg	0.15	0.15	0.095	0.31	0.16	0.18	0.14	0.24	0.11		

	Location	OL-STA-60225	OL-STA-60225	OL-STA-60225	OL-STA-70124	OL-STA-70124	OL-STA-70124	OL-STA-40212	OL-STA-40212	OL-STA-40212			
	Field Sample ID	OL-1528-04	OL-1528-05	OL-1528-06	OL-1528-01	OL-1528-02	OL-1528-03	OL-1501-12	OL-1501-13	OL-1501-14			
	SDG	180-2660-1	180-2660-1	180-2660-1	180-2660-1	180-2660-1	180-2660-1	180-550-2	180-550-2	180-550-2			
	Sample Date	8/4/2011	8/4/2011	8/4/2011	8/4/2011	8/4/2011	8/4/2011	5/25/2011	5/25/2011	5/25/2011			
	Matrix	TISSUE											
	Sample Purpose	Regular sample											
	Sample Type	Tissue - fish											
	Specimen Length	90.2 mm	88.6 mm	89.2 mm	89.8 mm	87.2 mm	76.8 mm	122.8 mm	121.2 mm	118.8 mm			
	Sample Type	WH											
	Specimen Sex							U	U	U			
	Specimen Weight	8 g	7.68 g	6.8 g	8.3 g	6.98 g	4.33 g	14 g	13.6 g	14.8 g			
	Taxon	MIN	MIN	MIN	MIN	MIN	MIN	ALE	ALE	ALE			
Method	Parameter Name	Units											
SW7471	MERCURY	mg/kg	0.19	0.19	0.18	0.4	0.45	0.35	0.24	0.2	0.24		

	Location	OL-STA-40212		OL-STA-40212		OL-STA-40212		OL-STA-40212		OL-STA-60225		OL-STA-60225		OL-STA-60225		OL-STA-60225			
	Field Sample ID	OL-1501-15		OL-1501-16		OL-1501-17		OL-1501-18		OL-1501-19		OL-1502-12		OL-1502-13		OL-1502-14		OL-1502-15	
	SDG	180-550-2		180-550-2		180-550-2		180-550-2		180-550-2		180-616-1		180-616-1		180-616-1		180-616-1	
	Sample Date	5/25/2011		5/25/2011		5/25/2011		5/25/2011		5/25/2011		5/26/2011		5/26/2011		5/26/2011		5/26/2011	
	Matrix	TISSUE																	
	Sample Purpose	Regular sample																	
	Sample Type	Tissue - fish																	
	Specimen Length	123.4 mm		120.6 mm		120.2 mm		133.2 mm		117.6 mm		117.4 mm		122.6 mm		122 mm		115.4 mm	
	Sample Type	WH																	
	Specimen Sex	U		U		U		U		U		U		U		U		U	
	Specimen Weight	14.2 g		13.8 g		14 g		16.8 g		12.6 g		12.6 g		13 g		37.4 g		12.2 g	
	Taxon	ALE																	
Method	Parameter Name	Units																	
SW7471	MERCURY	mg/kg		0.27		0.18		0.21		0.21		0.25		0.21		0.26		0.21	
																		0.17	

	Location	OL-STA-60225	OL-STA-60225	OL-STA-60225	OL-STA-60225
	Field Sample ID	OL-1502-16	OL-1502-17	OL-1502-18	OL-1502-19
	SDG	180-616-1	180-616-1	180-616-1	180-616-1
	Sample Date	5/26/2011	5/26/2011	5/26/2011	5/26/2011
	Matrix	TISSUE	TISSUE	TISSUE	TISSUE
	Sample Purpose	Regular sample	Regular sample	Regular sample	Regular sample
	Sample Type	Tissue - fish	Tissue - fish	Tissue - fish	Tissue - fish
	Specimen Length	122.2 mm	117.8 mm	118 mm	122.4 mm
	Sample Type	WH	WH	WH	WH
	Specimen Sex	U	U	U	U
	Specimen Weight	14 g	12.6 g	12 g	13.6 g
	Taxon	ALE	ALE	ALE	ALE
Method	Parameter Name	Units			
SW7471	MERCURY	mg/kg	0.23	0.26	0.22
					0.24

APPENDIX C**DATA USABILITY SUMMARY REPORT, ONONDAGA LAKE BASELINE
MONITORING BOOK 3 ADDENDUM 1 (2011):
TRIBUTARY MONITORING**

APPENDIX C:

DATA USABILITY SUMMARY REPORT

ONONDAGA LAKE BASELINE MONITORING BOOK 3 FOR 2011: TRIBUTARY MONITORING

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LIST OF ATTACHMENTS

ATTACHMENT A	VALIDATED LABORATORY DATA
ATTACHMENT A-1	VALIDATED LABORATORY DATA FOR TRIBUTARY BASE FLOW SURFACE WATER SAMPLES
ATTACHMENT A-2	VALIDATED LABORATORY DATA FOR STORM WATER MONITORING SAMPLES

SECTION C1**DATA USABILITY SUMMARY**

Surface water samples were collected as part of the Book 3 baseline monitoring efforts for Onondaga Lake from June 15, 2011 through November 29, 2011. 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) and Upstate Freshwater Institute (UFI). 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) and through the New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP).

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 7 to 57 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 C2.

C1.2 SAMPLING AND CHAIN-OF-CUSTODY

The samples were collected, shipped under a COC record, and received at the laboratories within one to two days of sampling.

C1.3 LABORATORY ANALYTICAL METHODS

The tributary surface water samples were collected and analyzed for total and dissolved low level mercury, methylmercury, total suspended solids (TSS), and turbidity. The surface water samples collected for the storm water monitoring were analyzed for total low level mercury,

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methylmercury, TSS, and turbidity. Summaries of deviations from the Work Plan, QAPP, or USEPA Region II SOPs concerning these laboratory analyses are presented in Subsections C1.3.1 through C1.3.4. 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 C2. 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 surface water samples collected from the site were analyzed by TAL for total and/or 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 and field duplicate precision. The reported low level mercury analytical results were considered 100% complete (i.e., usable) for the data presented by TAL. PARCC requirements were met.

C1.3.2 Methylmercury Analysis

The surface water samples collected from the site were analyzed by TAL for methylmercury using the USEPA 1630 analytical method. Certain reported results for the methylmercury samples were qualified as estimated based upon surrogate recoveries and matrix spike recoveries. The reported methylmercury analytical results were considered 100% complete (i.e., usable) for the data presented by TAL. PARCC requirements were met.

C1.3.3 TSS and Turbidity Analyses

The surface water samples collected from the site were analyzed for TSS and turbidity by TAL and UFI using the SM18/20 2540D and 2130B analytical methods, respectively. Certain reported results for these samples were qualified as estimated based upon laboratory duplicate precision. The reported analytical results for these parameters were considered 100% complete (i.e., usable) for the data presented by TAL and UFI.

SECTION C2**DATA VALIDATION REPORTS****C2.1 TRIBUTARY BASE FLOW SURFACE WATER SAMPLES**

Data review has been completed for data packages generated by TAL and UFI containing tributary base flow 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-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 blank contamination
- Matrix spike / matrix spike duplicate (MS/MSD) recoveries
- Laboratory duplicate precision
- 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 blank contamination, MS/MSD recoveries, and field duplicate precision as discussed below.

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Blank Contamination

Many initial and continuing calibration blanks and laboratory preparation blanks associated with project samples contained total mercury at a concentration below the reporting limit ranging from 0.135 to 0.281 ng/L and dissolved mercury at a concentration below the reporting limit ranging from 0.128 to 0.308 ng/L. Many field blanks associated with project samples contained total mercury at a concentration below the reporting limit ranging from 0.12 to 0.38 ng/L and dissolved mercury at a concentration below the reporting limit ranging from 0.15 to 0.28 ng/L. Therefore, associated sample results less than validation action concentrations were considered not detected and qualified "U" for the associated samples.

It was noted that field blank OL-1465-01 associated with samples within sample delivery group (SDG) 240-2745-1 contained total and dissolved mercury at concentrations of 0.89 and 0.71 ng/L, respectively; and the field blank OL-1479-01 associated with samples within SDG 240-3171-1 contained total mercury at a concentration at 0.5 ng/L. Since contamination of the field blank water from the laboratory is suspected for these field blank samples, the contamination detected in these blanks was not used to evaluate project 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 low MS/MSD recoveries for total mercury (56%R/60%R) and dissolved mercury (70%R/69%R) associated with samples contained within SDG 240-2293-1; the high MSD recovery for total mercury (137%R) associated with samples contained within SDG 240-2745-1; the low MS/MSD recoveries for total mercury (62%R) and dissolved mercury (70%R) associated with samples contained within SDG 240-3171-1; the high MS/MSD recoveries for total mercury (380%R/581%R) and the low MSD recovery for dissolved mercury (70%R) associated with samples contained within SDG 240-3576-1; the low MSD recovery for total mercury (47%R) associated with samples contained within SDG 240-4043-1; the low MS/MSD for total mercury (-39%R/-20%R) associated with samples contained within SDG 240-5108-1; and the high MS recovery for total mercury (205%R) associated with samples contained within SDG 240-5953-1. Therefore, the results for those samples where MS/MSD recoveries fell below the QC limit were considered estimated, possibly biased low, with positive results qualified "J" and nondetected results qualified "UJ" for the affected samples. Positive results for those samples where MS/MSD recoveries exceeded the QC limit were considered estimated, possibly biased high, and qualified "J" 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 total mercury precision results for the field duplicate pairs OL-1430-03/-04 (62%RPD), OL-1465-03/-04 (74%RPD), OL-1639-03/-04 (133%RPD), OL-1651-03/-04 (124%RPD), and OL-1658-03/-04 (113%RPD); and the dissolved mercury precision result for the field duplicate pair OL-1493-03/-04 (68%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 were 100% complete (i.e., usable). The validated low level mercury laboratory data are tabulated and presented in Attachment A-1.

C2.1.2 Methylmercury

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

- Custody documentation
- Holding times
- Surrogate recoveries
- Initial and continuing calibration verifications
- Initial and continuing calibration, laboratory preparation blank, and field blank contamination
- Matrix spike / matrix spike duplicate (MS/MSD) recoveries
- Laboratory duplicate precision
- 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 surrogate recoveries, blank contamination, and MS/MSD recoveries as discussed below.

Surrogate Recoveries

All sample surrogate recoveries for n-propyl mercury chloride (QC limit 50-150%R) were considered acceptable and within the QC limit with the exception of the low surrogate recovery in samples OL-1610-03 (20%R), OL-1651-03 (42%R), OL-1658-02 (45%R), -03 (40%R), -04 (39%R), and -05 (18%R). Therefore, the methylmercury results for these samples were considered estimated, possibly biased low, and qualified "J" for the affected samples.

Blank Contamination

Many initial and continuing calibration blanks and laboratory preparation blanks associated with project samples contained methylmercury at a concentration below the reporting limit ranging from 0.0104 to 0.291 ng/L. Field blanks associated with project samples contained methylmercury at a concentration below the reporting limit ranging from 0.011 to 0.09 ng/L. Therefore, associated methylmercury results less than validation action concentrations were considered not detected and qualified "U" for the affected samples.

It was noted that the field blank OL-1479-01 associated with samples within SDG 240-3171-1 contained methylmercury at a concentration of 0.11 ng/L. Since contamination of the field blank water from the laboratory is suspected for this field blank sample, the contamination detected in this blank was not used to evaluate project samples.

MS/MSD Recoveries

All MS/MSD methylmercury recoveries were considered acceptable and within the 65-135%R QC limit with the exception of the low MS recovery (59%R) associated with samples within SDG 240-3171-1; the low MS/MSD recoveries (43%R/49%R) associated with samples within SDG 240-4043-1; and the low MSD recovery (47%R) associated with samples within SDG 240-5953-1. Therefore, the methylmercury results were considered estimated, possibly biased low, with positive results qualified "J" and nondetected results qualified "UJ" for the affected samples.

It was noted that the methylmercury MSD recovered -4% during the spiked analyses of sample OL-1666-03 with a laboratory spiked precision result of 181%RPD associated with samples contained within SDG 240-6341-1. Validation qualification of these samples was not warranted based upon a laboratory spiking error.

Usability

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

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 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 data presented by TAL 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 TAL 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

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

- Custody documentation
- Holding times

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- Initial and continuing calibration verifications
- Initial and continuing calibration blank, laboratory preparation blank, and field blank contamination
- Matrix spike / matrix spike duplicate (MS/MSD) recoveries
- Laboratory duplicate precision
- Laboratory control sample (LCS) recoveries
- 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 equipment blank OL-1496-01 associated with storm water samples within SDG 240-3638-1 contained low level mercury below the reporting limit at 0.21 ng/L. Validation qualification of the project samples was not required since the samples were not affected by the contamination detected in this blank.

Usability

All low level mercury sample results for the storm 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 Methylmercury

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

- Custody documentation
- Holding times

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- Surrogate recoveries
- Initial and continuing calibration verifications
- Initial and continuing calibration blank, laboratory preparation blank, and field blank contamination
- Matrix spike / matrix spike duplicate (MS/MSD) recoveries
- Laboratory duplicate precision
- Laboratory control sample (LCS) recoveries
- 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 recoveries for the surrogate n-propyl mercury chloride were considered acceptable and within the 50-150%R QC limit with the exception of the low surrogate recovery in samples OL-1486-03 (20%R), -06 (37%R), and -08 (35%R). The methylmercury 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 initial and continuing calibration blanks and laboratory preparation blanks associated with project samples contained methylmercury at a concentration below the reporting limit ranging from 0.0105 to 0.194 ng/L. Therefore, methylmercury results less than validation action concentrations were considered not detected and qualified "U" for the affected samples.

Usability

All methylmercury sample results for the storm 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 methylmercury data

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presented by TAL were 100% complete (i.e., usable). The validated methylmercury laboratory data are tabulated and presented in Attachment A-2.

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 blank contamination, initial and continuing calibration verifications, and quantitation limits were reviewed for compliance. Validation qualification of the sample results for these parameters was not required with the exception of the turbidity results for samples OL-1495-01 through -17 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 and UFI were 100% complete (i.e., usable). The validated laboratory data are tabulated and presented in Attachment A-2.



**ONONDAGA LAKE BASELINE MONITORING BOOK 3
DATA USABILITY SUMMARY REPORT**

ATTACHMENT A

VALIDATED LABORATORY DATA

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ATTACHMENT A-1**VALIDATED LABORATORY DATA FOR
TRIBUTARY BASE FLOW SURFACE WATER SAMPLES**

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Validated Book 3 Tributary Base Flow Surface Water Samples

		Field Sample ID	OL-1417-01	OL-1430-01	OL-1440-05	OL-1441-01	OL-1452-05	OL-1453-01	OL-1464-05	OL-1465-01
	Location	FIELD QC								
	Sample Depth									
	Sample Date	6/15/2011	6/29/2011	7/12/2011	7/12/2011	7/27/2011	7/27/2011	8/9/2011	8/9/2011	8/9/2011
	SDG	240-1165-1	240-1582-1	UFICHM2011-028	240-1882-1	UFICHM2011-033	240-2293-1	UFICHM2011-039	240-2745-1	
	Matrix	WATER								
	Sample Purpose	Field blank								
	Sample Type	Blank water (field)								
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N	1.10E-05 J	1.10E-05 J		5.00E-05 U		5.00E-05 U	9.00E-05
E1631	MERCURY	ug/L	N	0.00012 U	0.00036 J		0.0005 U		0.0002 J	0.00089 J
E1631	MERCURY	ug/L	Y	0.00012 U	0.00012 U		0.00012 U		0.00012 UJ	0.00071
SM2540D	Total Suspended Solids	mg/L	N							
UFI SOP	Total Suspended Solids	mg/L	N			2.5 U		2.5 U		2.5 U
UFI SOP	TURBIDITY	NTU	N			0.8 U		0.2 J		0.8 U

Validated Book 3 Tributary Base Flow Surface Water Samples

		Field Sample ID	OL-1478-05	OL-1479-01	OL-1492-05	OL-1493-01	OL-1609-05	OL-1610-01	OL-1625-05	OL-1626-01
	Location	FIELD QC								
	Sample Depth									
	Sample Date	8/24/2011	8/24/2011	9/7/2011	9/7/2011	9/20/2011	9/20/2011	10/5/2011	10/5/2011	10/5/2011
	SDG	UFICHM2011-044	240-3171-1	UFICHM2011-050	240-3576-1	UFICHM2011-058	240-4043-1	UFICHM2011-062	240-4570-1	
	Matrix	WATER								
	Sample Purpose	Field blank								
	Sample Type	Blank water (field)								
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N		1.10E-04 J		1.00E-05 U		1.00E-05 UJ	1.80E-05 J
E1631	MERCURY	ug/L	N		0.0005 J		0.00012 UJ		0.00012 UJ	0.00031 J
E1631	MERCURY	ug/L	Y		0.0005 UJ		0.00028 J		0.00012 U	
SM2540D	Total Suspended Solids	mg/L	N							
UFI SOP	Total Suspended Solids	mg/L	N	2.5 U		2.5 U		2.5 U		2.5 U
UFI SOP	TURBIDITY	NTU	N	0.3 J		0.3 J		0.8 U		0.8 U

		Field Sample ID	OL-1638-05	OL-1639-01	OL-1650-05	OL-1651-01	OL-1657-05	OL-1658-01	OL-1665-05	OL-1666-01
	Location	FIELD QC								
	Sample Depth									
	Sample Date	10/20/2011	10/20/2011	11/3/2011	11/3/2011	11/15/2011	11/15/2011	11/29/2011	11/29/2011	11/29/2011
	SDG	UFICHM2011-067	240-5108-1	UFICHM2011-071	240-5566-1	UFICHM2011-076	240-5953-1	UFICHM2011-079	240-6341-1	
	Matrix	Water								
	Sample Purpose	Field blank								
	Sample Type	Blank water (field)								
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N		1.10E-05 J		5.00E-05 U		1.00E-05 UJ	
E1631	MERCURY	ug/L	N		0.00038 J		0.00032 J		0.0005 UJ	
E1631	MERCURY	ug/L	Y							
SM2540D	Total Suspended Solids	mg/L	N							
UFI SOP	Total Suspended Solids	mg/L	N		2.5 U		2.5 U		2.5 U	
UFI SOP	TURBIDITY	NTU	N		0.8 U		0.2 J		0.4 J	

Validated Book 3 Tributary Base Flow Surface Water Samples

		Field Sample ID	OL-1667-05	OL-1418-01	OL-1419-02	OL-1420-01	OL-1429-01	OL-1431-01	OL-1440-01	OL-1442-01	OL-1443-02
	Location	FIELD QC	LEYCK-Park								
	Sample Depth		0-0 FT								
	Sample Date	11/29/2011	6/15/2011	6/15/2011	6/15/2011	6/28/2011	6/29/2011	7/12/2011	7/12/2011	7/12/2011	7/12/2011
	SDG	180-6293-1	180-1138-1	180-1138-2	UFICHM2011-021	UFICHM2011-024	180-1574-1	UFICHM2011-028	180-1902-1	180-1903-1	
	Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Field blank	Regular sample								
	Sample Type	Blank water (field)	Surface water								
Method	Parameter Name	Units	Filtered								
E1630	METHYL MERCURY	ug/L	N								
E1631	MERCURY	ug/L	N								
E1631	MERCURY	ug/L	Y								
SM2540D	Total Suspended Solids	mg/L	N		14				22		11
UFI SOP	Total Suspended Solids	mg/L	N				13.5	21.1		10.9	
UFI SOP	TURBIDITY	NTU	N				14.4	22.3		12.9	

Validated Book 3 Tributary Base Flow Surface Water Samples

		Field Sample ID	OL-1452-01	OL-1454-01	OL-1455-02	OL-1464-01	OL-1466-01	OL-1478-01	OL-1480-01	OL-1492-01	OL-1494-01
	Location	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park
	Sample Depth	0-0 Ft	0-0 FT	0-0 FT	0-0 Ft	0-0 FT	0-0 FT	0-0 Ft	0-0 FT	0-0 Ft	0-0 FT
	Sample Date	7/27/2011	7/27/2011	7/27/2011	8/9/2011	8/9/2011	8/24/2011	8/24/2011	8/24/2011	9/7/2011	9/7/2011
	SDG	UFICHM2011-033	180-2422-1	180-2422-1	UFICHM2011-039	180-2865-1	UFICHM2011-044	180-3412-1	UFICHM2011-050	180-3715-1	
	Matrix	WATER	WATER	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	Regular sample	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered								
E1630	METHYL MERCURY	ug/L	N								
E1631	MERCURY	ug/L	N								
E1631	MERCURY	ug/L	Y								
SM2540D	Total Suspended Solids	mg/L	N		4			36		12	
UFI SOP	Total Suspended Solids	mg/L	N	6.2			27.9		11.5		12.7
UFI SOP	TURBIDITY	NTU	N	6.9			27.3		12.1		10

Validated Book 3 Tributary Base Flow Surface Water Samples

		Field Sample ID	OL-1609-01	OL-1611-01	OL-1625-01	OL-1627-01	OL-1638-01
	Location	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park
	Sample Depth	0-0 Ft	0-0 FT	0-0 Ft	0-0 FT	0-0 FT	0-0 FT
	Sample Date	9/20/2011	9/20/2011	10/5/2011	10/5/2011	10/20/2011	10/20/2011
	SDG	UFICHM2011-058	180-4164-1	UFICHM2011-062	180-4640-1	UFICHM2011-067	
	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
Method	Parameter Name	Units	Filtered				
E1630	METHYL MERCURY	ug/L	N				
E1631	MERCURY	ug/L	N				
E1631	MERCURY	ug/L	Y				
SM2540D	Total Suspended Solids	mg/L	N	9.2		5.2	
UFI SOP	Total Suspended Solids	mg/L	N	8.3	6.5		31.9
UFI SOP	TURBIDITY	NTU	N	7.7	6.9		35.1

Validated Book 3 Tributary Base Flow Surface Water Samples

		Field Sample ID	OL-1640-01	OL-1650-01	OL-1652-01	OL-1657-01	OL-1659-01	OL-1665-01	OL-1667-01	OL-1417-02	OL-1418-02
	Location	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	NMCK-Amboy	NMCK-Amboy
	Sample Depth	-	0-0 FT								
	Sample Date	10/20/2011	11/3/2011	11/3/2011	11/15/2011	11/15/2011	11/29/2011	11/29/2011	11/29/2011	6/15/2011	6/15/2011
	SDG	180-5136-1	UFICHM2011-071	180-5591-1	UFICHM2011-076	180-5982-1	UFICHM2011-079	180-6293-1	240-1165-1	180-1138-1	
	Matrix	WATER	WATER	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	Regular sample	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered								
E1630	METHYL MERCURY	ug/L	N								8.40E-05
E1631	MERCURY	ug/L	N								0.0038
E1631	MERCURY	ug/L	Y								0.0005 U
SM2540D	Total Suspended Solids	mg/L	N	29		3.6 J		15		10	9.2
UFI SOP	Total Suspended Solids	mg/L	N		6.8		18.3		9.1		
UFI SOP	TURBIDITY	NTU	N		8.5		18.1		8.4		

		Field Sample ID	OL-1420-02	OL-1429-02	OL-1430-02	OL-1431-02	OL-1440-02	OL-1441-02	OL-1442-02	OL-1452-02
	Location	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 Ft
	Sample Date	6/15/2011	6/28/2011	6/29/2011	6/29/2011	7/12/2011	7/12/2011	7/12/2011	7/12/2011	7/27/2011
	SDG	UFICHM2011-021	UFICHM2011-024	240-1582-1	180-1574-1	UFICHM2011-028	240-1882-1	180-1902-1	UFICHM2011-033	
	Matrix	WATER	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	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered							
E1630	METHYL MERCURY	ug/L	N		8.80E-05			8.50E-05		
E1631	MERCURY	ug/L	N		0.0019			0.00072		
E1631	MERCURY	ug/L	Y		0.00047 J			0.00036 J		
SM2540D	Total Suspended Solids	mg/L	N			17			4	
UFI SOP	Total Suspended Solids	mg/L	N	18.4	23.5		7.5			6.5
UFI SOP	TURBIDITY	NTU	N	9.3	16.4		7.2			3.9

		Field Sample ID	OL-1453-02	OL-1454-02	OL-1464-02	OL-1465-02	OL-1466-02	OL-1478-02	OL-1479-02	OL-1480-02	OL-1492-02
	Location	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy
	Sample Depth	0-0 FT	0-0 FT	0-0 Ft	0-0 FT	0-0 FT	0-0 Ft	0-0 FT	0-0 FT	0-0 FT	0-0 Ft
	Sample Date	7/27/2011	7/27/2011	8/9/2011	8/9/2011	8/9/2011	8/9/2011	8/24/2011	8/24/2011	8/24/2011	9/7/2011
	SDG	240-2293-1	180-2422-1	UFICHM2011-039	240-2745-1	180-2865-1	UFICHM2011-044	240-3171-1	180-3412-1	UFICHM2011-050	
	Matrix	WATER	WATER	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	Regular sample	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered								
E1630	METHYL MERCURY	ug/L	N	8.10E-05			1.60E-04			1.80E-04	J
E1631	MERCURY	ug/L	N	0.00079	J		0.003	J		0.0012	J
E1631	MERCURY	ug/L	Y	0.0005	UJ		0.00039	J		0.0005	UJ
SM2540D	Total Suspended Solids	mg/L	N		16			30			6.8
UFI SOP	Total Suspended Solids	mg/L	N			26.3			8.7		
UFI SOP	TURBIDITY	NTU	N			22.8			4.8		6.8
											11.4

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		Field Sample ID	OL-1493-02	OL-1494-02	OL-1609-02	OL-1610-02	OL-1611-02	OL-1625-02	OL-1626-02	OL-1627-02	OL-1638-02
	Location	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy
	Sample Depth	0-0 FT	0-0 FT	0-0 Ft	0-0 FT	0-0 FT	0-0 Ft	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	9/7/2011	9/7/2011	9/20/2011	9/20/2011	9/20/2011	10/5/2011	10/5/2011	10/5/2011	10/5/2011	10/20/2011
	SDG	240-3576-1	180-3715-1	UFICHM2011-058	240-4043-1	180-4164-1	UFICHM2011-062	240-4570-1	180-4640-1	UFICHM2011-067	
	Matrix	WATER	WATER	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	Regular sample	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered								
E1630	METHYL MERCURY	ug/L	N	3.00E-04	U		5.60E-05	J		6.40E-05	
E1631	MERCURY	ug/L	N	0.00086	J		0.0011	J		0.0012	
E1631	MERCURY	ug/L	Y	0.00071	J		0.00027	J			
SM2540D	Total Suspended Solids	mg/L	N		7.6			4			14
UFI SOP	Total Suspended Solids	mg/L	N			5.6			12.1		
UFI SOP	TURBIDITY	NTU	N			4			6.7		10.5
											15.2

Validated Book 3 Tributary Base Flow Surface Water Samples

		Field Sample ID	OL-1639-02	OL-1640-02	OL-1650-02	OL-1651-02	OL-1652-02	OL-1657-02	OL-1658-02	OL-1659-02	OL-1665-02
	Location	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy
	Sample Depth	0-0 FT	-	0-0 FT							
	Sample Date	10/20/2011	10/20/2011	11/3/2011	11/3/2011	11/3/2011	11/3/2011	11/15/2011	11/15/2011	11/15/2011	11/29/2011
	SDG	240-5108-1	180-5136-1	UFICHM2011-071	240-5566-1	180-5591-1	UFICHM2011-076	240-5953-1	180-5982-1	UFICHM2011-079	
	Matrix	WATER	WATER	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	Regular sample	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered								
E1630	METHYL MERCURY	ug/L	N	9.50E-05			6.50E-05			7.70E-05	J
E1631	MERCURY	ug/L	N	0.0018	J		0.0017			0.002	J
E1631	MERCURY	ug/L	Y								
SM2540D	Total Suspended Solids	mg/L	N		18			6			60
UFI SOP	Total Suspended Solids	mg/L	N			8.1			7.3		8
UFI SOP	TURBIDITY	NTU	N			5.7			85.7		4.9

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		Field Sample ID	OL-1666-02	OL-1667-02	OL-1417-03	OL-1417-04	OL-1418-03	OL-1420-03	OL-1429-03	OL-1430-03	OL-1430-04
	Location	NMCK-Amboy	NMCK-Amboy	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 Ft	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	11/29/2011	11/29/2011	6/15/2011	6/15/2011	6/15/2011	6/15/2011	6/15/2011	6/28/2011	6/29/2011	6/29/2011
	SDG	240-6341-1	180-6293-1	240-1165-1	240-1165-1	180-1138-1	UFICHM2011-021	UFICHM2011-024	240-1582-1	240-1582-1	240-1582-1
	Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Regular sample	Regular sample	Regular sample	Field duplicate	Regular sample	Field duplicate				
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered								
E1630	METHYL MERCURY	ug/L	N	4.70E-05 J		8.30E-05	1.00E-04			1.10E-04	9.00E-05
E1631	MERCURY	ug/L	N	0.00082		0.003	0.0037			0.0057 J	0.003 J
E1631	MERCURY	ug/L	Y			0.0005 U	0.0005 U			0.00019 J	0.00028 J
SM2540D	Total Suspended Solids	mg/L	N		3.6 J			6.8			
UFI SOP	Total Suspended Solids	mg/L	N						9.2	13	
UFI SOP	TURBIDITY	NTU	N						6.1	9.6	

Validated Book 3 Tributary Base Flow Surface Water Samples

		Field Sample ID	OL-1431-03	OL-1440-03	OL-1441-03	OL-1441-04	OL-1442-03	OL-1452-03	OL-1453-03
	Location	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 Ft	0-0 FT
	Sample Date	6/29/2011	7/12/2011	7/12/2011	7/12/2011	7/12/2011	7/12/2011	7/27/2011	7/27/2011
	SDG	180-1574-1	UFICHM2011-028	240-1882-1	240-1882-1	180-1902-1	UFICHM2011-033	240-2293-1	
	Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Regular sample	Regular sample	Regular sample	Field duplicate	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N		5.50E-05	6.80E-05			7.50E-05
E1631	MERCURY	ug/L	N		0.00081	0.00071			0.0009 J
E1631	MERCURY	ug/L	Y		0.00048 J	0.00062			0.0005 UJ
SM2540D	Total Suspended Solids	mg/L	N	13			4		
UFI SOP	Total Suspended Solids	mg/L	N		8.5			6.7	
UFI SOP	TURBIDITY	NTU	N		6.4			5.3	

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		Field Sample ID	OL-1453-04	OL-1454-03	OL-1464-03	OL-1465-03	OL-1465-04	OL-1466-03	OL-1478-03	OL-1479-03	OL-1479-04	
	Location	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	
	Sample Depth	0-0 FT	0-0 FT	0-0 Ft	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 Ft	0-0 FT	0-0 FT	
	Sample Date	7/27/2011	7/27/2011	8/9/2011	8/9/2011	8/9/2011	8/9/2011	8/9/2011	8/24/2011	8/24/2011	8/24/2011	
	SDG	240-2293-1	180-2422-1	UFICHM2011-039	240-2745-1	240-2745-1	180-2865-1	UFICHM2011-044	240-3171-1	240-3171-1	240-3171-1	
	Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	
	Sample Purpose	Field duplicate	Regular sample	Regular sample	Regular sample	Field duplicate	Regular sample	Regular sample	Regular sample	Regular sample	Field duplicate	
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	
Method	Parameter Name	Units	Filtered									
E1630	METHYL MERCURY	ug/L	N	8.00E-05			1.80E-04	1.80E-04		1.80E-04	J	
E1631	MERCURY	ug/L	N	0.00058	J		0.0012	J	0.0026	J	0.0014	J
E1631	MERCURY	ug/L	Y	0.0005	UJ		0.0005	U	0.0005	U	0.0005	UJ
SM2540D	Total Suspended Solids	mg/L	N		3.6	J			43			
UFI SOP	Total Suspended Solids	mg/L	N				20.3			5.5		
UFI SOP	TURBIDITY	NTU	N				19			4.9		

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		Field Sample ID	OL-1480-03	OL-1492-03	OL-1493-03	OL-1493-04	OL-1494-03	OL-1609-03	OL-1610-03	OL-1610-04	OL-1611-03
	Location	NMCK-Rte48		NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48
	Sample Depth	0-0 FT		0-0 Ft	0-0 FT	0-0 FT	0-0 FT	0-0 Ft	0-0 FT	0-0 FT	0-0 FT
	Sample Date	8/24/2011		9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/20/2011	9/20/2011	9/20/2011	9/20/2011
	SDG	180-3412-1		UFICHM2011-050	240-3576-1	240-3576-1	180-3715-1	UFICHM2011-058	240-4043-1	240-4043-1	180-4164-1
	Matrix	WATER		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Regular sample		Regular sample	Regular sample	Field duplicate	Regular sample	Regular sample	Regular sample	Field duplicate	Regular sample
	Sample Type	Surface water		Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered								
E1630	METHYL MERCURY	ug/L	N			3.00E-04 U	3.00E-04 U			4.30E-05 J	6.50E-05 J
E1631	MERCURY	ug/L	N			0.0051 J	0.0034 J			0.0039 J	0.0037 J
E1631	MERCURY	ug/L	Y			0.0015 J	0.00074 J			0.00015 J	0.00018 J
SM2540D	Total Suspended Solids	mg/L	N	4.8				66			
UFI SOP	Total Suspended Solids	mg/L	N		66.8				9.8		
UFI SOP	TURBIDITY	NTU	N		61.4				5.9		

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		Field Sample ID	OL-1625-03	OL-1626-03	OL-1626-04	OL-1627-03	OL-1638-03	OL-1639-03	OL-1639-04	OL-1640-03	OL-1650-03
	Location	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48
	Sample Depth	0-0 Ft	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	-	0-0 FT
	Sample Date	10/5/2011	10/5/2011	10/5/2011	10/5/2011	10/20/2011	10/20/2011	10/20/2011	10/20/2011	10/20/2011	11/3/2011
	SDG	UFICHM2011-062	240-4570-1	240-4570-1	180-4640-1	UFICHM2011-067	240-5108-1	240-5108-1	180-5136-1	UFICHM2011-071	
	Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Regular sample	Regular sample	Field duplicate	Regular sample	Regular sample	Regular sample	Field duplicate	Regular sample	Regular sample	
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered								
E1630	METHYL MERCURY	ug/L	N		8.00E-05	8.40E-05		9.70E-05	9.30E-05		
E1631	MERCURY	ug/L	N		0.002	0.0017		0.0099 J	0.002 J		
E1631	MERCURY	ug/L	Y								
SM2540D	Total Suspended Solids	mg/L	N				10			21	
UFI SOP	Total Suspended Solids	mg/L	N	10.9			24.3				4.2
UFI SOP	TURBIDITY	NTU	N	7.7			19.2				5.2

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		Field Sample ID	OL-1651-03	OL-1651-04	OL-1652-03	OL-1657-03	OL-1658-03	OL-1658-04	OL-1659-03	OL-1665-03	OL-1666-03
	Location	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	11/3/2011	11/3/2011	11/3/2011	11/15/2011	11/15/2011	11/15/2011	11/15/2011	11/15/2011	11/29/2011	11/29/2011
	SDG	240-5566-1	240-5566-1	180-5591-1	UFICHM2011-076	240-5953-1	240-5953-1	240-5982-1	UFICHM2011-079	240-6341-1	
	Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Regular sample	Field duplicate	Regular sample	Regular sample	Regular sample	Field duplicate	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	Surface water	Surface water
Method	Parameter Name	Units	Filtered								
E1630	METHYL MERCURY	ug/L	N	4.50E-05 J	4.60E-05 J		4.00E-05 J	7.50E-05 J			4.40E-05 J
E1631	MERCURY	ug/L	N	0.0014 J	0.00033 J		0.0093 J	0.0026 J			0.0012
E1631	MERCURY	ug/L	Y								
SM2540D	Total Suspended Solids	mg/L	N			3.6 J				82	
UFI SOP	Total Suspended Solids	mg/L	N				59				3.9
UFI SOP	TURBIDITY	NTU	N				55.4				4.4

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		Field Sample ID	OL-1666-04	OL-1667-03	OL-1417-05	OL-1418-04	OL-1420-04	OL-1429-04	OL-1430-05	OL-1431-04	OL-1440-04
	Location	NMCK-Rte48	NMCK-Rte48	ONCK-Spencer							
	Sample Depth	0-0 FT	0-0 FT	0-0 Ft	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	11/29/2011	11/29/2011	6/15/2011	6/15/2011	6/15/2011	6/15/2011	6/28/2011	6/29/2011	6/29/2011	7/12/2011
	SDG	240-6341-1	180-6293-1	240-1165-1	180-1138-1	UFICHM2011-021	UFICHM2011-024	240-1582-1	180-1574-1	UFICHM2011-028	
	Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Field duplicate	Regular sample								
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered								
E1630	METHYL MERCURY	ug/L	N	3.00E-05	J	1.60E-04				1.40E-04	
E1631	MERCURY	ug/L	N	0.00075		0.0044				0.0022	
E1631	MERCURY	ug/L	Y			0.0005	U			0.00047	J
SM2540D	Total Suspended Solids	mg/L	N		4	U		62			110
UFI SOP	Total Suspended Solids	mg/L	N						86.6		
UFI SOP	TURBIDITY	NTU	N					68.6	113		
											8.9
											9.7

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		Field Sample ID	OL-1441-05	OL-1442-04	OL-1452-04	OL-1453-05	OL-1454-04	OL-1464-04	OL-1465-05	OL-1466-04	OL-1478-04
	Location	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer
	Sample Depth	0-0 FT	0-0 FT	0-0 Ft	0-0 FT	0-0 FT	0-0 FT	0-0 Ft	0-0 FT	0-0 FT	0-0 Ft
	Sample Date	7/12/2011	7/12/2011	7/27/2011	7/27/2011	7/27/2011	7/27/2011	8/9/2011	8/9/2011	8/9/2011	8/24/2011
	SDG	240-1882-1	180-1902-1	UFICHM2011-033	240-2293-1	180-2422-1	UFICHM2011-039	240-2745-1	180-2865-1	UFICHM2011-044	
	Matrix	WATER	WATER	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	Regular sample	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered								
E1630	METHYL MERCURY	ug/L	N	7.10E-05			1.10E-04			1.50E-04	
E1631	MERCURY	ug/L	N	0.00055			0.00074 J			0.0019 J	
E1631	MERCURY	ug/L	Y	0.00042 J			0.0005 UJ			0.0005 U	
SM2540D	Total Suspended Solids	mg/L	N		3.2 J			9.2			11
UFI SOP	Total Suspended Solids	mg/L	N			18.1			40.2		15.2
UFI SOP	TURBIDITY	NTU	N			19.3			38		17

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		Field Sample ID	OL-1479-05	OL-1480-04	OL-1492-04	OL-1493-05	OL-1494-04	OL-1609-04	OL-1610-05	OL-1611-04	OL-1625-04
	Location	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer
	Sample Depth	0-0 FT	0-0 FT	0-0 Ft	0-0 FT	0-0 FT	0-0 FT	0-0 Ft	0-0 FT	0-0 FT	0-0 Ft
	Sample Date	8/24/2011	8/24/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/20/2011	9/20/2011	9/20/2011	10/5/2011
	SDG	240-3171-1	180-3412-1	UFICHM2011-050	240-3576-1	180-3715-1	UFICHM2011-058	240-4043-1	180-4164-1	UFICHM2011-062	
	Matrix	WATER	WATER	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	Regular sample	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered								
E1630	METHYL MERCURY	ug/L	N	1.20E-04	J		3.00E-04	U		5.30E-05	J
E1631	MERCURY	ug/L	N	0.00075	J		0.0017	J		0.0009	J
E1631	MERCURY	ug/L	Y	0.0005	UJ		0.00064	J		0.00017	J
SM2540D	Total Suspended Solids	mg/L	N		13			64			12
UFI SOP	Total Suspended Solids	mg/L	N			63.8			11.1		
UFI SOP	TURBIDITY	NTU	N			60.1			11.5		
											32.8

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		Field Sample ID	OL-1626-05	OL-1627-04	OL-1638-04	OL-1639-05	OL-1640-04	OL-1650-04	OL-1651-05	OL-1652-04	OL-1657-04
	Location	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	-	0-0 FT				
	Sample Date	10/5/2011	10/5/2011	10/20/2011	10/20/2011	10/20/2011	11/3/2011	11/3/2011	11/3/2011	11/3/2011	11/15/2011
	SDG	240-4570-1	180-4640-1	UFICHM2011-067	240-5108-1	180-5136-1	UFICHM2011-071	240-5566-1	180-5591-1	UFICHM2011-076	
	Matrix	WATER	WATER	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	Regular sample	Regular sample
	Sample Type	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered								
E1630	METHYL MERCURY	ug/L	N	5.20E-05		4.50E-05	J		3.00E-05	J	
E1631	MERCURY	ug/L	N	0.00078		0.00055	J		0.00072		
E1631	MERCURY	ug/L	Y								
SM2540D	Total Suspended Solids	mg/L	N		29			64			9.6
UFI SOP	Total Suspended Solids	mg/L	N			56.3			17.6		682
UFI SOP	TURBIDITY	NTU	N			69.5			24.1		660

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		Field Sample ID	OL-1658-05	OL-1659-04	OL-1665-04	OL-1666-05	OL-1667-04	
Method	Parameter Name	Units	Filtered					
E1630	METHYL MERCURY	ug/L	N	7.50E-05	J		4.50E-04	
E1631	MERCURY	ug/L	N	0.0021	J		0.0006	
E1631	MERCURY	ug/L	Y					
SM2540D	Total Suspended Solids	mg/L	N		710			10
UFI SOP	Total Suspended Solids	mg/L	N			17.4		
UFI SOP	TURBIDITY	NTU	N			21.4		

		Field Sample ID	OL-1495-01	OL-1496-01	OL-1497-01	OL-1499-01	OL-1498-01	OL-1600-01	OL-1495-02
	Location	FIELD QC		FIELD QC	LEYCK-Park				
	Sample Depth								0-0 FT
	Sample Date	9/7/2011		9/7/2011	9/7/2011	9/7/2011	9/9/2011	9/9/2011	9/7/2011
	Sample Time	14:10		14:10	14:10	11:55	11:55	11:55	14:55
	SDG	UFICHM2011-051		240-3638-1	180-3757-1	240-3729-1	UFICHM2011-051	180-3791-1	UFICHM2011-051
	Matrix	WATER		WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Field blank		Field blank	Regular sample				
	Sample Type	Blank water (field)		Blank water (field)	Surface water				
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N		0.00001 U		0.00001 U		
E1631	MERCURY	ug/L	N		0.00021 J		0.00012 U		
SM2540D	Total Suspended Solids	mg/L	N						
SW8082	AROCLOR-1016	ug/L	N		0.01 U			0.012 U	
SW8082	AROCLOR-1221	ug/L	N		0.01 U			0.012 U	
SW8082	AROCLOR-1232	ug/L	N		0.01 U			0.012 U	
SW8082	AROCLOR-1242	ug/L	N		0.01 U			0.012 U	
SW8082	AROCLOR-1248	ug/L	N		0.036			0.027	
SW8082	AROCLOR-1254	ug/L	N		0.01 U			0.012 U	
SW8082	AROCLOR-1260	ug/L	N		0.01 U			0.012 U	
SW8082	AROCLOR-1262	ug/L	N		0.01 U			0.012 U	
SW8082	AROCLOR-1268	ug/L	N		0.01 U			0.012 U	
SW8082	PCBS, N.O.S.	ug/L	N		0.036			0.027	
UFI SOP	Total Suspended Solids	mg/L	N	2.5 U			2.5 U		40.4
UFI SOP	TURBIDITY	NTU	N	0.8 J			0.8 U		27.3 J

		Field Sample ID	OL-1495-06	OL-1497-02	OL-1497-06	OL-1495-10	OL-1495-14	OL-1497-10	OL-1497-14
	Location	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	9/7/2011	9/7/2011	9/7/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011
	Sample Time	18:15	14:55	18:15	9:18	10:45	9:18	10:45	
	SDG	UFICHM2011-051	180-3757-1	180-3757-1	UFICHM2011-051	UFICHM2011-051	180-3757-1	180-3757-1	
	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N						
E1631	MERCURY	ug/L	N						
SM2540D	Total Suspended Solids	mg/L	N	69	100			25	25
SW8082	AROCLOR-1016	ug/L	N	0.0094 U	0.0094 U			0.0094 U	0.0095 U
SW8082	AROCLOR-1221	ug/L	N	0.0094 U	0.0094 U			0.0094 U	0.0095 U
SW8082	AROCLOR-1232	ug/L	N	0.0094 U	0.0094 U			0.0094 U	0.0095 U
SW8082	AROCLOR-1242	ug/L	N	0.0094 U	0.0094 U			0.0094 U	0.0095 U
SW8082	AROCLOR-1248	ug/L	N	0.13	0.23			0.13	0.11
SW8082	AROCLOR-1254	ug/L	N	0.0094 U	0.0094 U			0.0094 U	0.0095 U
SW8082	AROCLOR-1260	ug/L	N	0.0094 U	0.0094 U			0.0094 U	0.0095 U
SW8082	AROCLOR-1262	ug/L	N	0.0094 U	0.0094 U			0.0094 U	0.0095 U
SW8082	AROCLOR-1268	ug/L	N	0.0094 U	0.0094 U			0.0094 U	0.0095 U
SW8082	PCBS, N.O.S.	ug/L	N	0.13	0.23			0.13	0.11
UFI SOP	Total Suspended Solids	mg/L	N	82.9		35.1	31.2		
UFI SOP	TURBIDITY	NTU	N	36.2 J		21.3 J	23.1 J		

		Field Sample ID	OL-1498-02	OL-1600-02	OL-1498-06	OL-1600-06	OL-1495-03	OL-1495-07	OL-1496-02
	Location	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	9/8/2011	9/8/2011	9/9/2011	9/9/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011
	Sample Time	17:40	17:40	12:20	12:20	15:20	15:20	17:18	15:20
	SDG	UFICHM2011-051	180-3791-1	UFICHM2011-051	180-3791-1	UFICHM2011-051	UFICHM2011-051	UFICHM2011-051	240-3638-1
	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N						0.0003 U
E1631	MERCURY	ug/L	N						0.0048
SM2540D	Total Suspended Solids	mg/L	N	26		16			
SW8082	AROCLOR-1016	ug/L	N		0.0094 U	0.0094 U			
SW8082	AROCLOR-1221	ug/L	N		0.0094 U	0.0094 U			
SW8082	AROCLOR-1232	ug/L	N		0.0094 U	0.0094 U			
SW8082	AROCLOR-1242	ug/L	N		0.0094 U	0.0094 U			
SW8082	AROCLOR-1248	ug/L	N		0.089	0.048			
SW8082	AROCLOR-1254	ug/L	N		0.0094 U	0.0094 U			
SW8082	AROCLOR-1260	ug/L	N		0.0094 U	0.0094 U			
SW8082	AROCLOR-1262	ug/L	N		0.0094 U	0.0094 U			
SW8082	AROCLOR-1268	ug/L	N		0.0094 U	0.0094 U			
SW8082	PCBS, N.O.S.	ug/L	N		0.089	0.048			
UFI SOP	Total Suspended Solids	mg/L	N	21.9		41.4		32.3	17.6
UFI SOP	TURBIDITY	NTU	N	25.9		12.2		12.5 J	8.9 J

		Field Sample ID	OL-1496-06	OL-1497-03	OL-1497-07	OL-1499-02	OL-1499-06	OL-1495-11	OL-1495-15
	Location	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/8/2011	9/8/2011
	Sample Time	17:18	15:20	17:18	16:50	11:10	8:20		9:55
	SDG	240-3638-1	180-3757-1	180-3757-1	240-3729-1	240-3729-1	UFICHM2011-051	UFICHM2011-051	
	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N	0.00032		0.00033	0.0003	U	
E1631	MERCURY	ug/L	N	0.0016		0.016	0.0035		
SM2540D	Total Suspended Solids	mg/L	N		15	16			
SW8082	AROCLOR-1016	ug/L	N						
SW8082	AROCLOR-1221	ug/L	N						
SW8082	AROCLOR-1232	ug/L	N						
SW8082	AROCLOR-1242	ug/L	N						
SW8082	AROCLOR-1248	ug/L	N						
SW8082	AROCLOR-1254	ug/L	N						
SW8082	AROCLOR-1260	ug/L	N						
SW8082	AROCLOR-1262	ug/L	N						
SW8082	AROCLOR-1268	ug/L	N						
SW8082	PCBS, N.O.S.	ug/L	N						
UFI SOP	Total Suspended Solids	mg/L	N				199.6		83.2
UFI SOP	TURBIDITY	NTU	N				157 J		114 J

		Field Sample ID	OL-1496-09	OL-1496-12	OL-1497-11	OL-1497-15	OL-1498-03	OL-1600-03	OL-1498-07
	Location	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/9/2011
	Sample Time	8:20	9:55	8:20	9:55	16:50	16:50	16:50	11:10
	SDG	240-3638-1	240-3638-1	180-3757-1	180-3757-1	UFICHM2011-051	180-3791-1	UFICHM2011-051	
	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N	0.00045	0.00036				
E1631	MERCURY	ug/L	N	0.029	0.021				
SM2540D	Total Suspended Solids	mg/L	N		200	130		96	
SW8082	AROCLOR-1016	ug/L	N						
SW8082	AROCLOR-1221	ug/L	N						
SW8082	AROCLOR-1232	ug/L	N						
SW8082	AROCLOR-1242	ug/L	N						
SW8082	AROCLOR-1248	ug/L	N						
SW8082	AROCLOR-1254	ug/L	N						
SW8082	AROCLOR-1260	ug/L	N						
SW8082	AROCLOR-1262	ug/L	N						
SW8082	AROCLOR-1268	ug/L	N						
SW8082	PCBS, N.O.S.	ug/L	N						
UFI SOP	Total Suspended Solids	mg/L	N				94		30.7
UFI SOP	TURBIDITY	NTU	N				71.4		24.7

		Field Sample ID	OL-1600-07	OL-1495-04	OL-1495-08	OL-1496-03	OL-1496-07	OL-1497-04	OL-1497-08
	Location	NMCK-Amboy	NMCK-Rte48						
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	9/9/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011
	Sample Time	11:10	15:45	16:50	15:45	16:50	15:45	15:45	16:50
	SDG	180-3791-1	UFICHM2011-051	UFICHM2011-051	240-3638-1	240-3638-1	180-3757-1	180-3757-1	180-3757-1
	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N			0.0003 U	0.0003 U		
E1631	MERCURY	ug/L	N			0.0073	0.0049		
SM2540D	Total Suspended Solids	mg/L	N	37				17	16
SW8082	AROCLOR-1016	ug/L	N						
SW8082	AROCLOR-1221	ug/L	N						
SW8082	AROCLOR-1232	ug/L	N						
SW8082	AROCLOR-1242	ug/L	N						
SW8082	AROCLOR-1248	ug/L	N						
SW8082	AROCLOR-1254	ug/L	N						
SW8082	AROCLOR-1260	ug/L	N						
SW8082	AROCLOR-1262	ug/L	N						
SW8082	AROCLOR-1268	ug/L	N						
SW8082	PCBS, N.O.S.	ug/L	N						
UFI SOP	Total Suspended Solids	mg/L	N		19.3	11.9			
UFI SOP	TURBIDITY	NTU	N		13.5 J	9.6 J			

		Field Sample ID	OL-1499-03	OL-1499-07	OL-1495-12	OL-1495-16	OL-1496-10	OL-1496-13	OL-1497-12
	Location	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	9/7/2011	9/7/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011
	Sample Time	16:30	10:50	8:00	9:40	8:00	9:40	8:00	8:00
	SDG	240-3729-1	240-3729-1	UFICHM2011-051	UFICHM2011-051	240-3638-1	240-3638-1	180-3757-1	
	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N	0.00047	0.0003 U		0.00046	0.00054	
E1631	MERCURY	ug/L	N	0.022	0.0048		0.064	0.079	
SM2540D	Total Suspended Solids	mg/L	N						310
SW8082	AROCLOR-1016	ug/L	N						
SW8082	AROCLOR-1221	ug/L	N						
SW8082	AROCLOR-1232	ug/L	N						
SW8082	AROCLOR-1242	ug/L	N						
SW8082	AROCLOR-1248	ug/L	N						
SW8082	AROCLOR-1254	ug/L	N						
SW8082	AROCLOR-1260	ug/L	N						
SW8082	AROCLOR-1262	ug/L	N						
SW8082	AROCLOR-1268	ug/L	N						
SW8082	PCBS, N.O.S.	ug/L	N						
UFI SOP	Total Suspended Solids	mg/L	N		387.6	266.5			
UFI SOP	TURBIDITY	NTU	N		250 J	187 J			

		Field Sample ID	OL-1497-16	OL-1498-04	OL-1600-04	OL-1498-08	OL-1600-08	OL-1495-05	OL-1495-09
	Location	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	ONCK-Spencer	ONCK-Spencer
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	9/8/2011	9/8/2011	9/8/2011	9/9/2011	9/9/2011	9/9/2011	9/7/2011	9/7/2011
	Sample Time	9:40	16:30	16:30	10:50	10:50	14:25		17:50
	SDG	180-3757-1	UFICHM2011-051	180-3791-1	UFICHM2011-051	180-3791-1	UFICHM2011-051	UFICHM2011-051	UFICHM2011-051
	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N						
E1631	MERCURY	ug/L	N						
SM2540D	Total Suspended Solids	mg/L	N	260		130		38	
SW8082	AROCLOR-1016	ug/L	N						
SW8082	AROCLOR-1221	ug/L	N						
SW8082	AROCLOR-1232	ug/L	N						
SW8082	AROCLOR-1242	ug/L	N						
SW8082	AROCLOR-1248	ug/L	N						
SW8082	AROCLOR-1254	ug/L	N						
SW8082	AROCLOR-1260	ug/L	N						
SW8082	AROCLOR-1262	ug/L	N						
SW8082	AROCLOR-1268	ug/L	N						
SW8082	PCBS, N.O.S.	ug/L	N						
UFI SOP	Total Suspended Solids	mg/L	N		124		29.5		73.4
UFI SOP	TURBIDITY	NTU	N		78.6		25		30.7 J
									63.3 J

		Field Sample ID	OL-1496-05	OL-1496-08	OL-1497-05	OL-1497-09	OL-1499-05	OL-1499-08	OL-1495-13
	Location	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/8/2011
	Sample Time	14:25	17:50	14:25	17:50	17:15	11:45		9:00
	SDG	240-3638-1	240-3638-1	180-3757-1	180-3757-1	240-3729-1	240-3729-1		UFICHM2011-051
	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N	0.00035	0.00043		0.00033	0.0003	U
E1631	MERCURY	ug/L	N	0.018	0.042		0.0095	0.0022	
SM2540D	Total Suspended Solids	mg/L	N		96	200			
SW8082	AROCLOR-1016	ug/L	N						
SW8082	AROCLOR-1221	ug/L	N						
SW8082	AROCLOR-1232	ug/L	N						
SW8082	AROCLOR-1242	ug/L	N						
SW8082	AROCLOR-1248	ug/L	N						
SW8082	AROCLOR-1254	ug/L	N						
SW8082	AROCLOR-1260	ug/L	N						
SW8082	AROCLOR-1262	ug/L	N						
SW8082	AROCLOR-1268	ug/L	N						
SW8082	PCBS, N.O.S.	ug/L	N						
UFI SOP	Total Suspended Solids	mg/L	N						464
UFI SOP	TURBIDITY	NTU	N						385 J

		Field Sample ID	OL-1495-17	OL-1496-11	OL-1496-14	OL-1497-13	OL-1497-17	OL-1498-05	OL-1600-05
	Location	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer
	Sample Depth	0-0 FT	0-0 Ft	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011
	Sample Time	10:20	9:00	10:20	9:00	10:20	17:15		17:15
	SDG	UFICHM2011-051	240-3638-1	240-3638-1	180-3757-1	180-3757-1	UFICHM2011-051		180-3791-1
	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N		0.00019	0.00041			
E1631	MERCURY	ug/L	N		0.017	0.014			
SM2540D	Total Suspended Solids	mg/L	N			430	310		270
SW8082	AROCLOR-1016	ug/L	N						
SW8082	AROCLOR-1221	ug/L	N						
SW8082	AROCLOR-1232	ug/L	N						
SW8082	AROCLOR-1242	ug/L	N						
SW8082	AROCLOR-1248	ug/L	N						
SW8082	AROCLOR-1254	ug/L	N						
SW8082	AROCLOR-1260	ug/L	N						
SW8082	AROCLOR-1262	ug/L	N						
SW8082	AROCLOR-1268	ug/L	N						
SW8082	PCBS, N.O.S.	ug/L	N						
UFI SOP	Total Suspended Solids	mg/L	N	330				264	
UFI SOP	TURBIDITY	NTU	N	299	J			257	

		Field Sample ID	OL-1498-09	OL-1600-09
		Location	ONCK-Spencer	ONCK-Spencer
		Sample Depth	0-0 FT	0-0 FT
		Sample Date	9/9/2011	9/9/2011
		Sample Time	11:45	11:45
		SDG	UFICHM2011-051	180-3791-1
		Matrix	WATER	WATER
		Sample Purpose	Regular sample	Regular sample
		Sample Type	Surface water	Surface water
Method	Parameter Name	Units	Filtered	
E1630	METHYL MERCURY	ug/L	N	
E1631	MERCURY	ug/L	N	
SM2540D	Total Suspended Solids	mg/L	N	93
SW8082	AROCLOR-1016	ug/L	N	
SW8082	AROCLOR-1221	ug/L	N	
SW8082	AROCLOR-1232	ug/L	N	
SW8082	AROCLOR-1242	ug/L	N	
SW8082	AROCLOR-1248	ug/L	N	
SW8082	AROCLOR-1254	ug/L	N	
SW8082	AROCLOR-1260	ug/L	N	
SW8082	AROCLOR-1262	ug/L	N	
SW8082	AROCLOR-1268	ug/L	N	
SW8082	PCBS, N.O.S.	ug/L	N	
UFI SOP	Total Suspended Solids	mg/L	N	79
UFI SOP	TURBIDITY	NTU	N	72.2

ATTACHMENT A-2**VALIDATED LABORATORY DATA FOR
STORM WATER MONITORING SAMPLES**

PARSONS

Validated Book 3 Storm Water Monitoring Samples

		Field Sample ID	OL-1485-01	OL-1486-01	OL-1485-02	OL-1485-06	OL-1485-10	OL-1485-14	OL-1487-02
	Location	FIELD QC		FIELD QC	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park
	Sample Depth				0-0 FT				
	Sample Date	8/28/2011		8/28/2011	8/28/2011	8/28/2011	8/28/2011	8/28/2011	8/28/2011
	Sample Time	12:10		12:10	13:25	15:38	18:50	20:25	13:25
	SDG	UFICHM2011-048		240-3343-1	UFICHM2011-048	UFICHM2011-048	UFICHM2011-048	UFICHM2011-048	180-3496-1
	Matrix	WATER		WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Field blank		Field blank	Regular sample				
	Sample Type	Blank water (field)		Blank water (field)	Surface water				
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N		0.00001	U			
E1631	MERCURY	ug/L	N		0.00012	U			
SM2540D	Total Suspended Solids	mg/L	N						28
UFI SOP	Total Suspended Solids	mg/L	N	2.5	U	17	37.7	71.6	48
UFI SOP	TURBIDITY	NTU	N	0.8	U	13.4	25.1	29.9	36.7

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		Field Sample ID	OL-1487-06	OL-1487-10	OL-1487-14	OL-1485-18	OL-1485-22	OL-1487-18	OL-1487-22
	Location	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	8/28/2011	8/28/2011	8/28/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011
	Sample Time	15:38	18:50	20:25	9:10	11:00	9:10	11:00	
	SDG	180-3496-1	180-3496-1	180-3496-1	UFICHM2011-048	UFICHM2011-048	180-3496-1	180-3496-1	
	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N						
E1631	MERCURY	ug/L	N						
SM2540D	Total Suspended Solids	mg/L	N	36	91	59		24	16
UFI SOP	Total Suspended Solids	mg/L	N			19.2	15.3		
UFI SOP	TURBIDITY	NTU	N			18.7	17		

Validated Book 3 Storm Water Monitoring Samples

		Field Sample ID	OL-1485-03	OL-1485-07	OL-1485-11	OL-1485-15	OL-1486-02	OL-1486-06	OL-1486-09		
	Location	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy		
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT		
	Sample Date	8/28/2011	8/28/2011	8/28/2011	8/28/2011	8/28/2011	8/28/2011	8/28/2011	8/28/2011		
	Sample Time	12:15	14:35	17:50	19:30	12:15	14:35	17:50			
	SDG	UFICHM2011-048	UFICHM2011-048	UFICHM2011-048	UFICHM2011-048	240-3343-1	240-3343-1	240-3343-1			
	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		
Method	Parameter Name	Units	Filtered								
E1630	METHYL MERCURY	ug/L	N				0.0003	U	0.00008	J	0.000064
E1631	MERCURY	ug/L	N				0.0024		0.0029		0.0042
SM2540D	Total Suspended Solids	mg/L	N								
UFI SOP	Total Suspended Solids	mg/L	N	11.8	12.5	19.1	20.3				
UFI SOP	TURBIDITY	NTU	N	4.6	7.2	12.1	14.3				

Validated Book 3 Storm Water Monitoring Samples

		Field Sample ID	OL-1486-12	OL-1487-03	OL-1487-07	OL-1487-11	OL-1487-15	OL-1485-19	OL-1485-23
	Location	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	8/28/2011	8/28/2011	8/28/2011	8/28/2011	8/28/2011	8/28/2011	8/29/2011	8/29/2011
	Sample Time	19:30	12:15	14:35	17:50	19:30	8:10		10:00
	SDG	240-3343-1	180-3496-1	180-3496-1	180-3496-1	180-3496-1	UFICHM2011-048	UFICHM2011-048	
	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N	0.0001					
E1631	MERCURY	ug/L	N	0.0035					
SM2540D	Total Suspended Solids	mg/L	N		12	10	19	18	
UFI SOP	Total Suspended Solids	mg/L	N					15.6	18.2
UFI SOP	TURBIDITY	NTU	N					14.5	14.6

Validated Book 3 Storm Water Monitoring Samples

		Field Sample ID	OL-1486-15	OL-1486-18	OL-1487-19	OL-1487-23	OL-1485-04	OL-1485-08	OL-1485-12
	Location	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/28/2011	8/28/2011	8/28/2011
	Sample Time	8:10	10:00	8:10	10:00	12:00	14:05		17:30
	SDG	240-3343-1	240-3343-1	180-3496-1	180-3496-1	UFICHM2011-048	UFICHM2011-048	UFICHM2011-048	
	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N	0.000088	0.000087				
E1631	MERCURY	ug/L	N	0.0032	0.003				
SM2540D	Total Suspended Solids	mg/L	N			18	17		
UFI SOP	Total Suspended Solids	mg/L	N				13.1	44.4	30.1
UFI SOP	TURBIDITY	NTU	N				14.2	41.2	30.3

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		Field Sample ID	OL-1485-16	OL-1486-03	OL-1486-07	OL-1486-10	OL-1486-13	OL-1487-04	OL-1487-08
	Location	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	8/28/2011	8/28/2011	8/28/2011	8/28/2011	8/28/2011	8/28/2011	8/28/2011	8/28/2011
	Sample Time	19:00	12:00	14:05	17:30	19:00	12:00		14:05
	SDG	UFICHM2011-048	240-3343-1	240-3343-1	240-3343-1	240-3343-1	180-3496-1	180-3496-1	
	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N	0.000031	J	0.00006	0.0003	U	0.000085
E1631	MERCURY	ug/L	N	0.0088		0.0093	0.0087		0.0066
SM2540D	Total Suspended Solids	mg/L	N						18
UFI SOP	Total Suspended Solids	mg/L	N	17.4					46
UFI SOP	TURBIDITY	NTU	N	17.2					

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		Field Sample ID	OL-1487-12	OL-1487-16	OL-1485-20	OL-1485-24	OL-1486-16	OL-1486-19	OL-1487-20
	Location	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	8/28/2011	8/28/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011
	Sample Time	17:30	19:00	7:45	9:40	7:45	9:40	7:45	7:45
	SDG	180-3496-1	180-3496-1	UFICHM2011-048	UFICHM2011-048	240-3343-1	240-3343-1	180-3496-1	
	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N				0.000092	0.000077	
E1631	MERCURY	ug/L	N				0.0037	0.0025	
SM2540D	Total Suspended Solids	mg/L	N	32	21				14
UFI SOP	Total Suspended Solids	mg/L	N			14.8	9.2		
UFI SOP	TURBIDITY	NTU	N			11.3	8.3		

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		Field Sample ID	OL-1487-24	OL-1485-05	OL-1485-09	OL-1485-13	OL-1485-17	OL-1486-05	OL-1486-08
	Location	NMCK-Rte48	ONCK-Spencer						
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	8/29/2011	8/28/2011	8/28/2011	8/28/2011	8/28/2011	8/28/2011	8/28/2011	8/28/2011
	Sample Time	9:40	13:00	15:09	18:22	20:10	13:00		15:09
	SDG	180-3496-1	UFICHM2011-048	UFICHM2011-048	UFICHM2011-048	UFICHM2011-048	240-3343-1	240-3343-1	
	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N					0.00012	0.00022 J
E1631	MERCURY	ug/L	N					0.011	0.014
SM2540D	Total Suspended Solids	mg/L	N	15					
UFI SOP	Total Suspended Solids	mg/L	N		39.3	71.2	167.6	292	
UFI SOP	TURBIDITY	NTU	N		22.4	45.5	107	252	

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		Field Sample ID	OL-1486-11	OL-1486-14	OL-1487-05	OL-1487-09	OL-1487-13	OL-1487-17	OL-1485-21
	Location	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	8/28/2011	8/28/2011	8/28/2011	8/28/2011	8/28/2011	8/28/2011	8/28/2011	8/29/2011
	Sample Time	18:22	20:10	13:00	15:09	18:22	20:10		8:40
	SDG	240-3343-1	240-3343-1	180-3496-1	180-3496-1	180-3496-1	180-3496-1	180-3496-1	UFICHM2011-048
	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N	0.00014	0.00034				
E1631	MERCURY	ug/L	N	0.011	0.014				
SM2540D	Total Suspended Solids	mg/L	N			66	100	190	340
UFI SOP	Total Suspended Solids	mg/L	N						395.6
UFI SOP	TURBIDITY	NTU	N						400

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		Field Sample ID	OL-1485-25	OL-1486-17	OL-1486-20	OL-1487-21	OL-1487-25
	Location	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011
	Sample Time	10:45	8:40	10:45	8:40	10:45	
	SDG	UFICHM2011-048	240-3343-1	240-3343-1	180-3496-1	180-3496-1	
	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
Method	Parameter Name	Units	Filtered				
E1630	METHYL MERCURY	ug/L	N	0.00031	0.00028		
E1631	MERCURY	ug/L	N	0.003	0.014		
SM2540D	Total Suspended Solids	mg/L	N			380	310
UFI SOP	Total Suspended Solids	mg/L	N	345			
UFI SOP	TURBIDITY	NTU	N	384			

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		Field Sample ID	OL-1495-01	OL-1496-01	OL-1499-01	OL-1498-01	OL-1495-02	OL-1495-06	OL-1497-02
	Location	FIELD QC	FIELD QC	FIELD QC	FIELD QC	FIELD QC	LEYCK-Park	LEYCK-Park	LEYCK-Park
	Sample Depth						0-0 FT	0-0 FT	0-0 FT
	Sample Date	9/7/2011		9/7/2011		9/9/2011	9/7/2011	9/7/2011	9/7/2011
	Sample Time	14:10		14:10		11:55	14:55	18:15	14:55
	SDG	UFICHM2011-051		240-3638-1	240-3729-1	UFICHM2011-051	UFICHM2011-051	UFICHM2011-051	180-3757-1
	Matrix	WATER		WATER	WATER	WATER	WATER	WATER	WATER
	Sample Purpose	Field blank		Field blank	Field blank	Field blank	Regular sample	Regular sample	Regular sample
	Sample Type	Blank water (field)		Blank water (field)	Blank water (field)	Blank water (field)	Surface water	Surface water	Surface water
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N		0.00001 U	0.00001 U			
E1631	MERCURY	ug/L	N		0.00021 J	0.00012 U			
SM2540D	Total Suspended Solids	mg/L	N						69
UFI SOP	Total Suspended Solids	mg/L	N	2.5 U			2.5 U	40.4	82.9
UFI SOP	TURBIDITY	NTU	N	0.8 J			0.8 U	27.3 J	36.2 J

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		Field Sample ID	OL-1497-06	OL-1495-10	OL-1495-14	OL-1497-10	OL-1497-14	OL-1498-02	OL-1600-02
	Location	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park	LEYCK-Park
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	9/7/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011
	Sample Time	18:15	9:18	10:45	9:18	10:45	17:40		17:40
	SDG	180-3757-1	UFICHM2011-051	UFICHM2011-051	180-3757-1	180-3757-1	UFICHM2011-051	180-3791-1	
	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N						
E1631	MERCURY	ug/L	N						
SM2540D	Total Suspended Solids	mg/L	N	100		25	25		26
UFI SOP	Total Suspended Solids	mg/L	N		35.1	31.2		21.9	
UFI SOP	TURBIDITY	NTU	N		21.3 J	23.1 J		25.9	

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		Field Sample ID	OL-1498-06	OL-1600-06	OL-1495-03	OL-1495-07	OL-1496-02	OL-1496-06	OL-1497-03
	Location	LEYCK-Park	LEYCK-Park	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	9/9/2011	9/9/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011
	Sample Time	12:20	12:20	15:20	17:18	15:20	17:18	15:20	15:20
	SDG	UFICHM2011-051	180-3791-1	UFICHM2011-051	UFICHM2011-051	240-3638-1	240-3638-1	180-3757-1	
	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N				0.0003 U	0.00032	
E1631	MERCURY	ug/L	N				0.0048	0.0016	
SM2540D	Total Suspended Solids	mg/L	N	16					15
UFI SOP	Total Suspended Solids	mg/L	N	41.4	32.3	17.6			
UFI SOP	TURBIDITY	NTU	N	12.2	12.5 J	8.9 J			

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		Field Sample ID	OL-1497-07	OL-1499-02	OL-1499-06	OL-1495-11	OL-1495-15	OL-1496-09	OL-1496-12
	Location	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	9/7/2011	9/7/2011	9/7/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011
	Sample Time	17:18	16:50	11:10	8:20	9:55	8:20	9:55	
	SDG	180-3757-1	240-3729-1	240-3729-1	UFICHM2011-051	UFICHM2011-051	240-3638-1	240-3638-1	
	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N	0.00033	0.0003 U			0.00045	0.00036
E1631	MERCURY	ug/L	N	0.016	0.0035			0.029	0.021
SM2540D	Total Suspended Solids	mg/L	N	16					
UFI SOP	Total Suspended Solids	mg/L	N			199.6	83.2		
UFI SOP	TURBIDITY	NTU	N			157 J	114 J		

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		Field Sample ID	OL-1497-11	OL-1497-15	OL-1498-03	OL-1600-03	OL-1498-07	OL-1600-07	OL-1495-04
	Location	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Amboy	NMCK-Rte48
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/9/2011	9/9/2011	9/7/2011
	Sample Time	8:20	9:55	16:50	16:50	11:10	11:10	15:45	
	SDG	180-3757-1	180-3757-1	UFICHM2011-051	180-3791-1	UFICHM2011-051	180-3791-1	UFICHM2011-051	
	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N						
E1631	MERCURY	ug/L	N						
SM2540D	Total Suspended Solids	mg/L	N	200	130	96		37	
UFI SOP	Total Suspended Solids	mg/L	N		94		30.7		19.3
UFI SOP	TURBIDITY	NTU	N		71.4		24.7		13.5 J

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		Field Sample ID	OL-1495-08	OL-1496-03	OL-1496-07	OL-1497-04	OL-1497-08	OL-1499-03	OL-1499-07
	Location	NMCK-Rte48		NMCK-Rte48		NMCK-Rte48		NMCK-Rte48	
	Sample Depth	0-0 FT		0-0 FT		0-0 FT		0-0 FT	
	Sample Date	9/7/2011		9/7/2011		9/7/2011		9/7/2011	
	Sample Time	16:50		15:45		16:50		16:50	
	SDG	UFICHM2011-051		240-3638-1		240-3638-1		180-3757-1	
	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	
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N		0.0003 U	0.0003 U		0.00047	0.0003 U
E1631	MERCURY	ug/L	N		0.0073	0.0049		0.022	0.0048
SM2540D	Total Suspended Solids	mg/L	N				17	16	
UFI SOP	Total Suspended Solids	mg/L	N	11.9					
UFI SOP	TURBIDITY	NTU	N	9.6 J					

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		Field Sample ID	OL-1495-12	OL-1495-16	OL-1496-10	OL-1496-13	OL-1497-12	OL-1497-16	OL-1498-04
	Location	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48	NMCK-Rte48
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011
	Sample Time	8:00	9:40	8:00	9:40	8:00	9:40	8:00	16:30
	SDG	UFICHM2011-051	UFICHM2011-051	240-3638-1	240-3638-1	180-3757-1	180-3757-1	UFICHM2011-051	
	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N		0.00046	0.00054			
E1631	MERCURY	ug/L	N		0.064	0.079			
SM2540D	Total Suspended Solids	mg/L	N				310	260	
UFI SOP	Total Suspended Solids	mg/L	N	387.6	266.5				124
UFI SOP	TURBIDITY	NTU	N	250 J	187 J				78.6

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		Field Sample ID	OL-1600-04	OL-1498-08	OL-1600-08	OL-1495-05	OL-1495-09	OL-1496-05	OL-1496-08
	Location	NMCK-Rte48		NMCK-Rte48		NMCK-Rte48	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer
	Sample Depth	0-0 FT		0-0 FT		0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	9/8/2011		9/9/2011		9/9/2011	9/7/2011	9/7/2011	9/7/2011
	Sample Time	16:30		10:50		10:50	14:25	17:50	14:25
	SDG	180-3791-1		UFICHM2011-051		180-3791-1	UFICHM2011-051	UFICHM2011-051	240-3638-1
	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N					0.00035	0.00043
E1631	MERCURY	ug/L	N					0.018	0.042
SM2540D	Total Suspended Solids	mg/L	N	130		38			
UFI SOP	Total Suspended Solids	mg/L	N		29.5		73.4	160.2	
UFI SOP	TURBIDITY	NTU	N		25		30.7 J	63.3 J	

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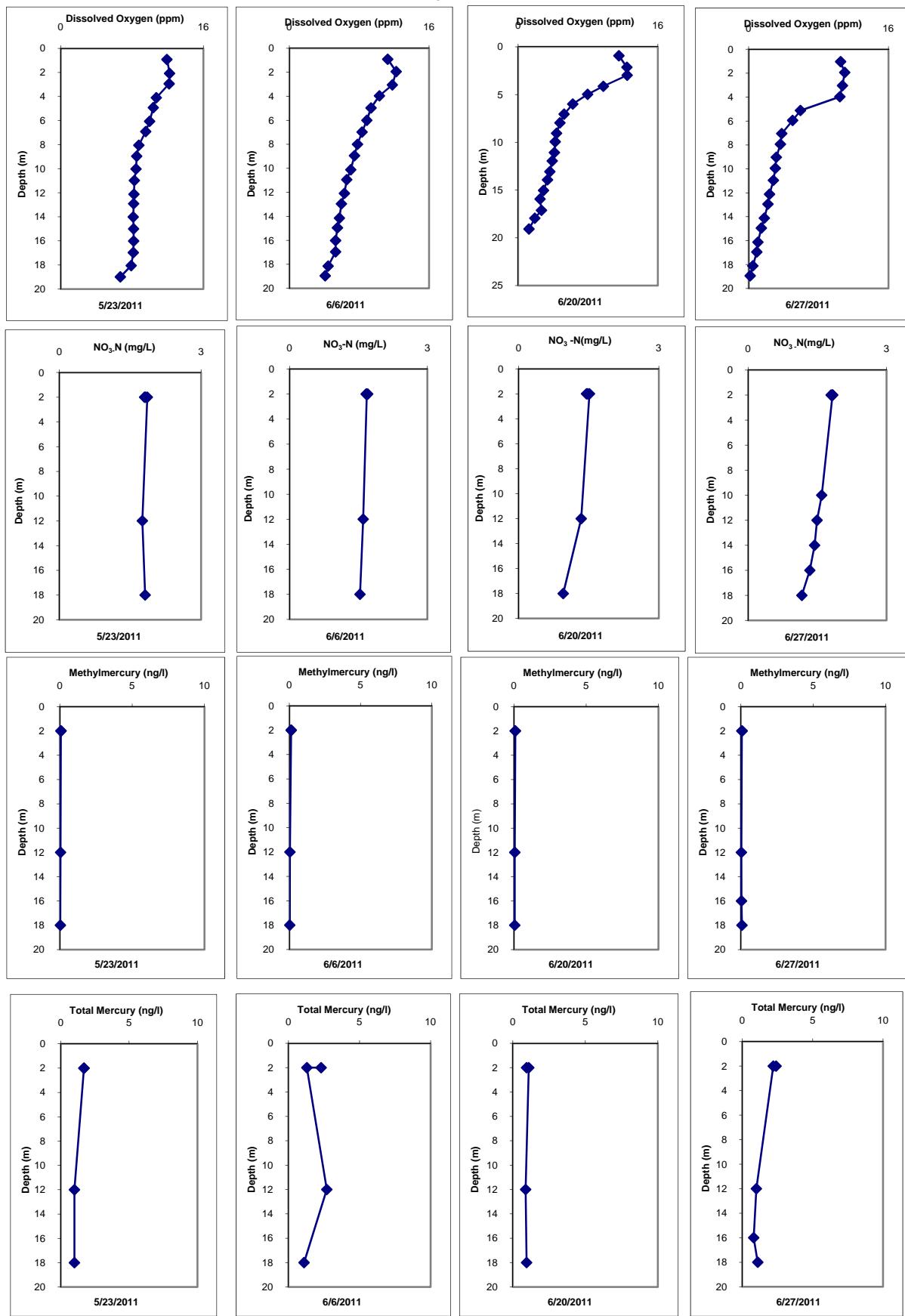
		Field Sample ID	OL-1497-05	OL-1497-09	OL-1499-05	OL-1499-08	OL-1495-13	OL-1495-17	OL-1496-11
	Location	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 Ft
	Sample Date	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011
	Sample Time	14:25	17:50	17:15	11:45	9:00	10:20		9:00
	SDG	180-3757-1	180-3757-1	240-3729-1	240-3729-1	UFICHM2011-051	UFICHM2011-051		240-3638-1
	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N		0.00033	0.0003	U		0.00019
E1631	MERCURY	ug/L	N		0.0095	0.0022			0.017
SM2540D	Total Suspended Solids	mg/L	N	96	200				
UFI SOP	Total Suspended Solids	mg/L	N				464	330	
UFI SOP	TURBIDITY	NTU	N				385	J	299

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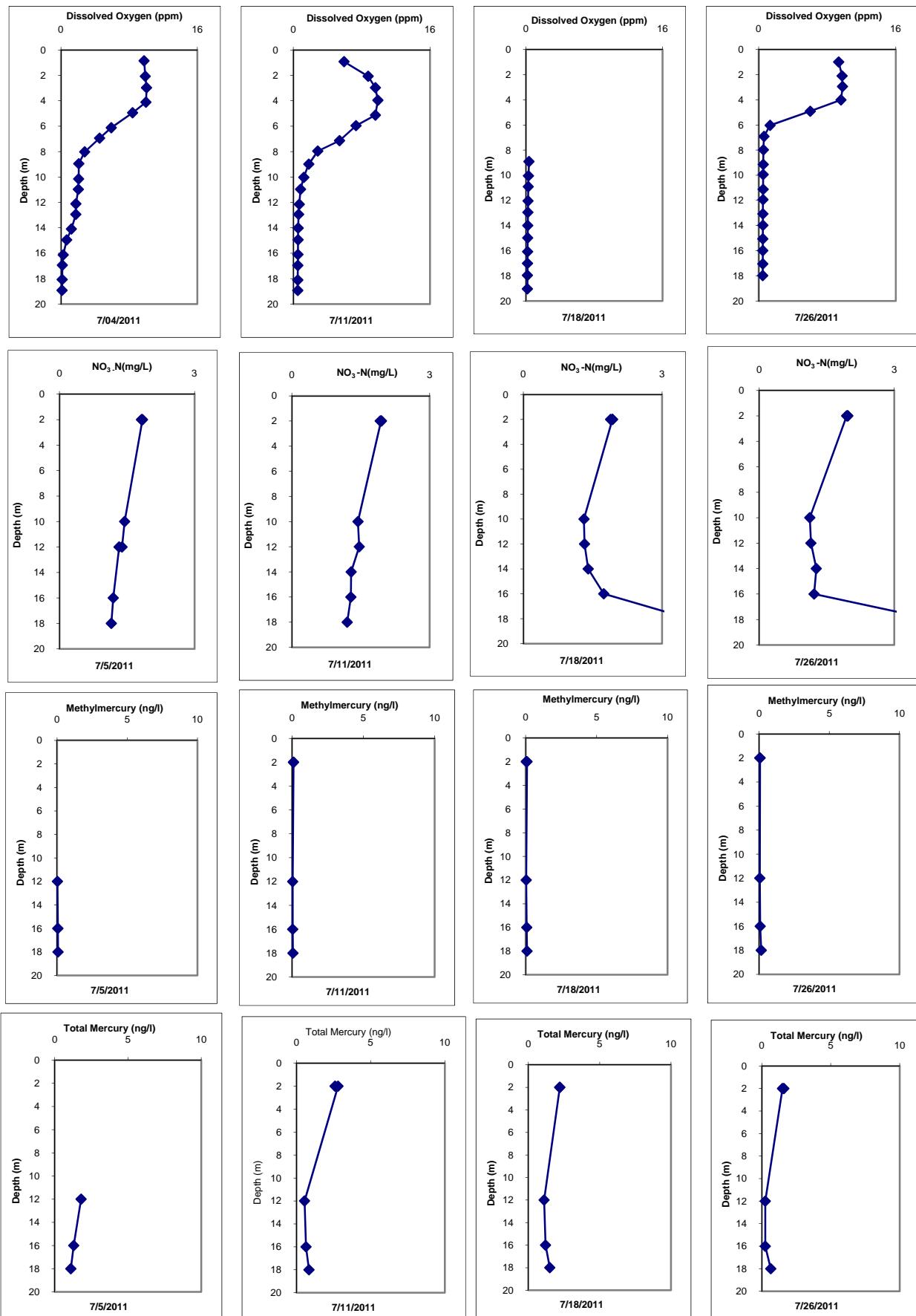
		Field Sample ID	OL-1496-14	OL-1497-13	OL-1497-17	OL-1498-05	OL-1600-05	OL-1498-09	OL-1600-09
	Location	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer	ONCK-Spencer
	Sample Depth	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT	0-0 FT
	Sample Date	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/9/2011	9/9/2011
	Sample Time	10:20	9:00	10:20	17:15	17:15		11:45	11:45
	SDG	240-3638-1	180-3757-1	180-3757-1	UFICHM2011-051	180-3791-1	UFICHM2011-051	180-3791-1	180-3791-1
	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
Method	Parameter Name	Units	Filtered						
E1630	METHYL MERCURY	ug/L	N	0.00041					
E1631	MERCURY	ug/L	N	0.014					
SM2540D	Total Suspended Solids	mg/L	N		430	310	270		93
UFI SOP	Total Suspended Solids	mg/L	N			264		79	
UFI SOP	TURBIDITY	NTU	N			257		72.2	

APPENDIX D**PLOTS OF DISSOLVED OXYGEN, NITRATE, TOTAL MERCURY AND
METHYLMERCURY BY DEPTH AT SOUTH DEEP IN 2011**

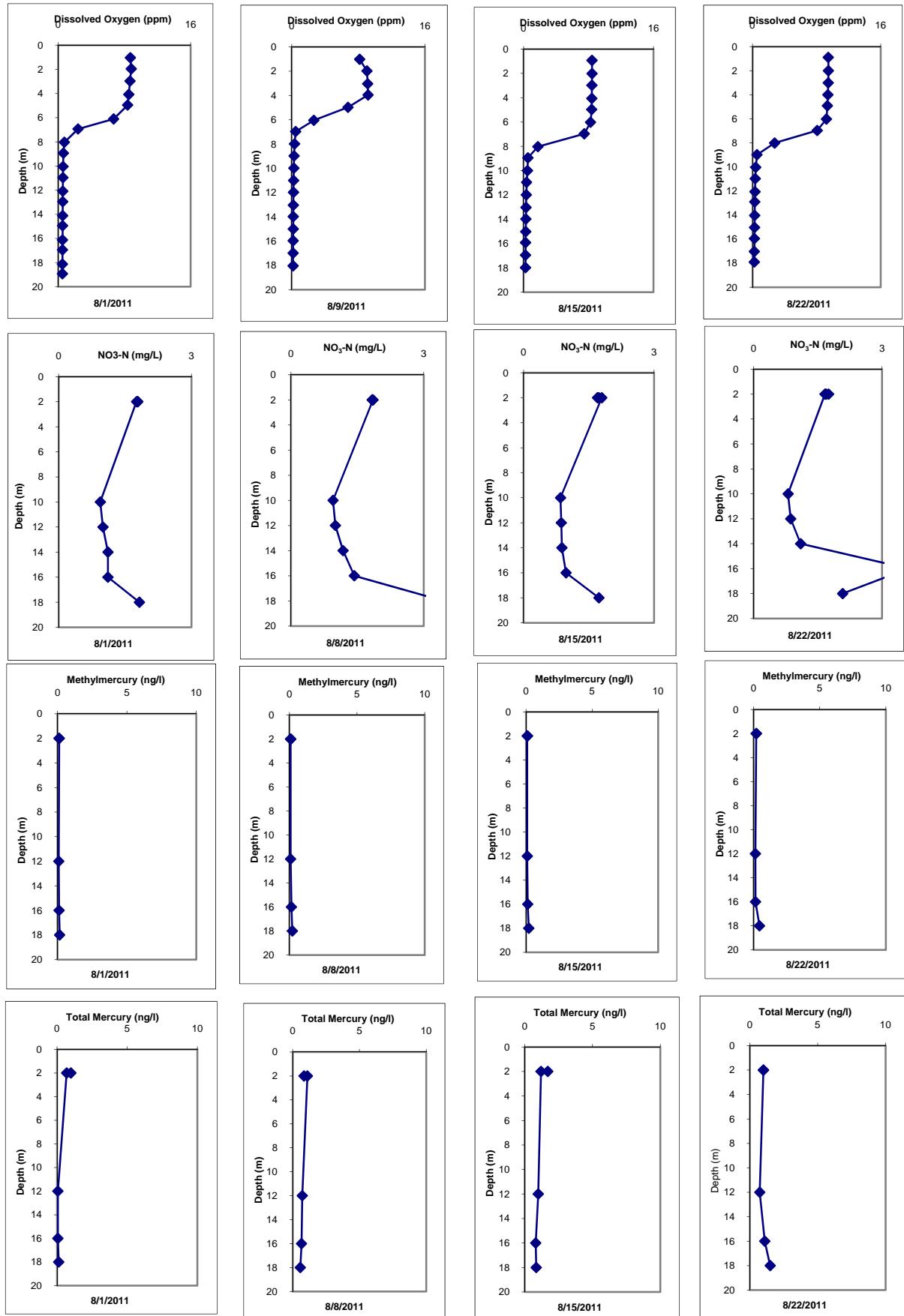
2011 Water Quality Results: South Deep



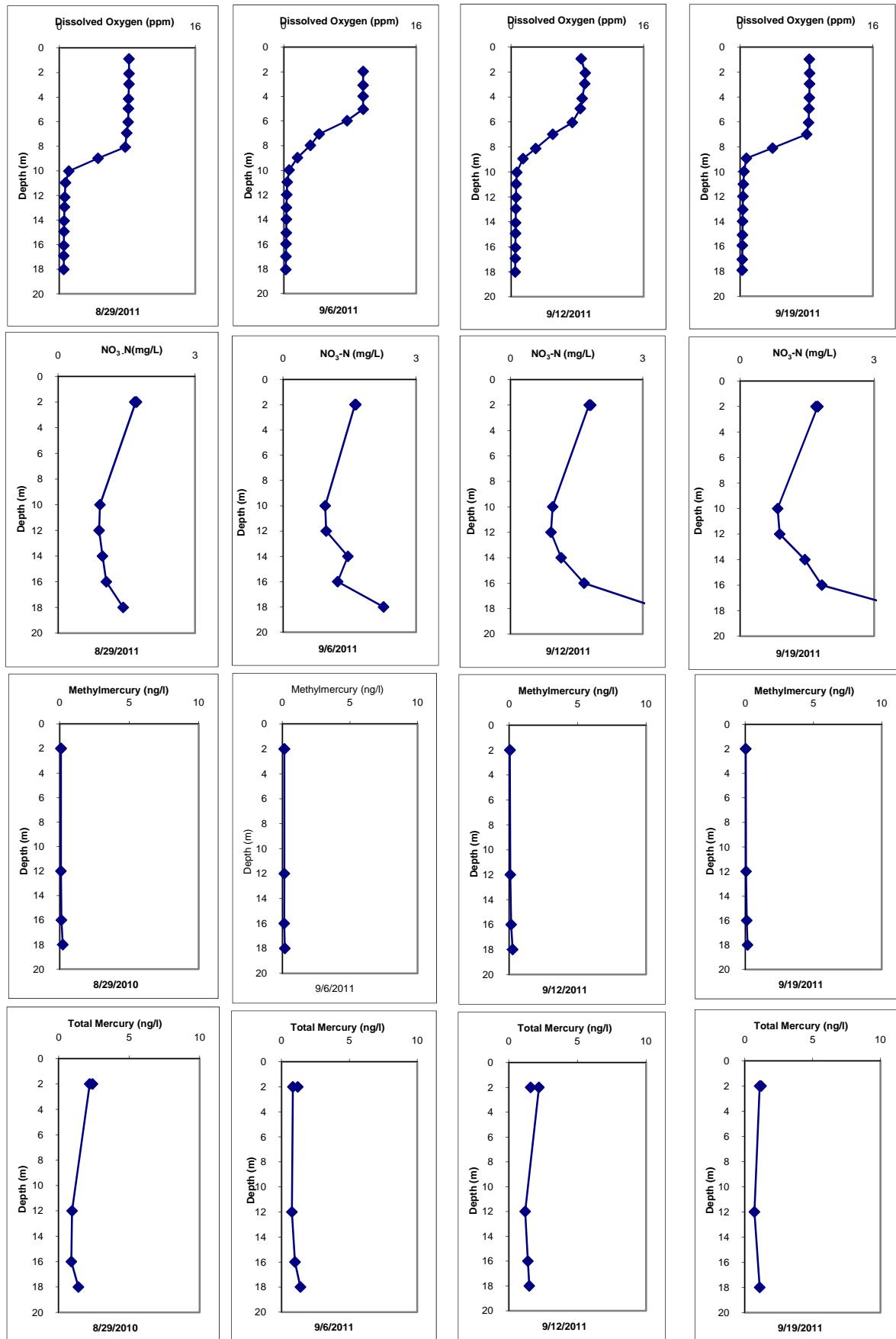
2011 Water Quality Results: South Deep



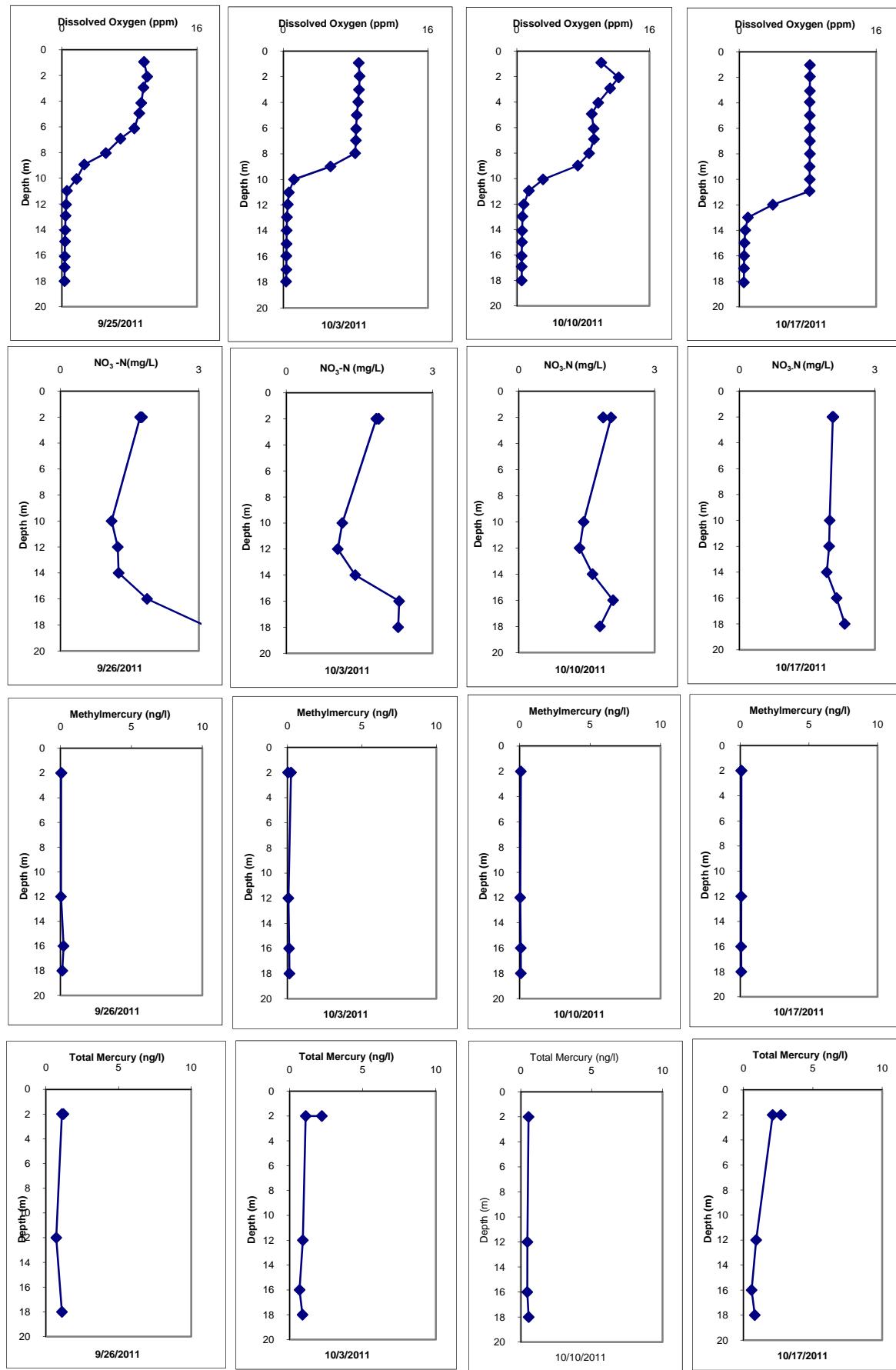
2011 Water Quality Results: South Deep



2011 Water Quality Results: South Deep



2011 Water Quality Results: South Deep



2011 Water Quality Results: South Deep

