



**GE Corporate
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April 13, 2001

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RE: HUDSON RIVER MONITORING PROGRAM 2000 SUMMARY REPORT

Dear Mr. Tomchuk:

The General Electric Company (GE) is forwarding the following report entitled "*Hudson River Monitoring Program – 2000 Summary Report*". This report has been prepared by Quantitative Environmental Analysis, LLC (QEA). Please place this report in the administrative record.

Should you have any questions, please let me know.

Sincerely,

Robert G. Gibson

RGG/bi

Enclosure

cc: Mr. William Daigle - NYSDEC
Mr. Robert Montione - NYSDOH
Mr. Jay Field – NOAA
Mr. John Haggard - GE
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317554



Quantitative Environmental Analysis, LLC

FINAL

Hudson River Monitoring Program

2000 Summary Report

Prepared for:

**General Electric Company
Albany, New York**

April 2001

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SCANNING TRACKING SHEET

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DOC TITLE/SUBJECT:

**HUDSON RIVER PCBS UPDATE #9
2000 HUDSON RIVER MONITORING PROGRAM
(HRMP) DATA AND PDF FILES OF DATA
SUMMARY PACKAGES (Page: 317556)**

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FINAL

Hudson River Monitoring Program

2000 Summary Report

Prepared by:

Quantitative Environmental Analysis, LLC

Prepared for:

**General Electric Company
Albany, New York**

**Job Number:
GENhrm 131**

April 2001

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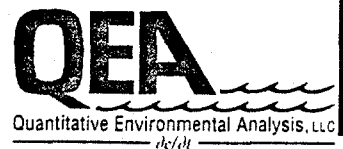
Appendix B. Field Logs.

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Exhibit B. Northeast Analytical, Inc. Total Suspended Solids Laboratory Data Packages (bound separately).

SECTION 1 INTRODUCTION



SECTION 1 INTRODUCTION

This annual summary report has been prepared by Quantitative Environmental Analysis, LLC (QEA) on behalf of the General Electric Company (GE) to document the results of the 2000 Hudson River Monitoring Program (HRMP). This monitoring program was conducted by QEA, and included activities performed for the Post-Construction Remnant Deposit Monitoring Program (PCRDMP) and additional sampling and analysis programs. The monitoring was performed in accordance with the requirements of a consent decree (Consent Decree 1990; 90-CV-575) between GE and the federal government, and a Sampling and Analysis Plan (SAP; QEA 2000a). This SAP includes a Field Sampling Plan (FSP), a Quality Assurance Project Plan (QAPP), and a Health and Safety Plan (HASP).

1.1 BACKGROUND

A detailed description of the environmental history of the Hudson River is presented in a report prepared by QEA entitled "*PCBs in the Upper Hudson River, Volume 1 Historical Perspective and Model Overview*" (QEA 1999a). A summary of this history is presented below.

Over an approximate 30 year period, ending in 1977, two GE capacitor manufacturing facilities in Fort Edward and Hudson Falls, New York discharged PCBs into the upper Hudson River (Figure 1-1). Much of the PCBs were contained in sediment deposited in the pool behind the Fort Edward Dam located at Hudson River Mile (HRM)¹ 194.9 (Figure 1-2). Removal of the 100-year-old Dam by Niagara Mohawk Power Corporation in 1973 dropped water levels in the pool.

¹ For reference, the HRM system begins at the southern tip of Manhattan (the battery) in New York City, and increases traveling upstream.

As a result, an estimated 1.5 million cubic yards of sediment deposits (referred to as the Remnant Deposits) were left along the banks of the River up to 1.5 miles upstream of Fort Edward (NUS 1984).

Five discrete Remnant Deposits (Figure 1-2) were identified upstream of Fort Edward (NUS 1984). Remnant Site 1 originally appeared as an island; however, floods in 1976 and 1983 reportedly scoured much of the sediment associated with this deposit, submerging portions of the island during high flow periods (NUS 1984). Remnant Site 1 currently consists of several small islands spread out over approximately 1,500 feet, centered at HRM 196.1. Remnant Site 2 occupies approximately eight acres along the west bank of the River at HRM 195.7. Remnant Site 3 is located along the east bank of the River at HRM 195.5 and encompasses approximately 19 acres. Remnant Site 4 occupies 21 acres located on the west and south banks of the River where the River bends sharply to the east. Remnant Site 5 is located immediately upstream of the old Fort Edward Dam on the north bank of the Hudson River occupying approximately four acres (NUS 1984). Several limited remedial activities were performed on the Remnant Deposits by New York State between 1974 and 1978 (NUS 1984).

A feasibility study (FS) of the Hudson River Superfund Site, which included Hudson River sediment and the Remnant Deposits, was performed by NUS (1984) for the United States Environmental Protection Agency (USEPA). The purpose of the FS was to examine potential remedial alternatives and recommend one that met the goals and objectives established under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

In September 1984, USEPA issued a Record of Decision (ROD; USEPA 1984) for the Hudson River, which specified no action for Hudson River sediment. Additionally, the ROD contained plans for in-place containment of Remnant Sites 2, 3, 4, and 5 by application of soil

cover, vegetation of the cover and bank stabilization (USEPA 1984). No action was selected for Site 1. The consent decree (Consent Decree 1990) with the federal government specified the scope of the remediation work to be done, and required post-construction monitoring. In-place containment of the Remnant Deposits was completed by GE during the fall of 1990 (O'Brien & Gere 1996a; JL Engineering 1992). The objectives of this containment were to control the release of PCBs from the Remnant Deposits to the Hudson River, and to minimize potential human exposure to PCBs as a result of direct contact or volatilization (Consent Decree 1990). Post-construction monitoring has been conducted since 1991.

1.2 ADDITIONAL REMEDIAL ACTIVITIES

GE has performed additional remedial activities at the GE Hudson Falls Plant Site and the adjacent abandoned Allen Mill located on Bakers Falls in Hudson Falls, N.Y. During the post-construction monitoring performed by GE, a significant increase in water column PCB loading was detected after mid-September 1991. This loading originated upstream of the Route 197 Bridge and downstream of the Bakers Falls Bridge monitoring stations (Figure 1-2). Within a week's time, PCB levels within the River increased from less than 100 ng/L to approximately 4000 ng/L (O'Brien & Gere 1993). After an extensive investigation, the source of the increased water column PCB loading was attributed to the collapse of a wooden gate structure within an abandoned paper mill (Allen Mill) located adjacent to the Hudson Falls capacitor plant on Bakers Falls (O'Brien & Gere 1994a; Figure 1-2). The gate had kept water from flowing through a tunnel cut into bedrock beneath the Mill, presumably since the Mill's closure in the early 1900s. The tunnel contained dense non-aqueous phase liquid (DNAPL) PCBs that had migrated from beneath the Hudson Falls Plant Site through subsurface bedrock fractures and into the tunnel.

In January 1993, with the cooperation of Adirondack Hydro Development Corporation (AHDC) and the New York State Department of Environmental Conservation (NYSDEC), the water flow through the Mill was largely controlled. By spring 1993, two of the three waterways within the Mill were isolated from the River and the removal of PCB containing material from within the Allen Mill commenced. Removal activities continued until the fall of 1995. Approximately 45 tons of PCBs were contained in the 3,430 tons of sediment removed from the Allen Mill (O'Brien & Gere 1996b).

In 1994, during the construction of the new dam at Bakers Falls, PCB DNAPL was observed seeping from bedrock fractures in the portion of the Falls adjacent to the Hudson Falls Plant Site. A number of remedial actions have been taken to contain and control these PCB seeps including grouting of bedrock fractures, manual collection of PCB oils when accessible, and the installation and operation of pumping wells to hydraulically control the seeps (HSI GeoTrans 1999). The release of PCB DNAPL through these bedrock seeps has declined significantly in response to mitigation efforts. In an additional effort to control the seeps, sediment and debris from the Hudson River in the vicinity of the original wastewater outfall was removed in 1998. The original outfall was located immediately upstream of the Dam and the area where the seeps are concentrated.

In addition to the activities to control Riverbed PCB seeps and PCB movement from the Allen Mill, GE has conducted an intensive investigation and remedial program at the Hudson Falls Plant Site. DNAPL PCBs have been discovered in the fractured bedrock below the Site. As of January 3, 2001, 5,149 gallons of DNAPL have been removed from the subsurface (GE 2001). A groundwater recovery system has been installed to create a hydraulic barrier between the Site and the River, not only to collect PCB-containing groundwater but also DNAPL (HSI GeoTrans 1999). The effectiveness of this system in reducing PCB flux from the Site to the

River is being assessed through the measurement of PCB levels in the River adjacent to and downstream of the Site.

1.3 PREVIOUS MONITORING ACTIVITIES SUMMARY

1.3.1 Construction Phase Monitoring

An environmental monitoring program was initiated prior to, and continued throughout the in-place containment construction activities performed on the Remnant Deposits. Between 1989 and 1991, this environmental monitoring was conducted and documented by Harza Engineering Company (Harza 1990, 1992a, 1992b). The environmental activities performed by Harza included the collection and analysis of water, sediment, air, and aquatic biota samples employing various techniques. The results of this monitoring indicate that there was little, if any, measurable concentrations of PCB leaving the Remnant Deposit areas.

1.3.2 Post-Construction Monitoring

Beginning in 1991, the water column of the Hudson River has been monitored for PCBs utilizing capillary column analytical techniques with a total PCB method detection limit (MDL) of 11 ng/L (O'Brien & Gere 1992a,b). The PCRDMF was initiated by O'Brien & Gere in 1992, and has been performed on an annual basis since. Annual reports have been prepared summarizing the results of each year's activities (O'Brien & Gere 1993, 1994b, 1995, 1996a, 1997, 1998b; QEA 2000b; QEA 2001). QEA began monitoring activities on the Hudson River in February of 1999.

1.4 PROJECT OBJECTIVES

The objectives of the HRMP are to:

- monitor the effectiveness of the remedial action performed on the Remnant Deposits;
- monitor the effectiveness of remediation activities conducted at, and adjacent to, the GE Hudson Falls Plant Site;
- provide data to evaluate the significance of other sources of PCBs to the Hudson River; and
- allow continued evaluation of long term trends in PCB concentrations and composition in Hudson River water.

1.5 REPORT ORGANIZATION

This remainder of this report is organized as follows:

Section 2 - presents the methods and materials used to perform the monitoring program.

Section 3 - presents the results of the monitoring program including a discussion of the spatial and temporal trends in the data.

Section 4 - presents a summary of the results of the 2000 monitoring program.

Appendix A - presents the results of data verification and validation for data collected during 2000.

Appendix B - presents copies of original field notes prepared during sample collection.

Exhibit A - presents congener-specific laboratory data (on compact disc in pocket of report).

Exhibit B - presents total suspended solids laboratory data.

SECTION 2 METHODS



SECTION 2 METHODS

2.1 ROUTINE WATER SAMPLING LOCATIONS

Water column samples were obtained on a weekly basis from seven stations on the River during 2000. The routine HRMP sampling stations are described in detail in Table 2-1, illustrated in Figure 1-2, and are summarized in the table below. The station descriptions are generally consistent with the nomenclature used in the GE Hudson River Database.

Sampling Station	Approximate HRM	Significance
Bakers Falls Bridge	197.0	Upstream (background).
Plunge Pool	196.9	Immediately downstream of GE Hudson Falls Plant Site area, indicator of source activity.
Boat Launch	196.9	Immediately downstream of GE Hudson Falls Plant Site area, adjacent to Allen Mill tailrace tunnel outlet, indicator of source activity.
Route 197 Bridge	194.2	First monitoring station downstream of the Remnant Deposit reach of the Hudson River.
TID-WEST	188.5	Sampled historically to monitor PCB concentrations in water flowing out of Thompson Island Pool. Data collected from this station are biased high. Sampling continues to provide continuity in database.
TID-PRW2	188.49	Sampling initiated at this location in 1997 to provide more representative data in vicinity of Thompson Island Dam.
Route 29 Bridge	181.4	Furthest downstream station routinely monitored.

2.1.1 Sampling Bias at TID-WEST

Concerns regarding the representativeness of the TID-WEST sampling station are summarized in Table 2-1, and discussed in detail in a report entitled "*Thompson Island Pool Sediment PCB Sources*" (QEA 1998). The results of several investigations conducted throughout Thompson Island Pool (TIP), and adjacent to and downstream of Thompson Island Dam (TID), indicated that the PCB concentrations in samples collected from the western Dam abutment of TID (TID-WEST) are biased high compared to the bulk of the flow over the Dam.

Concerns regarding the sampling bias have resulted in the addition of the sampling station at a location downstream of the Dam (TID-PRW2; Figure 1-2) considered to be more representative of cross-sectional average conditions. Therefore, data from the TID-PRW2 sampling station have been used for much of the interpretation presented later in this report. However, the sampling program has continued to include the TID-WEST station to provide data that are comparable to historical data collected at this location, facilitating evaluation of long-term trends in PCB concentration.

2.2 ROUTINE SAMPLE COLLECTION PROCEDURES

Sample collection procedures are summarized for each sampling location in Table 2-1. Samples consisted of either depth-integrated composites, near-bottom grabs, or surface grabs, depending on the River characteristics and access. Depth integrated composites were collected at all of the routine sampling locations except the plunge pool (near bottom grab), boat launch (near bottom grab), and TID-WEST (surface grab) stations. Duplicate samples were collected at the routine sampling stations and archived to provide a reserve sample in the event that the handling or analysis compromised the integrity of the original sample. Laboratory analyses were conducted in accordance with the procedures discussed in Section 2.8.

Sample collection activities were restricted during portions of the winter due to River ice conditions, particularly at the TID-PRW2 and plunge pool stations. The affected dates and locations are documented in Section 3.

2.3 ADDITIONAL WATER SAMPLING PROGRAMS

2.3.1 2000 High Flow Sampling

Water column samples were collected from the Hudson River during two high flow events on the Hudson River during 2000. These high flow events occurred on March 27-28, 2000 and on April 4-5, 2000. For both of these events, high flow was induced by heavy rainfall occurring within the region.

The sampling program focused on the east and west channel of the Hudson River at the Route 197 Bridge sampling station in Fort Edward. Sampling was conducted in accordance with the procedures presented in the sampling and analysis plan developed for the PCRDMP (QEA 2000). During the high flow events, samples were collected at approximately 1,000-cfs increments along the hydrograph as determined from instantaneous flow information obtained from the USGS gaging station in Fort Edward. During daylight, samples were collected from both the east and west channels at Fort Edward and composited consistent with routine sampling procedures. After dark, samples were collected only from the east channel due to safety concerns related to traffic on the west channel bridge. Background conditions were monitored by sampling at the Bakers Falls Bridge sampling station in Hudson Falls. One round of weekly routine water column monitoring was also conducted during both high flow events.

2.3.2 Additional Plunge Pool Area Sampling

As described in Section 2.1, water samples were collected from two locations in the plunge pool (plunge pool and boat launch) on a routine basis throughout 2000. In addition to these routine locations, water samples were collected from other locations in the plunge pool on

two occasions (August 9 and August 30) during 2000. These sampling events were coordinated with sampling performed along a transect located just downstream of the plunge pool (Section 2.3.3), and were collected to more fully characterize PCB concentrations in Hudson River water within the plunge pool area and to identify potential source areas of PCB DNAPL. These additional sampling events included sample collection at the locations depicted in Figure 2-1 and 2-2, including:

- HR-1;
- HR-2;
- HR-5;
- HR-6;
- HR-7;
- HR-8;
- HR-9;
- HR-10; and
- HR-11.

The collection methods used to obtain samples at these locations were consistent with those used to collect the boat launch and plunge pool samples. Samples collected in the plunge pool area were obtained approximately 1-2 ft above the Riverbed. Laboratory analyses were consistent with the procedures presented in Section 2.8.

2.3.3 Transect Monitoring Downstream of Plunge Pool

The Transect Monitoring Program involved the collection of hydrologic data and water samples along a transect across the River, downstream of the Hudson Falls Plant Site area on two

occasions (Figures 2-1 and 2-2). This program was performed to more closely define the magnitude of PCB loading to the Hudson River attributable to the GE Hudson Falls Plant Site area. Bathymetric survey and flow velocity data were collected along the transect. Water samples were then collected at closely spaced intervals along the transect and analyzed for PCBs. The bathymetry, flow velocity, and PCB data were obtained to estimate PCB loading passing the transect.

2.3.4 Additional Total Suspended Solids Sampling at Route 197 Bridge

In addition to the routine monitoring, water column samples were collected from the Route 197 Bridge beginning April 12, 2000 and continued through the end of the year. These additional samples were collected using a depth-integrating sampler identical to the samplers used by the United States Geological Survey (USGS). The USGS sampler consists of a housing that contains a removable glass jar with a small nozzle opening at one end. The housing is designed to keep the sampler oriented upstream, pointed into the flow as it is lowered and raised through the water column. The sampler is lowered at a constant rate from the surface of the water column to the sediment interface and then raised back to the surface at the same rate. The USGS method is designed to collect a water sample that is representative of the entire water column while maintaining the velocity of the water. These samples were collected at the same time as the routine samples and were submitted for total suspended solids (TSS) analysis.

Additionally, QEA personnel (using the Kemmerer Bottle method) collected three sets of paired samples with the USGS personnel who used the 'fish' sampler. These samples were collected on March 15 and 29, and April 5, 2000. The samples collected on March 29 and April 5 were obtained during high flow conditions.

2.4 FLOW MONITORING

The flow rate in the Hudson River is measured to assess the affects of flow on water column PCB concentrations, and to allow the evaluation of PCB mass loading in the River. The use of flow data to estimate PCB loading is discussed in Section 3. Flow was monitored at the USGS gaging station located in Fort Edward (station no. 01327750). This gaging station is located approximately 0.4 miles upstream of the Route 197 Bridge in Fort Edward, near the location of the former Fort Edward Dam (Figure 1-2). Instantaneous flows are estimated when samples are collected from the Route 197 Bridges by contacting the telemetry equipment located at the gaging station and obtaining the River stage. The stage is then converted to flow in cubic feet per second (cfs) based on the rating table developed by USGS. Provisional flow data are also obtained electronically from USGS. Provisional data are made available by USGS prior to quality assurance review; therefore, the data may change when USGS issues finalized data. Flow data presented in this report after October 1, 1999 are provisional data. The data include instantaneous flows recorded every 15 minutes and daily mean flow for the River at Fort Edward. These data are presented in Section 3, and are included in the GE Hudson River Database.

2.5 FIELD DATA

Field data were recorded on field log forms at the time of sample collection. The field log forms are included in Appendix B. The data recorded on the field log forms included:

- sample location;
- date and time of sample collection;
- sample type;
- sampling method;
- water temperature;
- depths of sample collection;
- QA/QC samples collected, including the location of blind duplicate samples;
- flow rate at Fort Edward USGS gaging station;
- observations of flow over Bakers Falls;
- weather data; and
- other observations and comments.

2.6 EQUIPMENT DECONTAMINATION

New sampling equipment, including a “whale” pump and polyethylene tubing, was used to collect the near-bottom grab samples from the boat launch and the plunge pool during each sampling event; therefore, decontamination was not required. Sampling equipment used for the other routine HRMP sampling locations were decontaminated between uses according to procedures specified in the QAPP (QEA 2000a). These procedures included rinsing the portions of the equipment that come in contact with samples with acetone, then hexane, and finally

distilled water. Waste solvent was containerized and delivered to the laboratory for appropriate disposal.

2.7 SAMPLE HANDLING PROCEDURES

Upon collection, the samples were placed in appropriate containers, chilled to approximately 4°C with ice, and transported to the analytical laboratory in accordance with appropriate chain of custody procedures. Each sample was assigned a unique sample designation identifying sample location, date, and time. Chain of custody procedures and container specifications are presented in the QAPP (QEA 2000a).

2.8 ANALYTICAL TESTING PROGRAM FOR ROUTINE SAMPLING

Laboratory analyses were performed by Northeast Analytical Inc. (NEA). Water samples were analyzed for congener-specific PCBs using Method NE013_04 (NEA 1999) and total suspended solids (TSS) using USEPA method 160.2. Specific analytical methods and protocols are presented in the QAPP (QEA 2000a). The method detection limit (MDL) and the practical quantitation limit (PQL) for the congener-specific PCB analyses are 11 ng/L and 44 ng/L, respectively (QEA 2000a). PCB homolog and congener distributions in samples containing total PCBs at concentrations between the MDL and PQL are considered estimates due to the decreased sensitivity of the method for lower chlorinated congeners at these concentrations. PCB concentrations falling between the MDL and PQL are reported with a "P" qualifier.

The congener-specific PCB analytical method and data management procedures address analytical calibration errors and coelution biases that have been identified with the method (HydroQual 1997). An error was detected in the original calibration of the Green Bay mixed

Aroclor standard used by NEA for DB-1 analyses (USEPA 1987). The congener distribution of the Green Bay standard was apparently miscalculated, predominantly for components of DB-1 Peak 5, and a revision to the calibration was later published (USEPA 1994). NEA has revised the congener-specific PCB analytical method to incorporate the use of this revised calibration (NEA 1999).

A coelution error resulted from the assumptions developed for deconvolution of peaks containing multiple congeners with different chlorination levels (mixed peaks). Originally, deconvolution of these peaks were based on mass spectrometry analysis of Aroclor mixtures (Frame et al. 1996). As mixed-peak congener mass ratios in Hudson River environmental samples deviate from those of commercial Aroclors, measurement errors are introduced into the quantitation of these peaks. Coelution correction factors were developed using Hudson River data; therefore, these factors are specific to the Hudson River project and represent an additional level of data interpretation beyond the purview of the laboratory. Specifically, DB-1 capillary column peaks 5, 8 and 14 were adjusted using media-specific coelution correction factors (HydroQual 1997) prior to presentation in this report and inclusion in the GE Hudson River Database.

2.8.1 Data Reporting

A data reporting program has been developed that generally conforms to the guidelines presented in the NYSDEC ASP Superfund PCB/Pesticide requirements and provides the information required for validation of the data (Section 2.9). The data have been organized into a compilation of laboratory-generated data in both bound and electronic file format. Laboratory data reports are presented in Exhibit A (congener-specific PCB data) and Exhibit B (total suspended solids data). Exhibit A is included in the compact disc that accompanies this report.

The data reduction and handling activities included integration of the data electronically into the GE Hudson River Database, which was updated and provided to USEPA, NYSDEC, GE and other data users on a regular basis throughout 2000.

2.9 QUALITY ASSURANCE/QUALITY CONTROL

Quality assurance/quality control (QA/QC) procedures have been designed to provide data of sufficient quality to facilitate monitoring the effectiveness of the remedial action performed on the remnant deposits in accordance with the requirements of the consent decree (Consent Decree 1990). In addition to following the sample collection procedures specified in the QAPP (QEA 2000a), the QA/QC procedures included the collection and analysis of field QA/QC samples. These field QA/QC samples were collected during each routine sampling event, and included matrix spike, blind duplicate, and equipment blank samples.

The results of the laboratory analyses performed on the field QA/QC samples were evaluated as part of the data validation process. The results of the data validation are presented in Appendix A to this report. These results indicate that over 99% of the data are useable for quantitative purposes. Data qualifiers assigned as a result of data validation are included in the data summary tables presented in this report. Data that were assigned a qualifier of "R" were not used in any quantitative assessments for this program.

SECTION 3 RESULTS AND DISCUSSION

SECTION 3 RESULTS AND DISCUSSION

3.1 INTRODUCTION

In this section, the results from the 2000 Hudson River routine water column monitoring are presented and discussed by sampling location, in upstream to downstream order. For each station, a discussion of PCB and TSS concentrations and PCB loading and composition data is provided. This section concludes with a discussion of short- and long-term temporal trends, spatial trends across the monitored reach, and the various sources of PCB loading to the River. Data that were rejected (qualified with an "R") during data validation (Appendix A) were not included in the evaluations presented in this report.

Temporal profiles (*i.e.*, plots of parameters in chronological order throughout 2000) are presented for River flow, TSS, and PCB concentration and mass loading, at each station. In general, data points are connected by lines on these figures to facilitate trend analysis. A break in the line indicates a lapse in sampling for one or more weeks. Data points not connected to the line indicate blind duplicate results. Data points indicating a concentration less than the MDL are represented as open symbols, plotted at the MDL. PCB concentrations less than the MDL were set to the MDL of 11 ng/L for PCB mass loading calculations. This is a conservative approach, and likely overestimates PCB mass loading under these conditions.

Estimating PCB loading requires assigning a representative flow rate to a representative PCB concentration over a selected period of time. It is important to recognize that the short-term temporal variability typically observed in both flow rate and PCB concentrations affects the accuracy of the estimated loading. The use of daily average flow for each day that a PCB

concentration was obtained has been adopted, and the PCB concentration has been assumed to be constant for the entire day. The relatively large size of the database is expected to minimize the impact of the uncertainty associated with individual load estimates. For the high flow sampling, where multiple PCB concentrations are available on a single day, loading has been calculated using the 15-minute flow data from the Fort Edward gaging station at the time each sample was collected at the Route 197 Bridge sampling station, and then integrated to obtain a daily mean load.

Loadings were calculated using 2000 USGS daily average flow data from the Fort Edward gaging station. USGS flow data recorded after October 1, 1999 are provisional data. As discussed in Section 2.4, provisional data have not undergone USGS quality assurance review, and may change when finalized. The Fort Edward flow data (both daily average and instantaneous) were adjusted by proration factors² for stations located downstream of Fort Edward, to account for flow increases that arise from tributary inputs and direct drainage. The proration factors used in loading calculations were based on the upper Hudson River flow balance presented in QEA (1999b) and are 1.043 and 1.167 for TID and the Route 29 Bridge, respectively.

The water column PCB composition for each station was assessed by examining the average mass percent of each PCB homolog represented in the samples collected from a given station. The variability in PCB composition throughout the year is represented by error bars that correspond to ± 2 standard errors of the mean (2 SEM). Water column PCB homolog composition was compared to that of Aroclor 1242 (Frame et al. 1996), which was the predominant Aroclor used at GE's Hudson Falls and Fort Edward facilities.

² Proration factors represent the ratio of flow at a downstream station to that at an upstream station.

3.2 BAKERS FALLS BRIDGE (BACKGROUND) MONITORING STATION

The Bakers Falls Bridge is upstream (*i.e.*, indicative of background PCB levels) of the GE Hudson Falls Plant Site area and the Remnant Deposit region of the River (Figure 1-2). A total of 57 water column samples were collected in 2000 from this station, including blind duplicate samples that were collected for QA/QC purposes. Data are not available for the July 19, 2000 sampling event due to a laboratory accident that resulted in loss of the samples. PCB and TSS data for this sampling station are presented in Table 3-1, and temporal profiles of flow, TSS concentration, PCB concentration, and PCB mass loading at Bakers Falls Bridge are plotted in Figure 3-1.

During routine monitoring in 2000, TSS concentrations at Bakers Falls Bridge ranged from less than 1 mg/L to 9.0 mg/L (mean 2.1 mg/L). Four samples were collected from the Bakers Falls Bridge sampling station during high flow sampling (Section 3.4.3). These samples were analyzed for TSS with resulting concentrations ranging from 1.6 to 9.0 mg/L. PCB concentrations at the Bakers Falls Bridge monitoring station were below the MDL of 11 ng/L for over 98% of the routine monitoring samples collected in 2000 (Figure 3-1), and were also below the MDL for the high flow event samples. Only one of the 57 samples collected had a PCB concentration greater than the MDL, at 12 ng/L. Because PCB concentrations at Bakers Falls Bridge are usually below the MDL, PCB loadings are generally not calculable. Moreover, the less than detectable concentrations preclude analysis of PCB composition.

3.3 HUDSON FALLS PLANT SITE MONITORING STATIONS

In 2000, GeoTrans personnel collected routine water column samples from two locations at the base of Bakers Falls on a weekly basis. Data are not available for the July 19, 2000

sampling event due to a laboratory accident that resulted in loss of the samples. These locations, designated as BOATLAUNCH and PLUNGEPOOL are illustrated in Figures 1-2 and 2-1. This monitoring is not required by the PCRDMP Consent Decree (Consent Decree 1990) or the Consent Decree for the GE Hudson Falls Plant site area; however, the data from these monitoring stations are documented by this report.

Quantitative estimates of Plant Site loadings using PCB concentrations measured at these locations is precluded by the complex hydrodynamics produced by the Falls and operation of the hydroelectric facility within this region of the River. The amount of water and associated PCBs leaving the plunge pool cannot be determined directly using these data. However, PCB data from these two sampling locations can be used as qualitative indicators of the activity of the Hudson Falls Plant Site area source³.

The 2000 PCB and TSS data collected from both the plunge pool and boat launch monitoring stations are presented in Table 3-2, and Figures 3-2 and 3-3, respectively. Twenty-two samples were collected at the plunge pool sampling station in 2000. TSS concentrations in these samples ranged from less than 1.0 to 7.6 mg/L, and PCB concentrations ranged from less than 11 to 12 ng/L (Figure 3-2). PCBs were only detected twice during 2000, on September 13 and November 15. The mean PCB concentration at the plunge pool sampling location decreased from approximately 17 ng/L in 1999 to slightly above 11 ng/L in 2000.

Fifty water column samples were collected from the boat launch sampling station in 2000. TSS concentrations ranged from less than 1 to 11.8 mg/L, and PCB concentrations ranged

³ Previous studies indicate that the monitoring data generated at the station in Fort Edward (Section 3.3) provide a better basis upon which to estimate the magnitude of the Hudson Falls Plant Site loadings than these two stations (O'Brien and Gere 1996c).

from less than 11 to 301 ng/L (Figure 3-3). The highest TSS concentration was measured on October 18 during a low flow period, and corresponded with the highest PCB concentration measured at the boat launch in 2000 (301 ng/L). The elevated PCB concentration may have been related to the elevated suspended solids concentration (11.8 mg/L) in the sample. The next two highest concentrations were measured during high flow events on March 29 and April 5, 2000 at 76 and 69 ng/L, respectively. Both of these samples were collected on the rising limb of the hydrograph during the high flow events. While there may be some correlation between flow and PCB concentrations measured in the plunge pool area, the complex hydrodynamics in the area described above preclude quantitative assessment of these data. However, the mean PCB concentration at the boat launch decreased from 68 ng/L in 1999 to approximately 30 ng/L in 2000.

PCB composition data collected at the boat launch and plunge pool demonstrate that water column PCBs in the vicinity of the Hudson Falls Plant Site continue to resemble the unaltered Aroclor 1242 pattern observed in previous years (Figure 3-4; QEA 2000b). The similarity of PCB homolog composition to Aroclor 1242, in conjunction with the increased concentrations observed relative to the background station (Bakers Falls Bridge), indicate that the GE Hudson Falls Plant Site area source continued to contribute PCBs to the water column during 2000. However, this source is greatly reduced in magnitude from previous years, and continues to decrease. This decrease is also evident in data collected from the Route 197 Bridge sampling station (Section 3.4). This correlation indicates that the boat launch and plunge pool sampling stations are useful as qualitative indicators of the magnitude of the GE Hudson Falls Plant Site area source.

The value of the plunge pool and boat launch sampling stations as indicators of source activity is also indicated in Figure 3-5. In this figure, PCB concentrations measured at the boat

launch, plunge pool, and Route 197 Bridge sampling stations are compared. Peaks in concentration at the boat launch coincided with PCB detections at the Route 197 Bridge sampling station on several occasions.

3.3.1 Additional Plunge Pool Area Sampling

In addition to the routine plunge pool and boat launch sampling, GeoTrans personnel conducted two rounds of sampling at stations located along the eastern and northern limits of the plunge pool (Figures 2-1 and 2-2). In total, 18 samples were collected as part of this program. This sampling program was conducted in conjunction with sampling performed along a transect across the River just downstream of the plunge pool (Section 3.3.2). These sampling locations were selected to further characterize PCB concentrations in the plunge pool, and to identify potential PCB source areas.

The data generated for these samples are presented in Table 3-3. TSS concentrations were not quantified for these samples. PCB levels in the additional plunge pool samples during the two rounds of sampling ranged from <11 to 141 ng/L and <11 to 450 ng/L, respectively. These data indicate that PCB concentrations are variable in the plunge pool area, and confirm that the PCB sources to the plunge pool are located primarily along the northern and eastern limits of the pool. The highest concentration measured during the first round of sampling was at HR-9 (Figure 2-1), while the highest concentration measured during the second round of sampling was at HR-5 (Figure 2-2). HR-5, which is located near the northwest corner of the abandoned Bakers Falls power house, adjacent to the tailrace tunnel outlet, exhibited the highest concentrations of samples collected in a similar program during 1999.

As discussed in Section 3.2, the complex hydrodynamics that exist within the plunge pool prevent performing a quantitative PCB loading analysis from this area; however, these data support the conclusion that the GE Hudson Falls Plant Site area source(s), while greatly reduced in magnitude from previous years, continued to contribute PCBs to the water column during 2000.

3.3.2 Transect Monitoring Downstream of Plunge Pool

As discussed in Section 2.3.3, two rounds of sampling were conducted by QEA personnel at stations located along a transect across the river, downstream of the Hudson Falls Plant Site area (Figures 2-1 and 2-2). During the first round of sampling on August 9, 2000, 20 samples were collected along the transect at approximately 20 foot increments. The second round of sampling on August 30, 2000 consisted of 9 samples taken at approximately 60 foot increments across the transect. Data for both of these sampling events can be found in Table 3-3. The first round of sampling on August 9, 2000 showed TSS concentrations that ranged from less than 1.0 mg/L to 7.5 mg/L. The second round of sampling on August 30, 2000 showed TSS concentrations that ranged from less than 1.0 mg/L to 2.9 mg/L. PCB concentrations for both sampling events were less than 11 ng/L for all samples collected. Due to the fact that all samples were less than the MDL, PCB mass loading estimates at the transect were not performed.

3.4 ROUTE 197 BRIDGE MONITORING STATION

The Route 197 Bridge sampling station in Fort Edward is downstream of the Remnant Deposits region of the River at HRM 194.2 (Figure 1-2). There are four potential sources of the PCBs observed at the Route 197 Bridge:

- source(s) upstream of Bakers Falls;
- the Hudson Falls Plant Site area;
- the five Remnant Deposits between Hudson Falls and Rogers Island; and
- the former 004 Outfall area in the vicinity of the Fort Edward Plant Site.

Figure 1-2 illustrates the position of the Route 197 Bridge sampling station with respect to the Plant Site area, Remnant Deposits, and former Outfall 004.

A total of 46 routine sampling events were conducted in 2000. Sampling was not conducted on January 19 and 26, and February 2 and 9 due to winter weather conditions. Data are not available for the July 19, 2000 sampling event due to a laboratory accident that resulted in loss of the samples. Additionally, an evacuation of the Village of Fort Edward due to a chemical spill prevented sampling at this station on August 30, 2000. As discussed in Section 2.1, samples collected at the Route 197 Bridge station typically consist of equal-volume composites from the east and west channels of Rogers Island. In 2000, a total of 57 composite samples were collected along with 5 discrete samples from the east channel Route 197 Bridge. These totals include blind duplicate samples collected for QA/QC purposes, and samples collected during high flow monitoring.

PCB and TSS data are presented in Table 3-4. When sampling after dark during the high flow sampling, samples were collected from the east channel only (designated as HRM 194.2E), as the west channel was not accessible due to safety concerns related to working from that bridge. Temporal profiles of flow, TSS concentration, PCB concentration, and PCB mass loading are plotted in Figure 3-6. Results from the time-intensive sampling conducted during high-flow events are plotted in Figures 3-7 and 3-8.

3.4.1 Total Suspended Solids Sampling Results

As described in Section 2.3.4, sampling for TSS at the Route 197 Bridge was conducted in accordance with routine methodology (depth integrated composite collected with Kemmerer Bottle sampler) and methodology developed by USGS (depth integrated composite sample with USGS "fish" sampler). TSS concentrations in samples collected from the Route 197 Bridge using a Kemmerer Bottle during 2000 ranged from less than 1.0 to 12.3 mg/L (mean 2.3 mg/L; Table 3-4), while TSS concentrations in samples collected by the USGS method ranged from less than 1.0 to 10.8 mg/L (mean 2.4 mg/L; Table 3-5). The TSS data produced by both methods are compared in Figure 3-9.

Three paired samples were collected by the USGS and QEA personnel on March 15 and 29 as well as on April 5, 2000. TSS concentrations in samples collected by USGS personnel were 1, 27, and 13 mg/L respectfully, compared to 1, 12, and 6 mg/L in the samples collected by QEA personnel. The samples collected on March 29 and April 5 were obtained during a high flow event. Higher concentrations were observed during high flow for both methods; however, the samples obtained by USGS personnel using the "fish" sampler were significantly higher than those collected by QEA using the Kemmerer Bottle sampler. Qualitative comparison between flow and TSS generally indicates a positive relationship (Figure 3-10).

3.4.2 Routine Sampling PCB Results

PCB concentrations at the Route 197 Bridge sampling station were largely below the method detection limit throughout 2000. For samples collected during routine weekly sampling in 2000 (exclusive of time-intensive high flow sampling), PCB concentrations at the Route 197 Bridge were below the MDL for 39 out of the 46 sampling events. When PCBs were detected,

concentrations ranged from 12 to 33 ng/L. Under low flow conditions (below 10,000 cfs), PCBs were only detected on four occasions, with concentrations ranging from 14 to 22 ng/L. The mean PCB concentration for routine sampling in 2000 was 12 ng/L.

Daily mean flows at the USGS gaging station in Fort Edward during routine sampling in 2000 ranged from 1,374 to 19,460 cfs. Flow rates in 2000 were higher than normal. The daily mean flow at Fort Edward exceeded 10,000 cfs on 44 days; with the annual mean flow exceeding the typical annual mean flow of 5,200 cfs by approximately 1,000 cfs.

PCB mass loadings observed at the Route 197 Bridge during 2000 have been estimated. However, due to the large number of data that are less than the MDL, and the use of PCB concentrations of 11 ng/L for samples that were actually reported as less than 11 ng/L to calculate loading, these estimates are likely biased high. PCB loading estimates were generally less than 0.5 lbs/day, except during high flow periods events (Section 3.4.3; Figures 3-6 and 3-7).

PCB concentrations measured at the Route 197 Bridge sampling station were slightly lower in 2000 compared to previous years. The annual mean was approximately 12 ng/L in 2000 compared to 14 ng/L in 1999 (Figure 3-11). A portion of this decrease may have been related to the generally higher flow rates experienced during 2000 compared to 1999. However, the trend in the data are consistent with the trends in PCB concentrations measured at the plunge pool and boat launch sampling stations, indicating that the reductions in PCB loading from the Hudson Falls Plant Site area are being measured at the Route 197 Bridge sampling station. As described in Section 3.2, quantifying PCB loading to the Hudson River from the GE Hudson Falls Plant Site area and Bakers Falls is not possible due to the complex hydrodynamics in the area.

3.4.3 High Flow PCB Sampling

As discussed in Section 2.3.1, sampling was conducted during two high flow events in 2000 (March and April 2000), which occurred approximately one week apart. These high flow events provided a rare opportunity to study the effects of mobilizing PCBs from the GE Hudson Falls Plant Site area on PCB concentrations in the River. The flow characteristics of each event were very similar, with a steep rising limb on the hydrograph, nearly identical peak flows, and a similar falling limb on the hydrograph (Figure 3-7). Flow in the river prior to each event was below 8,000 cfs resulting in the dewatering of Bakers Falls. Flow was below 8,000 cfs for approximately 2 weeks prior to the March event, and approximately 2 days prior to the April event (Figure 3-7). High flow PCB, TSS, and flow data for each event are presented in Table 3-4.

During high flow periods, PCB loading at the Route 197 Bridge was higher than during low-flow periods (Figures 3-6 and 3-7). Estimates of instantaneous loading during the March high-flow event ranged between approximately 1.0 and 12 lbs/day. PCB loading increased rapidly during the rising limb of the hydrograph, followed by a rapid decrease, although flow rates remained elevated (Figure 3-7). This trend is similar to those observed in previous years (Figure 3-8). PCB loading was reduced to approximately 1.0 lb/day within approximately 24 hours of the onset of the high flow event (Figure 3-7). In contrast to the March event, the April event resulted in relatively small increases in concentration (maximum concentration 31 ng/L), even though flow conditions were nearly identical to the March event. Consequently, instantaneous PCB loading rates ranged from 1.0 to 2.0 lbs/day during the event (Figure 3-7).

Significant variability exists in the response of River PCB concentrations to flow conditions experienced during the 2000 high flow events. Rapid increases in flow during the

first phase of the March high flow event resulted in the release of PCBs to the River at rates that were significantly above low flow PCB loading rates. This same trend was observed during the April event; however, PCB loading was significantly lower than during the March event. Based on the reduced PCB loading measured during the April high flow event compared to the March event, it appears that the source of PCBs is depleted rapidly during the initial phases of a high flow event, and requires a period of time to replenish.

3.4.4 PCB Composition

The average water column PCB composition at the Route 197 Bridge continues to closely resemble the PCB composition in samples collected at the boat launch and plunge pool (Figure 3-12). It should be noted that PCB composition data becomes less reliable as concentrations decrease below 44 ng/L. Therefore, as PCB concentrations continue to decline at these locations, an increase in the variability in the composition data is likely. However, the similarity in composition suggests that the PCB loading observed at the Route 197 Bridge is largely derived from PCBs entering the River in the vicinity of Bakers Falls. The PCB composition at the Route 197 Bridge during the March and April high flow periods was generally consistent with that observed during the balance of the year (Figure 3-13).

3.5 THOMPSON ISLAND DAM MONITORING STATIONS

Routine monitoring was conducted at two stations located at TID to evaluate water column PCB loading across TIP during 2000. This monitoring is not required by the PCRDMP Consent Decree (Consent Decree 1990). However, the data from these monitoring stations are documented by this report.

Sampling at TID historically has been conducted from the west wing wall of the Dam at the western channel of Thompson Island (TID-WEST). However, studies conducted in 1996-97 indicated that this sampling location is not representative of the actual PCB load passing TID (QEA 1998; O'Brien and Gere 1998a). Beginning in October 1997, a sampling location downstream of the Dam was added to the routine monitoring program, (TID-PRW2; Figure 1-2). This sampling location was found to produce water column samples which more accurately represent average PCB concentrations exiting TIP (QEA 1998). As discussed in Section 2.2, sampling at TID-WEST has been continued to provide continuity with the historical database.

3.5.1 TID-WEST

In 2000, 65 routine samples were collected from TID-WEST, including blind duplicate samples collected for QA/QC purposes. Data are not available for the July 19, 2000 sampling event due to a laboratory accident that resulted in loss of the samples. High flow sampling was not conducted at TID-WEST in 2000. PCB and TSS analytical results for TID-WEST are presented in Table 3-6. Temporal profiles of flow, TSS concentration, and PCB concentration are presented in Figure 3-14. TID-WEST data cannot be used to accurately estimate PCB loading, as samples collected from this station are not considered to be representative of average PCB concentrations exiting TIP (QEA 1998). Therefore, evaluation of PCB loading at TID utilizes data collected from the TID-PRW2 station.

3.5.1.1 Total Suspended Solids Sampling Results

During routine monitoring in 2000, TSS concentrations at TID-WEST ranged from less than 1 mg/L to 26 mg/L (mean 4.0 mg/L; Figure 3-14). Similar to the upstream stations,

qualitative comparison of TSS and flow data suggests a positive relationship, with higher TSS concentrations normally being observed at higher flows.

3.5.1.2 PCB Sampling Results

PCB concentrations at TID-WEST during routine monitoring 2000 ranged from less than 11 ng/L to 318 ng/L (mean 84 ng/L; Figure 3-14). A seasonal trend in PCB concentration at TID-WEST can be observed in 2000 (Figure 3-14). This trend consists of low concentrations throughout the winter months, an increase beginning in mid April to a peak in June, followed by a decline until an increase was observed in late fall prior to decreasing at the end of the year. This trend is consistent with data collected in past years at the same location (QEA 2001, 2000b).

3.5.1.3 PCB Composition

The water column PCB composition for TID-WEST samples collected in 2000 continues to exhibit the altered Aroclor 1242 homolog signature observed in previous years (Figure 3-15; QEA 2001, 2000b). On average, the mono- and di- homolog fraction of samples collected at TID-WEST made up approximately 60% of the total PCB mass, compared to approximately 15% in Aroclor 1242. The composition of PCBs in water at TID is discussed in detail in the *Thompson Island Pool Sediment PCB Sources Report* (QEA 1998).

3.5.2 TID-PRW2

Analytical results for TID-PRW2 in 2000 are presented in Table 3-6 and Figure 3-14. A total of 43 samples were collected during 2000 from the TID-PRW2. Due to safety considerations, sampling in 2000 did not occur at this location from January 19 through February

23, March 29, April 5, and December 6, 20, and 27. Data are not available for the July 19, 2000 sampling event due to a laboratory accident that resulted in loss of the samples. Samples were not collected on November 22 due to equipment problems.

3.5.2.1 Total Suspended Solids Sampling Results

TSS concentrations at TID-PRW2 during 2000 ranged from less than 1 mg/L to 29.5 mg/L (mean 4.7 mg/L). TSS concentrations observed at TID-PRW2 are similar to those at TID-WEST, and therefore exhibit a similar correlation with flow, particularly during higher flow periods.

3.5.2.2 PCB Sampling Results

During routine monitoring at TID-PRW2 in 2000, PCB concentrations ranged from less than 11 ng/L to 93 ng/L (mean 42 ng/L). PCB mass loading ranged from approximately 0.25 to 2.25 lbs/day (annual low-flow mean 1.13 lbs/day). Variability in flow rate did not appear to have a significant impact on PCB mass loading at TID-PRW2 during 2000; however, this station is typically not sampled when flow rates in the River are elevated due to safety concerns. Nonetheless, the same seasonal trend in PCB concentration that is observed in the TID-WEST monitoring data is also present at this location (Figure 3-14). Flow rates in 2000 were higher than normal. The daily mean flow exceeded 10,000 cfs on 44 days; with the annual mean flow of approximately 6,200 cfs exceeding the typical annual mean flow by approximately 1,000 cfs. PCB mass loadings at TID-PRW2 (Figure 3-14) are larger than those at the Route 197 Bridge (Figure 3-6). The incremental loading across the TIP is discussed further in Section 3.9. Little correlation between PCB concentration and TSS is apparent (Figure 3-16). Loading mechanisms are discussed further in QEA 1999b and in Section 3.9 of this report.

3.5.2.3 PCB Composition

The average homolog pattern observed in samples collected at TID-PRW2 is similar to that from TID-WEST (Figure 3-15). On average, mono- and di- chlorobiphenyls made up nearly 60% of the total PCB mass in 2000 TID-PRW2 samples. This homolog signature is consistent with PCBs derived from surface sediments in TIP (QEA 1999a).

3.5.3 Comparison between TID-WEST and TID-PRW2

As plotted in Figures 3-14 and 3-16, TSS concentrations at the two TID stations were similar in 2000. As shown in Figure 3-15, the PCB composition at the two stations was similar in 2000, with TID-WEST samples containing a slightly larger proportion of mono- and di- PCB homologs than those collected from TID-PRW2. PCB data collected during 2000 are consistent with the sampling bias observed at TID-WEST, as documented in QEA (1998). Figure 3-16 also presents a comparison of PCB concentrations at TID-PRW2 and TID-WEST. All samples collected at TID-WEST during 2000 resulted in a higher PCB concentration than samples collected from TID-PRW2 on the same day. The PCB concentration at TID-PRW2 ranged from approximately 3% to 92% of the concentration measured at TID-WEST. On average, the PCB concentration at TID-PRW2 was approximately 54% of that measured at TID-WEST.

Although the PCB concentrations at TID-WEST are statistically higher than those at TID-PRW2, the variability in this high bias (Figure 3-16) precludes the development of a statistically robust technique for predicting unbiased TID concentrations based on the TID-WEST data. To account for the bias in their PCB fate modeling effort, USEPA developed correction factors to predict the unbiased concentration at TID as a function of PCB

concentration at the Route 197 Bridge, PCB concentration at TID, and the flow at Fort Edward (USEPA 1998; USEPA 1999). The statistical robustness of the stratified data regression technique is not adequate to estimate PCB loadings at TID because of both within-year and year-to-year variability in the bias at TID-WEST. Moreover, the flow component of the bias is uncertain, as sampling TID-PRW2 at elevated flows is not possible due to limited accessibility. As discussed in QEA (1998), the results from TID-PRW2 are considered to be most representative of the PCB load passing TID.

3.6 ROUTE 29 BRIDGE MONITORING STATION

The Route 29 Bridge sampling location in Schuylerville is located approximately seven miles downstream of TID at HRM 181.4. The Route 29 Bridge is the furthest downstream station routinely sampled in GE's Hudson River Monitoring Program. Monitoring at this station is not required by the PCRDMP Consent Decree (Consent Decree 1990). However, the data from this monitoring station are documented in this report.

Fifty-seven samples were collected from the Route 29 Bridge in 2000, including blind duplicate samples collected for QA/QC purposes. Samples were not collected on January 19 and 26, and February 2 and 9 and December 27, 2000 due to winter weather conditions. Data are not available for the July 19, 2000 sampling event due to a laboratory accident that resulted in loss of the samples. PCB and TSS analytical data from the Route 29 Bridge sampling station are presented in Table 3-7. Temporal profiles of flow, TSS concentration, PCB concentration, and PCB mass loading at the Route 29 Bridge are presented in Figure 3-17.

3.6.1 Total Suspended Solids Sampling Results

TSS results ranged from less than 1.0 mg/L to 59 mg/L (mean 6.9 mg/L) during routine monitoring at the Route 29 Bridge (Figure 3-17). Six rounds of sampling were conducted when flow rates exceeded 10,000 cfs. On these dates, TSS concentrations ranged from 2.7 mg/L to 18.2 mg/L. As with the upstream stations, the higher TSS concentrations during routine monitoring at the Route 29 Bridge generally occurred during periods of higher River flow (Figure 3-17).

3.6.2 PCB Sampling Results

PCB concentrations ranged from less than 11 to 141 ng/L (mean 63 ng/L) during 2000 routine monitoring at the Route 29 Bridge, and calculated PCB mass loadings ranged from approximately 0.5 to 16 lbs/day (Figure 3-17). The annual mean low flow loading was approximately 1.8 lbs/day. Comparison of Figures 3-14 and 3-17 indicates that PCB loadings at the Route 29 Bridge are higher than those observed at TID-PRW2. A seasonal trend in PCB concentration and mass loading, similar to that observed at Thompson Island Dam, is evident in the data from the Route 29 Bridge. The increase in PCB concentration between winter and early summer at the Route 29 Bridge is similar in magnitude to that at TID. Similar to the 2000 data from TID, the PCB loading at the Route 29 Bridge correlates with flow and TSS but this correlation is not apparent for PCB concentration due to the elevated concentrations observed at low flows.

3.6.3 PCB Composition

On average, the PCB homolog composition at the Route 29 Bridge closely resembles the altered Aroclor 1242 signature seen at TID (Figure 3-18). This water column PCB homolog composition is consistent with the current understanding of PCB sources to this reach of the River (*i.e.*, upstream load passing TID and surface sediment PCB sources between TID and the Route 29 Bridge). A discussion of PCB loading and sources for each monitoring station is presented in Sections 3.8 and 3.9, respectively.

3.7 TEMPORAL TRENDS IN WATER COLUMN PCBs DURING 2000

The temporal trends in the 2000 Hudson River Monitoring data during both routine monitoring and high-flow periods are generally consistent with previous years' results and the conceptual model of PCB fate and transport in the upper Hudson River (QEA 1999a).

3.7.1 PCBs During Routine Monitoring

Temporal trends in 2000 PCB concentration and PCB mass loading for routine monitoring at all sampling locations except TID-WEST are presented in Figures 3-19 and 3-20, respectively. Loading calculations were not performed for TID-WEST due to the bias in the data at this location. This comparison between the stations illustrates the increase in magnitude in both PCB concentration and mass loading from upstream to downstream. The figures also demonstrate the seasonal trend observed at the sampling locations downstream of the Route 197 Bridge. As discussed in Section 3.5, the strong seasonal patterns observed at Thompson Island Dam and the Route 29 Bridge share nearly the same fourfold increase in PCBs between early April and mid June. This seasonality is consistent with the trend observed since September

1997, as shown in Figure 3-21, which compares the temporal trends in total PCBs observed at the Route 197 Bridge, TID-PRW2, and the Route 29 Bridge. The TID-PRW2 and the Route 29 Bridge sampling stations were not routinely sampled until September of 1997.

3.7.2 High Flow PCBs

During the March and April 2000 high flow events, PCB concentrations at the Route 197 Bridge sampling station were quantified several times on the rising limb of the hydrograph, during peak flow, and after peak flow (Section 2.3.1). Additionally, one round of routine sampling was conducted at all the monitoring stations except TID-PRW2 during each high flow event. Both of the routine sampling events were conducted near the peak flow for each high flow event.

During high flow periods, PCB loading at the Route 197 Bridge was higher than during low flow periods (Figures 3-6 and 3-7). Estimates of instantaneous loading during the March high flow event ranged between approximately 1.0 and 10 lbs/day. PCB loading increased rapidly during the rising limb of the hydrograph, followed by a rapid decrease, although flow rates remained elevated (Figure 3-7). This trend is similar to those observed in previous years (Figure 3-8). PCB loading was reduced to approximately 1.0 lb/day within approximately 24 hours of the onset of the March high flow event (Figure 3-7). In contrast to the March event, the April event resulted in relatively small increases in concentration (maximum concentration 31 ng/L), even though flow conditions were nearly identical to the March event. Consequently, instantaneous PCB loading rates ranged from 1.0 to 2.0 lbs/day during the event.

Samples collected at TID-WEST and the Route 29 Bridge on March 29, 2000 (near peak flow) indicated that PCB concentrations had increased from the previous sampling date, when

the River was at much lower flow (Figure 3-14 and Figure 3-17). PCB loading at the Route 29 Bridge increased from below 1.0 lb/day prior to the March high flow event to approximately 16 lbs/day on March 29, 2000 (Figure 3-17). PCB concentrations increased to a lesser extent during the April high flow event, with PCB loading estimated at approximately 6 lbs/day (Figure 3-17). However, the apparent decrease in loading observed between the two events may be related to variability in the data rather than an actual decrease in loading, as time-intensive sampling was not conducted.

3.7.3 PCB Composition

Temporal trends in 2000 average total chlorines per biphenyl (Cl/BP) are presented in Figure 3-22. Chlorination levels observed at the Route 197 Bridge were relatively constant during 2000, and are consistent with an Aroclor 1242 source. As discussed above, the lower Cl/BP levels at TID and the Route 29 Bridge indicate the water column PCBs at these stations are derived through partitioning and diffusion processes from surface sediment sources. The 2000 temporal profiles of Cl/BP for TID and the Route 29 Bridge also exhibit a slight seasonality characterized by higher chlorination levels in the winter and spring months and decreases in the early summer and mid-autumn months. The decline in chlorination levels coincides with increases in PCB concentration at these stations. Samples collected at TID-WEST are slightly less chlorinated than samples collected from TID-PRW2 (Figure 3-22; QEA 1998). As with PCB concentration and mass loading, the 2000 total chlorines per biphenyl data are consistent with those observed in previous years (Figure 3-23). Moreover, the seasonal variation in Cl/BP observed in 2000 is also apparent in the data from previous years. Mechanisms potentially responsible for the observed seasonality in PCB composition downstream of the Route 197 Bridge are discussed in QEA (1999b).

3.8 SPATIAL TRENDS IN WATER COLUMN PCBs DURING 2000

Spatial trends in PCB concentrations, loadings at low flows, and PCB composition are discussed for 2000 in this section.

3.8.1 Monthly-Average PCB Concentrations

Monthly-average spatial profiles of routine monitoring PCB data collected in 2000 are presented in Figure 3-24. In this plot, the average PCB concentration (± 2 SEM) is plotted for each month's data against River mile, for the four routine monitoring stations (*i.e.*, Bakers Falls Bridge, Route 197 Bridge, TID-PRW2, and Route 29 Bridge). A general increase in PCB concentration from upstream to downstream is observed in all months. The relative magnitude of the increase in PCBs with downstream distance is greatest in late spring, summer, and early fall and lowest in the winter. The PCB concentration increase between Bakers Falls Bridge and the Route 197 Bridge is smaller than that between the Route 197 Bridge and TID and between TID and the Route 29 Bridge. This suggests that sediment PCB sources downstream of the Route 197 Bridge are largely responsible for the upstream-to-downstream increase in 2000 monthly average PCB concentrations. As discussed in Section 3.9.2, modeling (QEA 1999b) and data analyses indicate that the PCB loadings to the water column downstream of the Route 197 Bridge are consistent with transport of PCBs from the surficial sediment (*i.e.*, top few cm) layer.

3.8.2 Low Flow PCB Loadings

Figure 3-25 presents a spatial profile of the average low-flow⁴ PCB mass loading for 2000. The trend shown is a near-linear increase in PCB mass loading with distance downstream, from the Route 197 Bridge to the Route 29 Bridge. This trend is consistent with the current understanding of a surface sediment PCB loading source within TIP and in the reach from TID to the Route 29 Bridge (QEA 1999a). As only two data points during high flow are available at sampling stations downstream of the Route 197 Bridge during 2000, spatial trends during high flow have not been evaluated.

3.8.3 PCB Composition

A spatial comparison of the average (± 2 SEM) 2000 ortho, meta + para, and total chlorines per biphenyl for the routine monitoring data, and for Aroclor 1242 is shown in Figure 3-26. The average ortho chlorine per biphenyl level in 2000 was relatively constant from upstream to downstream, and was generally consistent with the level present in Aroclor 1242. This trend is expected since ortho-substituted chlorines are largely resistant to environmental degradation processes (QEA 1999a). Meta + para and total chlorine per biphenyl data indicate higher chlorination levels at the plunge pool, boat launch, and Route 197 Bridge stations, consistent with an Aroclor 1242 source. Total and meta + para chlorines per biphenyl observed at downstream locations (*i.e.*, TID and Route 29 Bridge) are substantially lower than those at upstream stations, consistent with homolog patterns discussed in Sections 3.5 and 3.6 and our current understanding of PCB fate within the system. These lower chlorination levels indicate inputs from surface sediment PCBs, which are less chlorinated than Aroclor 1242 due to

⁴ Low flow is defined as less than 10,000 cfs measured by the USGS at the Fort Edward gaging station.

biologically-mediated dechlorination and preferential partitioning of the lower-chlorinated congeners to the aqueous phase (QEA 1999a).

3.9 PCB LOADINGS

Data collected at TID and the Route 29 Bridge were insufficient to evaluate loading under high flow conditions; however, an evaluation of the average low-flow PCB loading sources within the monitored reach of the River in 2000 is presented in Figure 3-27. In general, PCB concentrations at the Bakers Falls Bridge sampling station are below the MDL, precluding estimating loading at this location. Data from the plunge pool are general indicators of PCB sources, but River hydrodynamics in this area are too complex to accurately quantify the mass loading. Therefore, the input loading generated from the Hudson Falls Plant Site is best measured from data collected at the Route 197 Bridge.

Estimating PCB loading at the Route 197 Bridge sampling station requires the use of numerous data that are below the MDL. A conservative approach has been adopted for this calculation which uses the MDL of 11 ng/L to calculate loading for days when the PCB concentration is less than 11 ng/L. Therefore, the loading estimates at the Route 197 Bridge are biased high. Using this conservative approach, the average 2000 low-flow PCB loading measured at the Route 197 Bridge is approximately 0.36 lbs/day (Figure 3-27), which is higher than 1999 loading levels. However, this increase is likely due to the higher flow rates experienced in 2000 compared to 1999, combined with the conservative method used to estimate loading described above.

The average 2000 low-flow water column delta loadings⁵ computed for TIP and the reach from TID to the Route 29 Bridge are shown in Figure 3-28. The water column PCB delta loading was calculated as the difference between water column PCB mass loading at the Route 197 Bridge and the unbiased TID-PRW2 location for TIP, and the difference between mass loading at TID-PRW2 and the Route 29 Bridge for the reach between TID and the Route 29 Bridge. The increase in loading observed in TIP and from TID to the Route 29 Bridge is greater than the mean load entering the pool at the Route 197 Bridge. The magnitude of this increase in loading is consistent with our understanding of sediment-water exchange processes within the Hudson River (QEA 1999b). The large degree of variability in the delta loadings shown in Figure 3-28 is mainly due to the seasonality in low-flow delta loads.

As shown in Figure 3-28, the delta loading for both reaches (*i.e.*, TIP and TID to the Route 29 Bridge) is less than 1.0 lbs/day in the winter. The delta loadings increase in late spring to early summer, and peaks at approximately 2.0 and 1.9 lbs/day for TIP and TID to the Route 29 Bridge, respectively. The 2000 delta loadings decrease throughout the mid to late summer and early fall, exhibit a slight increase to approximately 1 lbs/day in mid fall, and then decrease in late fall to the lower wintertime levels. The similar magnitudes and seasonal patterns of the low-flow delta loadings calculated for TIP and TID to the Route 29 Bridge suggests that similar mechanisms are likely responsible for sediment PCB flux within these reaches.

⁵ A delta loading is the difference in PCB mass loading between a downstream station and an upstream station. A positive delta loading represents a net mass input to the water column, and a negative delta loading represents a net loss of water column mass. Delta loadings in this report were computed from paired flow and concentration data at the two stations, by event, and averages were calculated for all events.

3.10 PCB SOURCES

3.10.1 PCB Sources Upstream of Fort Edward

Potential PCB sources upstream of Fort Edward include the Hudson Falls Plant Site DNAPL releases in the Bakers Falls area, the Remnant Deposits, and the former Outfall 004 area near the Fort Edward Plant Site. The monitoring near Hudson Falls (*i.e.*, the plunge pool and boat launch locations) indicates that sources in this area were active in 2000. Loadings upstream of the Route 197 Bridge increased with increasing flow, as evidenced by the large increases seen in estimated loading rates during the March 2000 high flow event, which ranged from approximately 1 to nearly 10 lbs/day. As discussed in Section 3.4.3, PCB loading estimates were significantly lower during the April 2000 high flow event. The composition of the PCBs at the Route 197 Bridge in 2000 was consistently similar to Aroclor 1242, suggesting water column PCBs upstream of the Route 197 Bridge were primarily derived from the Hudson Falls Plant Site PCB DNAPL sources.

3.10.2 Evaluation of Sediment PCB Sources

PCB congener patterns were used to evaluate potential sources of TIP water column PCB loading. Congener patterns are typically examined on a weight percent basis, in which each PCB congener's mass is represented as a percent of the total PCB in the sample. By plotting weight percent against the ordinal congener number (which increases with chlorination level), a "signature" or "chemical fingerprint" of the PCB composition is created for a given sample. Congener patterns have been useful for evaluation of upper Hudson River sediment PCB sources because deeper sediments typically contain a higher weight percent of the less chlorinated congeners than surface sediments (QEA 1999a). In addition, differences in physicochemical

properties among the PCB congeners result in differential transport under different loading mechanisms (*i.e.*, PCB loadings from pore water diffusion and sediment resuspension result in different water column PCB compositions; QEA 1998). Therefore, PCB congener patterns from 2000 water column loading data were evaluated in conjunction with sediment congener patterns to examine potential sediment PCB sources and loading mechanisms.

The composition of the 2000 summer (June-August) low-flow water column PCB delta load from TIP was used to infer the nature of the sediment PCB source (*i.e.*, deep versus surface). Based on the mean water column congener composition and the assumption of a pore water source in equilibrium with surface sediment PCBs, the composition of the sediment source required to produce the water column PCB congener delta loadings observed from the TIP in 2000 was calculated. The calculated sediment source composition closely matches the average surface sediment PCB composition from the 0-2 cm data collected from the TIP in 1998 (O'Brien & Gere 1999a; Figure 3-29). This analysis indicates that the primary source of the low-flow water column PCB delta load within TIP appears to be consistent with PCBs that are partitioned from surface sediments to the aqueous phase. Similarities in PCB congener composition at the Route 29 Bridge and TID suggests that the surface sediment sources within this reach contribute to the water PCB delta loading between these two stations *via* a similar mechanism.

3.11 LONG TERM TRENDS IN WATER COLUMN PCBs

A plot of PCB concentration at the Route 197 Bridge and TID-WEST from 1991 to 2000 is presented in Figure 3-30. Long-term trends in PCB concentration at Bakers Falls Bridge are not presented because PCBs have been largely below the MDL for this period. PCB concentrations at the Route 29 Bridge and TID-PRW2 are not shown because these stations were

not routinely sampled for most of this period. Therefore, although the TID-WEST data are biased high, these data are a qualitative indicator of longer term temporal trends in PCB concentrations.

As shown in Figure 3-30, PCB concentrations at the Route 197 Bridge have decreased significantly since the early 1990's. Mean concentrations on the order of 200-300 ng/L in the early 1990's were reduced to approximately 50 ng/L in the mid-1990's, and continued to decrease to approximately 13 ng/L in 1997. The average PCB concentration was higher in 1998 at 19 ng/L than in 1997; however, the mean concentration decreased in 1999 to 14 ng/L, and to 12 ng/L in 2000. The higher levels and variability in PCB concentrations at the Route 197 Bridge in the early 1990's signify active Plant Site sources (*e.g.*, the 1991 Allen Mill event discussed in Section 1.2). In later years (*i.e.*, 1996-2000), the reduction in variability in PCB concentrations is due primarily to mitigation of the Hudson Falls Plant Site area sources. Post-1997, PCB concentrations at the Route 197 Bridge have exhibited some correlation with flow, as increases in concentrations within a given year typically coincided with high-flow events.

Since the early 1990's, PCB concentrations at TID-WEST have declined in response to reduced PCB inputs from upstream. Annual average PCB concentrations at TID-WEST of approximately 300-400 ng/L in 1991-92 decreased to approximately 100-150 ng/L in 1993-95, and ranged between 70 and 90 ng/L from 1996 through 1998. The mean concentration at TID-WEST in 1999 increased to approximately 125 ng/L; however, this increase is likely related to the relatively low flows experienced throughout most of 1999 as compared to previous years (Figure 3-30). Lower flows would result in an increase in water column PCB concentrations in 1999, assuming that PCB loading rates were similar. The mean PCB concentration at TID-WEST decreased in 2000 to 88 ng/L.

PCB concentrations at TID-PRW2 and the Route 29 Bridge since the fall of 1997 are presented in Figure 3-31. The mean PCB concentration at TID-PRW2 has decreased, with the annual means for 1998, 1999, and 2000 at 59, 49, and 42 ng/L; respectively. Similarly, the annual mean PCB concentration for these three years at the Route 29 Bridge are 72, 70, and 64 ng/L; respectively.

3.11.1 PCB Loading

Estimated PCB loading rates for the Route 197 Bridge sampling station have decreased significantly since the early 1990's, with the annual mean low flow loading declining from over 5 lbs/day in 1991 to less than 0.5 lbs/day by 1996. The annual mean low flow loading has remained below 0.5 lbs/day since 1996 (Figure 3-32). As PCB data collected at TID-WEST are biased, evaluation of PCB loading at this location is not considered to be a representative analysis.

PCB data have only been available at TID-PRW2 and the Route 29 Bridge since the fall of 1997. Mean annual low flow PCB loading at TID-PRW2 has been variable, with estimated loading of 1.3, 0.85, and 1.13 lbs/day for 1998, 1999, and 2000; respectively (Figure 3-31). Only low-flow loading estimates have been compared for this station, as it typically is not sampled at higher flows due to safety considerations. PCB loading at the Route 29 Bridge has also been variable, with respective estimated mean annual low flow loading of 1.67, 1.37, and 1.77 lbs/day for these same three years (Figure 3-32). Total annual mean PCB loading for the Route 29 Bridge was also variable at 3.03, 1.65, and 2.50 lbs/day for 1998, 1999, and 2000; respectively. This variability indicates that the current data set is insufficient to identify long term PCB loading trends in the Hudson River.

SECTION 4 SUMMARY

SECTION 4 SUMMARY

The 2000 HRMP has resulted in the collection and laboratory analysis of approximately 435 water samples. These samples were collected for the following sampling activities:

- routine monitoring;
- high flow monitoring;
- additional plunge pool area sampling;
- transect sampling downstream of the plunge pool; and
- additional sampling at Route 197 Bridge for suspended solids monitoring.

The data produced as a result of these analyses have been evaluated to satisfy the following program objectives:

- monitor the effectiveness of the remedial action performed on the Remnant Deposits;
- monitor the effectiveness of remediation activities conducted at, and adjacent to, the GE Hudson Falls Plant Site;
- provide data to evaluate the significance of other sources of PCBs to the Hudson River; and
- allow continued evaluation of long term trends in PCB concentrations in Hudson River water.

4.1 EFFECTIVENESS OF THE REMEDIAL ACTION PERFORMED ON THE REMNANT DEPOSITS

The remedial action performed on the Remnant Deposits continued to be an effective measure for controlling the migration of PCBs to the Hudson River during 2000. The primary evidence for this is that when PCBs were detected at the Route 197 Bridge monitoring station, they appeared to originate from the GE Hudson Falls Plant Site area, and not from the Remnant Deposit reach of the River. The similar PCB composition observed in samples collected near the GE Hudson Falls Plant Site area when compared to the Route 197 Bridge samples indicates that the GE Hudson Falls Plant Site area is the dominant PCB source in the Remnant Deposit reach of the River (Section 3.7.3). If the Remnant Deposits were a significant source of PCBs to the River, the PCB composition would be expected to be altered at the Route 197 Bridge monitoring station. Because the Remnant Deposits have been stabilized and capped, PCB releases to the River are limited to dissolved phase loadings (*e.g.*, leachate from rainwater infiltration and groundwater flow). These loadings would consist of PCBs that partitioned from the capped sediments, and would therefore exhibit an altered (*i.e.*, less chlorinated) composition due to the differential partitioning of the PCB congeners⁶. Such alterations were not observed in sampling conducted downstream of the Remnant Deposits at the Route 197 Bridge sampling station.

Additionally, the timing of the remedial actions performed at, and adjacent to, the GE Hudson Falls plant beginning in 1993 has coincided with significant reductions in PCB loading measured at the Route 197 Bridge, while the PCB composition has remained similar. This is a

⁶ In general, the partitioning of PCB congeners is inversely proportional to chlorination level. Therefore, aqueous phase PCBs in equilibrium with sediment phase PCBs consist of a higher mass fraction of the lighter (*i.e.*, less chlorinated) congeners (QEA 1999a).

further indication that the PCB loading measured at the Route 197 Bridge originates upstream of the Remnant Deposits in the GE Hudson Falls Plant Site area.

4.2 EFFECTIVENESS OF GE HUDSON FALLS PLANT SITE REMEDIATION

Remediation of the GE Hudson Falls Plant Site area has been effective in reducing the PCB loading entering the Hudson River, as measured at the Route 197 Bridge. Annual mean PCB loading decreased approximately 85% between 1993 (when remediation was initiated) and 1997. PCB loading from the Plant Site did increase slightly from 1997 to 1998; however, PCB concentrations in 1999 and 2000 decreased, and were generally consistent with 1997 levels.

4.3 SIGNIFICANCE OF OTHER PCB SOURCES TO THE HUDSON RIVER

The significance of other PCB sources to the Hudson River has been evaluated based on data collected during 2000 and previous years (Sections 3.8 and 3.9). The results of this evaluation confirm the conclusions presented previously (QEA 1999a), and include the following:

- the primary source of PCBs in the Remnant Deposit reach of the River (as measured at the Route 197 Bridge) is the GE Hudson Falls Plant Site area;
- the primary source of PCBs across the TIP is the surface sediment (*i.e.*, top few cm; QEA 1999a) between the Route 197 Bridge and Thompson Island Dam; and
- the primary source of PCBs between Thompson Island Dam and Schuylerville is from surface sediment in this reach of the River.

4.4 LONG TERM TRENDS IN PCB CONCENTRATIONS IN THE HUDSON RIVER

Evaluation of Hudson River water column PCB data from 1991 through 2000 indicates that PCB loading to the River has decreased significantly. PCB loading from the GE Hudson Falls Plant Site area, as measured by PCBs at the Route 197 Bridge sampling station, has decreased since 1991 due to the remedial activities that have been conducted at the GE Hudson Falls Plant Site area. This decrease is evidenced by the over 90% decline in yearly average PCB loading since 1991.

The remedial activities at Hudson Falls were also instrumental in reducing the mean annual PCB concentrations at Thompson Island Dam, as measured at the TID-WEST sampling station, by approximately 60% between 1991-92 and 1993-94. Since 1995, PCB concentrations at TID-WEST have been approximately 30% of those measured in 1991-92. PCB loading at TID-PRW2 and the Route 29 Bridge sampling stations has been variable for the period that data exists for (fall 1997, 1998, 1999, and 2000). Trends at these locations will become more evident as additional data become available.

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TABLES

TABLE 2-1. DESCRIPTION OF SAMPLING LOCATIONS AND PROCEDURES

Sampling Location(1)	Approx. HRM(2)	Description	Approx. Water Depth (3)	Sampling Method	Significance and Potential Data Limitations
Bakers Falls Bridge	197.0	Approximate center of the channel from the downstream side of the County Route 27 Bridge in Hudson Falls. Approximate distance from top of guardrail to river bed ~ 38 ft.	8 ft.	Depth integrated composite collected with 1.2-L stainless steel Kemmerer Bottle Sampler.	Remnant Deposit Post-Construction monitoring station. Measures background PCB concentrations in Hudson River upstream of GE facilities, remnant deposits, and PCB-containing sediment.
Boat Launch	196.9	Located approximately 10 ft. from east shore of the plunge pool located at the base of Bakers Falls. Immediately downstream of GE Hudson Falls facility, Allen Mill, and DNAPL bedrock seeps on Bakers Falls.	5 ft	Grab sample from ~ 1 ft. off bottom collected through vinyl tubing w/12v "Whale" pump.	Qualitative indicator of activity of source(s) of DNAPL to Hudson River. Complex hydrodynamics in the plunge pool prevent estimating magnitude of PCB loading to the river.
Plunge Pool	196.9	Located approximately 50 ft from east shore of Bakers Falls plunge pool. Deepest area of plunge pool.	33 ft	Grab sample from ~ 20 ft. off bottom collected through vinyl tubing w/12v "Whale" pump.	Qualitative indicator of activity of source(s) of DNAPL to Hudson River. Complex hydrodynamics in the plunge pool prevent estimating magnitude of PCB loading to the river.
Route 197 Bridges	194.2	Samples are collected from the east and west channels of the Hudson River and combined to form an equal volume composite. The west channel is sampled from the approximate center of the west channel from the upstream side of the Route 197 Bridge in Fort Edward. Distance from concrete deck to river bed ~ 29 ft. East channel is sampled from the upstream side of the Route 197 bridge in Fort Edward, in the approximate center of the navigational channel, which runs towards the west side of the east channel. Distance from edge of concrete deck to Riverbed ~ 34 ft.	8 ft. (West) 8 ft. (East)	Depth integrated composite made up of aliquots from both channels. Collected with 1.2 L stainless steel Kemmerer Bottle Sampler. Three aliquots are collected at each station: one 1-2 ft off bottom, one near mid-depth of the water column, and one near the surface.	Remnant Deposit Post-Construction monitoring station. Studies performed by O'Brien & Gere Engineers in 1995 (4) indicate that sampling from this location should provide representative data. Under mean flow conditions, approximately 65% of the river flow is in the west channel and 35% is in the east channel; however, the proportion of water flowing through each channel varies with flow rate. The east and west channel samples are composited at a ratio of 1:1
TID-West	188.5	Samples are collected from shore from the western abutment of Thompson Island Dam.	2 ft.	Surface grab.	Studies performed by O'Brien & Gere Engineers in 1997 (5) and documented in QEA, 1998 indicate that samples collected from this location are biased high.

TABLE 2-1. DESCRIPTION OF SAMPLING LOCATIONS AND PROCEDURES

Sampling Location(1)	Approx. HRM(2)	Description	Approx. Water Depth (3)	Sampling Method	Significance and Potential Data Limitations
TID-PRW2	188.48	Samples are collected from the approximate center of the channel approximately 200 ft downstream of Thompson Island Dam from a boat.	11 ft.	Depth integrated composite collected with 1.2-L stainless steel Kemmerer Bottle Sampler.	Studies performed by O'Brien & Gere Engineers in 1997 (5) indicate that samples collected from this location are more representative of PCB concentrations in water leaving the TIP. Access to this location is often not possible during winter and high flow events.
Route 29 Bridge	181.4	Samples are collected from the approximate center of the eastern channel (main channel) from the upstream side of the Route 29 Bridge in Schuylerville. Distance from the top of the guardrail to the Riverbed ~ 53 ft.	17 ft.	Depth integrated composite collected with 1.2-L stainless steel Kemmerer Bottle Sampler.	Samples collected from this location are assumed to be representative of PCB loading past this station.

(1) - Designations presented correspond to those used in the Hudson River Database.

(2) - HRM refers to Hudson River Mile. HRM 0.0 is located at the Battery in New York City.

(3) - Approximate water depth at typical mean flow of 5,000 cfs.

(4) - O'Brien & Gere. 1996. Hudson River Project, River Monitoring Test. Syracuse, New York. O'Brien & Gere Engineers, Inc., January, 1996.

(5) - O'Brien & Gere. 1998. Hudson River Project, 1996 - 1997 Thompson Island Pool Studies. Syracuse, New York. O'Brien & Gere Engineers, Inc., February, 1998.

TABLE 3-1. 2000 Hudson River water column monitoring results for Bakers Falls Bridge (1)

Date Collected	Approx. HRM (2)	Comments QA/QC (3)	Location	Instantaneous Flow (cfs) (4)	Daily Average (cfs) Flow (5)	Water Temp. (C)	TSS (mg/L)	Total PCB (ng/L)	Homolog Distribution (weight percent) (6)						
									Mono	Di	Tri	Tetra	Penta	Hexa	Hepta
01/05/00	197.0	U	B.F.Br	6,960	7,930	1.0	1.8	<11	--	--	--	--	--	--	--
01/12/00	197.0	U	B.F.Br	4,230	4,770	1.0	<1.0	<11	--	--	--	--	--	--	--
		R, BD	B.F.Br			1.0	<1.0	<11	--	--	--	--	--	--	--
02/16/00	197.0	U	B.F.Br	2,680	3,400	1.0	1.1	<11	--	--	--	--	--	--	--
02/23/00	197.0	U	B.F.Br	NA	3,510	2.0	<1.0	<11	--	--	--	--	--	--	--
03/01/00	197.0	U	B.F.Br	8,750	8,360	1.0	4.7	<11	--	--	--	--	--	--	--
03/08/00	197.0	U	B.F.Br	5,700	5,665	3.0	<1.0	<11	--	--	--	--	--	--	--
		U, BD	B.F.Br			3.0	1.2	<11	--	--	--	--	--	--	--
03/15/00	197.0	U	B.F.Br	6,956	6,956	3.0	<1.0	<11	--	--	--	--	--	--	--
03/22/00	197.0	U	B.F.Br	5,248	4,942	4.0	1.2	<11	--	--	--	--	--	--	--
		U, BD	B.F.Br			4.0	<1.0	<11	--	--	--	--	--	--	--
03/28/00	197.0	U	B.F.Br	8,220	9,119	6.0	1.6	<11	--	--	--	--	--	--	--
		U, J	B.F.Br	17,522		4.0	9.0	<11	--	--	--	--	--	--	--
03/29/00	197.0	U	B.F.Br	19,500	18,206	5.0	3.3	<11	--	--	--	--	--	--	--
04/05/00	197.0	U	B.F.Br	18,500	18,171	2.0	5.5	<11	--	--	--	--	--	--	--
04/12/00	197.0	U	B.F.Br	11,600	11,008	3.0	1.1	<11	--	--	--	--	--	--	--
04/19/00	197.0	U	B.F.Br	13,800	13,549	6.0	1.1	<11	--	--	--	--	--	--	--
04/26/00	197.0	U	B.F.Br	17,700	18,007	7.0	2.8	<11	--	--	--	--	--	--	--
05/03/00	197.0	U	B.F.Br	8,670	8,803	13.0	1.2	<11	--	--	--	--	--	--	--
		U, BD	B.F.Br			13.0	1.6	<11	--	--	--	--	--	--	--
05/10/00	197.0	U	B.F.Br	8,760	8,978	15.0	1.5	<11	--	--	--	--	--	--	--

TABLE 3-1. 2000 Hudson River water column monitoring results for Bakers Falls Bridge (1)

Date Collected	Approx. HRM (2)	Comments QA/QC (3)	Location	Instantaneous Flow (cfs) (4)	Daily Average (cfs) Flow (5)	Water Temp. (C)	TSS (mg/L)	Total PCB (ng/L)	Homolog Distribution (weight percent) (6)						
									Mono	Di	Tri	Tetra	Penta	Hexa	Hepta
05/17/00	197.0	U	B.F.Br	18,850	19,460	13.0	3.4	<11	--	--	--	--	--	--	--
		U, BD	B.F.Br			13.0	2.4	<11	--	--	--	--	--	--	--
05/24/00	197.0	U	B.F.Br	8,756	9,133	13.0	1.9	<11	--	--	--	--	--	--	--
05/31/00	197.0	U	B.F.Br	8,360	8,353	17.0	1.6	<11	--	--	--	--	--	--	--
06/07/00	197.0	U	B.F.Br	5,730	5,877	16.0	3.7	<11	--	--	--	--	--	--	--
06/14/00	197.0	U	B.F.Br	6,960	7,206	16.0	2.5	<11	--	--	--	--	--	--	--
06/21/00	197.0	U	B.F.Br	6,760	6,143	25.0	2.5	<11	--	--	--	--	--	--	--
06/28/00	197.0	U	B.F.Br	3,680	4,835	23.0	1.7	<11	--	--	--	--	--	--	--
07/05/00	197.0	U	B.F.Br	3,529	3,290	22.0	2.1	<11	--	--	--	--	--	--	--
07/12/00	197.0	U	B.F.Br	7,000	5,342	22.0	1.5	<11	--	--	--	--	--	--	--
07/26/00	197.0	U	B.F.Br	896	3,088	22.0	1.5	<11	--	--	--	--	--	--	--
08/02/00	197.0	U	B.F.Br	7,900	7,850	22.0	2.8	<11	--	--	--	--	--	--	--
08/09/00	197.0	U	B.F.Br	2,600	3,950	25.0	<1.0	<11	--	--	--	--	--	--	--
08/16/00	197.0	U	B.F.Br	5,400	4,166	21.0	7.5	<11	--	--	--	--	--	--	--
		U, BD	B.F.Br			21.0	7.2	<11	--	--	--	--	--	--	--
08/23/00	197.0	U	B.F.Br	3,440	4,456	21.0	1.3	<11	--	--	--	--	--	--	--
08/30/00	197.0	U	B.F.Br	3,410	3,371	22.0	1.3	<11	--	--	--	--	--	--	--
09/06/00	197.0	U	B.F.Br	4,000	3,897	21.0	<1.0	<11	--	--	--	--	--	--	--
09/13/00	197.0	U	B.F.Br	2,220	3,148	21.0	1.1	<11	--	--	--	--	--	--	--
09/20/00	197.0	U	B.F.Br	3,230	3,428	19.0	<1.0	<11	--	--	--	--	--	--	--
09/27/00	197.0	P	B.F.Br	4,567	3,489	17.0	1.9	12	0.00	5.69	67.89	18.84	5.84	1.74	0.00

TABLE 3-1. 2000 Hudson River water column monitoring results for Bakers Falls Bridge (1)

Date Collected	Approx. HRM (2)	Comments QA/QC (3)	Location	Instantaneous Flow (cfs) (4)	Daily Average (cfs) Flow (5)	Water Temp. (C)	TSS (mg/L)	Total PCB (ng/L)	Homolog Distribution (weight percent) (6)						
									Mono	Di	Tri	Tetra	Penta	Hexa	Hepta
10/04/00	197.0	U	B.F.Br	1,960	2,047	17.0	<1.0	<11	--	--	--	--	--	--	--
10/11/00	197.0	U	B.F.Br	3,139	3,139	13.0	<1.0	<11	--	--	--	--	--	--	--
		U, BD	B.F.Br			13.0	1.3	<11	--	--	--	--	--	--	--
10/18/00	197.0	U	B.F.Br	4,000	3,704	13.0	1.4	<11	--	--	--	--	--	--	--
10/25/00	197.0	U	B.F.Br	6,840	4,162	12.0	1.8	<11	--	--	--	--	--	--	--
11/01/00	197.0	U	B.F.Br	6,566	3,358	9.0	2.5	<11	--	--	--	--	--	--	--
11/08/00	197.0	U	B.F.Br	4,990	3,278	10.0	2.0	<11	--	--	--	--	--	--	--
11/15/00	197.0	U	B.F.Br	6,880	3,901	8.0	<1.0	<11	--	--	--	--	--	--	--
		U, BD	B.F.Br			8.0	1.9	<11	--	--	--	--	--	--	--
11/22/00	197.0	U	B.F.Br	1,590	1,374	5.0	<1.0	<11	--	--	--	--	--	--	--
11/29/00	197.0	U	B.F.Br	1,870	2,067	4.0	<1.0	<11	--	--	--	--	--	--	--
12/06/00	197.0	U	B.F.Br	4,670	4,145	1.0	<1.0	<11	--	--	--	--	--	--	--

TABLE 3-1. 2000 Hudson River water column monitoring results for Bakers Falls Bridge (1)

Date Collected	Approx. HRM (2)	Comments QA/QC (3)	Location	Instantaneous Flow (cfs) (4)	Daily Average (cfs) Flow (5)	Water Temp. (C)	TSS (mg/L)	Total PCB (ng/L)	Homolog Distribution (weight percent) (6)						
									Mono	Di	Tri	Tetra	Penta	Hexa	Hepta
12/13/00	197.0	U	B.F.Br	4,530	3,751	0.5	<1.0	<11	--	--	--	--	--	--	--
12/20/00	197.0	U	B.F.Br	8,800	8,066	0.5	4.1	<11	--	--	--	--	--	--	--
12/27/00	197.0	U, J	B.F.Br	NA	5,810	0.5	<1.0	<11	--	--	--	--	--	--	--

- (1) Samples analyzed by capillary column using Method NE013_04 unless otherwise noted. Method NE013_04 data has been adjusted for analytical bias, as described in the report Correction of Analytical Biases in the 1991-1997 GE Hudson River PCB Database (O'Brien & Gere Engineers, Inc., September 1997).
- (2) HRM = Hudson River Mile. HRM 0.0 is located at the Battery in New York City.
- (3) Comments reflect PCB data qualifiers and additional information regarding sampling and analytical methods. Data qualifier definitions from USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (2/94).
- (4) Instantaneous flows recorded during sampling for the Fort Edward gaging station are presented.
- (5) Daily flow is presented as mean daily flow for the Fort Edward gaging station provided by USGS. Flow data is provisional after 10/1/99.
- (6) Homolog groups octa-, nona-, and deca-chlorinated biphenyls were not detected greater than 0.02%.

Key:

BD= Blind duplicate.

U= Indicates that the sample was analyzed, but the compound of interest (PCBs) was not detected above the method detection limit (MDL 11 ng/L) of the procedure. The sample result is still considered useable for evaluation purposes.

P= Indicates that PCBs were detected in the sample at a concentration below the practical quantitation limit (PQL 44 ng/L). The sample is still considered useable for evaluation purposes.

J= Indicates that the result is considered approximate. This qualifier denotes that the identity of the compound is accurate; however, there is limited confidence in the accuracy of the PCB concentration. The sample result is still useable for evaluation purposes.

UJ= Indicates that the MDL and the sample result is considered approximate. The sample result is still considered useable for evaluation purposes.

PJ= Indicates that PCBs were detected in the sample at a concentration below the practical quantitation limit (PQL 44 ng/L); however, this result is considered approximate. The identity of the compound is accurate; however, there is limited confidence in the accuracy of the PCB concentration. The sample result is still useable for evaluation purposes.

R= Indicates that the sample result or detection limit has been rejected due to serious deficiencies during the analytical process and/or inability to meet quality control criteria. The sample result is therefor considered unusable for quantitative evaluations.

TABLE 3-2. 2000 Hudson River water column monitoring results for Boatlaunch, Plungepool, and Plungepool area samples (1)

Date Collected	Approx. HRM (2)	Comments QA/QC (3)	Location	Instantaneous Flow (cfs) (4)	Daily Average (cfs) Flow (5)	Water Temp. (C)	TSS (mg/L)	Total PCB (ng/L)	Homolog Distribution (weight percent) (6)						
									Mono	Di	Tri	Tetra	Penta	Hexa	Hepta
01/05/00	197.0		BOATLAUNCH	6,960	7,930	0.0	1.5	67	0.00	14.94	49.00	30.16	5.08	0.81	0.00
01/12/00	197.0	P	BOATLAUNCH	4,230	4,770	1.0	<1.0	27	0.00	9.94	50.23	29.40	9.39	1.03	0.00
01/19/00	197.0	P	BOATLAUNCH	6,850	6,290	0.0	1.3	20	0.00	26.32	44.95	20.62	6.38	1.72	0.00
01/26/00	197.0	P	BOATLAUNCH	4,880	5,240	1.0	1.0	14	0.00	20.84	45.73	21.26	9.29	2.87	0.00
02/02/00	197.0	P	BOATLAUNCH	NA	4,160	6.0	1.2	26	0.00	27.67	49.89	18.92	2.56	0.96	0.00
02/09/00	197.0	P	BOATLAUNCH	NA	3,960	0.7	1.3	25	0.00	21.18	54.44	19.88	2.92	1.57	0.00
02/16/00	197.0	P	BOATLAUNCH	2,680	3,400	2.0	<1.0	36	0.00	21.95	53.77	20.06	3.42	0.80	0.00
02/23/00	197.0	P	BOATLAUNCH	NA	3,510	2.0	<1.0	20	0.00	23.56	51.00	16.82	6.85	1.77	0.00
03/01/00	197.0	P	BOATLAUNCH	8,750	8,748	2.0	3.5	20	0.00	7.81	46.80	35.51	8.13	1.75	0.00
03/08/00	197.0	P	BOATLAUNCH	5,700	5,665	3.0	1.3	19	0.00	8.65	43.85	36.46	8.82	2.23	0.00
	197.0	U	PLUNGEPOOL			3.0	1.8	<11	--	--	--	--	--	--	--
03/15/00	197.0	P	BOATLAUNCH	6,956	6,956	2.0	<1.0	11	0.00	6.02	48.52	33.49	10.75	1.22	0.00
	197.0	U	PLUNGEPOOL			2.0	1.2	<11	--	--	--	--	--	--	--
03/22/00	197.0	P,J	BOATLAUNCH	5,248	4,942	4.0	<1.0	19	0.00	17.25	42.79	31.42	7.33	1.21	0.00
	197.0	U	PLUNGEPOOL			4.0	<1.0	<11	--	--	--	--	--	--	--
03/29/00	197.0		BOATLAUNCH	19,500	18,206	6.0	5.2	76	0.00	12.96	43.74	35.22	6.88	1.20	0.00
04/05/00	197.0		BOATLAUNCH	18,500	18,171	6.0	4.7	69	0.00	11.37	44.27	35.25	8.00	1.12	0.00
04/12/00	197.0	P	BOATLAUNCH	11,600	11,008	4.0	<1.0	13	0.00	8.40	43.64	39.74	7.46	0.77	0.00
04/19/00	197.0	P	BOATLAUNCH	13,800	13,549	7.0	<1.0	15	0.00	8.72	42.88	38.48	8.63	1.30	0.00
04/26/00	197.0	P	BOATLAUNCH	17,700	18,007	7.0	5.3	30	0.00	9.83	47.62	31.88	9.19	1.49	0.00
05/03/00	197.0	P	BOATLAUNCH	8,670	8,803	9.0	1.2	20	0.00	13.24	47.54	28.25	8.99	1.97	0.00
05/10/00	197.0	P	BOATLAUNCH	8,760	8,978	16.0	2.0	21	0.00	5.66	47.30	37.99	8.03	1.01	0.00

TABLE 3-2. 2000 Hudson River water column monitoring results for Boatlaunch, Plungepool, and Plungepool area samples (1)

Date Collected	Approx. HRM (2)	Comments QA/QC (3)	Location	Instantaneous Flow (cfs) (4)	Daily Average (cfs) Flow (5)	Water Temp. (C)	TSS (mg/L)	Total PCB (ng/L)	Homolog Distribution (weight percent) (6)						
									Mono	Di	Tri	Tetra	Penta	Hexa	Hepta
05/17/00	197.0		BOATLAUNCH	18,850	19,460	16.0	3.0	46	0.00	17.13	43.11	31.22	7.35	1.19	0.00
05/24/00	197.0	P	BOATLAUNCH	8,756	9,133	13.0	2.0	28	0.00	13.15	42.96	33.04	9.24	1.60	0.00
05/31/00	197.0	P	BOATLAUNCH	8,360	8,353	16.0	1.3	19	0.00	24.90	38.22	29.33	6.32	1.23	0.00
06/07/00	197.0	P	BOATLAUNCH	5,730	5,877	16.0	2.8	21	0.00	26.99	34.88	27.82	8.64	1.68	0.00
06/14/00	197.0	U	BOATLAUNCH	6,960	7,206	17.0	1.6	<11	--	--	--	--	--	--	--
	197.0	U	PLUNGEPOOL			17.0	1.7	<11	--	--	--	--	--	--	--
06/21/00	197.0	P	BOATLAUNCH	6,760	6,143	25.0	1.9	44	0.00	14.07	48.68	33.24	3.62	0.40	0.00
	197.0	U	PLUNGEPOOL			25.0	2.0	<11	--	--	--	--	--	--	--
06/28/00	197.0	P	BOATLAUNCH	3,680	4,835	23.0	1.7	30	0.00	28.97	39.18	25.47	5.03	1.35	0.00
	197.0	U	PLUNGEPOOL			23.0	2.0	<11	--	--	--	--	--	--	--
07/05/00	197.0	P	BOATLAUNCH	3,529	3,290	22.0	<1.0	30	0.00	24.06	49.38	21.83	4.09	0.63	0.00
07/12/00	197.0	U	BOATLAUNCH	7,000	5,342	23.0	1.3	<11	--	--	--	--	--	--	--
	197.0	U	PLUNGEPOOL			24.0	1.5	<11	--	--	--	--	--	--	--
07/26/00	197.0	P	BOATLAUNCH	3,000	3,088	21.0	1.6	31	0.00	9.66	51.49	32.07	5.90	0.89	0.00
	197.0	U,J	PLUNGEPOOL			22.0	2.4	<11	--	--	--	--	--	--	--
08/02/00	197.0	P	BOATLAUNCH	7,900	7,850	22.0	3.0	21	0.00	24.97	46.48	21.10	6.18	1.28	0.00
08/09/00	197.0	P	BOATLAUNCH	2,600	3,950	22.0	<1.0	36	0.00	19.18	47.76	26.70	5.09	1.26	0.00
	197.0	U	PLUNGEPOOL			22.0	<1.0	<11	--	--	--	--	--	--	--
08/16/00	197.0	P	BOATLAUNCH	5,400	4,166	21.0	<1.0	32	0.00	7.41	48.84	33.00	9.70	1.05	0.00
	197.0	U	PLUNGEPOOL			21.0	7.6	<11	--	--	--	--	--	--	--

TABLE 3-2. 2000 Hudson River water column monitoring results for Boatlaunch, Plungepool, and Plungepool area samples (1)

Date Collected	Approx. HRM (2)	Comments QA/QC (3)	Location	Instantaneous Flow (cfs) (4)	Daily Average (cfs) Flow (5)	Water Temp. (C)	TSS (mg/L)	Total PCB (ng/L)	Homolog Distribution (weight percent) (6)						
									Mono	Di	Tri	Tetra	Penta	Hexa	Hepta
08/23/00	197.0	P	BOATLAUNCH	3,440	4,456	21.0	<1.0	22	0.00	3.64	36.92	52.54	5.20	1.70	0.00
	197.0	U	PLUNGEPOOL			21.0	<1.0	<11	--	--	--	--	--	--	--
08/30/00	197.0	P	BOATLAUNCH	3,410	3,371	22.0	1.3	19	0.00	12.11	49.97	28.78	7.86	1.29	0.00
	197.0	U	PLUNGEPOOL			22.0	1.1	<11	--	--	--	--	--	--	--
09/06/00	197.0	U	BOATLAUNCH	4,000	3,897	21.0	<1.0	<11	--	--	--	--	--	--	--
	197.0	U	PLUNGEPOOL			21.0	<1.0	<11	--	--	--	--	--	--	--
09/13/00	197.0	U	BOATLAUNCH	2,220	3,148	21.0	1.5	<11	--	--	--	--	--	--	--
	197.0	P	PLUNGEPOOL			21.0	1.1	12	0.00	8.02	59.00	25.68	5.59	1.72	0.00
09/20/00	197.0	P	BOATLAUNCH	3,230	3,428	19.0	1.4	20	0.00	29.64	45.81	19.33	3.94	1.29	0.00
	197.0	U	PLUNGEPOOL			19.0	1.9	<11	--	--	--	--	--	--	--
09/27/00	197.0	P	BOATLAUNCH	4,567	3,489	17.0	2.0	17	0.00	23.98	44.80	26.91	3.59	0.72	0.00
	197.0	U	PLUNGEPOOL			17.0	2.2	<11	--	--	--	--	--	--	--
10/04/00	197.0	P	BOATLAUNCH	1,960	2,047	17.0	<1.0	17	0.00	29.27	48.68	16.60	3.98	1.46	0.00
	197.0	U	PLUNGEPOOL			17.0	<1.0	<11	--	--	--	--	--	--	--
10/11/00	197.0	P	BOATLAUNCH	3,139	3,139	13.0	<1.0	18	0.00	8.44	57.56	29.88	3.26	0.86	0.00
	197.0	U	PLUNGEPOOL			13.0	1.3	<11	--	--	--	--	--	--	--
10/18/00	197.0		BOATLAUNCH	4,000	3,704	13.0	11.8	301	0.00	2.46	27.54	46.77	16.16	5.75	1.04
10/25/00	197.0	U	BOATLAUNCH	6,840	4,162	12.0	1.0	<11	--	--	--	--	--	--	--
	197.0	U	PLUNGEPOOL			12.0	1.3	<11	--	--	--	--	--	--	--

TABLE 3-2. 2000 Hudson River water column monitoring results for Boatlaunch, Plungepool, and Plungepool area samples (1)

Date Collected	Approx. HRM (2)	Comments QA/QC (3)	Location	Instantaneous Flow (cfs) (4)	Daily Average (cfs) Flow (5)	Water Temp. (C)	TSS (mg/L)	Total PCB (ng/L)	Homolog Distribution (weight percent) (6)						
									Mono	Di	Tri	Tetra	Penta	Hexa	Hepta
11/01/00	197.0	U	BOATLAUNCH	6,566	3,358	9.0	<1.0	<11	--	--	--	--	--	--	--
	197.0	U	PLUNGEPOOL			9.0	2.3	<11	--	--	--	--	--	--	--
11/08/00	197.0	U	BOATLAUNCH	4,990	3,278	10.0	<1.0	<11	--	--	--	--	--	--	--
	197.0	U	PLUNGEPOOL			10.0	1.1	<11	--	--	--	--	--	--	--
11/15/00	197.0	P	BOATLAUNCH	6,880	3,901	8.0	<1.0	22	0.00	6.03	48.47	36.25	7.68	1.57	0.00
	197.0	P	PLUNGEPOOL			8.0	<1.0	12	0.00	10.73	46.64	31.21	8.72	2.69	0.00
11/22/00	197.0	U,J	BOATLAUNCH	1,590	1,374	5.0	<1.0	<11	--	--	--	--	--	--	--
11/29/00	197.0	P	BOATLAUNCH	1,870	2,067	4.0	<1.0	13	0.00	5.40	43.73	39.86	9.04	1.97	0.00
12/06/00	197.0	P	BOATLAUNCH	4,670	4,145	1.0	2.8	36	0.00	10.35	47.11	34.21	6.69	1.64	0.00

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TABLE 3-2. 2000 Hudson River water column monitoring results for Boatlaunch, Plungepool, and Plungepool area samples (1)

Date Collected	Approx. HRM (2)	Comments QA/QC (3)	Location	Instantaneous Flow (cfs) (4)	Daily Average (cfs) Flow (5)	Water Temp. (C)	TSS (mg/L)	Total PCB (ng/L)	Homolog Distribution (weight percent) (6)						
									Mono	Di	Tri	Tetra	Penta	Hexa	Hepta
12/13/00	197.0	P	BOATLAUNCH	4,530	3,751	0.5	<1.0	13	0.00	18.54	50.93	22.55	5.39	2.60	0.00
12/20/00	197.0	P,J	BOATLAUNCH	8,800	8,066	0.5	4.4	42	0.00	10.76	37.13	43.58	7.31	1.23	0.00

- (1) Samples analyzed by capillary column using Method NE013_04 unless otherwise noted. Method NE013_04 data has been adjusted for analytical bias, as described in the report Correction of Analytical Biases in the 1991-1997 GE Hudson River PCB Database (O'Brien & Gere Engineers, Inc., September 1997).
- (2) HRM = Hudson River Mile. HRM 0.0 is located at the Battery in New York City.
- (3) Comments reflect PCB data qualifiers and additional information regarding sampling and analytical methods. Data qualifier definitions from USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (2/94).
- (4) Instantaneous flows recorded during sampling for the Fort Edward gaging station are presented.
- (5) Daily flow is presented as mean daily flow for the Fort Edward gaging station provided by USGS. Flow data is provisional after 10/1/99.
- (6) Homolog groups octa-, nona-, and deca-chlorinated biphenyls were not detected greater than 0.02%.

Key:

- BD= Blind duplicate.
- U= Indicates that the sample was analyzed, but the compound of interest (PCBs) was not detected above the method detection limit (MDL 11 ng/L) of the procedure. The sample result is still considered useable for evaluation purposes.
- P= Indicates that PCBs were detected in the sample at a concentration below the practical quantitation limit (PQL 44 ng/L). The sample is still considered useable for evaluation purposes.
- J= Indicates that the result is considered approximate. This qualifier denotes that the identity of the compound is accurate; however, there is limited confidence in the accuracy of the PCB concentration. The sample result is still useable for evaluation purposes.
- UJ= Indicates that the MDL and the sample result is considered approximate. The sample result is still considered useable for evaluation purposes.
- PJ= Indicates that PCBs were detected in the sample at a concentration below the practical quantitation limit (PQL 44 ng/L); however, this result is considered approximate. The identity of the compound is accurate; however, there is limited confidence in the accuracy of the PCB concentration. The sample result is still useable for evaluation purposes.
- R= Indicates that the sample result or detection limit has been rejected due to serious deficiencies during the analytical process and/or inability to meet quality control criteria. The sample result is therefore considered unusable for quantitative evaluations.

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TABLE 3-3. 2000 Hudson River water column monitoring results for Transect Monitoring Program

Date Collected	Approx. HRM (2)	Comments QA/QC (3)	Location	Instantaneous Flow (cfs) (4)	Daily Average (cfs) Flow (5)	Water Temp. (C)	TSS (mg/L)	Total PCB (ng/L)	Homolog Distribution (weight percent) (6)						
									Mono	Di	Tri	Tetra	Penta	Hexa	Hepta
08/09/00	196.9	U	0+10	2,600	3,950	25.0	2.4	<11	--	--	--	--	--	--	--
08/09/00	196.9	U	0+30	2,600	3,950	25.0	1.6	<11	--	--	--	--	--	--	--
08/09/00	196.9	U	0+50	2,600	3,950	25.0	2.2	<11	--	--	--	--	--	--	--
08/09/00	196.9	U	0+70	2,600	3,950	25.0	1.5	<11	--	--	--	--	--	--	--
08/09/00	196.9	U	0+90	2,600	3,950	25.0	2.0	<11	--	--	--	--	--	--	--
08/09/00	196.9	U	1+10	2,600	3,950	25.0	1.4	<11	--	--	--	--	--	--	--
08/09/00	196.9	U	1+30	2,600	3,950	25.0	1.6	<11	--	--	--	--	--	--	--
08/09/00	196.9	U	1+50	2,600	3,950	25.0	<1.0	<11	--	--	--	--	--	--	--
08/09/00	196.9	U	1+70	2,600	3,950	25.0	7.6	<11	--	--	--	--	--	--	--
08/09/00	196.9	U	1+90	2,600	3,950	25.0	1.8	<11	--	--	--	--	--	--	--
08/09/00	196.9	UJ	2+10	2,600	3,950	25.0	6.9	<11	--	--	--	--	--	--	--
08/09/00	196.9	U	2+30	2,600	3,950	25.0	1.1	<11	--	--	--	--	--	--	--
08/09/00	196.9	UJ	2+50	2,600	3,950	25.0	7.1	<11	--	--	--	--	--	--	--
08/09/00	196.9	U	2+70	2,600	3,950	25.0	7.5	<11	--	--	--	--	--	--	--
08/09/00	196.9	U	2+90	2,600	3,950	25.0	1.2	<11	--	--	--	--	--	--	--
08/09/00	196.9	UJ	3+10	2,600	3,950	25.0	7.1	<11	--	--	--	--	--	--	--
08/09/00	196.9	U	3+30	2,600	3,950	25.0	7.0	<11	--	--	--	--	--	--	--
08/09/00	196.9	UJ	3+50	2,600	3,950	25.0	1.4	<11	--	--	--	--	--	--	--
08/09/00	196.9	U	3+60	2,600	3,950	25.0	7.4	<11	--	--	--	--	--	--	--
08/09/00	196.9	U	3+50	2,600	3,950	25.0	<1.0	<11	--	--	--	--	--	--	--
08/09/00	197.0	U	HR-1 BL	2,600	3,950	22.0	--	<11	--	--	--	--	--	--	--
08/09/00	197.0	U	HR-2 BL	2,600	3,950	22.0	--	<11	--	--	--	--	--	--	--

TABLE 3-3. 2000 Hudson River water column monitoring results for Transect Monitoring Program

Date Collected	Approx. HRM (2)	Comments QA/QC (3)	Location	Instantaneous Flow (cfs) (4)	Daily Average (cfs) Flow (5)	Water Temp. (C)	TSS (mg/L)	Total PCB (ng/L)	Homolog Distribution (weight percent) (6)						
									Mono	Di	Tri	Tetra	Penta	Hexa	Hepta
08/09/00	197.0	P	HR-5 BL	2,600	3,950	22.0	--	28	0.00	18.31	43.14	32.92	4.85	0.77	0.00
08/09/00	197.0	P	HR-6 BL	2,600	3,950	22.0	--	16	0.00	23.88	41.49	27.80	5.34	1.49	0.00
08/09/00	197.0	P	HR-7 BL	2,600	3,950	22.0	--	19	0.00	20.34	34.24	35.08	8.23	2.10	0.00
08/09/00	197.0	U	HR-8 BL	2,600	3,950	22.0	--	<11	--	--	--	--	--	--	--
08/09/00	197.0		HR-9 BL	2,600	3,950	22.0	--	141	0.00	8.00	46.00	39.40	5.59	1.01	0.00
08/09/00	197.0		HR-10 BL	2,600	3,950	23.0	--	66	0.00	24.48	55.31	17.79	1.84	0.57	0.00
08/09/00	197.0	P	HR<11 BL	2,600	3,950	23.0	--	36	0.00	13.44	47.97	33.03	5.13	0.43	0.00
08/30/00	196.9	U	0+50	3,410	3,371	22.0	1.7	<11	--	--	--	--	--	--	--
08/30/00	196.9	U	1+10	3,410	3,371	22.0	2.4	<11	--	--	--	--	--	--	--
08/30/00	196.9	U	1+70	3,410	3,371	22.0	<1.0	<11	--	--	--	--	--	--	--
08/30/00	196.9	U	2+30	3,410	3,371	22.0	2.9	<11	--	--	--	--	--	--	--
08/30/00	196.9	U	3+10	3,410	3,371	22.0	1.3	<11	--	--	--	--	--	--	--
08/30/00	196.9	U	2+70	3,410	3,371	22.0	1.5	<11	--	--	--	--	--	--	--
08/30/00	196.9	U	3+30	3,410	3,371	22.0	1.4	<11	--	--	--	--	--	--	--
08/30/00	196.9	U	3+50	3,410	3,371	22.0	1.1	<11	--	--	--	--	--	--	--
08/30/00	196.9	U	3+60	3,410	3,371	22.0	1.1	<11	--	--	--	--	--	--	--
08/30/00	196.9	P	HR-1	3,500	3,371	22.0	--	23	0.00	22.44	38.93	30.41	6.32	1.90	0.00
08/30/00	196.9	U	HR-2	3,500	3,371	22.0	--	<11	--	--	--	--	--	--	--
08/30/00	196.9		HR-5	3,500	3,371	22.0	--	450	0.64	10.20	41.61	42.23	4.71	0.61	0.00
08/30/00	196.9	P	HR-6	3,500	3,371	22.0	--	38	0.00	6.01	41.38	45.62	6.02	0.97	0.00

TABLE 3-3. 2000 Hudson River water column monitoring results for Transect Monitoring Program

Date Collected	Approx. HRM (2)	Comments QA/QC (3)	Location	Instantaneous Flow (cfs) (4)	Daily Average (cfs) Flow (5)	Water Temp. (C)	TSS (mg/L)	Total PCB (ng/L)	Homolog Distribution (weight percent) (6)						
									Mono	Di	Tri	Tetra	Penta	Hexa	Hepta
08/30/00	196.9		HR-7	3,500	3,371	22.0	--	94	0.00	1.73	28.69	43.63	18.82	6.61	0.52
08/30/00	196.9	U	HR-8	3,500	3,371	22.0	--	<11	--	--	--	--	--	--	--
08/30/00	196.9	U	HR-9	3,500	3,371	22.0	--	<11	--	--	--	--	--	--	--
08/30/00	196.9	U	HR-10	3,500	3,371	22.0	--	<11	--	--	--	--	--	--	--
08/30/00	196.9	P	HR<11	3,500	3,371	22.0	--	33	0.00	15.37	30.09	38.16	13.48	2.91	0.00

- (1) Samples analyzed by capillary column using Method NE013_04 unless otherwise noted. Method NE013_04 data has been adjusted for analytical bias, as described in the report Correction of Analytical Biases in the 1991-1997 GE Hudson River PCB Database (O'Brien & Gere Engineers, Inc., September 1997).
- (2) HRM = Hudson River Mile. HRM 0.0 is located at the Battery in New York City.
- (3) Comments reflect PCB data qualifiers and additional information regarding sampling and analytical methods. Data qualifier definitions from USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (2/94).
- (4) Instantaneous flows recorded during sampling for the Fort Edward gaging station are presented.
- (5) Daily flow is presented as mean daily flow for the Fort Edward gaging station provided by USGS. Flow data is provisional after 10/1/99.
- (6) Homolog groups octa-, nona-, and deca-chlorinated biphenyls were not detected greater than 0.02%.
- Key:**
- BD= Blind duplicate.
- U= Indicates that the sample was analyzed, but the compound of interest (PCBs) was not detected above the method detection limit (MDL 11 ng/L) of the procedure. The sample result is still considered useable for evaluation purposes.
- P= Indicates that PCBs were detected in the sample at a concentration below the practical quantitation limit (PQL 44 ng/L). The sample is still considered useable for evaluation purposes.
- J= Indicates that the result is considered approximate. This qualifier denotes that the identity of the compound is accurate; however, there is limited confidence in the accuracy of the PCB concentration. The sample result is still useable for evaluation purposes.
- UJ= Indicates that the MDL and the sample result is considered approximate. The sample result is still considered useable for evaluation purposes.
- PJ= Indicates that PCBs were detected in the sample at a concentration below the practical quantitation limit (PQL 44 ng/L); however, this result is considered approximate. The identity of the compound is accurate; however, there is limited confidence in the accuracy of the PCB concentration. The sample result is still useable for evaluation purposes.
- R= Indicates that the sample result or detection limit has been rejected due to serious deficiencies during the analytical process and/or inability to meet quality control criteria. The sample result is therefore considered unusable for quantitative evaluations.

TABLE 3-4. 2000 Hudson River water column monitoring results for the Route 197 Bridge

Date Collected	Approx. HRM (2)	Comments QA/QC (3)	Location	Instantaneous Flow (cfs) (4)	Daily Average (cfs) Flow (5)	Water Temp. (C)	TSS (mg/L)	Total PCB (ng/L)	Homolog Distribution (weight percent) (6)						
									Mono	Di	Tri	Tetra	Penta	Hexa	Hepta
01/05/00	194.4	U	Rt.197 Br.	6,960	7,930	1.0	2.0	<11	--	--	--	--	--	--	--
01/12/00	194.4	U	Rt.197 Br.	4,230	4,770	1.0	<1.0	<11	--	--	--	--	--	--	--
02/16/00	194.4	U	Rt.197 Br.	2,680	3,400	1.0	2.0	<11	--	--	--	--	--	--	--
	194.4	U, BD	Rt.197 Br.			1.0	<1.0	<11	--	--	--	--	--	--	--
02/23/00	194.4	U	Rt.197 Br.	NA	3,510	2.0	<1.0	<11	--	--	--	--	--	--	--
03/01/00	194.4	U	Rt.197 Br.	8,750	8,748	1.0	4.8	<11	--	--	--	--	--	--	--
03/08/00	194.4	U	Rt.197 Br.	5,700	5,665	3.0	1.2	<11	--	--	--	--	--	--	--
03/15/00	194.4	U	Rt.197 Br.	6,956	6,956	2.0	1.3	<11	--	--	--	--	--	--	--
03/22/00	194.4	U	Rt.197 Br.	5,248	4,942	4.0	<1.0	<11	--	--	--	--	--	--	--
03/28/00	194.4	U	Rt.197 Br.	8,050	9,119	7.0	2.2	<11	--	--	--	--	--	--	--
	194.2	P	HRM 194.2E	15,296		4.0	8.6	25	0.00	8.44	33.84	44.93	10.46	2.33	0.00
	194.2		HRM 194.2E	16,752		4.0	6.0	77	0.00	11.48	38.38	37.75	9.70	2.69	0.00
	194.2		HRM 194.2E	17,619		4.0	10.4	103	0.00	8.24	38.82	39.77	10.79	2.38	0.00
03/29/00	194.4	P	Rt.197 Br.	19,500	18,206	5.0	12.3	33	0.00	11.86	32.46	35.25	15.55	4.87	0.00
	194.4	U	Rt.197 Br.	18,650		4.0	3.2	<11	--	--	--	--	--	--	--
	194.2		HRM 194.2E	18,749		4.0	2.8	47	0.00	10.88	36.62	41.16	9.23	2.10	0.00
03/30/00	194.4	U	Rt.197 Br.	6,760	15,297	3.0	7.2	<11	--	--	--	--	--	--	--
04/04/00	194.4	P	Rt.197 Br.	12,083	10,846	2.0	1.4	31	0.00	9.37	32.43	41.48	14.45	2.27	0.00
	194.4	P	Rt.197 Br.	14,745		2.0	1.8	13	0.00	12.64	36.30	36.02	13.35	1.70	0.00
	194.2	P	HRM 194.2E	16,562		2.0	5.1	15	0.00	14.09	34.41	35.13	13.66	2.71	0.00
04/05/00	194.4	P	Rt.197 Br.	18,500	18,171	2.0	1.6	14	0.00	17.73	32.73	34.10	13.75	1.69	0.00
	194.4	P	Rt.197 Br.			2.0	6.0	12	0.00	4.31	39.28	37.34	16.84	2.23	0.00

TABLE 3-4. 2000 Hudson River water column monitoring results for the Route 197 Bridge

Date Collected	Approx. HRM (2)	Comments QA/QC (3)	Location	Instantaneous Flow (cfs) (4)	Daily Average (cfs) Flow (5)	Water Temp. (C)	TSS (mg/L)	Total PCB (ng/L)	Homolog Distribution (weight percent) (6)						
									Mono	Di	Tri	Tetra	Penta	Hexa	Hepta
04/12/00	194.4	U	Rt.197 Br.	11,600	11,008	3.0	1.1	<11	--	--	--	--	--	--	--
04/19/00	194.4	U	Rt.197 Br.	13,800	13,549	6.0	1.7	<11	--	--	--	--	--	--	--
04/26/00	194.4	P	Rt.197 Br.	17,700	18,007	7.0	3.4	12	6.00	7.14	49.69	32.46	8.54	2.17	0.00
05/03/00	194.4	U	Rt.197 Br.	8,670	8,803	13.0	1.8	<11	--	--	--	--	--	--	--
05/10/00	194.4	U	Rt.197 Br.	8,760	8,978	15.0	1.8	<11	--	--	--	--	--	--	--
05/17/00	194.4	U	Rt.197 Br.	18,850	19,460	13.0	3.6	<11	--	--	--	--	--	--	--
05/24/00	194.4	U	Rt.197 Br.	8,800	9,133	13.0	2.0	<11	--	--	--	--	--	--	--
05/31/00	194.4	U	Rt.197 Br.	8,360	8,353	17.0	1.9	<11	--	--	--	--	--	--	--
06/07/00	194.4	U	Rt.197 Br.	5,730	5,877	16.0	2.8	<11	--	--	--	--	--	--	--
06/14/00	194.4	U	Rt.197 Br.	6,960	7,206	16.0	2.3	<11	--	--	--	--	--	--	--
06/21/00	194.4	U	Rt.197 Br.	6,760	6,143	25.0	2.2	<11	--	--	--	--	--	--	--
06/28/00	194.4	U	Rt.197 Br.	3,680	4,835	23.0	1.5	<11	--	--	--	--	--	--	--
07/05/00	194.4	P	Rt.197 Br.	3,529	3,290	22.0	3.1	14	0.00	27.17	30.86	30.85	10.14	0.98	0.00
07/12/00	194.4	U,J	Rt.197 Br.	7,000	5,342	22.0	1.8	<11	--	--	--	--	--	--	--
07/26/00	194.4	U	Rt.197 Br.	896	3,088	22.0	1.7	<11	--	--	--	--	--	--	--
08/02/00	194.4	U	Rt.197 Br.	7,900	7,850	22.0	3.2	<11	--	--	--	--	--	--	--
08/09/00	194.4	P	Rt.197 Br.	2,600	3,950	25.0	2.3	15	0.00	21.86	32.93	35.86	7.85	1.49	0.00
08/16/00	194.4	U	Rt.197 Br.	5,400	4,166	21.0	7.8	<11	--	--	--	--	--	--	--
08/23/00	194.4	U	Rt.197 Br.	3,440	4,456	21.0	1.1	<11	--	--	--	--	--	--	--
09/06/00	194.4	U	Rt.197 Br.	4,000	3,897	21.0	<1.0	<11	--	--	--	--	--	--	--

TABLE 3-4. 2000 Hudson River water column monitoring results for the Route 197 Bridge

Date Collected	Approx. HRM (2)	Comments QA/QC (3)	Location	Instantaneous Flow (cfs) (4)	Daily Average (cfs) Flow (5)	Water Temp. (C)	TSS (mg/L)	Total PCB (ng/L)	Homolog Distribution (weight percent) (6)						
									Mono	Di	Tri	Tetra	Penta	Hexa	Hepta
09/13/00	194.4	U	Rt.197 Br.	2,220	3,148	21.0	1.7	<11	--	--	--	--	--	--	--
09/20/00	194.4	U	Rt.197 Br.	3,230	3,428	19.0	1.4	<11	--	--	--	--	--	--	--
09/27/00	194.4	P	Rt.197 Br.	4,567	3,489	17.0	1.6	14	0.00	41.28	25.44	23.59	7.96	1.73	0.00
	194.4	P,BD	Rt.197 Br.			17.0	1.4	16	0.00	6.00	63.84	23.60	5.16	1.39	0.00
10/04/00	194.4	U	Rt.197 Br.	1,960	2,047	17.0	<1.0	<11	--	--	--	--	--	--	--
10/11/00	194.4	U	Rt.197 Br.	3,139	3,139	13.0	1.3	<11	--	--	--	--	--	--	--
10/18/00	194.4	P	Rt.197 Br.	4,000	3,704	13.0	1.3	22	0.00	2.54	20.45	26.82	28.51	21.68	0.00
10/25/00	194.4	U	Rt.197 Br.	6,840	4,162	12.0	1.4	<11	--	--	--	--	--	--	--
	194.4	U	Rt.197 Br.			12.0	1.6	<11	--	--	--	--	--	--	--
11/01/00	194.4	U	Rt.197 Br.	6,566	3,358	9.0	2.2	<11	--	--	--	--	--	--	--
11/08/00	194.4	U	Rt.197 Br.	4,990	3,278	10.0	3.1	<11	--	--	--	--	--	--	--
11/15/00	194.4	U	Rt.197 Br.	6,880	3,901	8.0	1.6	<11	--	--	--	--	--	--	--
11/22/00	194.4	U	Rt.197 Br.	1,590	1,374	5.0	1.3	<11	--	--	--	--	--	--	--
11/29/00	194.4	U	Rt.197 Br.	1,870	2,067	4.0	<1.0	<11	--	--	--	--	--	--	--

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TABLE 3-4. 2000 Hudson River water column monitoring results for the Route 197 Bridge

Date Collected	Approx. HRM (2)	Comments QA/QC (3)	Location	Instantaneous Flow (cfs) (4)	Daily Average (cfs) Flow (5)	Water Temp. (C)	TSS (mg/L)	Total PCB (ng/L)	Homolog Distribution (weight percent) (6)						
									Mono	Di	Tri	Tetra	Penta	Hexa	Hepta
12/06/00	194.4	U	Rt.197 Br.	4,670	4,145	1.0	1.1	<11	--	--	--	--	--	--	--
12/13/00	194.4	U	Rt.197 Br.	4,530	3,751	0.5	<1.0	<11	--	--	--	--	--	--	--
	194.4	U, BD	Rt.197 Br.			0.5	2.8	<11	--	--	--	--	--	--	--
12/20/00	194.4	U	Rt.197 Br.	8,800	8,066	0.5	4.6	<11	--	--	--	--	--	--	--
12/27/00	194.4	U	Rt.197 Br.	NA	5,810	0.5	<1.0	<11	--	--	--	--	--	--	--
	194.4	U, BD	Rt.197 Br.				<1.0	<11	--	--	--	--	--	--	--

- (1) Samples analyzed by capillary column using Method NE013_04 unless otherwise noted. Method NE013_04 data has been adjusted for analytical bias, as described in the report Correction of Analytical Biases in the 1991-1997 GE Hudson River PCB Database (O'Brien & Gere Engineers, Inc., September 1997).
- (2) HRM = Hudson River Mile. HRM 0.0 is located at the Battery in New York City.
- (3) Comments reflect PCB data qualifiers and additional information regarding sampling and analytical methods. Data qualifier definitions from USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (2/94).
- (4) Instantaneous flows recorded during sampling for the Fort Edward gaging station are presented.
- (5) Daily flow is presented as mean daily flow for the Fort Edward gaging station provided by USGS. Flow data is provisional after 10/1/99.
- (6) Homolog groups octa-, nona-, and deca-chlorinated biphenyls were not detected greater than 0.02%.
- Key:**
- BD= Blind duplicate.
- U= Indicates that the sample was analyzed, but the compound of interest (PCBs) was not detected above the method detection limit (MDL 11 ng/L) of the procedure. The sample result is still considered useable for evaluation purposes.
- P= Indicates that PCBs were detected in the sample at a concentration below the practical quantitation limit (PQL 44 ng/L). The sample is still considered useable for evaluation purposes.
- J= Indicates that the result is considered approximate. This qualifier denotes that the identity of the compound is accurate; however, there is limited confidence in the accuracy of the PCB concentration. The sample result is still useable for evaluation purposes.
- UJ= Indicates that the MDL and the sample result is considered approximate. The sample result is still considered useable for evaluation purposes.
- PJ= Indicates that PCBs were detected in the sample at a concentration below the practical quantitation limit (PQL 44 ng/L); however, this result is considered approximate. The identity of the compound is accurate; however, there is limited confidence in the accuracy of the PCB concentration. The sample result is still useable for evaluation purposes.
- R= Indicates that the sample result or detection limit has been rejected due to serious deficiencies during the analytical process and/or inability to meet quality control criteria. The sample result is therefor considered unusable for quantitative evaluations.

TABLE 3-5. 2000 Hudson River water column TSS results for the Route 197 Bridge.

Date Collected	Location	Sampling Method	Approx HRM (1)	Comments (2)	Flow (cfs) (3)	Daily Flow(cfs) (4)	Water Temp (C)	TSS (mg/L)
15-Mar-00	Rt.197 Br.	USGS ²	194.2		6,956	6,956	2.0	1.0
		QEA	194.2					1.3
29-Mar-00	Rt.197 Br.	USGS ²	194.2		18,749	18,206	5.0	27.0
		QEA	194.2					12.3
5-Apr-00	Rt.197 Br.	USGS ²	194.2		18,600	18,171	2.0	13.0
		QEA	194.2					6.0
12-Apr-00	Rt.197 Br.	USGS	194.2		11,600	11,010	3.0	1.0
		QEA	194.2					1.1
19-Apr-00	Rt.197 Br.	USGS	194.2		13,800	13,550	6.0	1.2
		QEA	194.2					1.7
26-Apr-00	Rt.197 Br.	USGS	194.2		17,700	18,010	7.0	3.9
		QEA	194.2					3.4
3-May-00	Rt.197 Br.	USGS	194.2		8,670	8,800	9.0	2.5
		QEA	194.2					1.8
10-May-00	Rt.197 Br.	USGS	194.2		8,760	8,980	15.0	1.4
		QEA	194.2					1.8
17-May-00	Rt.197 Br.	USGS	194.2		18,850	19,450	13.0	3.7
		QEA	194.2					3.6
24-May-00	Rt.197 Br.	USGS	194.2		8,800	9,130	13.0	2.3
		QEA	194.2					2.0
31-May-00	Rt.197 Br.	USGS	194.2		8,350	8,360	17.0	2.2
		QEA	194.2					1.9
7-Jun-00	Rt.197 Br.	USGS	194.2		5,730	5,877	16.0	2.9
		QEA	194.2					2.8
14-Jun-00	Rt.197 Br.	USGS	194.2		6,960	7,206	16.0	2.3
		QEA	194.2					2.2
21-Jun-00	Rt.197 Br.	USGS	194.2		6,760	6,143	25.0	2.2
		QEA	194.2					2.3
28-Jun-00	Rt.197 Br.	USGS	194.2		3,680	2,820	23.0	1.7
		QEA	194.2					1.5
5-Jul-00	Rt.197 Br.	USGS	194.2		3,529	3,290	22.0	3.0
		QEA	194.2					3.1
12-Jul-00	Rt.197 Br.	USGS	194.2		7,000	5,342	24.0	3.2
		QEA	194.2					1.7
19-Jul-00	Rt.197 Br.	USGS	194.2		NA	1,563	24.0	1.1
		QEA	194.2					1.7
26-Jul-00	Rt.197 Br.	USGS	194.2		NA	3,088	24.0	2.3
		QEA	194.2					1.7
2-Aug-00	Rt.197 Br.	USGS	194.2		7,900	7,850	22.0	3.6
		QEA	194.2					3.2
9-Aug-00	Rt.197 Br.	USGS	194.2		2,600	3,950	22.0	1.7
		QEA	194.2					2.3

TABLE 3-5. 2000 Hudson River water column TSS results for the Route 197 Bridge.

Date Collected	Location	Sampling Method	Approx HRM (1)	Comments (2)	Flow (cfs) (3)	Daily Flow(cfs) (4)	Water Temp (C)	TSS (mg/L)
16-Aug-00	Rt.197 Br.	USGS	194.2		5,400	4,166	22.0	10.8
		QEA	194.2					7.8
23-Aug-00	Rt.197 Br.	USGS	194.2		3,440	4,460	20.0	1.6
		QEA	194.2					1.1
6-Sep-00	Rt.197 Br.	USGS	194.2		4,000	3,897	17.0	1.0
		QEA	194.2					1.0
13-Sep-00	Rt.197 Br.	USGS	194.2		2,220	3,148	21.0	1.4
		QEA	194.2					1.7
20-Sep-00	Rt.197 Br.	USGS	194.2		3,230	3,428	19.0	1.4
		QEA	194.2					1.4
27-Sep-00	Rt.197 Br.	USGS	194.2		4,567	3,489	17.0	1.7
		QEA	194.2					1.6
11-Oct-00	Rt.197 Br.	USGS	194.2		3,139	3,840	13.0	<1.0
		QEA	194.2					1.3
18-Oct-00	Rt.197 Br.	USGS	194.2		3,704	4,000	13.0	1.9
		QEA	194.2					1.3
25-Oct-00	Rt.197 Br.	USGS	194.2		6,840	4,162	12.0	1.7
		QEA	194.2					1.4
1-Nov-00	Rt.197 Br.	USGS	194.2		3,358	6,656	9.0	2.4
		QEA	194.2					2.2
8-Nov-00	Rt.197 Br.	USGS	194.2		6,880	3,901	8.0	2.9
		QEA	194.2					3.1
22-Nov-00	Rt.197 Br.	USGS	194.2		1,590	1,374	5.0	1.3
		QEA	194.2					1.3
29-Nov-00	Rt.197 Br.	USGS	194.2		1,870	2,067	4.0	1.9
		QEA	194.2					1.0
6-Dec-00	Rt.197 Br.	USGS	194.2		4,670	4,145	1.0	2.6
		QEA	194.2					1.1
20-Dec-00	Rt.197 Br.	USGS	194.2		8,800	8,066	0.5	4.8
		QEA	194.2					4.6

Mean USGS Concentration⁶ = 2.5

Mean QEA Concentration = 2.1

- (1) HRM = Hudson River Mile. HRM 0.0 is located at the Battery in New York City.
- (2) Comments reflect PCB data qualifiers and additional information regarding sampling and analytical methods.
- (3) Instantaneous flows recorded during sampling for the Fort Edward gaging station are presented.
- (4) Daily flow is presented as mean daily flow for the Fort Edward gaging station from provisional data provided by USGS.
- (5) Data collected by USGS personnel. Samples without this footnote were collected by QEA personnel using the USGS style sampler.
- (6) Mean concentration of data collected by QEA using the USGS style sampler.

Key:

NA = Not Available.

TABLE 3-6. 2000 Hudson River water column monitoring results for the TID-WEST and TID-PRW2 (1)

Date Collected	Approx. HRM (2)	Comments QA/QC (3)	Location	Instantaneous Flow (cfs) (4)	Daily Average (cfs) Flow (5)	Water Temp. (C)	TSS (mg/L)	Total PCB (ng/L)	Homolog Distribution (weight percent) (6)						
									Mono	Di	Tri	Tetra	Penta	Hexa	Hepta
01/05/00	189.0	P	TID-WEST	6,960	7,930	1.0	26.0	26	0.00	27.73	38.81	22.71	9.59	1.17	0.00
01/05/00	188.4	P	TID-PRW2			1.0	25.0	15	0.00	29.85	33.20	25.36	9.70	1.89	0.00
01/05/00	189.0	P, J, BD	TID-WEST			1.0	26.0	20	0.00	28.29	33.60	24.57	11.15	2.39	0.00
01/12/00	189.0		TID-WEST	4,230	4,770	1.0	8.4	318	24.34	43.35	19.13	10.18	2.54	0.45	0.00
	188.4	U	TID-PRW2			1.0	6.4	<11	--	--	--	--	--	--	--
01/19/00	189.0	P	TID-WEST	6,290	6,290	1.0	1.8	11	0.00	28.22	36.99	24.16	8.61	2.03	0.00
02/16/00	189.0		TID-WEST	2,680	3,400	1.0	2.6	47	34.28	37.53	16.15	7.94	3.42	0.68	0.00
02/23/00	189.0	P	TID-WEST	NA	3,510	2.0	1.1	22	16.83	36.52	22.04	14.57	6.99	3.05	0.00
	189.0	P, BD	TID-WEST			2.0	1.1	29	24.49	37.99	23.74	7.68	4.66	1.45	0.00
03/01/00	189.0	P	TID-WEST	8,750	8,748	1.0	7.9	16	0.00	23.85	36.86	27.75	8.44	3.11	0.00
	188.4	U	TID-PRW2			1.0	7.8	<11	--	--	--	--	--	--	--
03/08/00	189.0	P	TID-WEST	5,700	5,665	3.0	4.1	12	0.00	40.52	28.33	21.76	7.18	2.21	0.00
	188.4	U	TID-PRW2			3.0	5.0	<11	--	--	--	--	--	--	--
03/15/00	189.0	P	TID-WEST	6,956	6,956	2.0	4.3	12	0.00	19.96	33.47	33.20	10.31	3.06	0.00
	188.4	U	TID-PRW2			2.0	2.6	<11	--	--	--	--	--	--	--
03/22/00	189.0	P	TID-WEST	5,248	4,942	4.0	1.9	27	17.72	37.92	27.79	11.99	4.13	0.46	0.00
	188.4	U	TID-PRW2			4.0	1.9	<11	--	--	--	--	--	--	--
03/29/00	189.0		TID-WEST	19,500	18,206	5.0	14.8	52	5.42	27.48	31.87	26.62	7.41	1.19	0.00
04/05/00	189.0	P	TID-WEST	18,500	18,171	2.0	5.6	33	11.75	25.75	31.29	21.96	8.07	1.16	0.00
	189.0	P, BD	TID-WEST			2.0	5.8	39	12.79	24.52	26.94	21.95	11.92	1.88	0.00
04/12/00	189.0	P	TID-WEST	11,600	11,008	3.0	1.4	13	0.00	33.17	33.00	24.63	7.89	1.31	0.00
	188.4	U	TID-PRW2			3.0	1.8	<11	--	--	--	--	--	--	--

TABLE 3-6. 2000 Hudson River water column monitoring results for the TID-WEST and TID-PRW2 (1)

Date Collected	Approx. HRM (2)	Comments QA/QC (3)	Location	Instantaneous Flow (cfs) (4)	Daily Average (cfs) Flow (5)	Water Temp. (C)	TSS (mg/L)	Total PCB (ng/L)	Homolog Distribution (weight percent) (6)						
									Mono	Di	Tri	Tetra	Penta	Hexa	Hepta
04/19/00	189.0	P	TID-WEST	13,800	13,549	6.0	1.8	19	16.99	30.27	24.97	22.14	4.51	1.12	0.00
	188.4	P	TID-PRW2			6.0	2.1	14	0.00	29.85	31.51	24.00	12.09	2.55	0.00
	188.4	P, BD	TID-PRW2			6.0	2.4	20	15.27	26.39	25.56	24.37	6.83	1.59	0.00
04/26/00	189.0	P	TID-WEST	17,700	18,007	7.0	2.9	36	17.99	27.94	28.56	18.94	5.07	1.51	0.00
05/03/00	189.0	P	TID-WEST	8,670	8,803	12.0	1.7	35	23.14	40.17	20.13	12.28	3.46	0.83	0.00
	188.4	P	TID-PRW2			12.0	1.6	16	0.00	39.50	31.18	21.45	6.94	0.93	0.00
05/10/00	189.0		TID-WEST	8,760	8,978	15.0	2.4	54	16.95	40.77	24.73	14.17	2.88	0.50	0.00
	188.4	P	TID-PRW2			15.0	2.3	42	13.17	34.25	28.53	18.11	4.89	1.04	0.00
	189.0	BD	TID-WEST			15.0	2.2	66	28.58	32.30	21.30	12.57	4.65	0.59	0.00
05/17/00	189.0		TID-WEST	18,850	19,460	13.0	5.1	60	16.07	34.20	29.08	15.36	4.55	0.74	0.00
05/24/00	189.0		TID-WEST	8,800	9,133	13.0	26.0	50	24.12	37.09	23.17	11.10	4.06	0.46	0.00
	188.4	P	TID-PRW2			13.0	24.8	39	15.24	27.93	28.98	17.67	8.95	1.23	0.00
05/31/00	189.0		TID-WEST	8,360	8,353	17.0	2.8	78	26.68	38.65	19.57	10.98	3.70	0.43	0.00
	188.4	P	TID-PRW2			17.0	2.5	39	22.04	38.94	23.48	9.64	5.04	0.85	0.00
	189.0	BD	TID-WEST			17.0	1.5	72	27.39	37.91	17.86	11.65	4.72	0.47	0.00
06/07/00	189.0		TID-WEST	5,730	5,877	16.0	17.1	72	23.39	40.05	20.89	10.82	4.20	0.66	0.00
	188.4	P	TID-PRW2			16.0	29.5	32	16.69	38.03	22.72	15.43	6.08	1.05	0.00
	189.0	BD	TID-WEST			16.0	13.6	73	26.54	39.04	19.29	10.65	3.89	0.59	0.00

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TABLE 3-6. 2000 Hudson River water column monitoring results for the TID-WEST and TID-PRW2 (1)

Date Collected	Approx. HRM (2)	Comments QA/QC (3)	Location	Instantaneous Flow (cfs) (4)	Daily Average (cfs) Flow (5)	Water Temp. (C)	TSS (mg/L)	Total PCB (ng/L)	Homolog Distribution (weight percent) (6)						
									Mono	Di	Tri	Tetra	Penta	Hexa	Hepta
06/14/00	189.0		TID-WEST	6,960	7,206	16.0	3.6	60	24.04	40.69	21.02	10.91	2.95	0.39	0.00
	188.4	P	TID-PRW2			16.0	4.3	41	20.07	34.01	26.67	14.18	4.29	0.78	0.00
	188.4	P, BD	TID-PRW2			16.0	3.9	44	22.53	36.40	18.79	14.95	6.47	0.86	0.00
06/21/00	189.0		TID-WEST	6,760	6,143	25.0	3.5	175	24.60	42.39	18.99	10.20	3.15	0.66	0.00
	188.4		TID-PRW2			25.0	3.1	49	29.92	35.70	20.44	11.00	2.34	0.60	0.00
	189.0	BD	TID-WEST			25.0	3.5	183	26.88	41.44	18.96	9.40	2.55	0.77	0.00
06/28/00	189.0		TID-WEST	3,680	4,835	23.0	2.7	238	27.09	41.29	19.93	8.93	2.22	0.54	0.00
	188.4		TID-PRW2			23.0	2.3	78	18.43	42.61	22.21	13.48	2.93	0.33	0.00
	188.4	BD	TID-PRW2			23.0	2.2	83	16.09	45.99	21.16	13.21	3.19	0.36	0.00
07/05/00	189.0		TID-WEST	3,529	3,290	22.0	2.0	219	24.91	40.71	19.81	10.84	3.04	0.68	0.00
	188.4		TID-PRW2			22.0	1.2	84	19.06	43.72	22.31	12.10	2.48	0.33	0.00
07/12/00	189.0	R	TID-WEST	7,000	5,342	22.0	1.7	144	34.00	38.34	17.21	8.48	1.73	0.24	0.00
	188.4		TID-PRW2			22.0	2.2	49	24.25	35.48	21.05	14.89	3.93	0.39	0.00
	189.0	R, BD	TID-WEST			22.0	1.2	97	30.81	35.76	19.90	10.40	2.69	0.45	0.00
07/26/00	189.0		TID-WEST	896	3,088	22.0	<1.0	176	31.72	42.40	16.10	7.56	1.80	0.43	0.00
	188.4		TID-PRW2			22.0	1.4	65	30.28	39.07	16.59	11.41	2.24	0.41	0.00
	189.0	BD	TID-WEST			22.0	1.2	172	31.78	41.40	15.76	8.09	2.21	0.76	0.00
08/02/00	189.0		TID-WEST	7,900	7,850	22.0	2.5	97	21.33	40.57	23.17	11.43	3.09	0.41	0.00
	188.4		TID-PRW2			22.0	4.1	46	13.01	36.08	28.12	16.84	5.08	0.87	0.00
08/09/00	189.0		TID-WEST	2,600	3,950	25.0	<1.0	106	22.00	40.17	22.93	11.88	2.61	0.41	0.00
	188.4		TID-PRW2			25.0	1.2	47	16.71	40.67	24.13	13.37	4.16	0.96	0.00
	189.0	BD	TID-WEST			25.0	<1.0	104	22.91	42.01	20.58	11.66	2.42	0.42	0.00

TABLE 3-6. 2000 Hudson River water column monitoring results for the TID-WEST and TID-PRW2 (1)

Date Collected	Approx. HRM (2)	Comments QA/QC (3)	Location	Instantaneous Flow (cfs) (4)	Daily Average (cfs) Flow (5)	Water Temp. (C)	TSS (mg/L)	Total PCB (ng/L)	Homolog Distribution (weight percent) (6)						
									Mono	Di	Tri	Tetra	Penta	Hexa	Hepta
08/16/00	188.4		TID-PRW2	5,400	4,166	21.0	6.6	54	19.54	43.77	21.30	12.01	2.82	0.56	0.00
	189.0		TID-WEST			21.0	6.5	92	20.76	42.66	21.99	11.42	2.79	0.37	0.00
08/23/00	189.0		TID-WEST	3,440	4,456	21.0	<1.0	49	21.25	39.34	22.02	12.67	4.22	0.49	0.00
	188.4	P	TID-PRW2			21.0	1.2	28	0.00	44.85	29.25	18.17	6.35	1.38	0.00
	189.0	BD	TID-WEST			21.0	1.2	48	16.32	40.13	23.42	15.22	4.33	0.58	0.00
08/30/00	188.4	P	TID-PRW2	3,410	3,371	22.0	<1.0	39	9.30	43.05	25.03	15.39	5.86	1.36	0.00
	189.0		TID-WEST			22.0	<1.0	83	13.11	47.10	25.58	10.99	2.69	0.53	0.00
	189.0	BD	TID-WEST			22.0	1.7	84	15.78	43.66	26.56	10.65	2.88	0.48	0.00
09/06/00	189.0		TID-WEST	4,000	3,897	21.0	<1.0	57	20.20	39.38	25.46	10.84	3.74	0.37	0.00
	188.4	P	TID-PRW2			21.0	<1.0	37	11.65	43.96	25.56	14.25	3.69	0.88	0.00
	188.4	P, BD	TID-PRW2			21.0	<1.0	44	17.94	39.82	22.85	13.52	5.11	0.76	0.00
09/13/00	189.0		TID-WEST	2,220	3,148	21.0	1.6	126	20.16	44.62	23.22	9.43	2.32	0.25	0.00
	188.4		TID-PRW2			21.0	1.5	51	6.37	42.92	33.70	12.87	3.78	0.36	0.00
09/20/00	189.0		TID-WEST	3,230	3,428	19.0	1.6	73	28.06	42.78	17.98	8.72	2.12	0.34	0.00
	188.4	P	TID-PRW2			19.0	2.4	42	16.20	46.78	21.76	11.26	3.40	0.60	0.00
	188.4	P, BD	TID-PRW2			19.0	1.8	44	18.63	46.10	20.51	11.00	3.08	0.69	0.00
09/27/00	189.0		TID-WEST	4,567	3,489	17.0	1.3	120	28.93	43.43	18.87	6.81	1.78	0.18	0.00
	188.4		TID-PRW2			17.0	1.6	58	26.82	42.92	19.21	6.94	3.73	0.39	0.00
10/04/00	189.0		TID-WEST	1,960	2,047	17.0	<1.0	160	25.23	34.69	31.74	6.82	1.33	0.18	0.00
	188.4		TID-PRW2			17.0	<1.0	86	31.79	43.00	16.79	6.46	1.63	0.33	0.00
	188.4	BD	TID-PRW2			17.0	<1.0	89	29.40	43.80	17.29	7.23	1.96	0.33	0.00

TABLE 3-6. 2000 Hudson River water column monitoring results for the TID-WEST and TID-PRW2 (1)

Date Collected	Approx. HRM (2)	Comments QA/QC (3)	Location	Instantaneous Flow (cfs) (4)	Daily Average (cfs) Flow (5)	Water Temp. (C)	TSS (mg/L)	Total PCB (ng/L)	Homolog Distribution (weight percent) (6)						
									Mono	Di	Tri	Tetra	Penta	Hexa	Hepta
10/11/00	189.0		TID-WEST	3,139	3,139	13.0	<1.0	151	39.67	42.72	12.14	4.45	0.87	0.15	0.00
	188.4		TID-PRW2			13.0	<1.0	93	35.13	42.62	15.02	5.00	1.83	0.39	0.00
10/18/00	189.0		TID-WEST	4,000	3704	13.0	1.3	140	43.02	42.17	9.88	3.66	1.00	0.27	0.00
	188.4		TID-PRW2			13.0	1.5	81	34.60	44.21	13.25	5.56	1.82	0.56	0.00
	189.0	BD	TID-WEST			13.0	1.2	142	42.27	42.04	10.28	3.93	1.34	0.14	0.00
10/25/00	189.0		TID-WEST	6,840	4,162	12.0	2.1	92	31.44	44.66	14.87	6.26	2.45	0.32	0.00
	188.4		TID-PRW2			12.0	2.9	64	34.35	34.32	18.91	9.75	2.15	0.53	0.00
11/01/00	189.0		TID-WEST	6,566	3,358	9.0	2.2	178	28.70	34.80	20.29	11.30	3.84	1.07	0.00
	188.4	P	TID-PRW2			9.0	<1.0	43	35.08	44.23	11.56	6.29	2.31	0.53	0.00
	189.0	BD	TID-WEST			9.0	2.7	187	27.34	34.91	21.20	11.30	3.99	1.26	0.00
11/08/00	189.0		TID-WEST	4,990	3278	10.0	1.4	98	36.92	42.94	13.85	4.37	1.60	0.32	0.00
	188.4		TID-PRW2			10.0	1.6	61	32.70	36.63	18.21	9.05	2.83	0.57	0.00
11/15/00	189.0		TID-WEST	6,880	3,901	8.0	2.7	143	41.63	39.49	12.40	4.50	1.34	0.65	0.00
	188.4		TID-PRW2			8.0	3.5	59	45.71	35.84	10.27	5.66	1.81	0.71	0.00
11/22/00	189.0		TID-WEST	1,590	1,374	5.0	2.1	78	31.52	42.22	16.03	7.67	2.25	0.31	0.00
	189.0	BD	TID-WEST			5.0	1.2	75	31.57	42.34	16.51	7.10	2.13	0.35	0.00
11/29/00	189.0	J	TID-WEST	1,870	2,067	4.0	1.6	52	37.51	34.80	15.65	9.01	2.34	0.69	0.00
	188.4	P	TID-PRW2			4.0	1.5	20	12.16	45.80	22.94	14.85	3.21	1.05	0.00
	189.0	P, J, BD	TID-WEST			4.0	1.8	23	21.39	38.66	17.96	15.01	5.26	1.72	0.00
12/06/00	189.0		TID-WEST	4,670	4,145	1.0	2.1	80	30.18	38.73	17.84	8.61	3.76	0.88	0.00
12/13/00	189.0	P	TID-WEST	4,530	3,751	0.5	2.3	38	23.22	34.84	23.41	12.15	5.15	1.23	0.00
	188.4	P	TID-PRW2			0.5	2.6	18	25.33	24.35	23.98	18.30	6.00	2.04	0.00

TABLE 3-6. 2000 Hudson River water column monitoring results for the TID-WEST and TID-PRW2 (1)

Date Collected	Approx. HRM (2)	Comments QA/QC (3)	Location	Instantaneous Flow (cfs) (4)	Daily Average (cfs) Flow (5)	Water Temp. (C)	TSS (mg/L)	Total PCB (ng/L)	Homolog Distribution (weight percent) (6)						
									Mono	Di	Tri	Tetra	Penta	Hexa	Hepta
12/20/00	189.0	P	TID-WEST	8,800	8,066	0.5	<1.0	21	37.65	21.29	21.22	12.59	5.73	1.53	0.00
	189.0	U,BD	TID-WEST			0.5	3.6	<11	--	--	--	--	--	--	--
12/27/00	189.0	P	TID-WEST	NA	5,810	0.5	<1.0	17	16.40	32.25	32.52	14.17	3.66	1.00	0.00

(1) Samples analyzed by capillary column using Method NE013_04 unless otherwise noted. Method NE013_04 data has been adjusted for analytical bias, as described in the report Correction of Analytical Biases in the 1991-1997 GE Hudson River PCB Database (O'Brien & Gere Engineers, Inc., September 1997).

(2) HRM = Hudson River Mile. HRM 0.0 is located at the Battery in New York City.

(3) Comments reflect PCB data qualifiers and additional information regarding sampling and analytical methods. Data qualifier definitions from USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (2/94).

(4) Instantaneous flows recorded during sampling for the Fort Edward gaging station are presented.

(5) Daily flow is presented as mean daily flow for the Fort Edward gaging station provided by USGS. Flow data is provisional after 10/1/99.

(6) Homolog groups octa-, nona-, and deca-chlorinated biphenyls were not detected greater than 0.02%.

Key:

BD= Blind duplicate.

U= Indicates that the sample was analyzed, but the compound of interest (PCBs) was not detected above the method detection limit (MDL 11 ng/L) of the procedure. The sample result is still considered useable for evaluation purposes.

P= Indicates that PCBs were detected in the sample at a concentration below the practical quantitation limit (PQL 44 ng/L). The sample is still considered useable for evaluation purposes.

J= Indicates that the result is considered approximate. This qualifier denotes that the identity of the compound is accurate; however, there is limited confidence in the accuracy of the PCB concentration. The sample result is still useable for evaluation purposes.

UJ= Indicates that the MDL and the sample result is considered approximate. The sample result is still considered useable for evaluation purposes.

PJ= Indicates that PCBs were detected in the sample at a concentration below the practical quantitation limit (PQL 44 ng/L); however, this result is considered approximate. The identity of the compound is accurate; however, there is limited confidence in the accuracy of the PCB concentration. The sample result is still useable for evaluation purposes.

R= Indicates that the sample result or detection limit has been rejected due to serious deficiencies during the analytical process and/or inability to meet quality control criteria. The sample result is therefor considered unusable for quantitative evaluations.

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TABLE 3-7. 2000 Hudson River water column monitoring results for the Route 29 Bridge.

Date Collected	Approx. HRM (2)	Comments QA/QC (3)	Location	Instantaneous Flow (cfs) (4)	Daily Average (cfs) Flow (5)	Water Temp. (C)	TSS (mg/L)	Total PCB (ng/L)	Homolog Distribution (weight percent) (6)						
									Mono	Di	Tri	Tetra	Penta	Hexa	Hepta
01/05/00	181.4	P	Rt.29 Br.	6,960	7,930	1.0	59.0	23	0.00	26.21	35.74	26.04	9.45	2.57	0.00
01/12/00	181.4	P	Rt.29 Br.	4,230	4,770	1.0	11.0	13	0.00	35.76	33.32	21.61	7.86	1.45	0.00
02/16/00	181.4	P	Rt.29 Br.	2,680	3,400	1.0	2.6	19	0.00	41.83	26.06	20.29	10.64	1.18	0.00
02/23/00	181.4	P	Rt.29 Br.	NA	3,510	2.0	<1.0	30	21.36	31.22	26.66	14.96	4.22	1.58	0.00
03/01/00	181.4	P	Rt.29 Br.	8,750	8,748	1.0	16.4	16	0.00	12.39	37.11	30.67	16.45	3.38	0.00
	181.4	P, BD	Rt.29 Br.			1.0	14.6	17	0.00	25.30	36.52	25.68	9.58	2.94	0.00
03/08/00	181.4	P	Rt.29 Br.	5,700	5,665	3.0	3.8	21	27.01	20.29	28.62	16.61	5.52	1.94	0.00
03/15/00	181.4	U	Rt.29 Br.	6,956	6,956	2.0	5.0	<11	--	--	--	--	--	--	--
	181.4	P, BD	Rt.29 Br.			2.0	3.7	12	0.00	25.95	32.35	30.66	10.00	1.04	0.00
03/22/00	181.4	P	Rt.29 Br.	5,248	4,942	4.0	4.4	27	17.40	28.31	30.76	17.12	5.85	0.55	0.00
03/29/00	181.4		Rt.29 Br.	19,500	18,206	5.0	18.2	141	7.66	20.58	33.43	24.97	10.24	3.13	0.00
	181.4	BD	Rt.29 Br.			5.0	16.3	125	4.34	19.20	37.22	27.09	9.54	2.61	0.00
04/05/00	181.4		Rt.29 Br.	18,500	18,171	2.0	5.9	52	6.72	21.20	34.86	26.09	9.44	1.69	0.00
04/12/00	181.4	P, J	Rt.29 Br.	11,600	11,008	3.0	2.9	18	0.00	30.73	32.27	26.11	9.85	1.04	0.00
	181.4	P	Rt.29 Br.			3.0	2.7	18	0.00	32.29	33.65	24.73	8.65	0.68	0.00
04/19/00	181.4	P	Rt.29 Br.	13,800	13,549	6.0	2.8	29	14.74	29.10	28.36	20.22	6.60	0.98	0.00
04/26/00	181.4		Rt.29 Br.	17,700	18,007	7.0	3.8	47	10.23	28.76	33.02	20.16	6.36	1.46	0.00
	181.4	BD	Rt.29 Br.			7.0	5.0	55	10.58	27.82	34.55	20.34	5.72	0.99	0.00
05/03/00	181.4	P	Rt.29 Br.	8,670	8,803	12.0	2.5	30	0.00	38.33	35.17	20.81	4.89	0.80	0.00
05/10/00	181.4		Rt.29 Br.	8,760	8,978	15.0	3.4	48	12.62	37.12	28.42	15.68	5.04	1.13	0.00
05/17/00	181.4		Rt.29 Br.	18,850	19,460	13.0	5.7	95	11.81	35.94	30.95	16.06	4.47	0.77	0.00

TABLE 3-7. 2000 Hudson River water column monitoring results for the Route 29 Bridge.

Date Collected	Approx. HRM (2)	Comments QA/QC (3)	Location	Instantaneous Flow (cfs) (4)	Daily Average (cfs) Flow (5)	Water Temp. (C)	TSS (mg/L)	Total PCB (ng/L)	Homolog Distribution (weight percent) (6)						
									Mono	Di	Tri	Tetra	Penta	Hexa	Hepta
05/24/00	181.4	BD	Rt.29 Br.	8,800	9,133	13.0	38.0	62	15.22	32.00	28.05	17.71	6.13	0.89	0.00
	181.4		Rt.29 Br.			13.0	17.4	60	9.82	36.36	29.59	17.25	5.97	1.02	0.00
05/31/00	181.4		Rt.29 Br.	8,360	8,353	17.0	3.5	73	17.57	38.05	22.83	14.13	6.34	1.07	0.00
06/07/00	181.4		Rt.29 Br.	5,730	5,877	16.0	17.5	63	17.58	35.29	25.33	15.43	5.62	0.75	0.00
06/14/00	181.4		Rt.29 Br.	6,960	7,206	16.0	5.3	73	19.87	33.94	25.30	14.74	5.48	0.68	0.00
06/21/00	181.4		Rt.29 Br.	6,760	6,143	25.0	4.4	93	16.34	38.35	26.03	14.81	3.75	0.73	0.00
06/28/00	181.4		Rt.29 Br.	3,680	4,835	23.0	3.3	120	14.78	41.41	25.26	13.96	3.73	0.86	0.00
07/05/00	181.4	BD	Rt.29 Br.	3,529	3,290	22.0	2.3	90	12.74	43.20	25.65	14.67	3.18	0.55	0.00
	181.4		Rt.29 Br.			22.0	1.5	88	16.21	44.83	22.54	13.30	2.80	0.32	0.00
07/12/00	181.4		Rt.29 Br.	7,000	5,342	22.0	3.1	83	17.15	32.71	27.05	17.77	4.62	0.69	0.00
07/26/00	181.4		Rt.29 Br.	896	3,088	22.0	1.6	69	21.46	40.58	21.50	13.35	2.59	0.52	0.00
08/02/00	181.4	BD	Rt.29 Br.	7,900	7,850	22.0	6.4	80	11.54	35.59	27.10	19.14	4.67	1.97	0.00
08/02/00	181.4		Rt.29 Br.			22.0	6.1	82	13.95	33.88	28.35	17.19	4.67	1.97	0.00
08/09/00	181.4		Rt.29 Br.	2,600	3,950	25.0	2.1	57	14.06	39.95	25.65	15.00	4.33	1.01	0.00
08/16/00	181.4		Rt.29 Br.	5,400	4,166	21.0	7.8	56	12.18	42.85	23.66	15.90	4.64	0.77	0.00
08/23/00	181.4		Rt.29 Br.	3,440	4,456	21.0	1.7	51	17.23	39.32	24.75	13.01	4.73	0.95	0.00
08/30/00	181.4		Rt.29 Br.	3,410	3,371	22.0	1.3	57	13.73	44.04	25.20	12.34	3.85	0.84	0.00
09/06/00	181.4		Rt.29 Br.	4,000	3,897	21.0	<1.0	62	13.85	39.49	30.05	13.32	2.81	0.49	0.00
09/13/00	181.4	BD	Rt.29 Br.	2,220	3,148	21.0	1.5	49	7.83	48.25	27.79	11.67	3.70	0.76	0.00
09/13/00	189.0		Rt.29 Br.			21.0	1.4	49	6.93	51.11	27.06	10.73	3.64	0.53	0.00
09/20/00	181.4		Rt.29 Br.	3,230	3,428	19.0	2.0	73	19.87	44.93	22.42	10.43	2.07	0.29	0.00

TABLE 3-7. 2000 Hudson River water column monitoring results for the Route 29 Bridge.

Date Collected	Approx. HRM (2)	Comments QA/QC (3)	Location	Instantaneous Flow (cfs) (4)	Daily Average (cfs) Flow (5)	Water Temp. (C)	TSS (mg/L)	Total PCB (ng/L)	Homolog Distribution (weight percent) (6)						
									Mono	Di	Tri	Tetra	Penta	Hexa	Hepta
09/27/00	181.4		Rt.29 Br.	4,567	3,489	17.0	2.1	72	25.76	42.93	19.73	8.16	2.99	0.43	0.00
10/04/00	181.4		Rt.29 Br.	1,960	2,047	17.0	<1.0	102	28.00	44.59	17.92	6.66	2.44	0.40	0.00
10/11/00	181.4		Rt.29 Br.	3,139	3,139	13.0	1.3	112	30.18	46.95	14.95	5.81	1.72	0.39	0.00
10/18/00	181.4		Rt.29 Br.	4,000	3,704	13.0	1.8	106	31.27	49.63	12.46	5.16	1.19	0.29	0.00
10/25/00	181.4		Rt.29 Br.	6,840	4,162	12.0	1.6	97	27.52	47.50	15.03	7.49	2.23	0.23	0.00
11/01/00	181.4		Rt.29 Br.	6,566	3,358	9.0	2.2	105	33.48	44.21	14.05	5.92	1.87	0.46	0.00
11/08/00	181.4		Rt.29 Br.	4,990	3,278	10.0	1.1	105	42.23	37.53	11.80	6.02	1.96	0.47	0.00
11/08/00	181.4	BD	Rt.29 Br.			10.0	1.3	98	39.46	41.02	13.28	4.79	1.21	0.25	0.00
11/15/00	181.4		Rt.29 Br.	6,880	3,901	8.0	4.0	81	30.89	46.28	13.12	7.13	2.21	0.36	0.00
11/22/00	181.4		Rt.29 Br.	1,590	1,374	5.0	1.3	62	25.92	41.28	10.87	9.29	7.60	5.04	0.00
11/29/00	181.4		Rt.29 Br.	1,870	2,067	4.0	2.6	57	30.18	37.98	18.88	9.85	2.17	0.93	0.00
12/06/00	181.4		Rt.29 Br.	4,670	4,145	1.0	3.3	96	32.76	38.13	16.64	8.98	2.92	0.57	0.00
12/06/00	181.4	BD	Rt.29 Br.			1.0	2.4	91	30.92	39.08	17.91	9.20	2.46	0.43	0.00

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TABLE 3-7. 2000 Hudson River water column monitoring results for the Route 29 Bridge.

Date Collected	Approx. HRM (2)	Comments QA/QC (3)	Location	Instantaneous Flow (cfs) (4)	Daily Average (cfs) Flow (5)	Water Temp. (C)	TSS (mg/L)	Total PCB (ng/L)	Homolog Distribution (weight percent) (6)						
									Mono	Di	Tri	Tetra	Penta	Hexa	Hepta
12/13/00	181.4		Rt.29 Br.	4,530	3,751	0.5	2.3	59	23.25	32.95	24.43	13.54	4.85	0.99	0.00
12/20/00	181.4	P	Rt.29 Br.	8,800	8,066	0.5	12.2	27	33.14	9.43	24.18	23.46	7.90	1.89	0.00

- (1) Samples analyzed by capillary column using Method NE013_04 unless otherwise noted. Method NE013_04 data has been adjusted for analytical bias, as described in the report Correction of Analytical Biases in the 1991-1997 GE Hudson River PCB Database (O'Brien & Gere Engineers, Inc., September 1997).
- (2) HRM = Hudson River Mile. HRM 0.0 is located at the Battery in New York City.
- (3) Comments reflect PCB data qualifiers and additional information regarding sampling and analytical methods. Data qualifier definitions from USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (2/94).
- (4) Instantaneous flows recorded during sampling for the Fort Edward gaging station are presented.
- (5) Daily flow is presented as mean daily flow for the Fort Edward gaging station provided by USGS. Flow data is provisional after 10/1/99.
- (6) Homolog groups octa-, nona-, and deca-chlorinated biphenyls were not detected greater than 0.02%.

Key:

BD= Blind duplicate.

U= Indicates that the sample was analyzed, but the compound of interest (PCBs) was not detected above the method detection limit (MDL 11 ng/L) of the procedure. The sample result is still considered useable for evaluation purposes.

P= Indicates that PCBs were detected in the sample at a concentration below the practical quantitation limit (PQL 44 ng/L). The sample is still considered useable for evaluation purposes.

J= Indicates that the result is considered approximate. This qualifier denotes that the identity of the compound is accurate; however, there is limited confidence in the accuracy of the PCB concentration. The sample result is still useable for evaluation purposes.

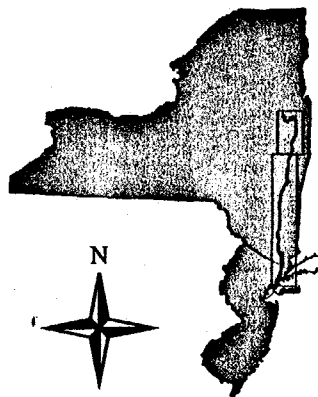
UJ= Indicates that the MDL and the sample result is considered approximate. The sample result is still considered useable for evaluation purposes.

PJ= Indicates that PCBs were detected in the sample at a concentration below the practical quantitation limit (PQL 44 ng/L); however, this result is considered approximate. The identity of the compound is accurate; however, there is limited confidence in the accuracy of the PCB concentration. The sample result is still useable for evaluation purposes.

R= Indicates that the sample result or detection limit has been rejected due to serious deficiencies during the analytical process and/or inability to meet quality control criteria. The sample result is therefor considered unusable for quantitative evaluations.

FIGURES

LOCATION MAP OF THE HUDSON RIVER



Upper Hudson Scale



Lower Hudson Scale



GENERAL ELECTRIC COMPANY
Hudson River Monitoring Program
2000 Annual Summary Report



Figure 1-1.
Hudson River location map.

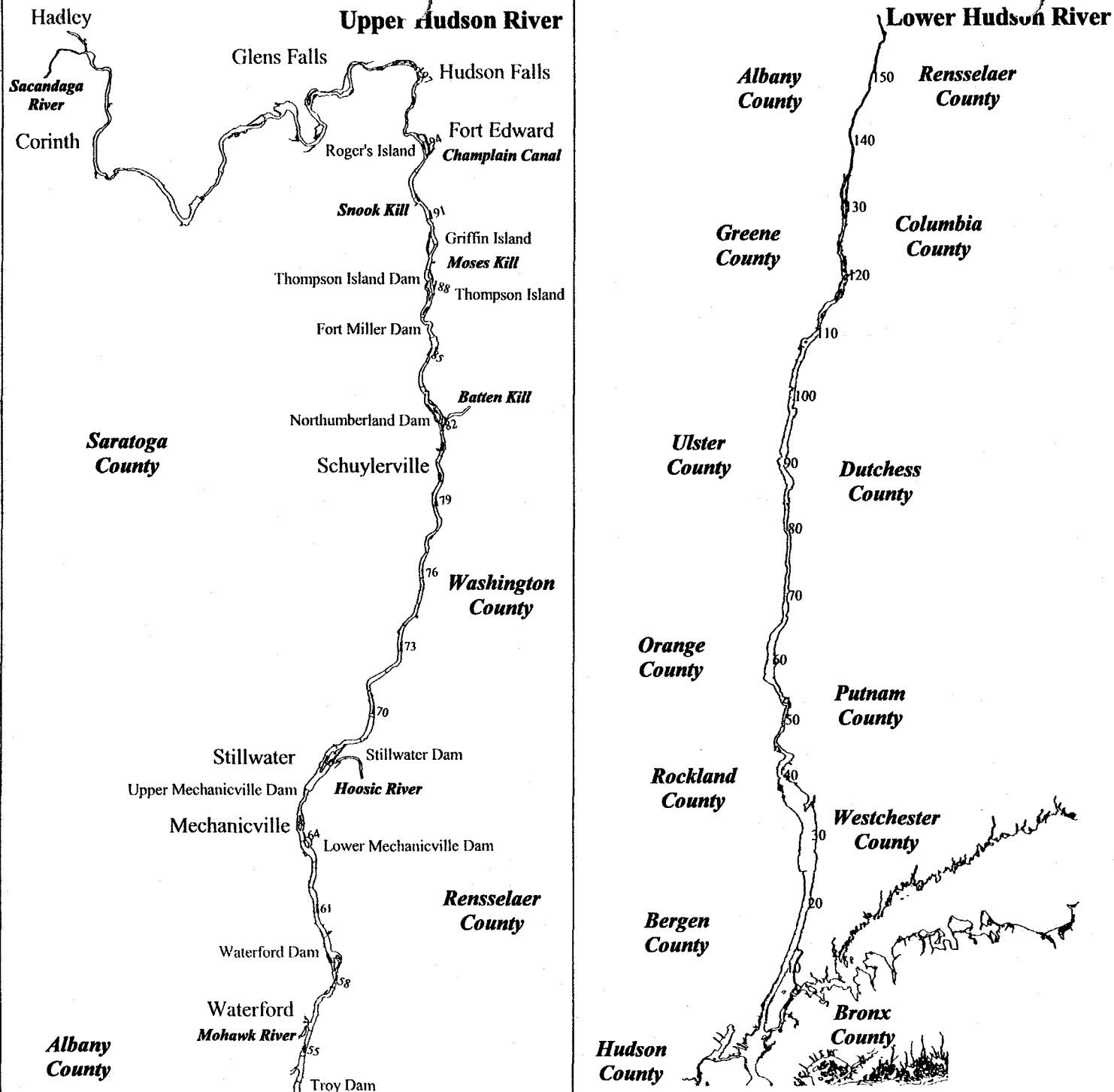
Note: Numbers along river indicate river miles measured from the Battery

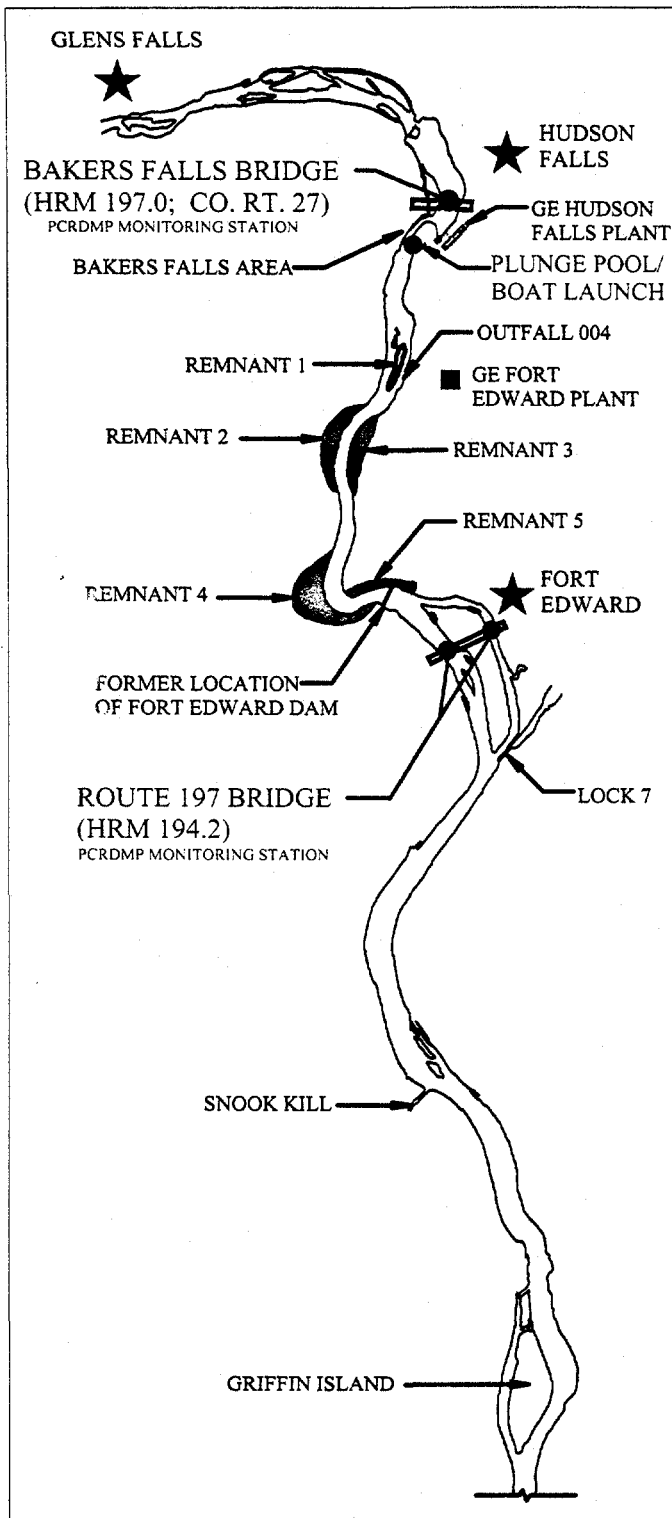
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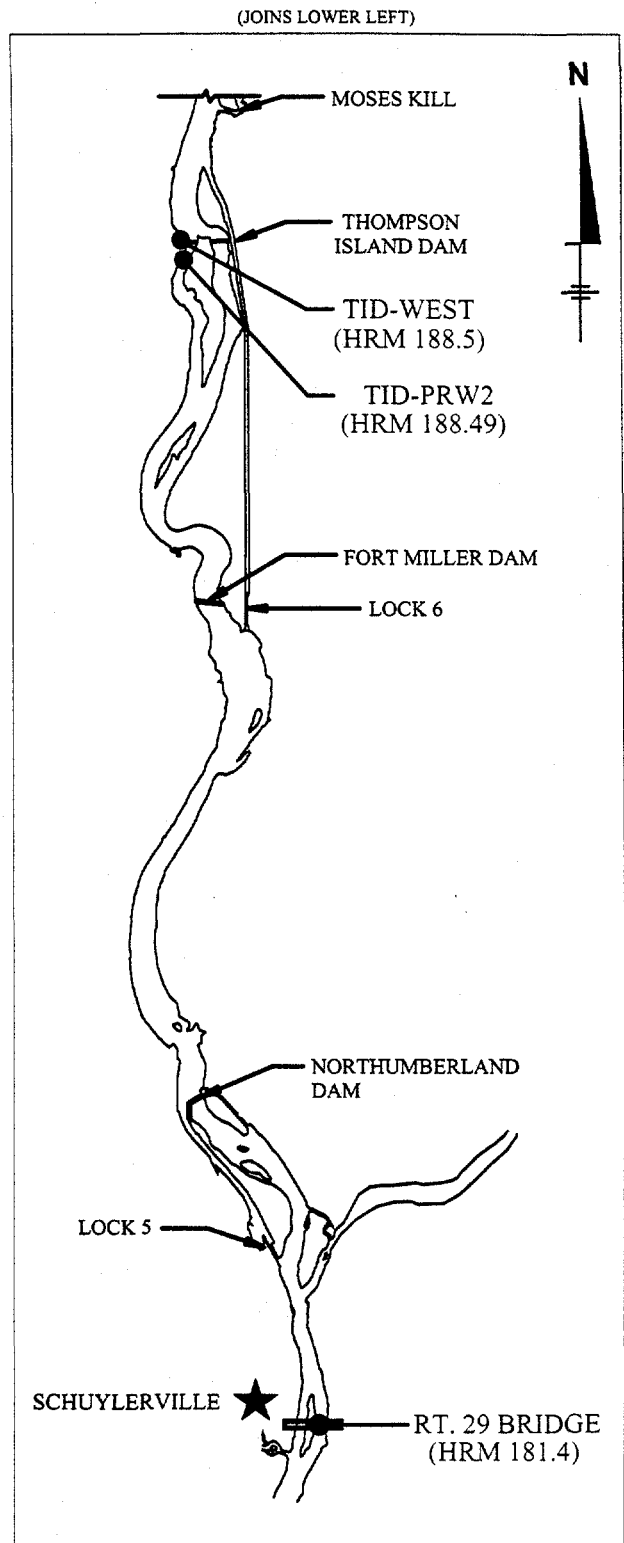
Project: GEHrs 131

April 2001





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LEGEND

● - WATER SAMPLING LOCATION

GENERAL ELECTRIC COMPANY
HUDSON RIVER MONITORING PROGRAM
ROUTINE SAMPLE LOCATION MAP

FIGURE 1-2

SCALE: 1 in. = 1 mile

FINAL

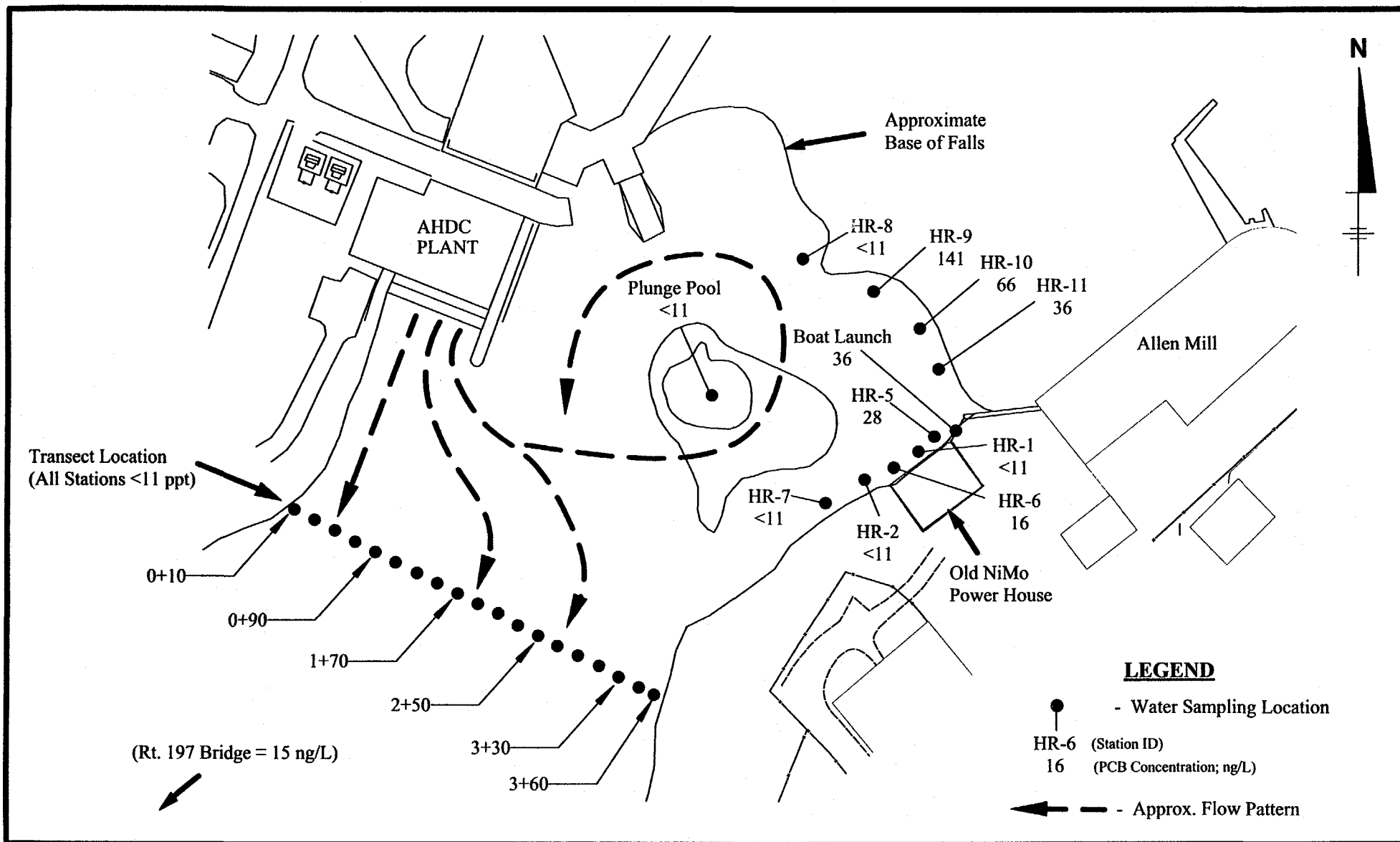
OEA
Quantitative Environmental Analysis, LLC

GENhrm 131

APRIL 2001

00 rpt. sample location_map.TCW

317650



HUDSON RIVER MONITORING PROGRAM
PLUNGE POOL AND DOWNSTREAM TRANSECT SAMPLING LOCATIONS
AUGUST 9, 2000

Transect Data I.TCW

FIGURE 2-1

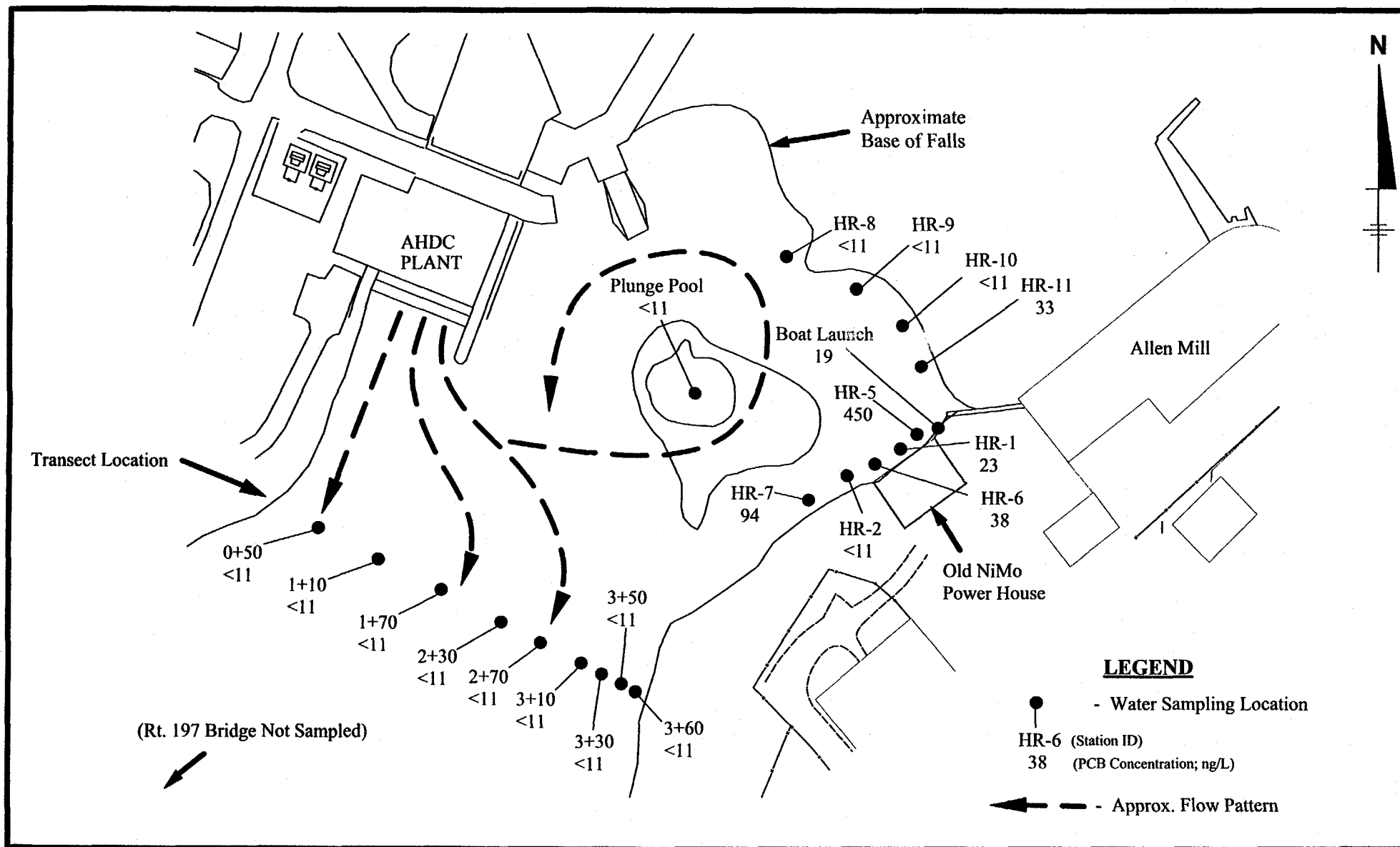
SCALE 1 IN. = 120 FT.

FINAL

OEA
 Quantitative Environmental Analysis, LLC

GENtmp

APRIL 2001



HUDSON RIVER MONITORING PROGRAM
PLUNGE POOL AND DOWNSTREAM TRANSECT SAMPLING LOCATIONS
AUGUST 30, 2000

FIGURE 2-2

SCALE 1 IN. = 120 FT.

FINAL

OEA
 Quantitative Environmental Analysis, LLC

GENmp

APRIL 2001

Transect Data 2.tcw

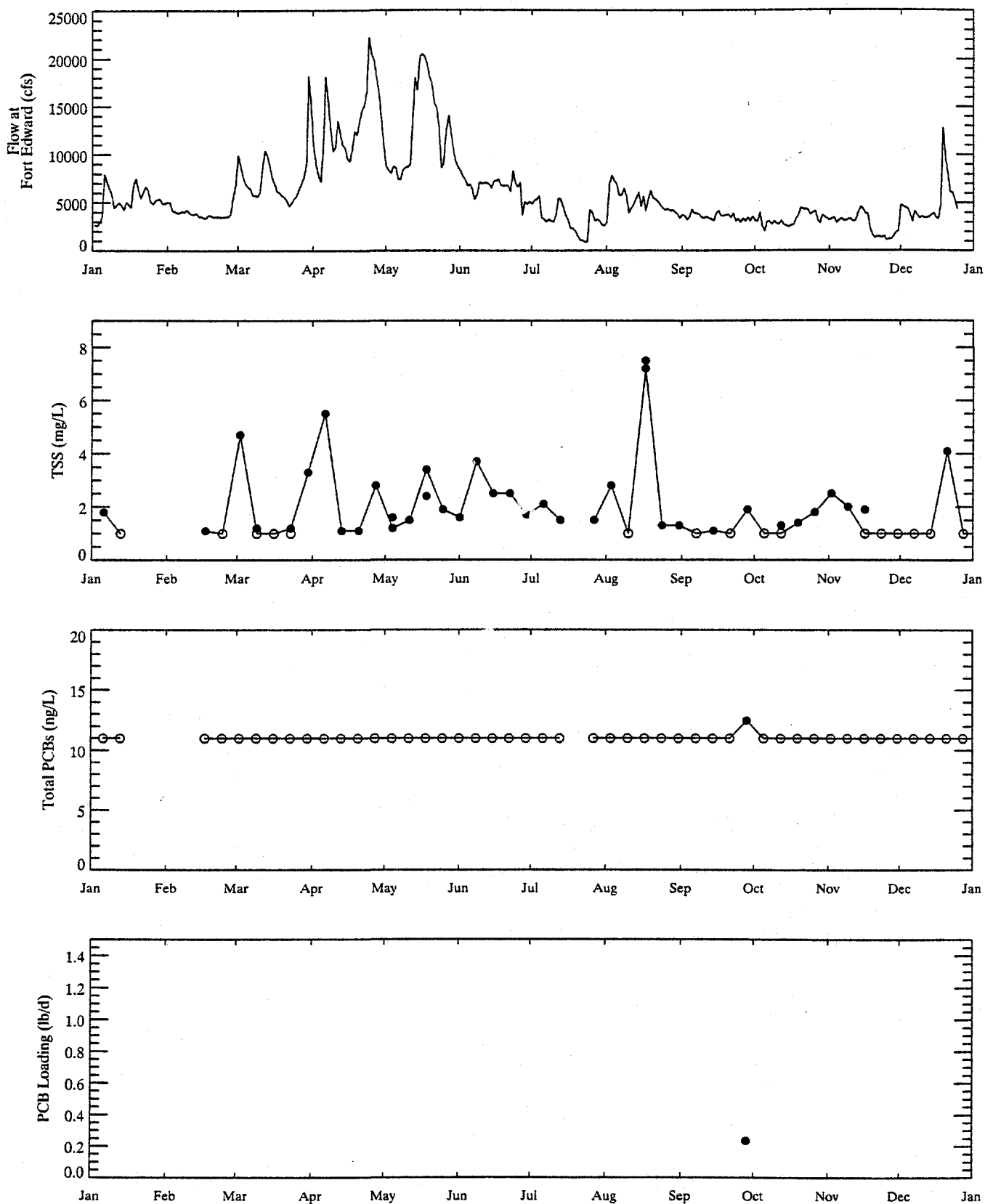


Figure 3-1. Temporal profiles of 2000 routine monitoring data collected at Bakers Falls Bridge.

Notes: Non-detects plotted as open symbols at MDL. Flow data plotted and used in loading calculations are USGS provisional daily averages. High flow monitoring data not shown. Breaks in lines indicate a gap in the data

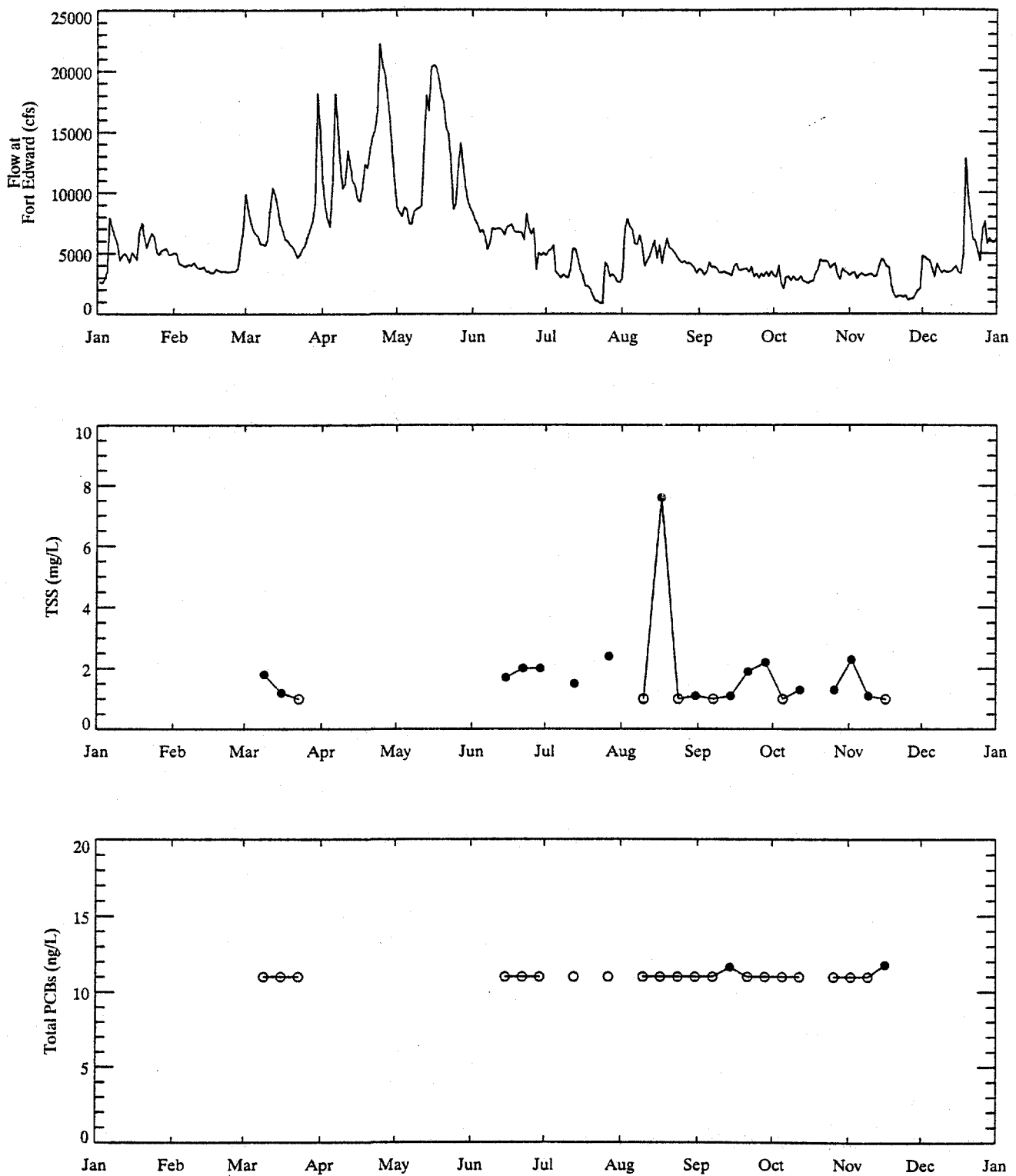


Figure 3-2. Temporal profiles of 2000 routine monitoring data collected at the plunge pool.

Notes: Non-detects plotted as open symbols at MDL. Flow data plotted are USGS provisional daily averages. Breaks in line indicate a gap in the data.

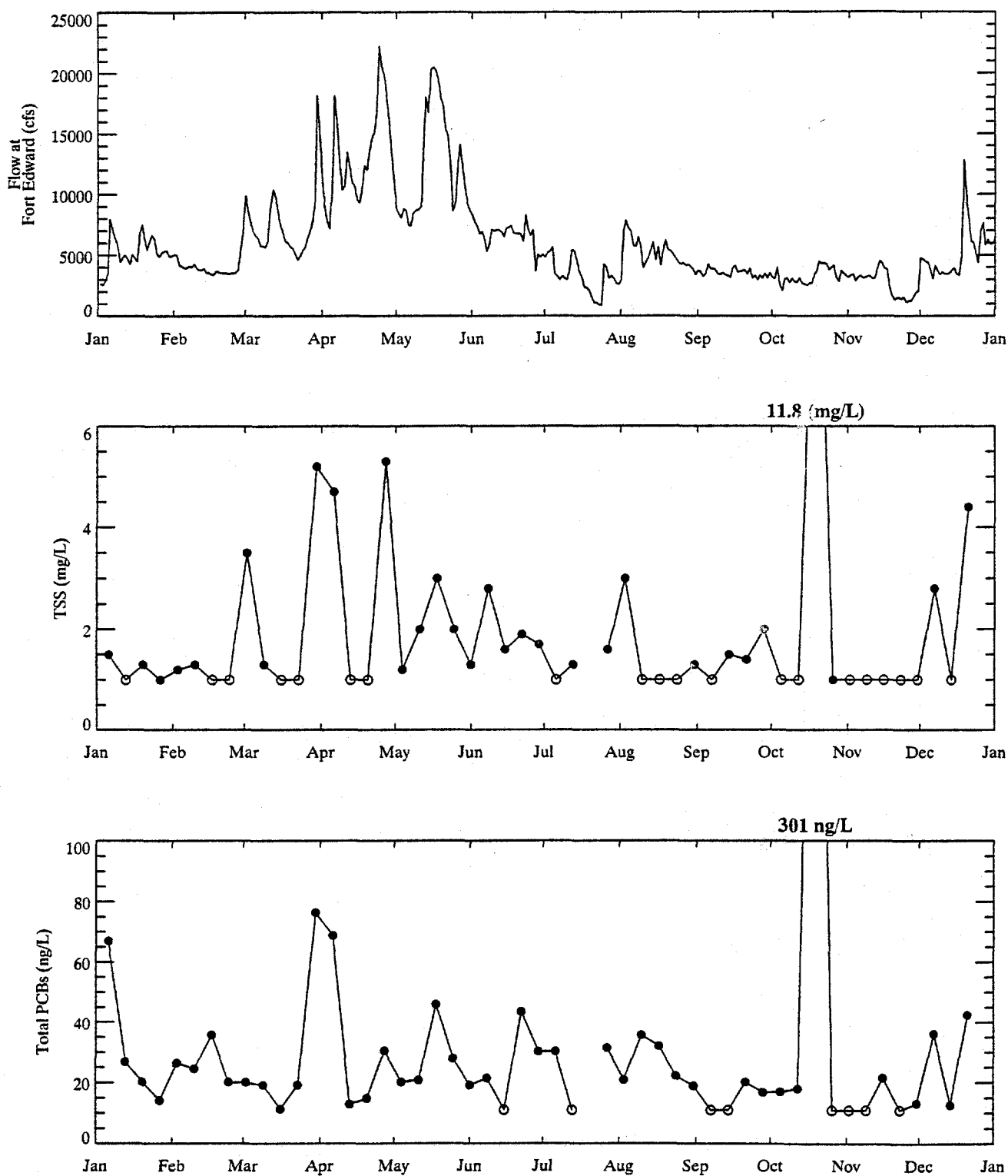


Figure 3-3. Temporal profiles of 2000 routine monitoring data collected at the boat launch.

Notes: Non-detects plotted as open symbols at MDL. Flow data plotted are USGS provisional daily averages. Breaks in line indicate a gap in the data.

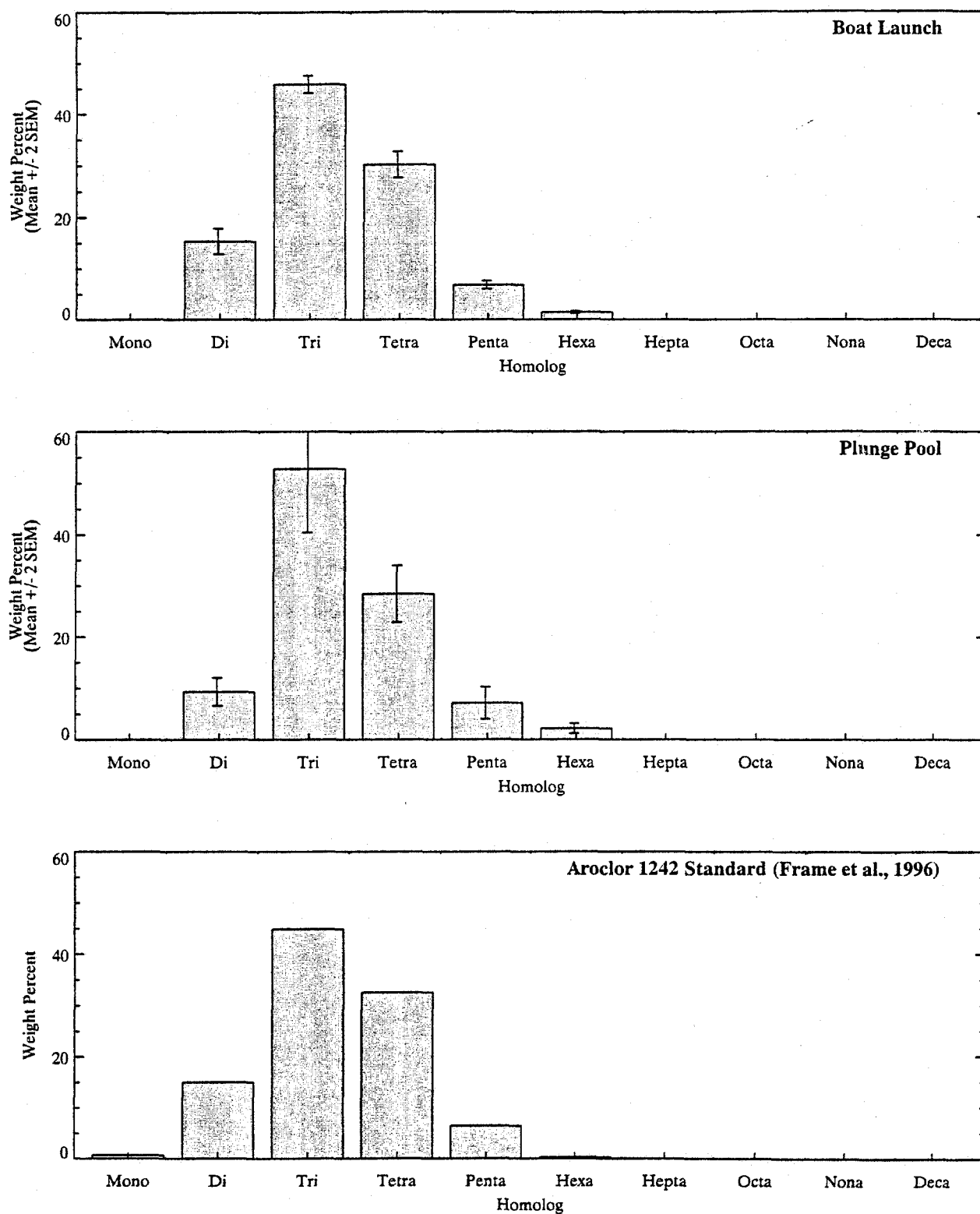


Figure 3-4. Comparison of the average homolog composition for 2000 routine monitoring data collected in the vicinity of the Hudson Falls Plant Site with an Aroclor 1242 standard.

Notes: Non-detects not included in data averages. High flow monitoring data not included.

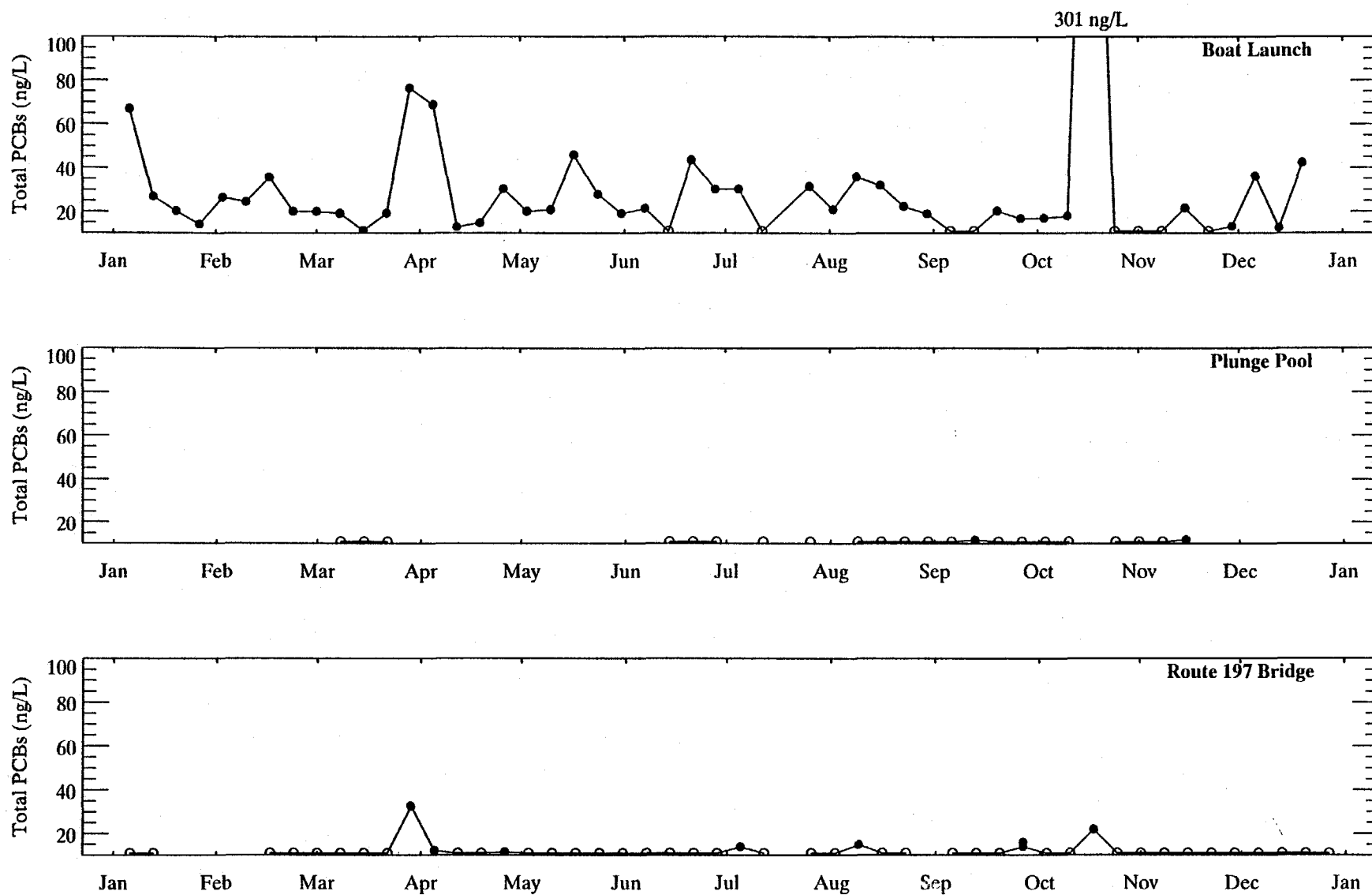


Figure 3-5. Comparison of 2000 PCB concentrations: Boat Launch, Plungepool, and Route 197 Bridge.

Note: Non-detects plotted as open symbols at MDL. Samples not plotted on lines are blind duplicate results. Breaks in line indicate a gap in the data. High flow monitoring data not shown.

317666

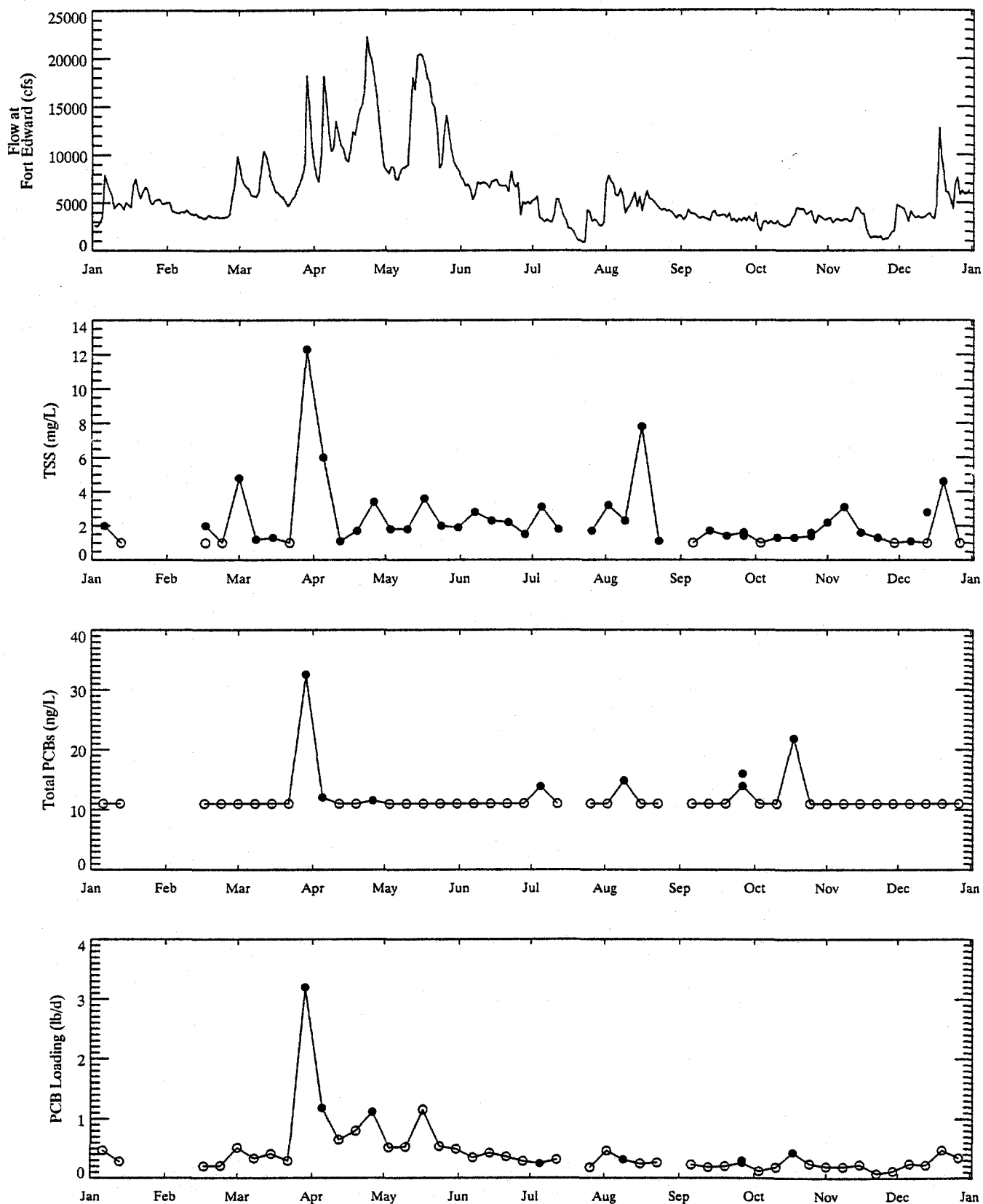


Figure 3-6. Temporal profiles of 2000 routine monitoring data collected at Route 197 Bridge.

Notes: Non-detects plotted as open symbols at MDL. Flow data plotted and used in loading calculations are USGS provisional daily averages. Samples not plotted on lines are blind duplicate results. High flow monitoring data not shown.

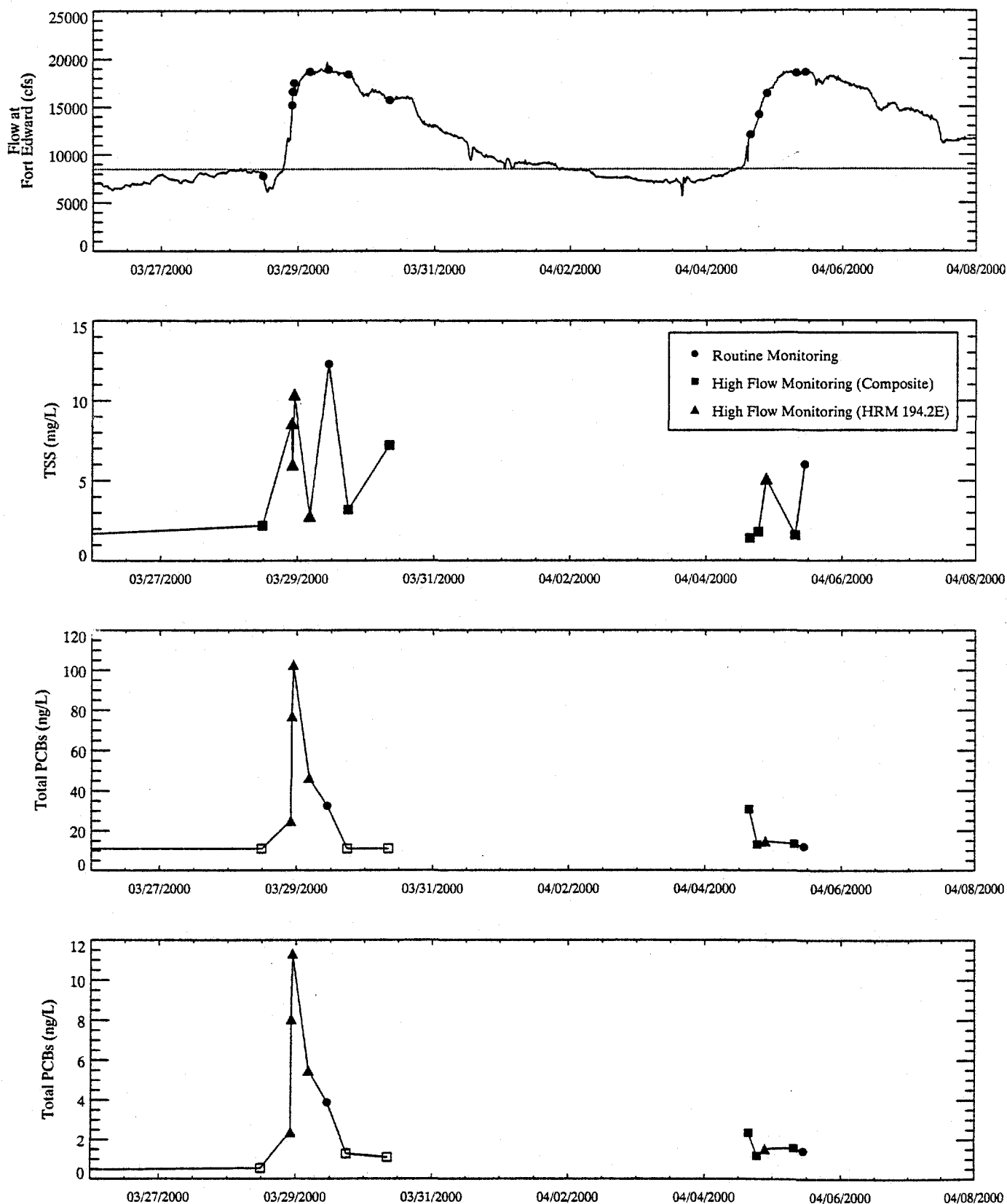


Figure 3-7. Temporal profiles of 2000 routine and high flow data collected at the Route 197 Bridge.

Notes: Non-detects plotted as open symbols at MDL. Flow data plotted are USGS provisional 15-minute flow data. Loadings calculated using 15-minute USGS provisional flow data.

317669

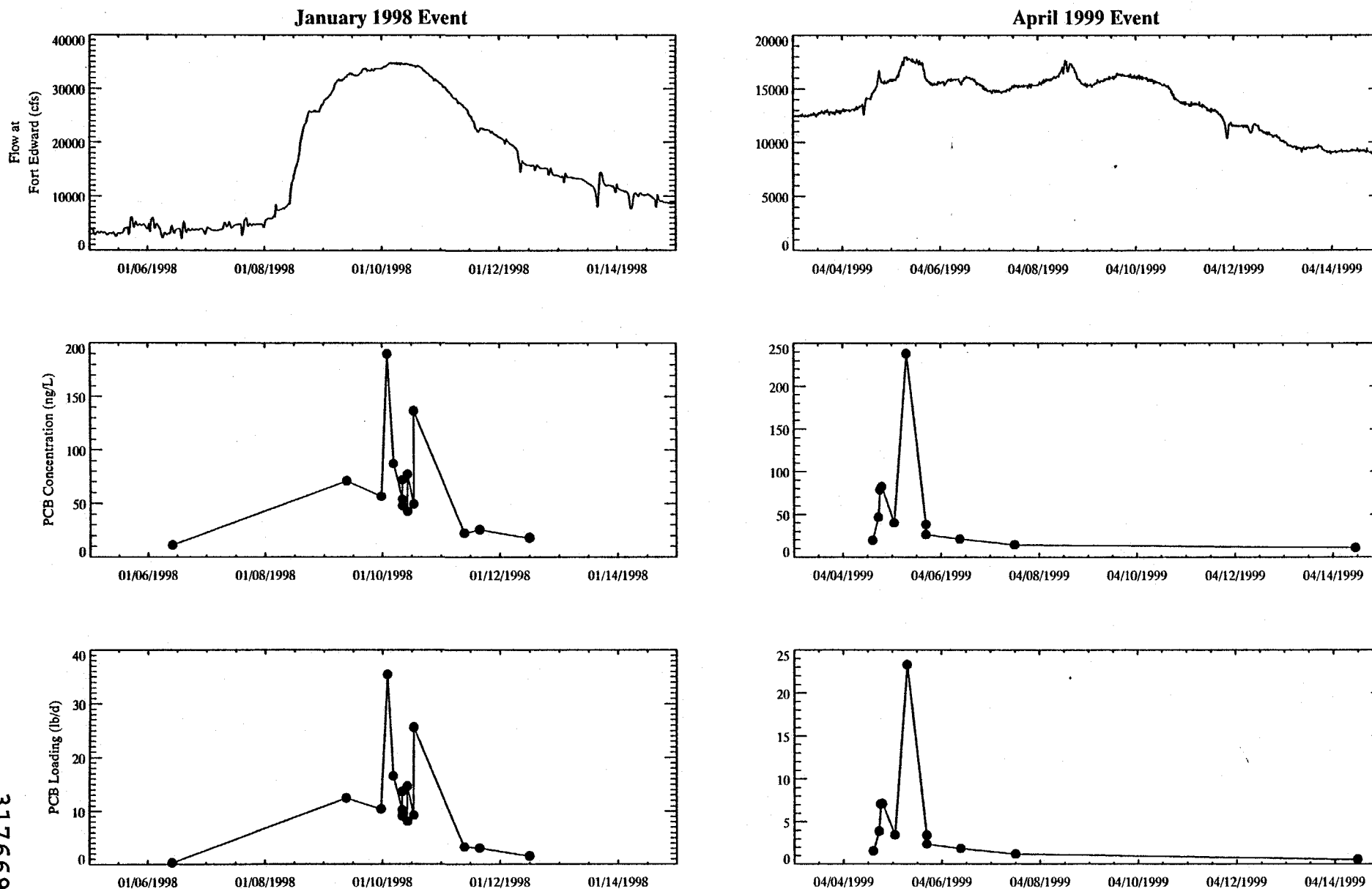


Figure 3-8. Comparison of PCB concentrations and loading at the Route 197 Bridge during high flow monitoring during 1998 and 1999.

Notes: Non-detects plotted as open symbols at MDL. Flow data plotted are USGS provisional 15-minute flow data. High flow loadings calculated using 15-minute USGS provisional flow data. Routine monitoring loadings calculated using daily average flow data.

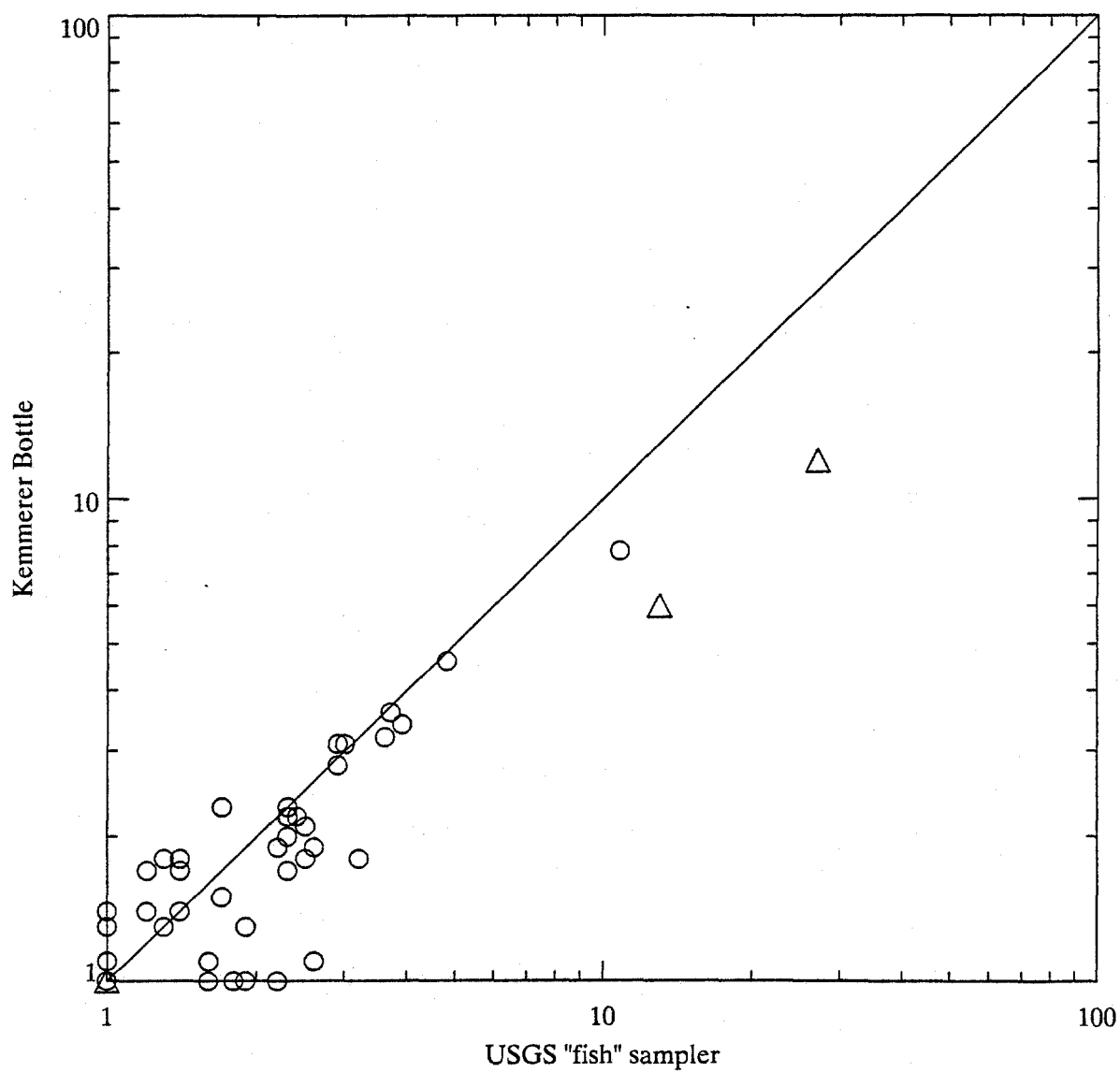


Figure 3-9. Comparison of 2000 TSS data collected at Fort Edward using USGS and GE sampling methodology.

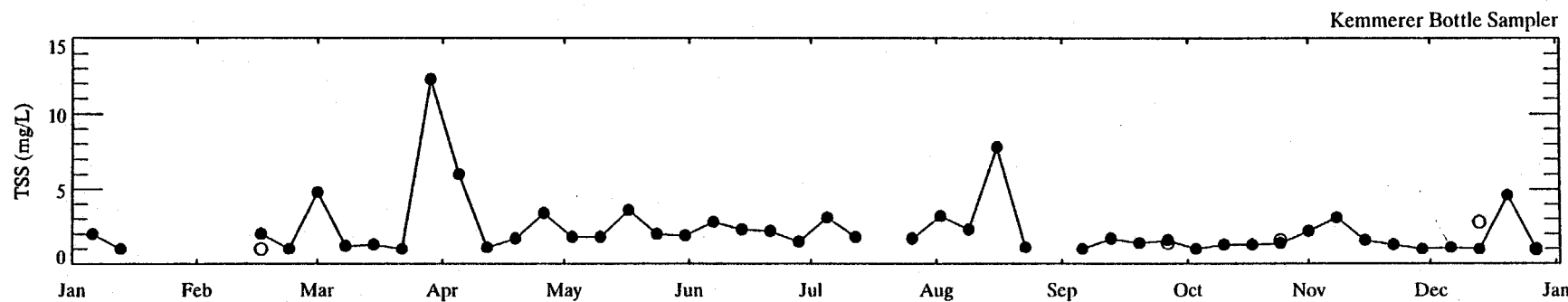
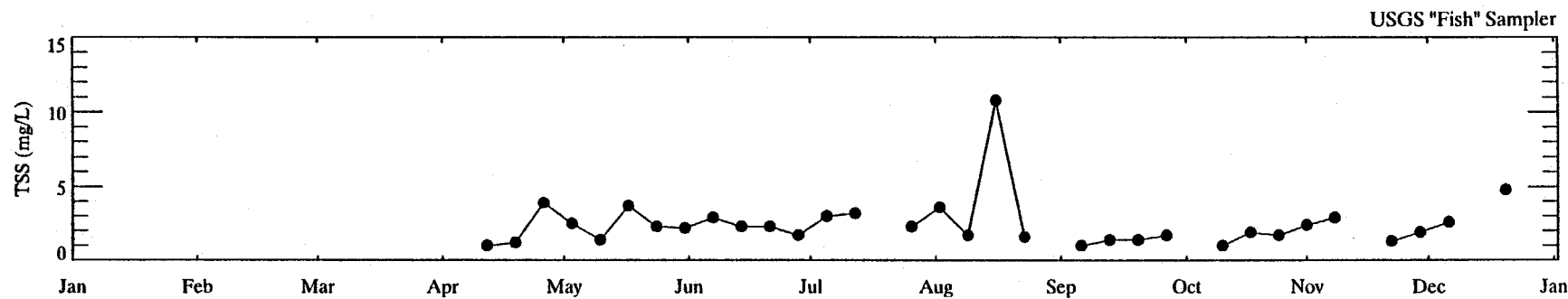
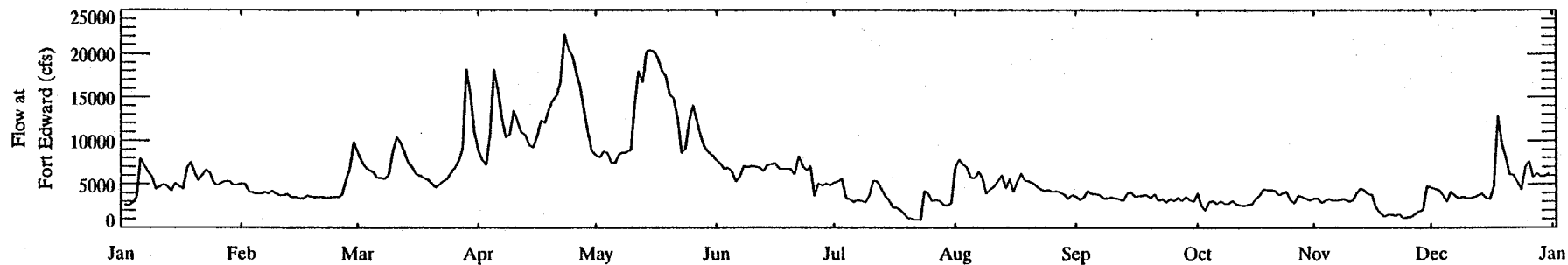


Figure 3-10. Temporal profile of 2000 TSS data collected at the Route 197 Bridge using USGS and GE sampling methodology.

Notes: Non-detects set to the MDL (1.0 mg/L). Samples not plotted on line are blind duplicate results. Flow data plotted are USGS provisional data.

317671

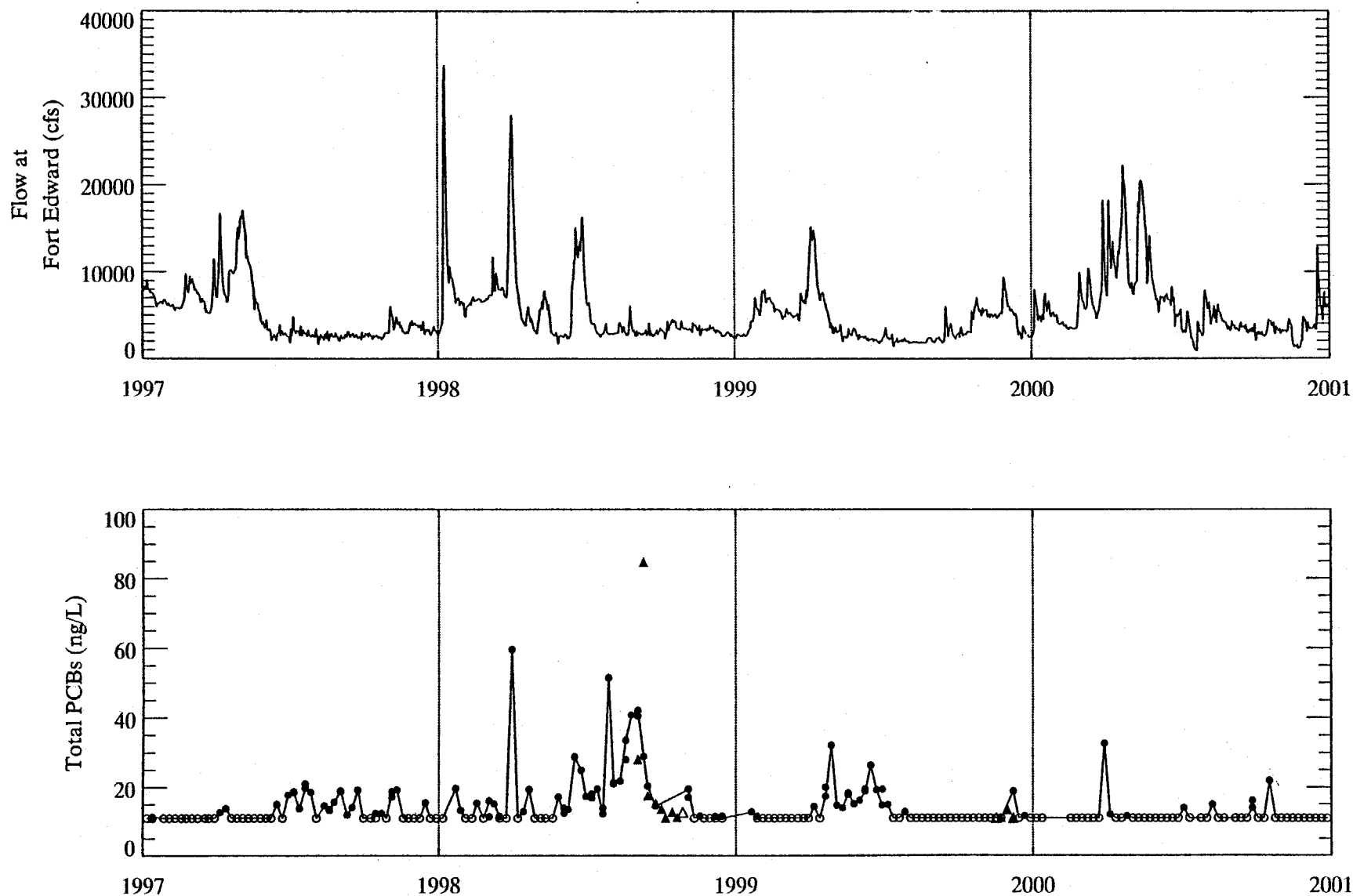


Figure 3-11. Temporal profiles of PCB monitoring results at the Route 197 Bridge 1997 through 2000.

Notes: Non-detect PCB concentrations plotted at the MDL (11 ng/L.). Flow data shown are USGS daily averages. Flow data collected after 10/1/99 are provisional. Triangles represent the average of samples collected from HRM 194.2E and HRM 194.2W. High flow data is not shown.

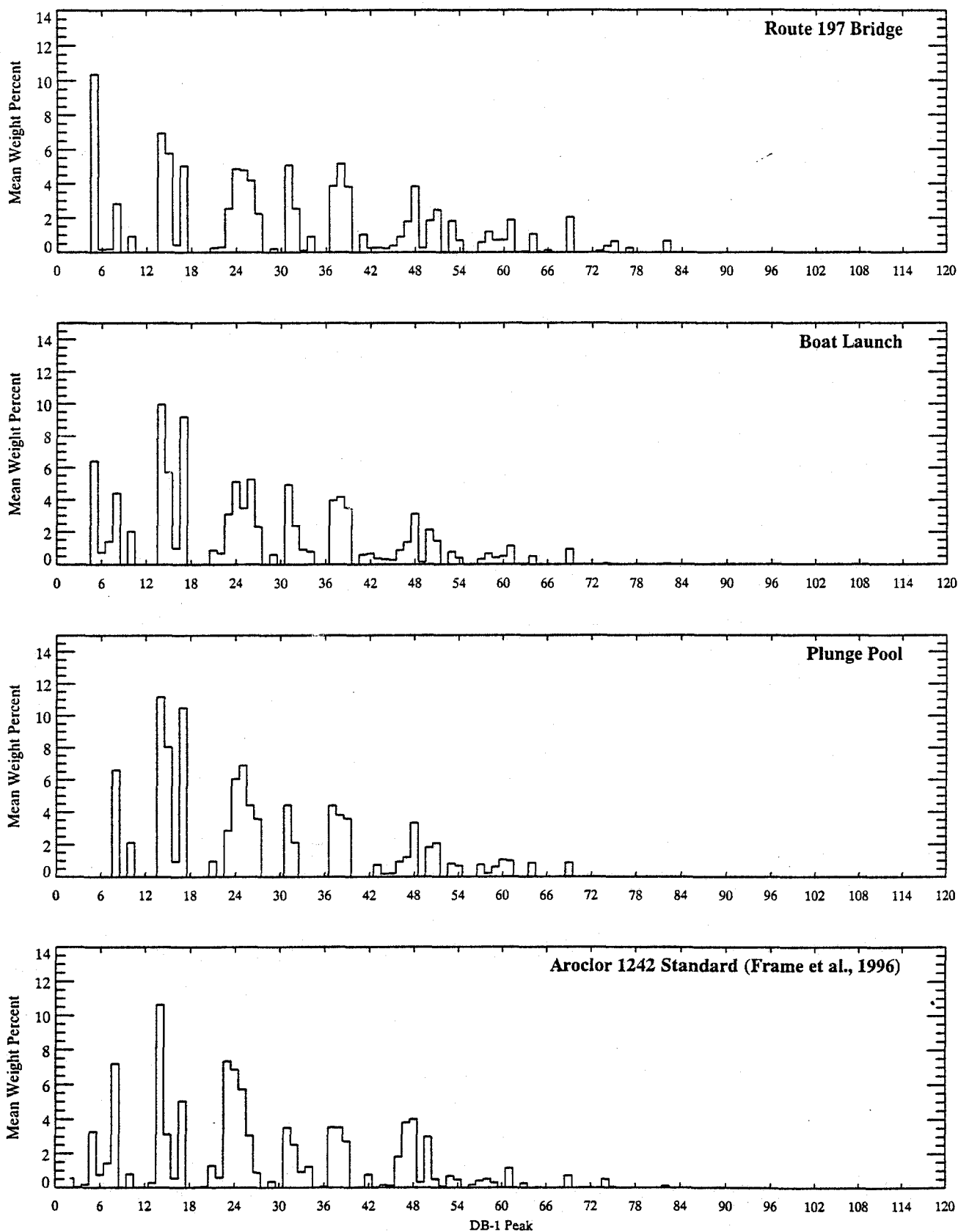


Figure 3-12. Comparison of the average congener composition for 2000 routine monitoring data collected at the Route 197 Bridge with the average composition in the vicinity of the Hudson Falls Plant Site and an Aroclor 1242 standard.

Notes: Non-detects not included in data averages. High flow monitoring data not included.

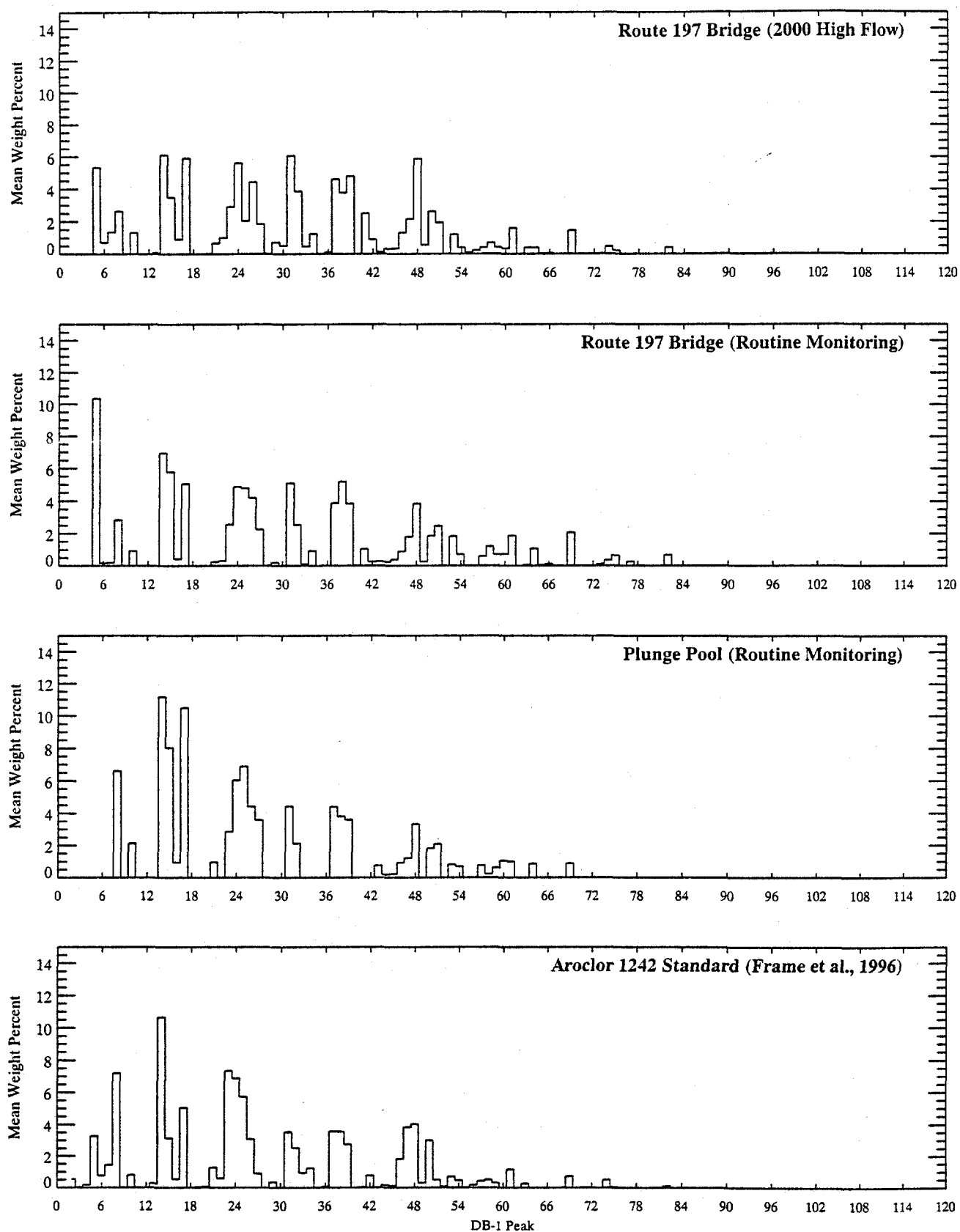


Figure 3-13. Comparison of the average congener composition for 2000 data collected at Route 197 Bridge during high flow with routine monitoring data and an Aroclor 1242 standard.

Notes: Non-detects not included in data averages. Samples collected at HRM 194.2E and 194.2W included in average.

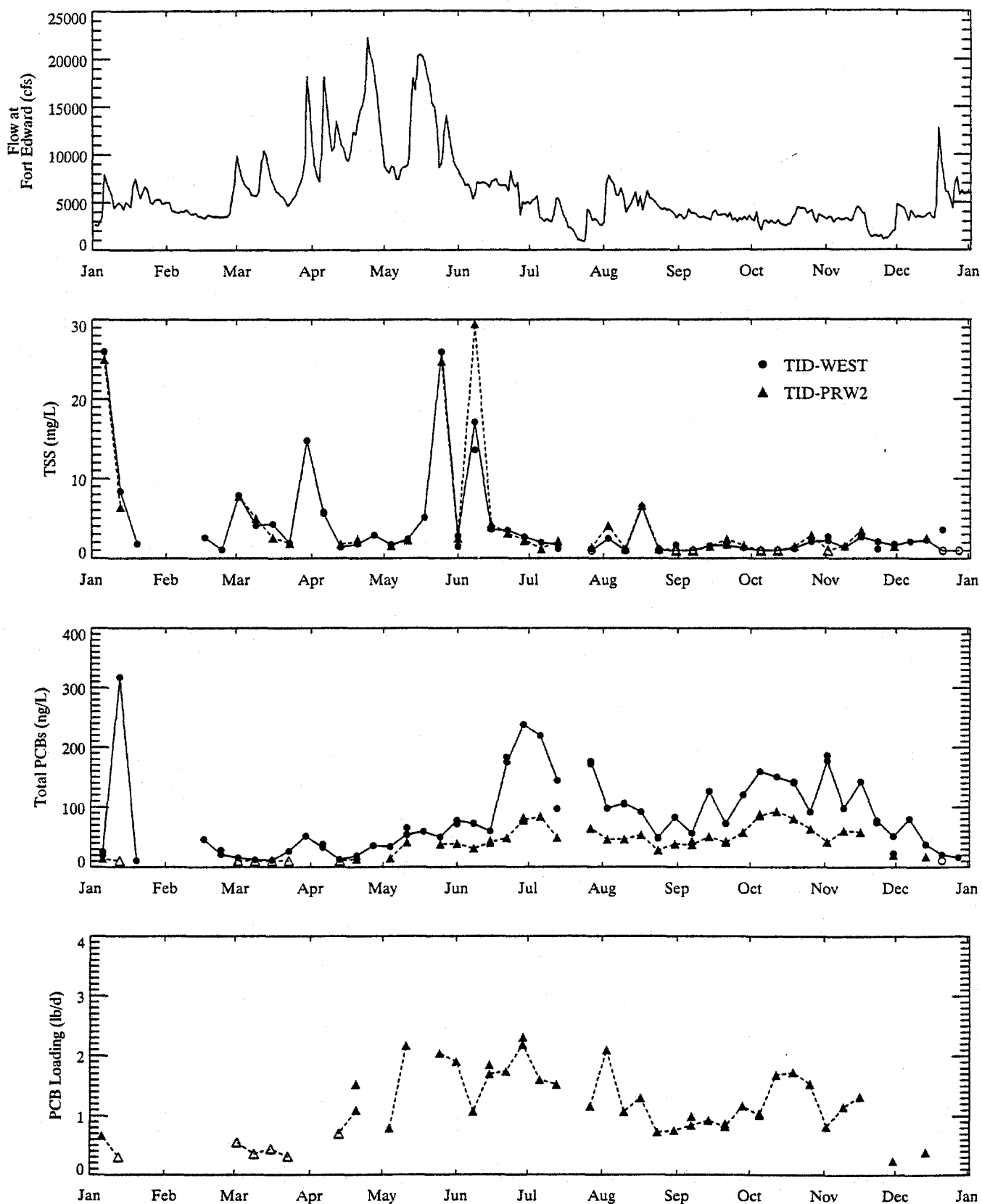


Figure 3-14. Temporal profiles of 2000 routine monitoring data collected at Thompson Island Dam.

Notes: Non-detects plotted as open symbols at MDL. Flow data plotted and used in loading calculations are USGS provisional daily averages. Samples not plotted on lines are blind duplicate results. Breaks in line indicate a gap in the data. Flow at Fort Edward prorated by a factor of 1.043 to calculate TID loading.

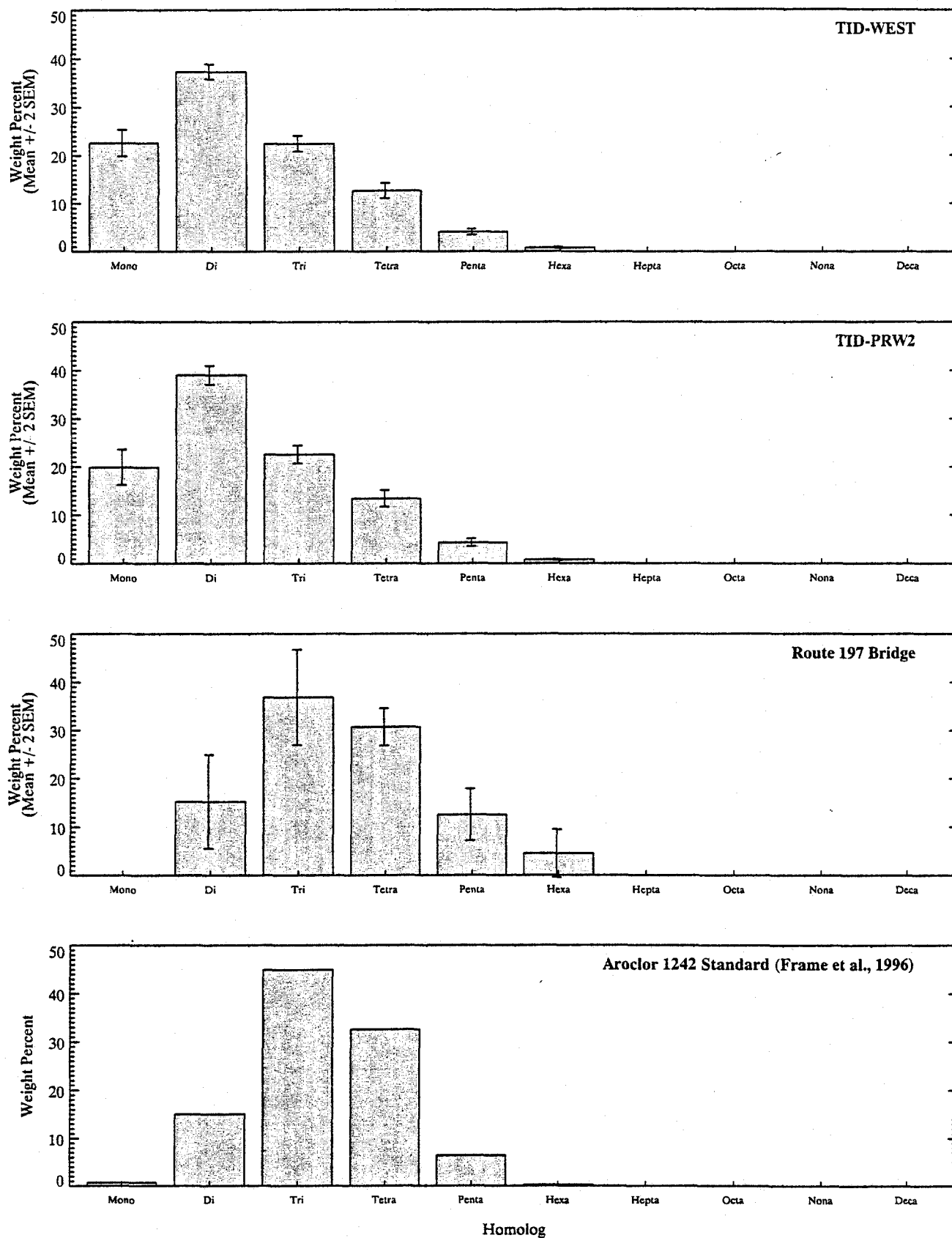


Figure 3-15. Comparison of the average homolog composition for 2000 routine monitoring data collected at Thompson Island Dam with that at Route 197 Bridge and an Aroclor 1242 standard.

Notes: Non-detects not included in data averages. High flow monitoring data not included.

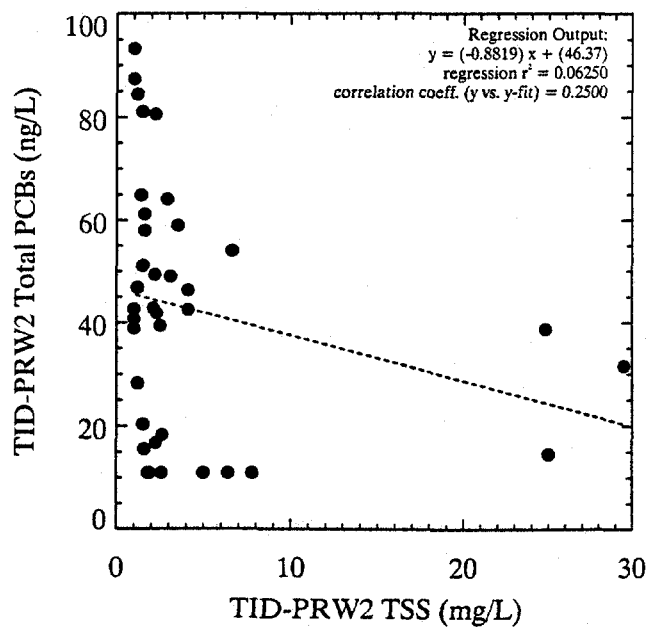
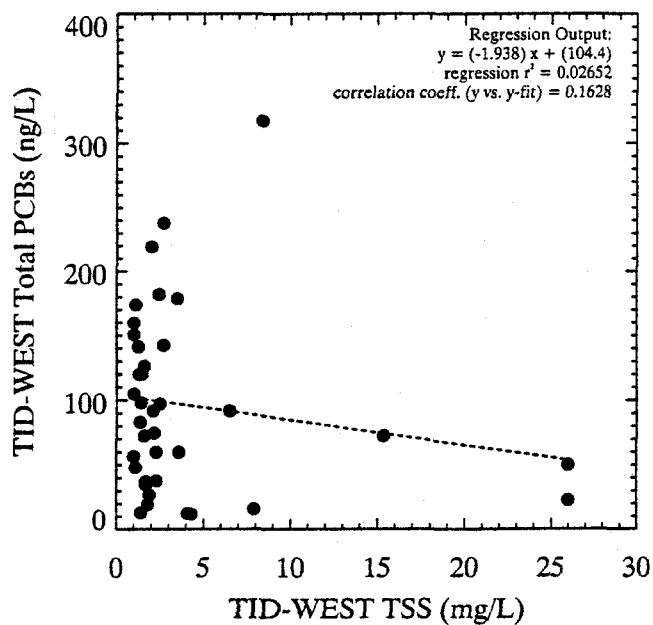
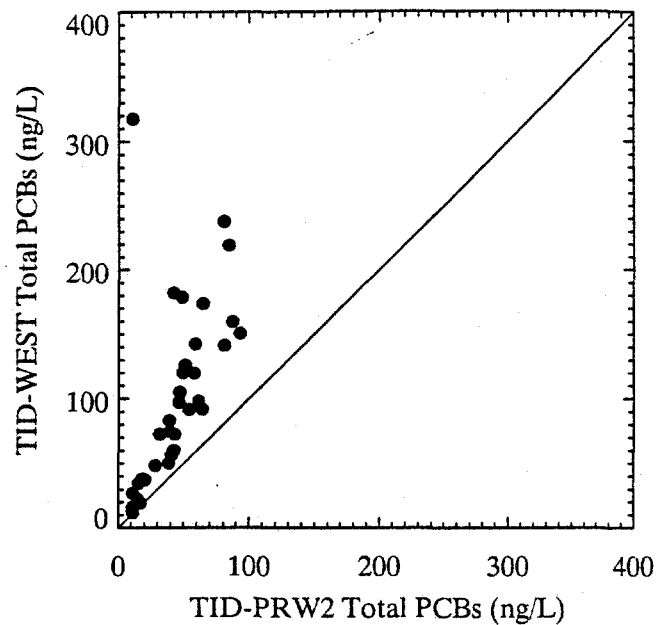
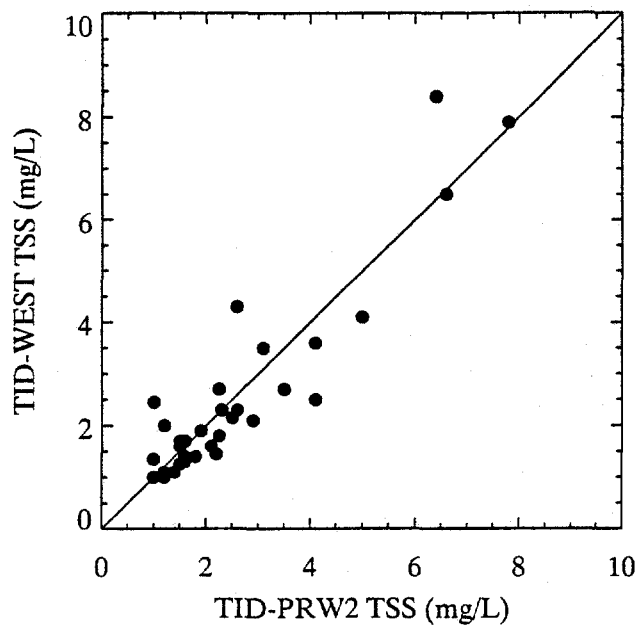


Figure 3-16. Comparison between 2000 water column TSS and total PCB data collected at TID-WEST and TID-PRW2

Notes: Duplicate samples averaged. High flow monitoring data not included. Non-detect PCB and TSS samples set to MDL.

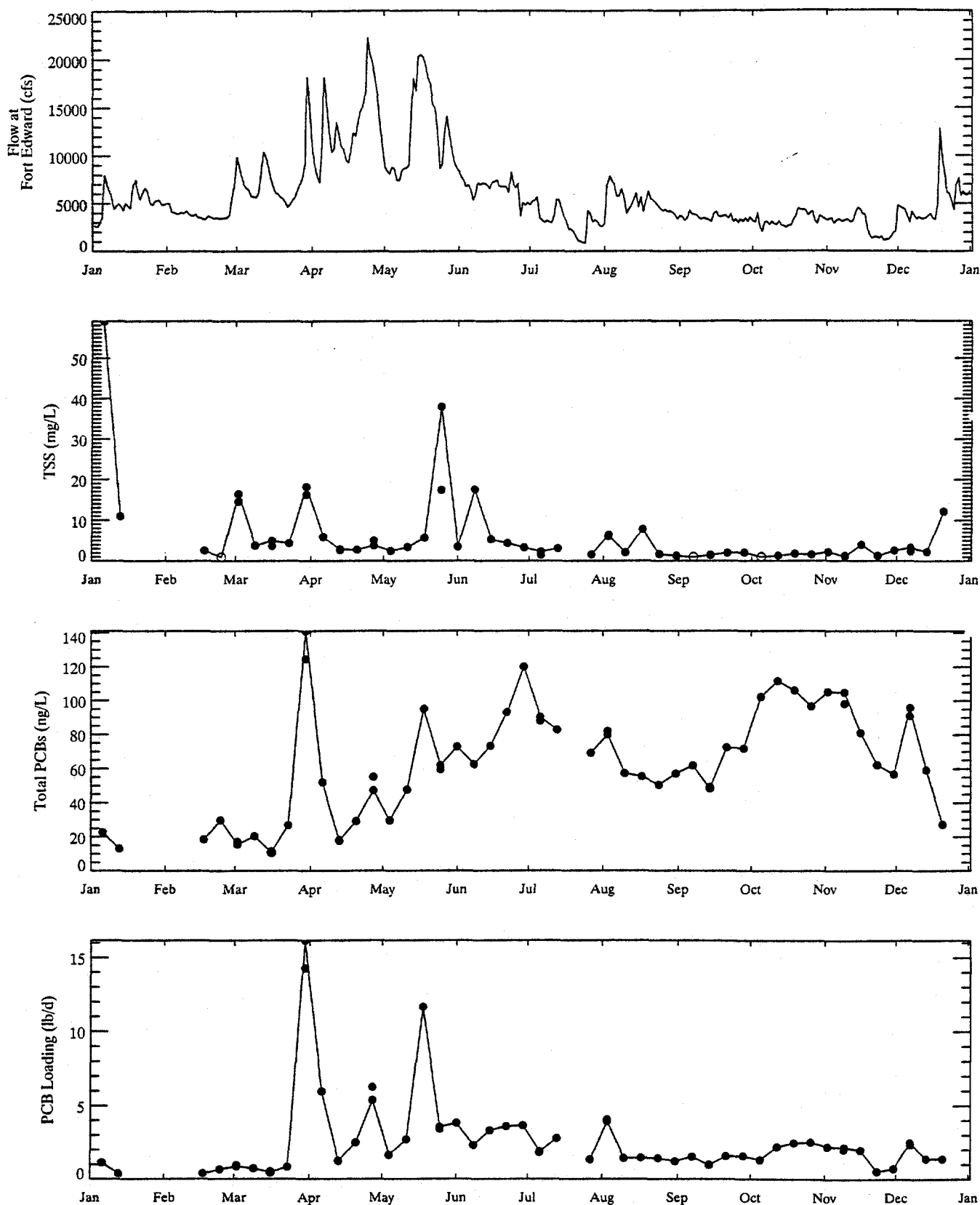


Figure 3-17. Temporal profiles of 2000 routine monitoring data collected at the Route 29 Bridge.

Notes: Non-detects plotted as open symbols at MDL. Flow data plotted and used in loading calculations are USGS provisional daily averages. Samples not plotted on lines are blind duplicate results. Flow at Fort Edward prorated by a factor of 1.167 to calculate Schuylerville loading.

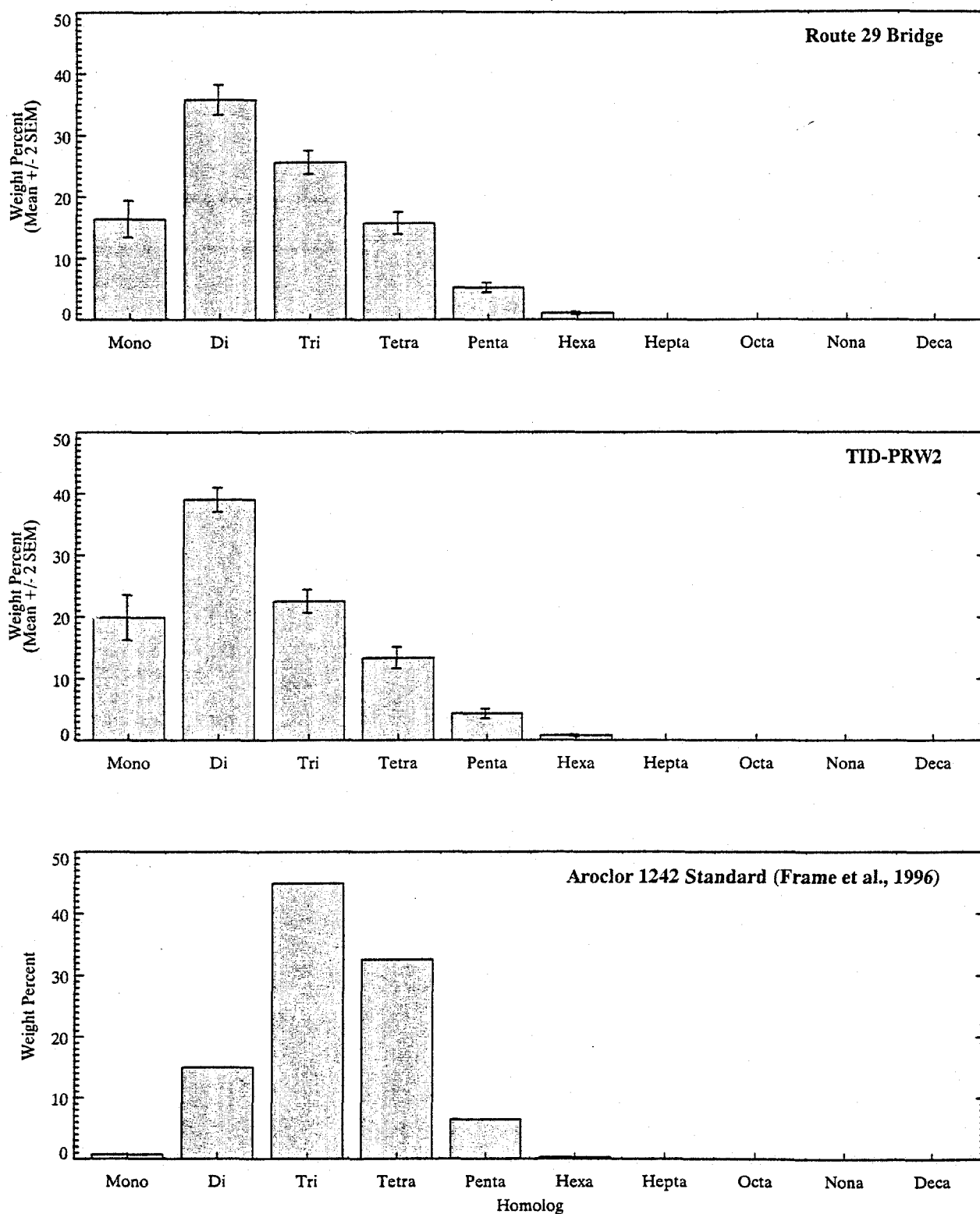


Figure 3-18. Comparison of the average homolog composition for 2000 routine monitoring data collected at Route 29 Bridge with TID-PRW2 and an Aroclor 1242 standard.

Note: Non-detects not included in data averages.

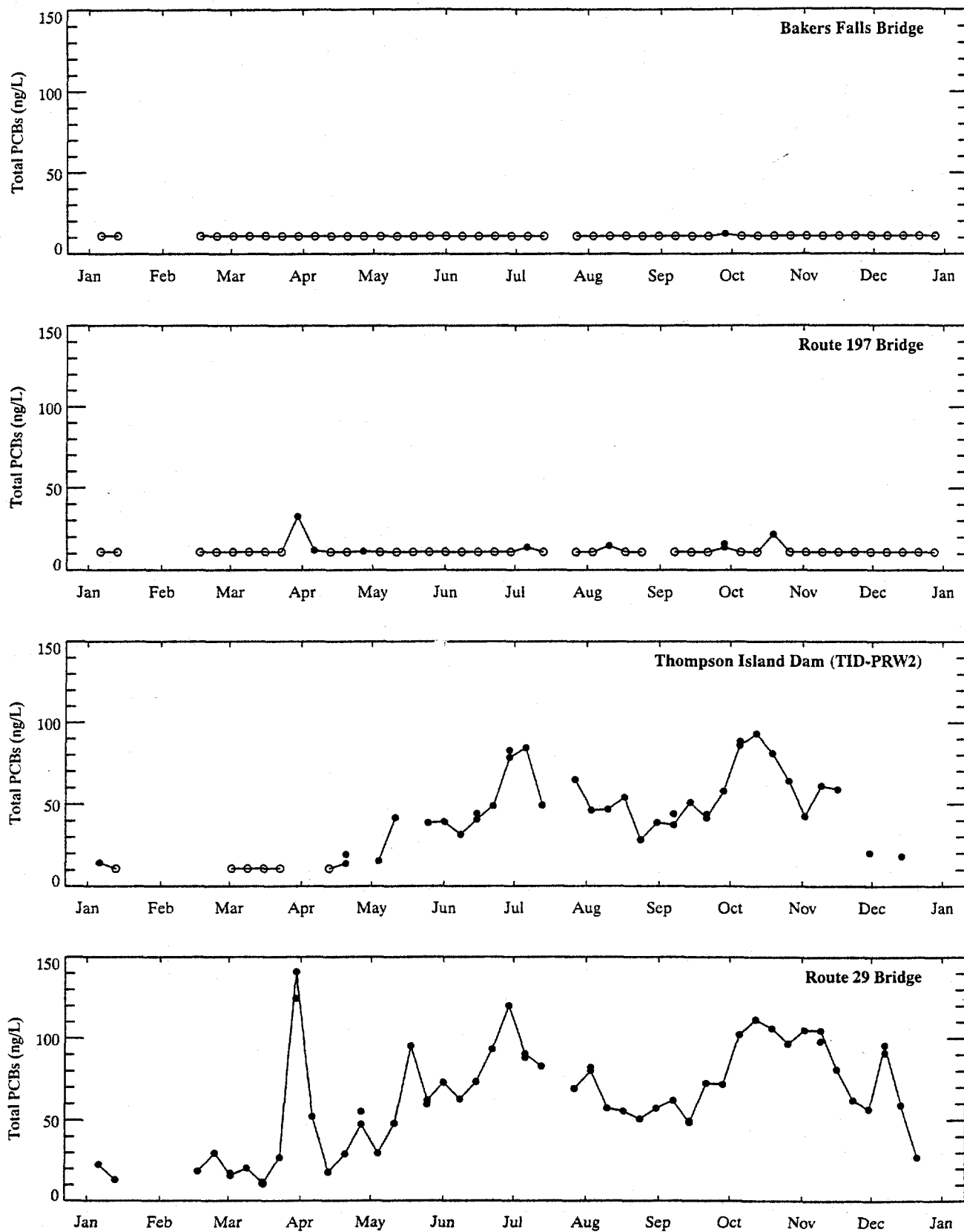


Figure 3-19. Temporal profiles of 2000 water column PCB concentrations for samples collected during routine monitoring.

Note: Non-detects plotted as open symbols at MDL. Samples not plotted on lines are blind duplicate results. Breaks in line indicate a gap in the data. High flow monitoring data not shown.

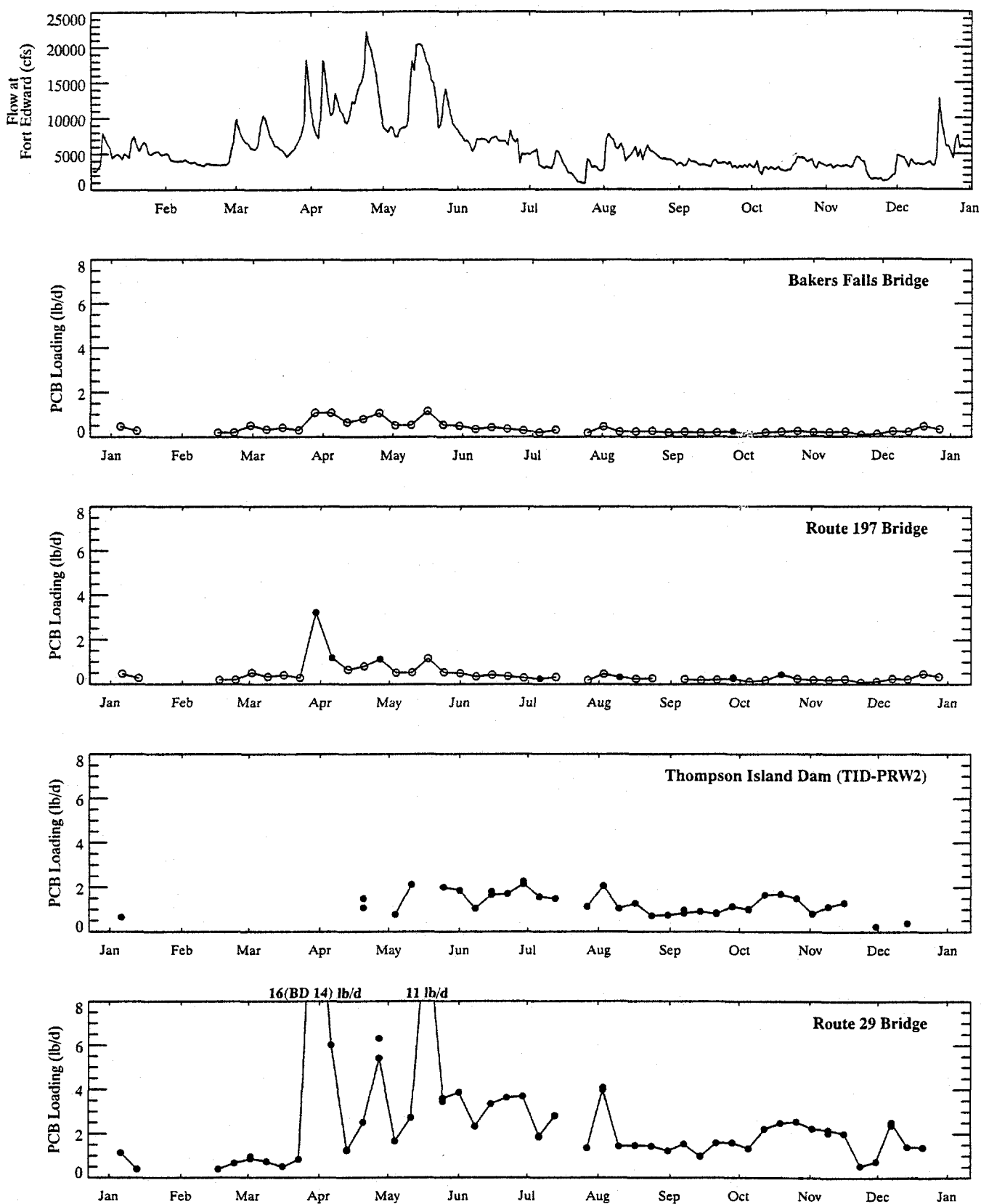


Figure 3-20. Temporal profiles of 2000 water column PCB mass loadings for samples collected during routine monitoring.

Notes: Non-detects plotted as open symbols at MDL. Flow data used in loading calculations are USGS provisional daily averages. Samples not plotted on lines are blind duplicate results. Breaks in line indicate a gap in the data. High flow monitoring data not shown. Thompson Island Dam and Schuylerville flows have been prorated for loading calculations.

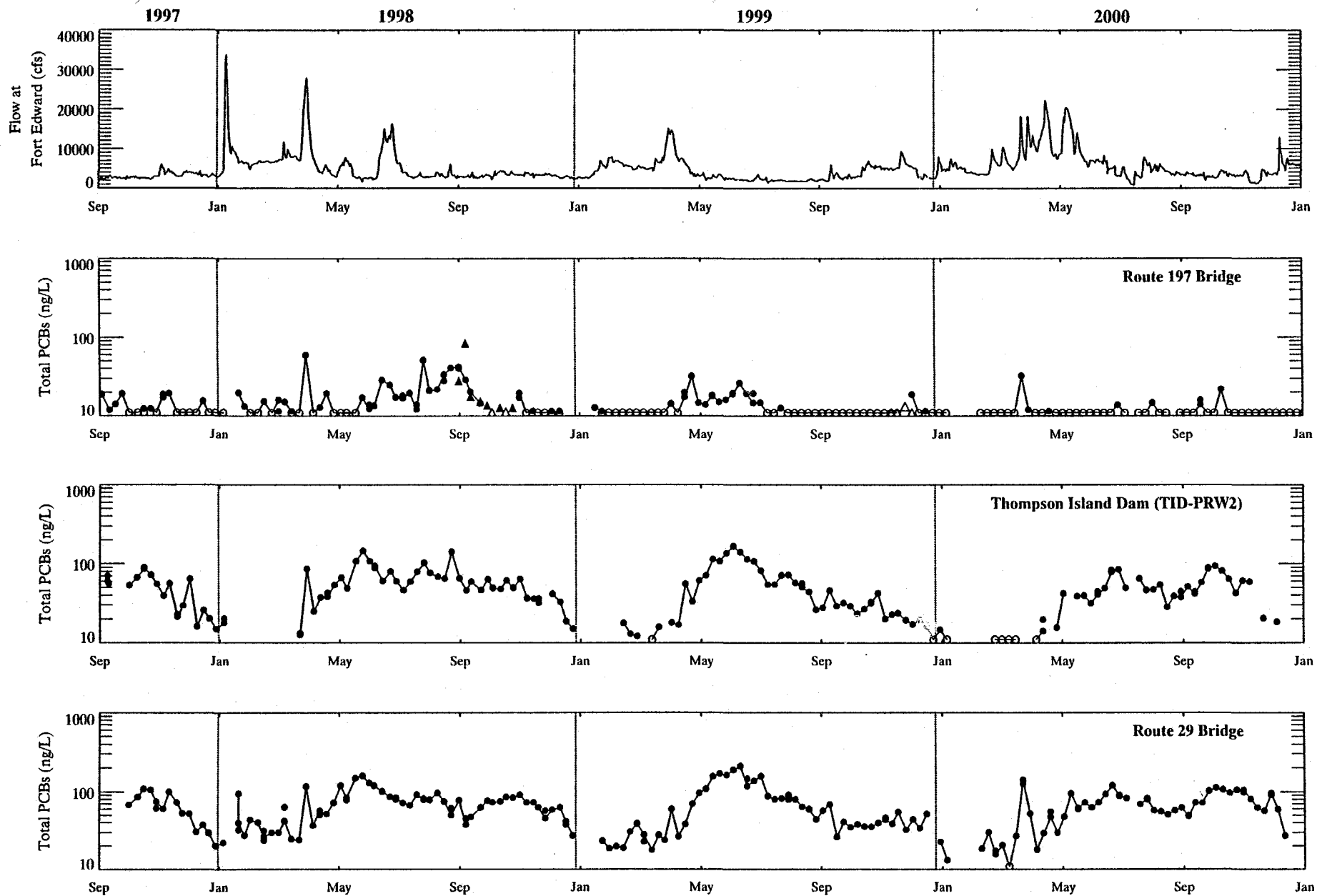


Figure 3-21. Temporal profiles of 1997-2000 routine monitoring PCB data collected at the Route 197 Bridge, TID-PRW2, and Route 29 Bridge.

Notes: Non-detect PCB concentrations plotted as open symbols at the MDL (11 ng/L.). Flow data shown are USGS daily averages. Flow data collected after 10/1/99 are provisional. Triangles represent the average of samples collected from HRM 194.2E and HRM 194.2W. High flow data not shown.

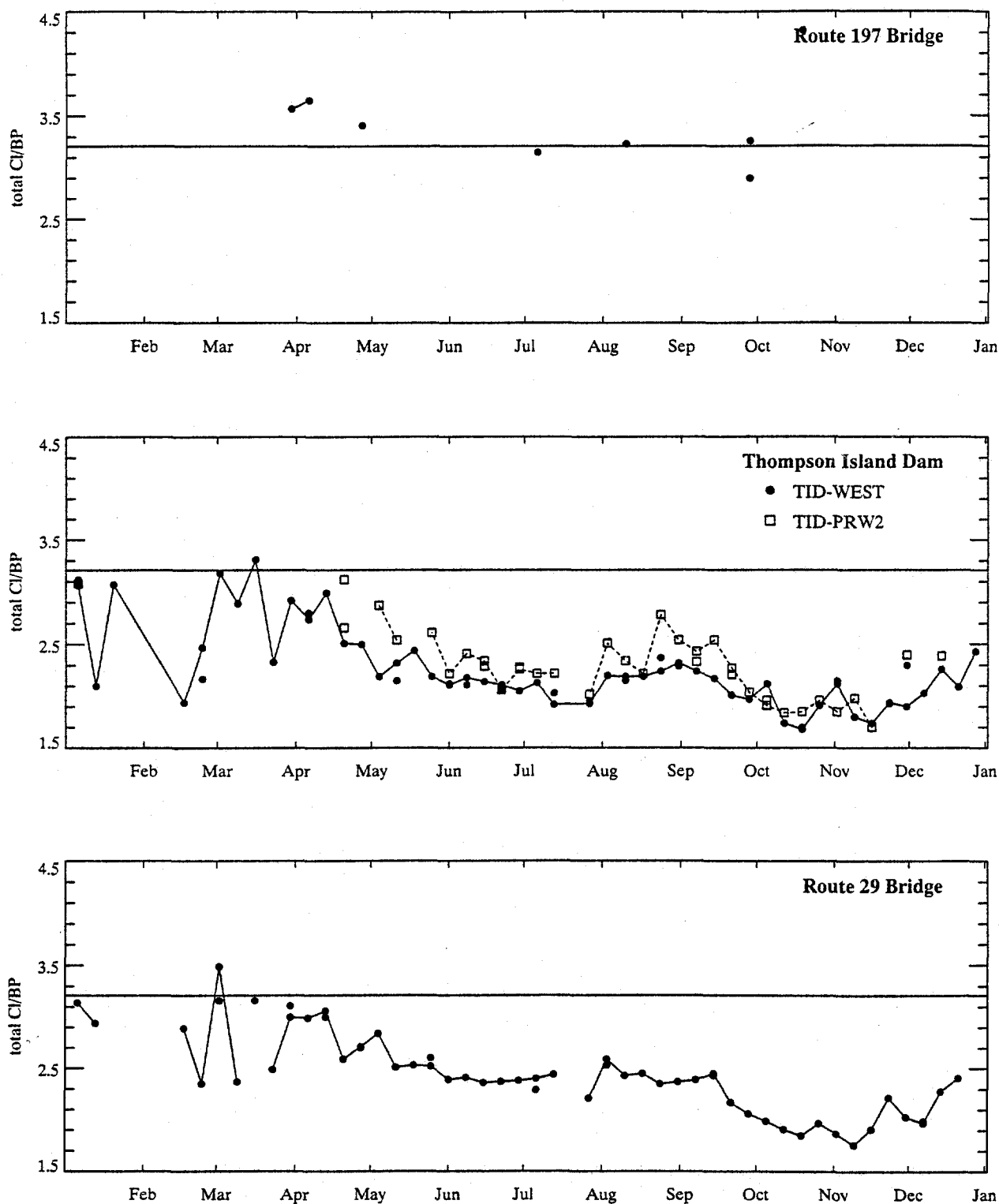


Figure 3-22. Temporal profiles of total chlorines per biphenyl for 2000 routine monitoring data.

Note: Chlorines per biphenyl not shown for samples with PCBs less than the MDL (11 ng/L). High flow monitoring data not shown. Horizontal lines represent Aroclor 1242.

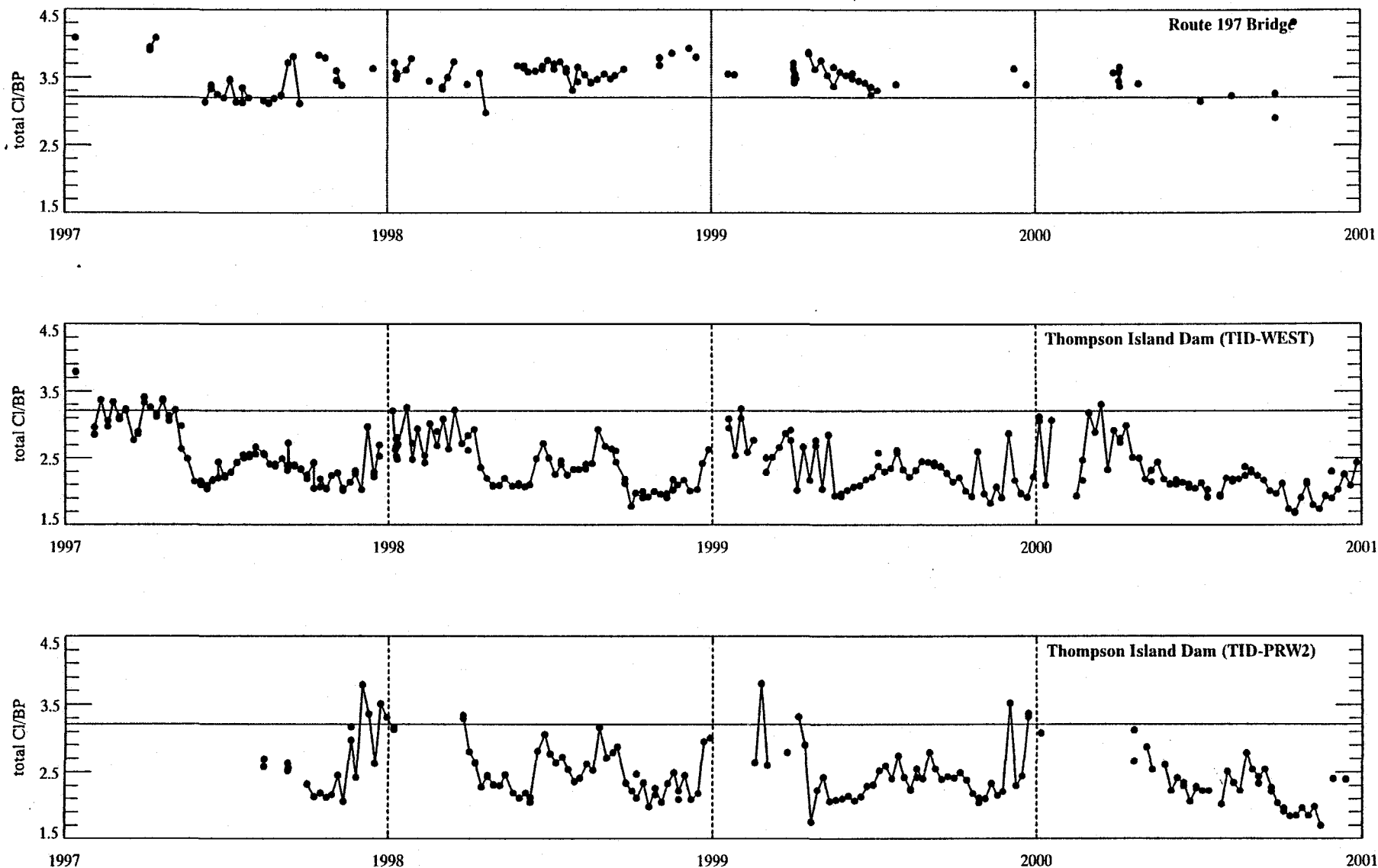


Figure 3-23. Temporal profiles of total chlorines per biphenyl for 1997-2000 routine monitoring data collected at the Route 197 Bridge and Thompson Island Dam.

Notes: Chlorines per biphenyl not shown for samples with PCBs less than the MDL (11 ng/L). Horizontal line represents Aroclor 1242.

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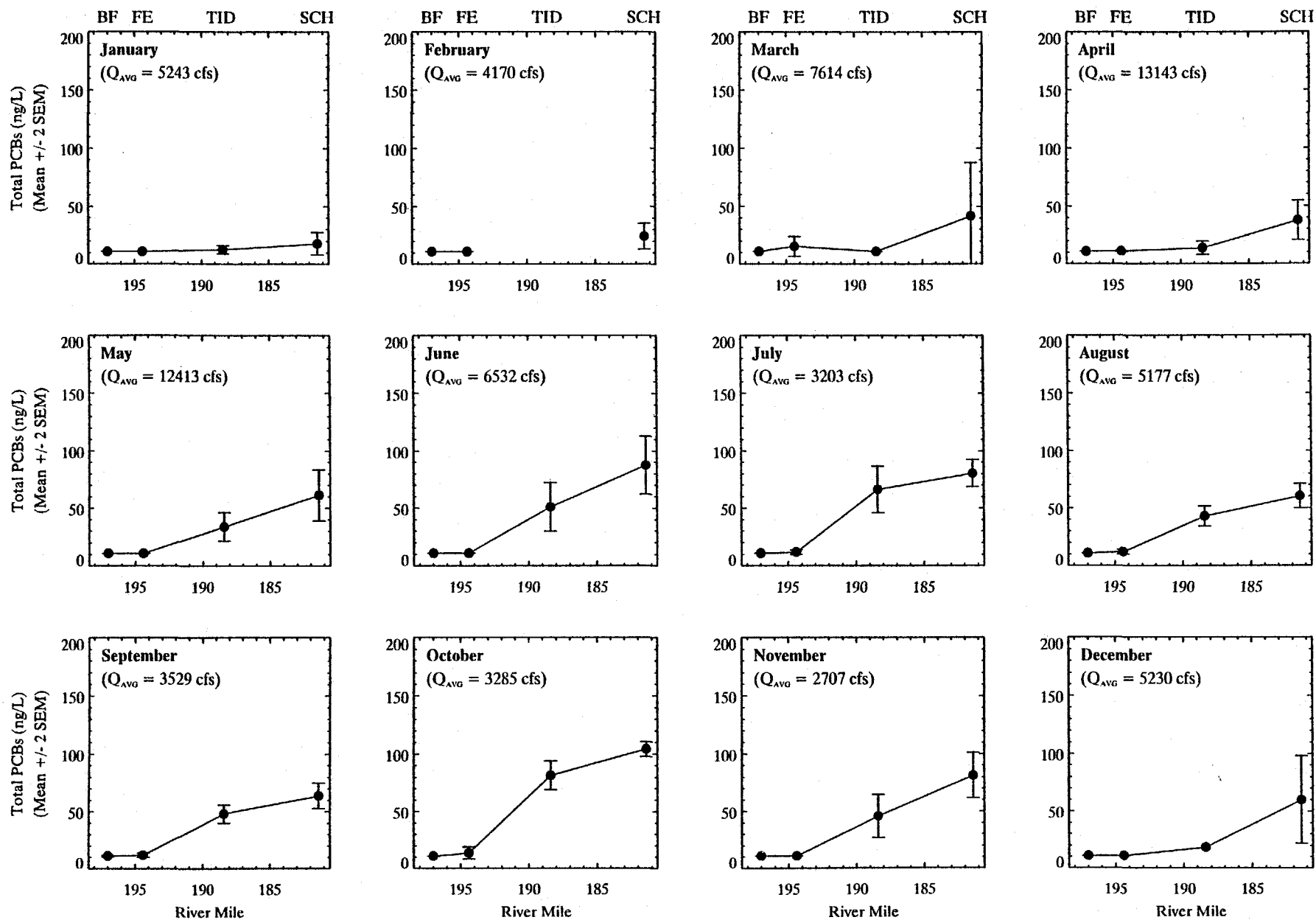


Figure 3-24. Spatial profiles of monthly average PCB concentrations for 2000 data collected during routine monitoring.

Notes: Non-detects set to MDL (11ng/L). TID data plotted are from TID-PRW2. High flow data not included. Q_{avg} represents monthly average flow at Fort Edward. TID-PRW2 data are not available for February 2000

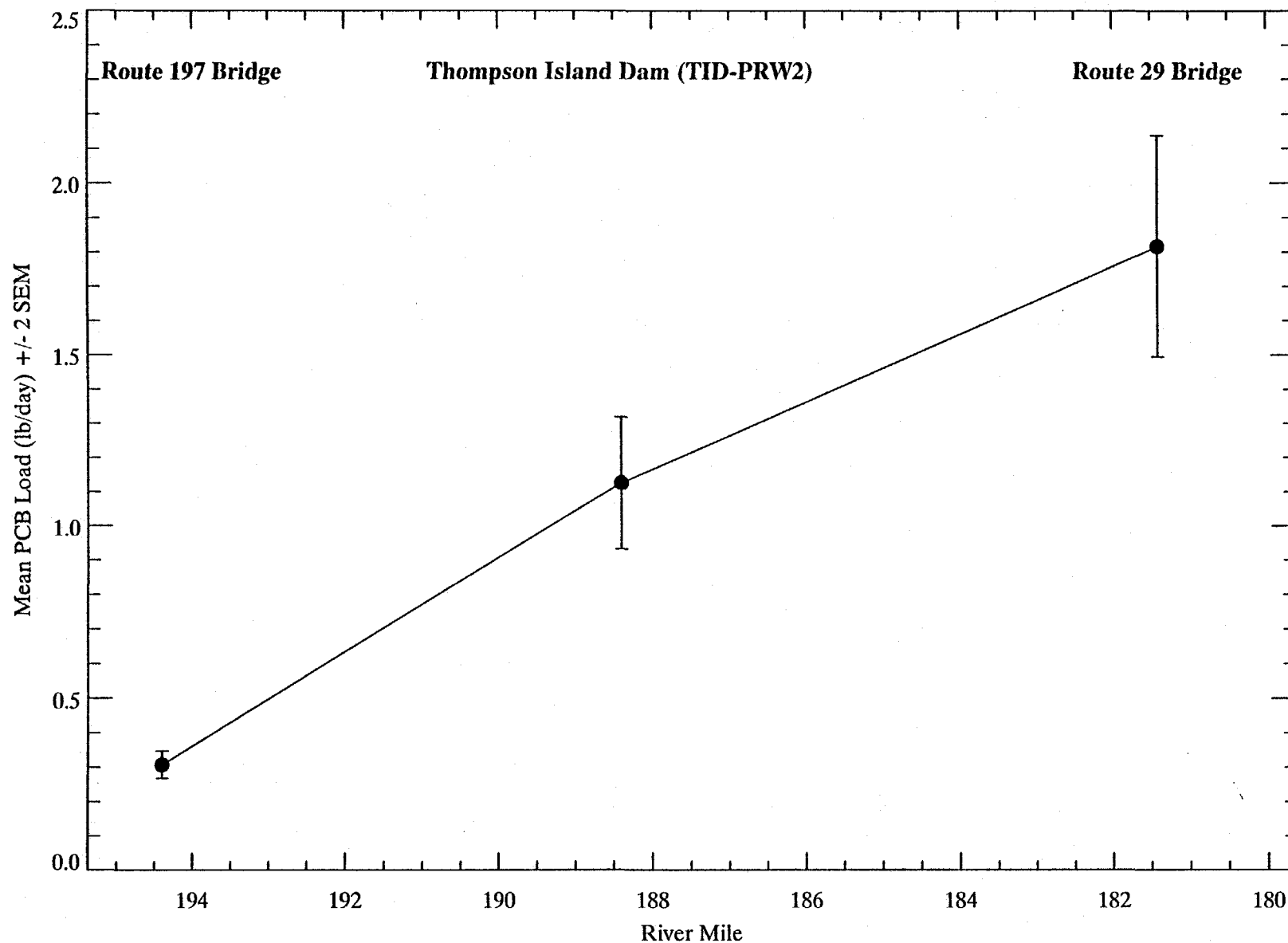


Figure 3-25. Spatial profile of average PCB loading from the Route 197 Bridge to the Route 29 bridge for 2000 low flow data (<10,000 cfs) collected during routine monitoring.

Notes: Flow at TID and Schuylerville prorated for loading calculations. High flow monitoring data not included.

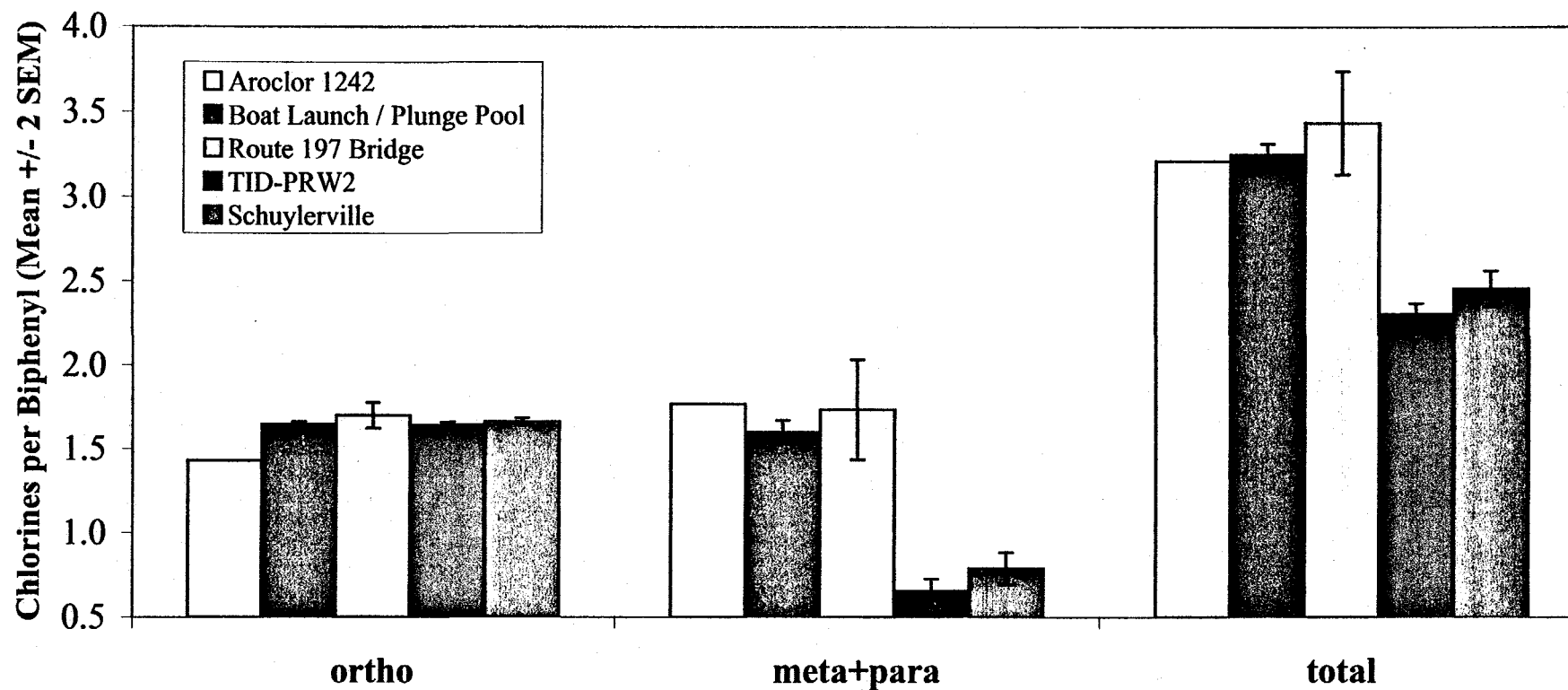


Figure 3-26. Spatial comparison between average ortho, meta+para, and total chlorines per biphenyl for 2000 data.

Notes: Non-detect samples omitted from averages; Aroclor 1242 composition based on Frame et al., 1996; Data from high flow sampling not included.

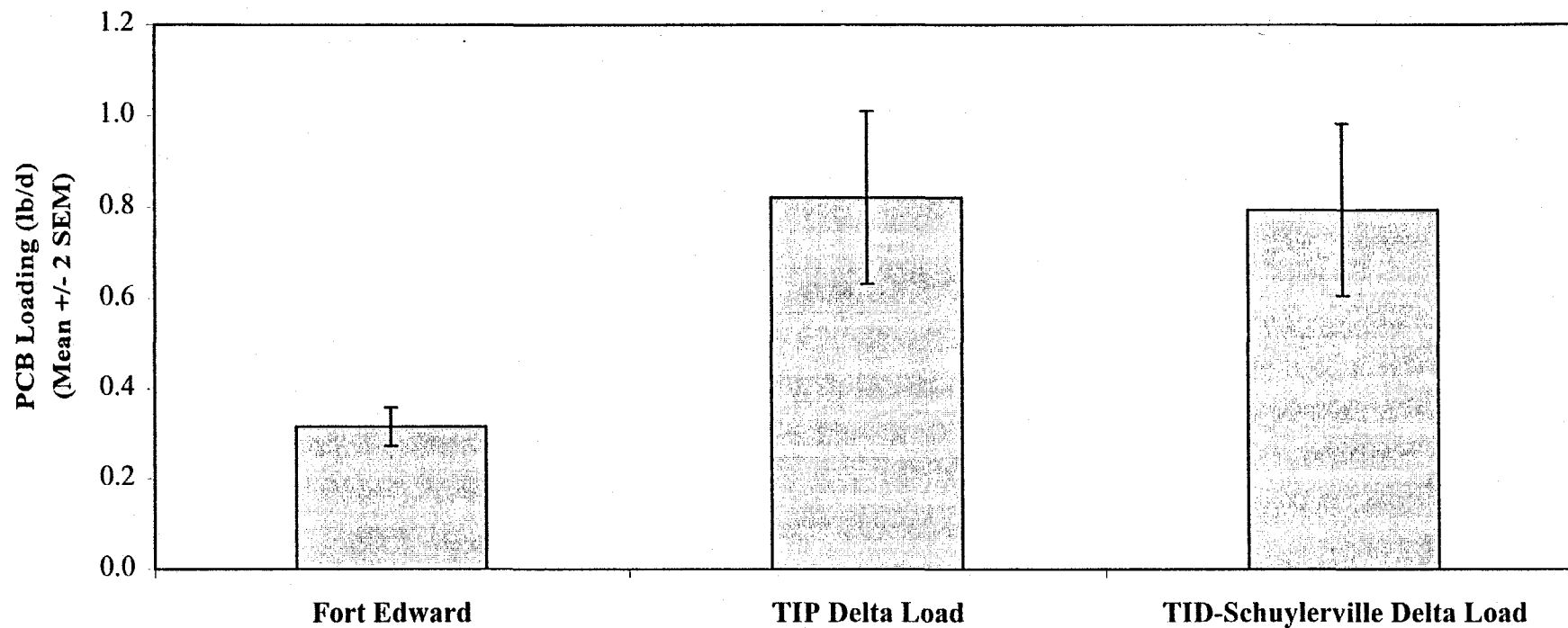


Figure 3-27. Evaluation of low flow (< 10,000 cfs) PCB loading sources within the monitored region of the upper Hudson River using 2000 routine monitoring data.

Notes: Delta loadings calculated using unbiased TID-PRW2 monitoring station.

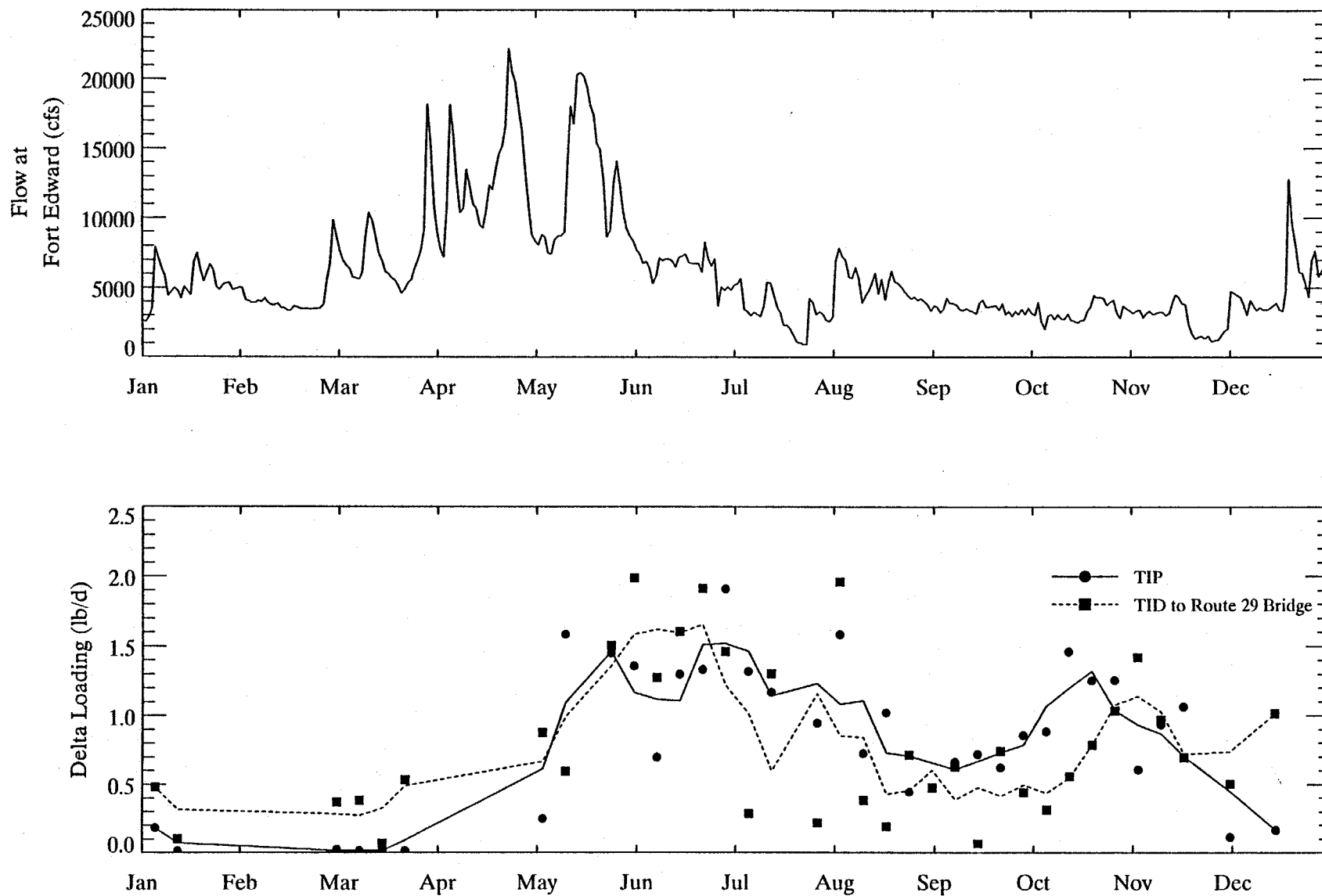


Figure 3-28. Temporal profile of 2000 computed low flow PCB delta loadings within Thompson Island Pool and from TID to Route 29 Bridge.

Notes: Data used at Thompson Island Dam are from TID-PRW2. Plotted lines are 3-point moving average of delta loadings. Two outliers with delta loading less than zero omitted from moving average.

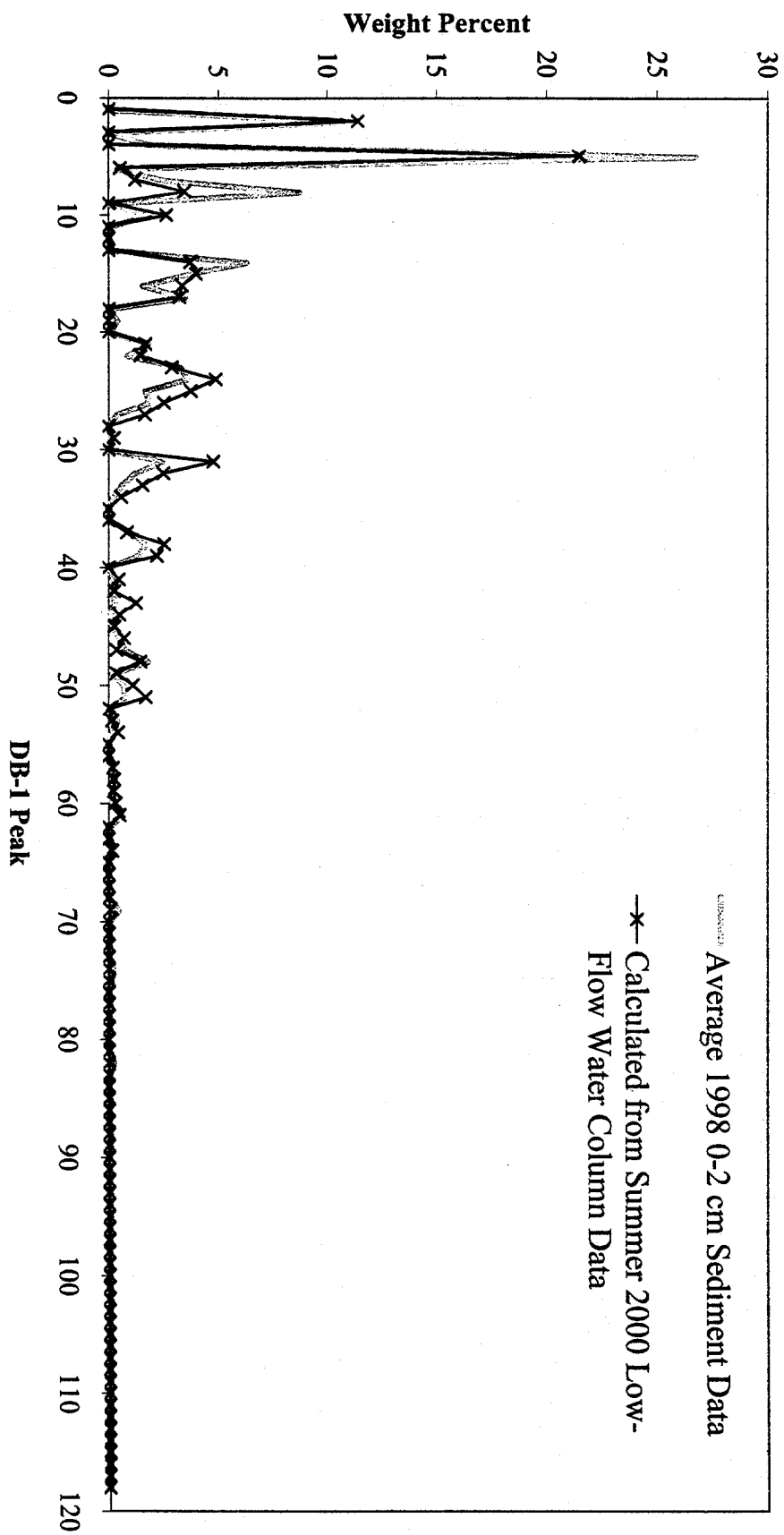


Figure 3-29. Comparison of the average 1998 0-2 cm TIP sediment PCB DB-1 peak distribution with that calculated from summer 2000 low-flow water column data based upon pore water transport and equilibrium partitioning.

317690

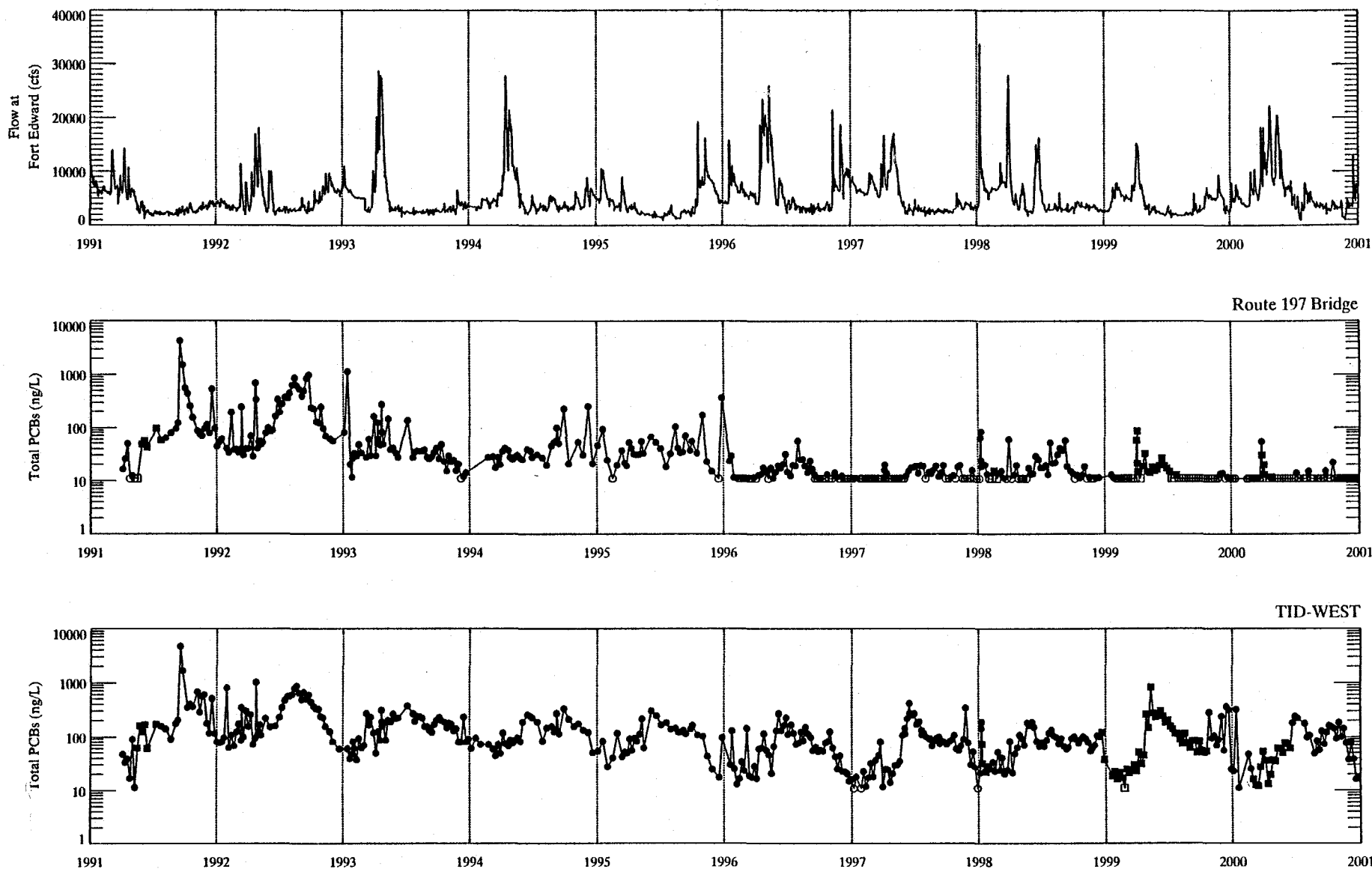


Figure 3-30. Temporal profiles of Total PCBs at the Route 197 Bridge and Thompson Island Dam Since 1991.

Note: Line connecting data points is daily average. MDL of 11 ng/L used for non-detect PCBs (open circles). Squares are high flow data (>10000 cfs).

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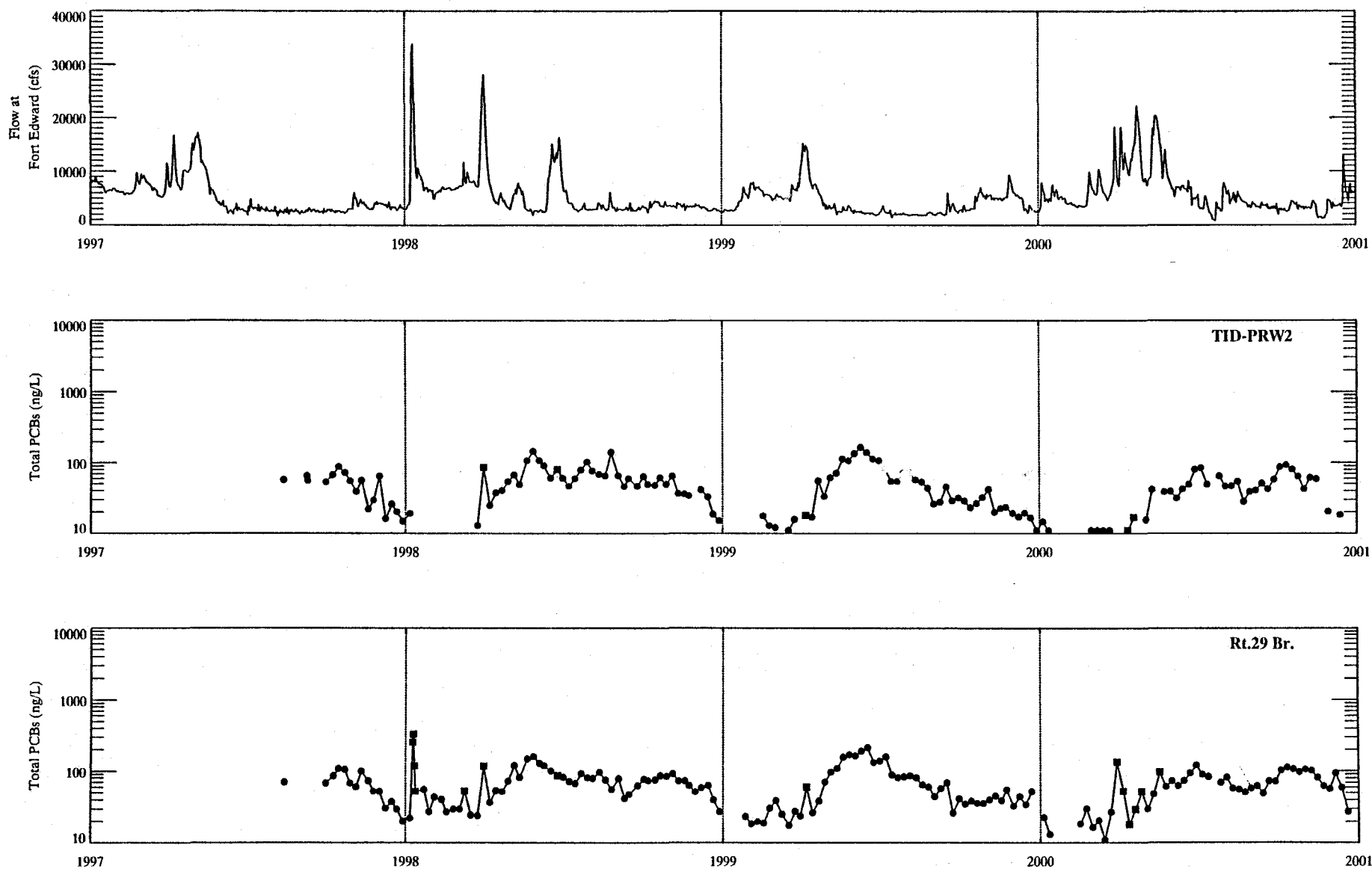


Figure 3-31. Temporal profiles of Total PCBs at Thompson Island Dam and the Route 29 bridge Since 1997.

Note: Line connecting data points is daily average. Non-detects plotted as open symbols at the MDL (11ng/L). Squares are high flow data (>10000 cfs).

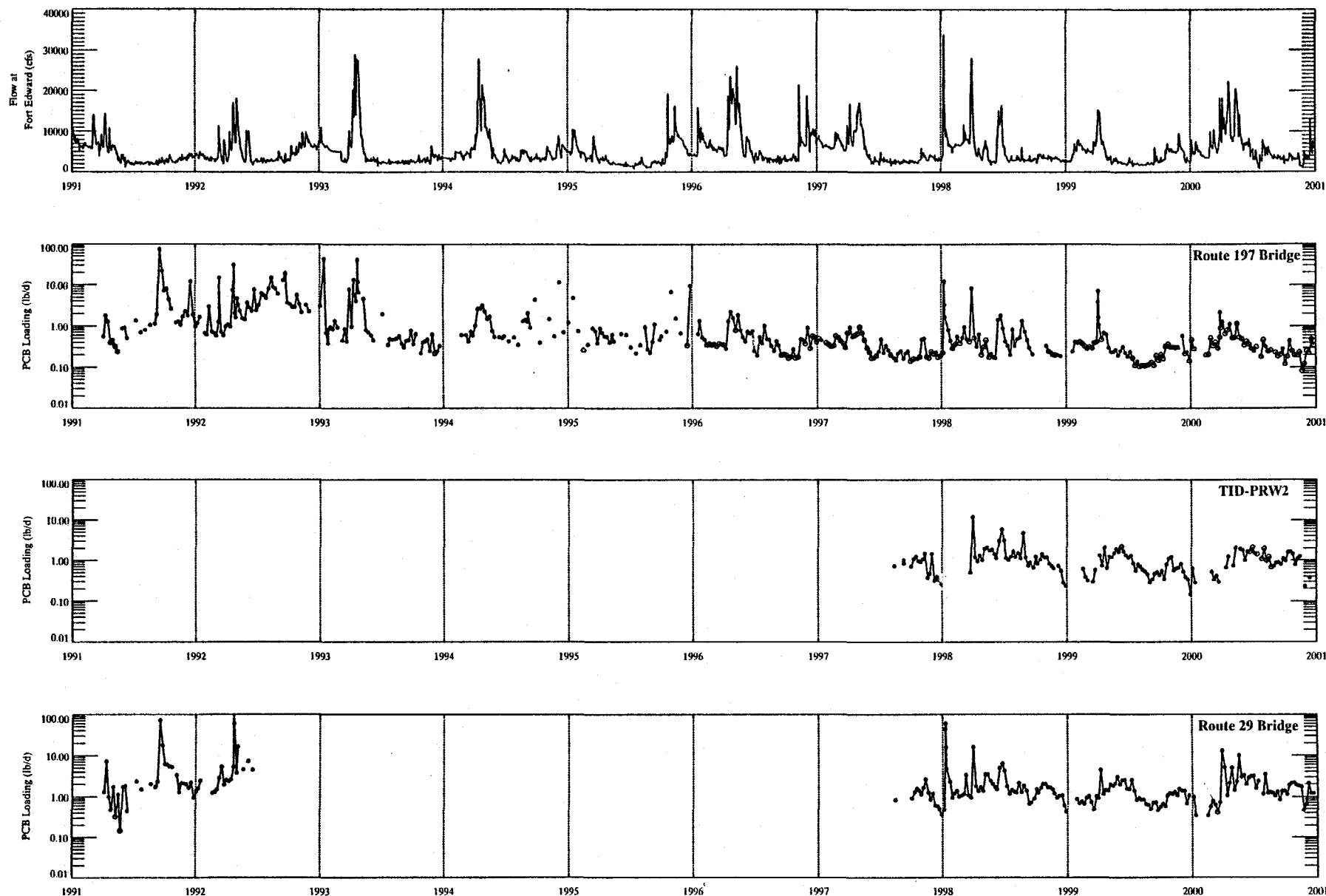


Figure 3-32. Temporal profiles of Total PCBs at the Route 197 Bridge, Thompson Island Dam and the Route 29 Bridge Since 1991.

Notes: Non-detects set to MDL (11 ng/L) for loading calculations. Loading calculations are daily averages. Flow data shown are USGS daily averages. Flow data collected after 10/1/99 are provisional. Flows have been prorated for TID=PRW2 and Route 29 Bridge loading calculations.

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APPENDIX A DATA QUALITY EVALUATION



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SECTION 1 - INTRODUCTION

1.1 INTRODUCTION

This report presents the results of a quality evaluation performed on water column monitoring data collected from the upper Hudson River by Quantitative Environmental Analysis, LLC (QEA) and GeoTrans, Inc. during 2000 on behalf of General Electric Company (GE). The sampling, laboratory analysis, and data quality evaluation has been conducted in accordance with a Sampling and Analysis Plan (SAP; QEA 2000) which includes a Field Sampling Plan (FSP), Quality Assurance Project Plan (QAPP), and Health and Safety Plan (HASP).

The samples collected for this program were analyzed for congener-specific polychlorinated biphenyls (PCBs) by Northeast Analytical, Inc. (NEA) in accordance with method NE013_04 (NEA 1999) and total suspended solids (TSS) by USEPA method 160.2. This data quality evaluation focuses on PCB data; TSS data quality has not been formally evaluated. Copies of the PCB and TSS data packages received from NEA are included as Exhibits A (a CD-ROM) and B, respectively.

This data quality evaluation has been performed for water column samples collected on a routine basis from two stations on the Hudson River for the Post-Construction Remnant Deposit Monitoring Program (PCRDMP). Additionally, the quality of data generated as a result of additional routine sampling conducted as part of GE's Hudson River Monitoring Program (HRMP) has been evaluated. The objectives and scope of both the PCRDMP and HRMP are presented in the PCRDMP SAP (QEA 2000). The quality of other, non-routine water column PCB data generated in 2000, but not formally associated with either the PCRDMP or HRMP was

also evaluated. Programs besides the PCRDMP and HRMP that generated water column data in 2000 are described in Section 2.3 of the main report, and include high-flow sampling, and sampling conducted in areas of the River adjacent to the GE Hudson Falls Plant Site (plunge pool area).

The data quality evaluation was conducted in two phases. The first phase (described in Section 2) consists of verifying that the data generation process was conducted in accordance with the FSP and QAPP (QEA 2000). The FSP and QAPP specify quality assurance (QA) procedures that pertain to the implementation of the field sampling activities and the execution of the analytical program. The second phase of the data quality evaluation (described in Section 3) consists of validation of the data. That is, determining to what extent the data are useable for their intended purpose.

1.2 OVERVIEW OF PCB ANALYTICAL METHODOLOGY

The NE013_04 method employs a high-resolution fused-silica capillary chromatographic column for analyzing PCBs on a congener-specific basis. The capillary column provides the separation and resolution of 112 chromatographic peaks, representing 209 PCB congeners (NEA 1999). Water samples are liquid-liquid extracted using separatory funnels and pesticide grade methylene chloride. After extraction, the sample consisting of PCBs dissolved in methylene chloride is passed through a drying column prior to exchange to pesticide grade hexane. The samples are then reduced in volume using Turbo-Vap® technology followed by nitrogen blowdown using a micro-apparatus. The final sample extracts undergo a cleanup procedure prior to analysis, which includes passage through a Florisil column, and the addition of mercury and concentrated sulfuric acid to remove sulfur and polar compounds, respectively. The sample

extracts are analyzed by direct liquid injection onto the capillary gas chromatographic (GC) column and PCBs are detected by an electron capture detector (ECD) (NEA 1999).

Research conducted in 1997 identified analytical biases in the quantification of PCB congener data generated by Method NE013_04 (formerly NEA6O8CAP; HydroQual 1997). These analytical biases resulted from coeluting mixed peak deconvolution assumptions used for Hudson River samples (coelution error). Prior to distribution of the data to the data users, coelution error correction factors are applied to the PCB data by QEA to account for analytical biases inherent in Method NE013_04 (HydroQual 1997; O'Brien & Gere 1997; QEA 2000).

1.3 OBJECTIVES

The overall objective of the PCRDMP is to generate data of sufficient quality to monitor the effectiveness of the remedial action performed on the Remnant Deposits, in accordance with the requirements of the consent decree (Consent Decree 1990). Satisfying this objective requires assessment of PCB flux from the Remnant Deposits to the Hudson River on a quantitative basis; therefore, the sampling and analysis program has been designed to provide data of sufficient quality and quantity to facilitate this type of analysis (QEA 2000).

The objective of this data quality evaluation is to assess whether the data were generated in accordance with the QAPP, and to evaluate the usability of the data for their intended use. This evaluation was performed by comparing the data to the pre-determined method and project criteria presented in the QAPP (QEA 2000).

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SECTION 2 - DATA VERIFICATION

2.1 DATA VERIFICATION

Data verification consists of evaluating the data generation process, including sample collection, sample handling, laboratory analysis, and data reporting for the following:

- assessment of whether the tasks specified in the SAP were performed (compliance);
- evaluating whether the tasks were performed correctly (correctness);
- identifying whether the tasks were consistently performed at all data collection points (consistency); and
- evaluating whether the program has resulted in obtaining sufficient data to satisfy the project objectives (completeness).

2.1.1 Compliance

In accordance with the QAPP, compliance with the sampling process design, sampling methods, sample handling and custody requirements, field QA/QC sample collection schedule, field QA/QC procedures, field equipment testing, inspection, and maintenance procedures were assessed by the project manager. No significant deviations from the SAP were noted for these activities during 2000.

The data management coordinator was responsible for assessing compliance with laboratory chain of custody requirements, analytical methods requirements, laboratory QA/QC procedures, testing, inspection, and maintenance of laboratory instrumentation, and laboratory

instrument calibration and frequency. The first phase of this assessment included a Tier 1 review of the data upon receipt of a Data Summary Package from NEA. Evaluating data quality on an as-received basis helps identify deficiencies in the data generation process as soon as possible, allowing for implementation of corrective action. Following the Tier 1 evaluation, a computerized verification system was utilized to evaluate the data. Approximately 10% of the data were verified manually for these criteria to confirm the results of the computer verification. Additionally, any data that were identified by the computer verification as not being in compliance were subjected to manual verification. No significant deviations from the SAP were noted for these activities during 2000.

Upon receipt from NEA, electronic data is added to the QA/QC databases using a Visual Basic Program. Data verification and validation is performed monthly using a customized program written in interactive data language (IDL) software. Data validation results are then incorporated into the database.

2.1.2 Correctness

As specified in the QAPP, the project manager was responsible for assessing whether field activities, including sample collection, handling, and transport were conducted correctly. No significant deviations from the SAP were noted for these activities during 2000. The data management coordinator had overall responsibility for assessing laboratory activities for correctness. Deviations in the analytical procedures were identified for a portion of the analyses, resulting in qualifying these data during validation (Section 3.1), as appropriate. The data affected by these deviations have been assigned qualifiers, as described in Section 3.1.

2.1.3 Consistency

The project manager was responsible for evaluating whether field activities were conducted consistently at all sampling locations. The data management coordinator was responsible for identifying inconsistencies in the laboratory data generation process. No significant inconsistencies were identified in either the field activities or the laboratory data generation process.

2.1.4 Completeness

Completeness pertains to evaluating whether the program has resulted in obtaining all the data necessary to perform the evaluations required to satisfy the project objectives. The PCRDMP is a routine monitoring program that has been conducted since 1991 with the resultant data evaluated in annual summary reports. This data evaluation found that the scope of the PCRDMP is appropriate for achieving the project objectives.

SECTION 3 - DATA VALIDATION

3.1 DATA VALIDATION

Data validation is the process of identifying the usability of the data for conducting the assessments required to satisfy the project objectives. In 2000, data validation was performed on a total of 403 environmental samples collected from the Hudson River, including 48 blind duplicate samples. In addition 48 equipment blanks were evaluated. Data that were recognized as not meeting applicable QA/QC criteria were qualified according to the type of deviation identified. Each data point that did not fully meet QA/QC criteria was assigned a data qualifier. These qualifiers also accompany the data in the GE Hudson River database. The qualifiers used for this program are described below:

- U** Indicates that the sample was analyzed, but the compound of interest (PCBs) was not detected above the method detection limit (MDL; 11 ng/L) of the procedure. The sample result is still considered useable for evaluation purposes.
- P** Indicates that PCBs were detected in the sample at a concentration below the practical quantitation limit (PQL; 44 ng/L). The sample result is still considered useable for evaluation purposes.
- J** Indicates that the result is considered approximate. This qualifier denotes that the identity of the compound is accurate; however, there is limited confidence in the accuracy of the PCB concentration. The sample result is still considered useable for evaluation purposes.

- UJ** Indicates that the MDL and sample result are considered approximate. The sample result is still considered useable for evaluation purposes.
- R** Indicates that the sample result or detection limit has been rejected due to serious deficiencies during the analytical process and/or inability to meet quality control criteria. The sample result is therefore considered unusable for quantitative evaluations.

The data validation process resulted in the assignment of data qualifiers to a total of 288 samples (not including 48 equipment blanks). Of these, 271 did not exhibit deviations during the data generation process, with 165 of these samples being below the MDL (assigned the "U" qualifier), and 106 samples below the PQL (assigned the "P" qualifier). Of the samples that did exhibit deviations, one sample was assigned the "J" qualifier, 5 were assigned the "PJ" qualifier, and 9 samples were assigned the "UJ" qualifier. Two samples were assigned the "R" qualifier, and therefore the results of these samples have not been included in the interpretive efforts presented in the main report. The results of the data validation, including the logic for the assignment of each qualifier are presented in Tables A-1 through A-5, as follows:

Table A-1	Summary of Data Qualifiers Assigned to Environmental Samples
Table A-2	Summary of Data Qualifiers Assigned to Equipment Blank Samples
Table A-3	Summary of Environmental Data Assigned "U" Qualifier
Table A-4	Summary of Environmental Data Assigned "P" Qualifier
Table A-5	Summary of Other Data Qualifiers Assigned to Environmental Samples

3.2 DATA USABILITY

The results of the data validation indicate that over 99% of the data are useable for meeting the project objective of monitoring the effectiveness of the remedial action performed on the Remnant Deposits through assessment of PCB flux from the Remnant Deposits to the Hudson River on a quantitative basis. USEPA guidance recommends performing a data quality assessment to identify how well the validated data can support their intended use. However, a formal data quality assessment is not appropriate for the PCRDM, as the PCRDM is an on-going routine monitoring program. The data resulting from this program have been evaluated and documented in annual summary reports since 1991. The results of these evaluations have demonstrated that data obtained for the PCRDM are appropriate to support evaluations required to satisfy the project objective.

SECTION 4 - REFERENCES

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O'Brien & Gere Engineers, Inc. 1997. Correction of Analytical Biases in the 1991 - 1997 GE Hudson River PCB Database. Syracuse, NY: O'Brien & Gere Engineers, Inc. September 1997.

Quantitative Environmental Analysis, LLC. February 2000. Post-Construction Remnant Deposit Monitoring Program Sampling and Analysis Plan.

Table A-1. Summary of Data Qualifiers Assigned to Environmental Samples

NEA ID No.	Sample ID	Date Collected	Program	PCB Concentration (ng/L)	Data Qualifiers	Notes (1)
AD00039	B.F.Br	1/5/00	HRMP	<11	U	Less than MDL
AD00040	Rt.197 Br.	1/5/00	HRMP	<11	U	Less than MDL
AD00043	TID-WEST	1/5/00	HRMP	26	P	Less than PQL
AD00044	TID-PRW2	1/5/00	HRMP	15	P	Less than PQL
AD00045	Rt.29 Br.	1/5/00	HRMP	23	P	Less than PQL
AD00046	TID-WEST	1/5/00	HRMP	20	P,J	Less than PQL, Internal standard area performance
AD00226	B.F.Br	1/12/00	HRMP	<11	U	Less than MDL
AD00228	Rt.197 Br.	1/12/00	HRMP	<11	U	Less than MDL
AD00231	TID-PRW2	1/12/00	HRMP	<11	U	Less than MDL
AD00232	Rt.29 Br.	1/12/00	HRMP	13	P	Less than PQL
AD00233	B.F.Br	1/12/00	HRMP	<11	U	Less than MDL
AD00235	BOATLAUNCH	1/12/00	HRMP	27	P	Less than PQL
AD00518	TID-WEST	1/19/00	HRMP	11	P	Less than PQL
AD00520	BOATLAUNCH	1/19/00	HRMP	20	P	Less than PQL
AD00660	BOATLAUNCH	1/26/00	HRMP	14	P	Less than PQL
AD00750	BOATLAUNCH	2/2/00	HRMP	26	P	Less than PQL
AD00788	BOATLAUNCH	2/9/00	HRMP	25	P	Less than PQL
AD00870	B.F.Br	2/16/00	HRMP	<11	U	Less than MDL
AD00871	Rt.197 Br.	2/16/00	HRMP	<11	U	Less than MDL
AD00874	Rt.29 Br.	2/16/00	HRMP	19	P	Less than PQL
AD00875	Rt.197 Br.	2/16/00	HRMP	<11	U	Less than MDL
AD00877	BOATLAUNCH	2/16/00	HRMP	36	P	Less than PQL
AD01183	B.F.Br	2/23/00	HRMP	<11	U	Less than MDL
AD01184	Rt.197 Br.	2/23/00	HRMP	<11	U	Less than MDL
AD01185	TID-WEST	2/23/00	HRMP	22	P	Less than PQL
AD01187	Rt.29 Br.	2/23/00	HRMP	30	P	Less than PQL
AD01188	TID-WEST	2/23/00	HRMP	29	P	Less than PQL
AD01190	BOATLAUNCH	2/23/00	HRMP	20	P	Less than PQL
AD01622	B.F.Br	3/1/00	HRMP	<11	U	Less than MDL
AD01624	Rt.197 Br.	3/1/00	HRMP	<11	U	Less than MDL
AD01625	TID-WEST	3/1/00	HRMP	16	P	Less than PQL
AD01627	TID-PRW2	3/1/00	HRMP	<11	U	Less than MDL
AD01628	Rt.29 Br.	3/1/00	HRMP	16	P	Less than PQL
AD01629	Rt.29 Br.	3/1/00	HRMP	17	P	Less than PQL
AD01631	BOATLAUNCH	3/1/00	HRMP	20	P	Less than PQL
AD01758	BOATLAUNCH	3/8/00	HRMP	19	P	Less than PQL
AD01759	PLUNGEPOOL	3/8/00	HRMP	<11	U	Less than MDL
AD01762	B.F.Br	3/8/00	HRMP	<11	U	Less than MDL
AD01763	Rt.197 Br.	3/8/00	HRMP	<11	U	Less than MDL
AD01765	TID-WEST	3/8/00	HRMP	12	P	Less than PQL
AD01766	TID-PRW2	3/8/00	HRMP	<11	U	Less than MDL
AD01768	Rt.29 Br.	3/8/00	HRMP	21	P	Less than PQL
AD01769	B.F.Br	3/8/00	HRMP	<11	U	Less than MDL
AD01970	Rt.29 Br.	3/15/00	HRMP	<11	U	Less than MDL
AD01971	Rt.197 Br.	3/15/00	HRMP	<11	U	Less than MDL
AD01973	TID-WEST	3/15/00	HRMP	12	P	Less than PQL
AD01975	TID-PRW2	3/15/00	HRMP	<11	U	Less than MDL
AD01976	B.F.Br	3/15/00	HRMP	<11	U	Less than MDL
AD01979	BOATLAUNCH	3/15/00	HRMP	11	P	Less than PQL
AD01981	PLUNGEPOOL	3/15/00	HRMP	<11	U	Less than MDL
AD02135	B.F.Br	3/22/00	HRMP	<11	U	Less than MDL

Table A-1. Summary of Data Qualifiers Assigned to Environmental Samples

NEA ID No.	Sample ID	Date Collected	Program	PCB Concentration (ng/L)	Data Qualifiers	Notes (1)
AD02136	Rt.197 Br.	3/22/00	HRMP	<11	U	Less than MDL
AD02137	TID-WEST	3/22/00	HRMP	27	P	Less than PQL
AD02139	TID-PRW2	3/22/00	HRMP	<11	U	Less than MDL
AD02141	Rt.29 Br.	3/22/00	HRMP	27	P	Less than PQL
AD02142	B.F.Br	3/22/00	HRMP	<11	U	Less than MDL
AD02144	BOATLAUNCH	3/22/00	HRMP	19	P,J	Less than PQL, Exceeded extraction holding time
AD02146	PLUNGEPOOL	3/22/00	HRMP	<11	U	Less than MDL
AD02350	B.F.Br	3/28/00	2000 HIGH FLOW	<11	U	Less than MDL
AD02351	Rt.197 Br.	3/28/00	2000 HIGH FLOW	<11	U	Less than MDL
AD02352	HRM 194.2E	3/28/00	2000 HIGH FLOW	25	P	Less than PQL
AD02355	B.F.Br	3/28/00	2000 HIGH FLOW	<11	U,J	Less than MDL, Internal standard area performance
AD02357	Rt.197 Br.	3/29/00	2000 HIGH FLOW	<11	U	Less than MDL
AD02358	Rt.197 Br.	3/30/00	2000 HIGH FLOW	<11	U	Less than MDL
AD02362	B.F.Br	3/29/00	HRMP	<11	U	Less than MDL
AD02363	Rt.197 Br.	3/29/00	HRMP	33	P	Less than PQL
AD02420	B.F.Br	4/5/00	HRMP	<11	U	Less than MDL
AD02423	Rt.197 Br.	4/5/00	HRMP	12	P	Less than PQL
AD02424	TID-WEST	4/5/00	HRMP	33	P	Less than PQL
AD02426	TID-WEST	4/5/00	HRMP	39	P	Less than PQL
AD02429	Rt.197 Br.	4/4/00	2000 HIGH FLOW 2	31	P	Less than PQL
AD02430	Rt.197 Br.	4/4/00	2000 HIGH FLOW 2	13	P	Less than PQL
AD02431	HRM 194.2E	4/4/00	2000 HIGH FLOW 2	15	P	Less than PQL
AD02432	Rt.197 Br.	4/5/00	2000 HIGH FLOW 2	14	P	Less than PQL
AD02787	B.F.Br	4/12/00	HRMP	<11	U	Less than MDL
AD02789	Rt.197 Br.	4/12/00	HRMP	<11	U	Less than MDL
AD02791	TID-WEST	4/12/00	HRMP	13	P	Less than PQL
AD02793	TID-PRW2	4/12/00	HRMP	<11	U	Less than MDL
AD02794	Rt.29 Br.	4/12/00	HRMP	18	P,J	Less than PQL, Internal standard area performance
AD02795	Rt.29 Br.	4/12/00	HRMP	18	P	Less than PQL
AD02797	BOATLAUNCH	4/12/00	HRMP	13	P	Less than PQL
AD03118	B.F.Br	4/19/00	HRMP	<11	U	Less than MDL
AD03119	Rt.197 Br.	4/19/00	HRMP	<11	U	Less than MDL
AD03122	TID-WEST	4/19/00	HRMP	19	P	Less than PQL
AD03123	TID-PRW2	4/19/00	HRMP	14	P	Less than PQL
AD03125	Rt.29 Br.	4/19/00	HRMP	29	P	Less than PQL
AD03126	TID-PRW2	4/19/00	HRMP	20	P	Less than PQL
AD03127	BOATLAUNCH	4/19/00	HRMP	15	P	Less than PQL
AD03804	B.F.Br	4/26/00	HRMP	<11	U	Less than MDL
AD03805	Rt.197 Br.	4/26/00	HRMP	12	P	Less than PQL
AD03807	TID-WEST	4/26/00	HRMP	36	P	Less than PQL
AD03812	BOATLAUNCH	4/26/00	HRMP	30	P	Less than PQL
AD04043	B.F.Br	5/3/00	HRMP	<11	U	Less than MDL
AD04044	Rt.197 Br.	5/3/00	HRMP	<11	U	Less than MDL
AD04046	TID-WEST	5/3/00	HRMP	35	P	Less than PQL
AD04049	TID-PRW2	5/3/00	HRMP	16	P	Less than PQL
AD04050	Rt.29 Br.	5/3/00	HRMP	30	P	Less than PQL
AD04051	B.F.Br	5/3/00	HRMP	<11	U	Less than MDL
AD04053	BOATLAUNCH	5/3/00	HRMP	20	P	Less than PQL
AD04182	B.F.Br	5/10/00	HRMP	<11	U	Less than MDL
AD04184	Rt.197 Br.	5/10/00	HRMP	<11	U	Less than MDL
AD04187	TID-PRW2	5/10/00	HRMP	42	P	Less than PQL

Table A-1. Summary of Data Qualifiers Assigned to Environmental Samples

NEA ID No.	Sample ID	Date Collected	Program	PCB Concentration (ng/L)	Data Qualifiers	Notes (1)
AD04192	BOATLAUNCH	5/10/00	HRMP	21	P	Less than PQL
AD04715	B.F.Br	5/17/00	HRMP	<11	U	Less than MDL
AD04717	Rt.197 Br.	5/17/00	HRMP	<11	U	Less than MDL
AD04722	B.F.Br	5/17/00	HRMP	<11	U	Less than MDL
AD04873	B.F.Br	5/24/00	HRMP	<11	U	Less than MDL
AD04874	Rt.197 Br.	5/24/00	HRMP	<11	U	Less than MDL
AD04879	TID-PRW2	5/24/00	HRMP	39	P	Less than PQL
AD04883	BOATLAUNCH	5/24/00	HRMP	28	P	Less than PQL
AD04953	B.F.Br	5/31/00	HRMP	<11	U	Less than MDL
AD04954	Rt.197 Br.	5/31/00	HRMP	<11	U	Less than MDL
AD04958	TID-PRW2	5/31/00	HRMP	39	P	Less than PQL
AD04963	BOATLAUNCH	5/31/00	HRMP	19	P	Less than PQL
AD05097	B.F.Br	6/7/00	HRMP	<11	U	Less than MDL
AD05098	Rt.197 Br.	6/7/00	HRMP	<11	U	Less than MDL
AD05101	TID-PRW2	6/7/00	HRMP	32	P	Less than PQL
AD05105	BOATLAUNCH	6/7/00	HRMP	21	P	Less than PQL
AD05259	B.F.Br	6/14/00	HRMP	<11	U	Less than MDL
AD05260	Rt.197 Br.	6/14/00	HRMP	<11	U	Less than MDL
AD05265	TID-PRW2	6/14/00	HRMP	41	P	Less than PQL
AD05267	TID-PRW2	6/14/00	HRMP	44	P	Less than PQL
AD05269	BOATLAUNCH	6/14/00	HRMP	<11	U	Less than MDL
AD05271	PLUNGEPOOL	6/14/00	HRMP	<11	U	Less than MDL
AD05604	B.F.Br	6/21/00	HRMP	<11	U	Less than MDL
AD05606	Rt.197 Br.	6/21/00	HRMP	<11	U	Less than MDL
AD05614	BOATLAUNCH	6/21/00	HRMP	44	P	Less than PQL
AD05616	PLUNGEPOOL	6/21/00	HRMP	<11	U	Less than MDL
AD05942	B.F.Br	6/28/00	HRMP	<11	U	Less than MDL
AD05943	Rt.197 Br.	6/28/00	HRMP	<11	U	Less than MDL
AD05951	BOATLAUNCH	6/28/00	HRMP	30	P	Less than PQL
AD05953	PLUNGEPOOL	6/28/00	HRMP	<11	U	Less than MDL
AD06097	B.F.Br	7/5/00	HRMP	<11	U	Less than MDL
AD06098	Rt.197 Br.	7/5/00	HRMP	14	P	Less than PQL
AD06106	BOATLAUNCH	7/5/00	HRMP	30	P	Less than PQL
AD06300	B.F.Br	7/12/00	HRMP	<11	U	Less than MDL
AD06301	Rt.197 Br.	7/12/00	HRMP	<11	U,J	Less than MDL, Internal standard area performance
AD06304	TID-WEST	7/12/00	HRMP	144	R	Duplicate RPD >35%
AD06308	TID-WEST	7/12/00	HRMP	97	R	Duplicate RPD >35%
AD06310	BOATLAUNCH	7/12/00	HRMP	<11	U	Less than MDL
AD06312	PLUNGEPOOL	7/12/00	HRMP	<11	U	Less than MDL
AD06923	B.F.Br	7/26/00	HRMP	<11	U	Less than MDL
AD06924	Rt.197 Br.	7/26/00	HRMP	<11	U	Less than MDL
AD06932	BOATLAUNCH	7/26/00	HRMP	31	P	Less than PQL
AD06934	PLUNGEPOOL	7/26/00	HRMP	<11	U,J	Less than MDL, Exceeded extraction holding time
AD07236	B.F.Br	8/2/00	HRMP	<11	U	Less than MDL
AD07237	Rt.197 Br.	8/2/00	HRMP	<11	U	Less than MDL
AD07245	BOATLAUNCH	8/2/00	HRMP	21	P	Less than PQL
AD07615	B.F.Br	8/9/00	HRMP	<11	U	Less than MDL
AD07616	Rt.197 Br.	8/9/00	HRMP	15	P	Less than PQL
AD07633	BOATLAUNCH	8/9/00	HRMP	36	P	Less than PQL
AD07635	PLUNGEPOOL	8/9/00	HRMP	<11	U	Less than MDL
AD07636	HR-1 BL	8/9/00	TRANSECT MON.	<11	U	Less than MDL

Table A-1. Summary of Data Qualifiers Assigned to Environmental Samples

NEA ID No.	Sample ID	Date Collected	Program	PCB Concentration (ng/L)	Data Qualifiers	Notes (1)
AD07637	HR-2 BL	8/9/00	TRANSECT MON.	<11	U	Less than MDL
AD07638	HR-5 BL	8/9/00	TRANSECT MON.	28	P	Less than PQL
AD07639	HR-6 BL	8/9/00	TRANSECT MON.	16	P	Less than PQL
AD07640	HR-7 BL	8/9/00	TRANSECT MON.	19	P	Less than PQL
AD07641	HR-8 BL	8/9/00	TRANSECT MON.	<11	U	Less than MDL
AD07644	HR-11 BL	8/9/00	TRANSECT MON.	36	P	Less than PQL
AD07645	0+10	8/9/00	TRANSECT MON.	<11	U	Less than MDL
AD07646	0+30	8/9/00	TRANSECT MON.	<11	U	Less than MDL
AD07647	0+50	8/9/00	TRANSECT MON.	<11	U	Less than MDL
AD07648	0+70	8/9/00	TRANSECT MON.	<11	U	Less than MDL
AD07649	0+90	8/9/00	TRANSECT MON.	<11	U	Less than MDL
AD07650	1+10	8/9/00	TRANSECT MON.	<11	U	Less than MDL
AD07651	1+30	8/9/00	TRANSECT MON.	<11	U	Less than MDL
AD07652	1+50	8/9/00	TRANSECT MON.	<11	U	Less than MDL
AD07653	1+70	8/9/00	TRANSECT MON.	<11	U	Less than MDL
AD07654	1+90	8/9/00	TRANSECT MON.	<11	U	Less than MDL
AD07656	2+10	8/9/00	TRANSECT MON.	<11	U,J	Less than MDL, Internal standard area performance
AD07657	2+30	8/9/00	TRANSECT MON.	<11	U	Less than MDL
AD07658	2+50	8/9/00	TRANSECT MON.	<11	U,J	Less than MDL, Internal standard area performance
AD07659	2+70	8/9/00	TRANSECT MON.	<11	U	Less than MDL
AD07660	2+90	8/9/00	TRANSECT MON.	<11	U	Less than MDL
AD07662	3+10	8/9/00	TRANSECT MON.	<11	U,J	Less than MDL, Internal standard area performance
AD07663	3+30	8/9/00	TRANSECT MON.	<11	U	Less than MDL
AD07664	3+50	8/9/00	TRANSECT MON.	<11	U,J	Less than MDL, Internal standard area performance
AD07665	3+60	8/9/00	TRANSECT MON.	<11	U	Less than MDL
AD07666	3+50	8/9/00	TRANSECT MON.	<11	U	Less than MDL
AD07880	B.F.Br	8/16/00	HRMP	<11	U	Less than MDL
AD07882	Rt.197 Br.	8/16/00	HRMP	<11	U	Less than MDL
AD07888	B.F.Br	8/16/00	HRMP	<11	U	Less than MDL
AD07890	BOATLAUNCH	8/16/00	HRMP	32	P	Less than PQL
AD07892	PLUNGEPOOL	8/16/00	HRMP	<11	U	Less than MDL
AD08192	B.F.Br	8/23/00	HRMP	<11	U	Less than MDL
AD08194	Rt.197 Br.	8/23/00	HRMP	<11	U	Less than MDL
AD08198	TID-PRW2	8/23/00	HRMP	28	P	Less than PQL
AD08202	BOATLAUNCH	8/23/00	HRMP	22	P	Less than PQL
AD08204	PLUNGEPOOL	8/23/00	HRMP	<11	U	Less than MDL
AD08457	B.F.Br	8/30/00	HRMP	<11	U	Less than MDL
AD08460	TID-PRW2	8/30/00	HRMP	39	P	Less than PQL
AD08464	BOATLAUNCH	8/30/00	HRMP	19	P	Less than PQL
AD08466	PLUNGEPOOL	8/30/00	HRMP	<11	U	Less than MDL
AD08467	0+50	8/30/00	TRANSECT MON.	<11	U	Less than MDL
AD08468	1+10	8/30/00	TRANSECT MON.	<11	U	Less than MDL
AD08469	1+70	8/30/00	TRANSECT MON.	<11	U	Less than MDL
AD08470	2+30	8/30/00	TRANSECT MON.	<11	U	Less than MDL
AD08471	3+10	8/30/00	TRANSECT MON.	<11	U	Less than MDL
AD08472	2+70	8/30/00	TRANSECT MON.	<11	U	Less than MDL
AD08473	3+30	8/30/00	TRANSECT MON.	<11	U	Less than MDL
AD08474	3+50	8/30/00	TRANSECT MON.	<11	U	Less than MDL
AD08475	3+60	8/30/00	TRANSECT MON.	<11	U	Less than MDL
AD08477	HR-1	8/30/00	TRANSECT MON.	23	P	Less than PQL

Table A-1. Summary of Data Qualifiers Assigned to Environmental Samples

NEA ID No.	Sample ID	Date Collected	Program	PCB Concentration (ng/L)	Data Qualifiers	Notes (1)
AD08478	HR-2	8/30/00	TRANSECT MON.	<11	U	Less than MDL
AD08480	HR-6	8/30/00	TRANSECT MON.	38	P	Less than PQL
AD08482	HR-8	8/30/00	TRANSECT MON.	<11	U	Less than MDL
AD08483	HR-9	8/30/00	TRANSECT MON.	<11	U	Less than MDL
AD08484	HR-10	8/30/00	TRANSECT MON.	<11	U	Less than MDL
AD08485	HR-11	8/30/00	TRANSECT MON.	33	P	Less than PQL
AD08564	B.F.Br	9/6/00	HRMP	<11	U	Less than MDL
AD08565	Rt.197 Br.	9/6/00	HRMP	<11	U	Less than MDL
AD08570	TID-PRW2	9/6/00	HRMP	37	P	Less than PQL
AD08572	TID-PRW2	9/6/00	HRMP	44	P	Less than PQL
AD08574	BOATLAUNCH	9/6/00	HRMP	<11	U	Less than MDL
AD08576	PLUNGEPOOL	9/6/00	HRMP	<11	U	Less than MDL
AD08936	B.F.Br	9/13/00	HRMP	<11	U	Less than MDL
AD08937	Rt.197 Br.	9/13/00	HRMP	<11	U	Less than MDL
AD08944	BOATLAUNCH	9/13/00	HRMP	<11	U	Less than MDL
AD08946	PLUNGEPOOL	9/13/00	HRMP	12	P	Less than PQL
AD09051	B.F.Br	9/20/00	HRMP	<11	U	Less than MDL
AD09052	Rt.197 Br.	9/20/00	HRMP	<11	U	Less than MDL
AD09055	TID-PRW2	9/20/00	HRMP	42	P	Less than PQL
AD09058	TID-PRW2	9/20/00	HRMP	44	P	Less than PQL
AD09060	BOATLAUNCH	9/20/00	HRMP	20	P	Less than PQL
AD09062	PLUNGEPOOL	9/20/00	HRMP	<11	U	Less than MDL
AD09405	BOATLAUNCH	9/27/00	HRMP	17	P	Less than PQL
AD09407	PLUNGEPOOL	9/27/00	HRMP	<11	U	Less than MDL
AD09553	B.F.Br	9/27/00	HRMP	12	P	Less than PQL
AD09555	Rt.197 Br.	9/27/00	HRMP	14	P	Less than PQL
AD09561	Rt.197 Br.	9/27/00	HRMP	16	P	Less than PQL
AD09713	B.F.Br	10/4/00	HRMP	<11	U	Less than MDL
AD09715	Rt.197 Br.	10/4/00	HRMP	<11	U	Less than MDL
AD09722	BOATLAUNCH	10/4/00	HRMP	17	P	Less than PQL
AD09724	PLUNGEPOOL	10/4/00	HRMP	<11	U	Less than MDL
AD09804	B.F.Br	10/11/00	HRMP	<11	U	Less than MDL
AD09806	Rt.197 Br.	10/11/00	HRMP	<11	U	Less than MDL
AD09812	B.F.Br	10/11/00	HRMP	<11	U	Less than MDL
AD09814	BOATLAUNCH	10/11/00	HRMP	18	P	Less than PQL
AD09816	PLUNGEPOOL	10/11/00	HRMP	<11	U	Less than MDL
AD10002	B.F.Br	10/18/00	HRMP	<11	U	Less than MDL
AD10003	Rt.197 Br.	10/18/00	HRMP	22	P	Less than PQL
AD10403	BOATLAUNCH	10/25/00	HRMP	<11	U	Less than MDL
AD10405	PLUNGEPOOL	10/25/00	HRMP	<11	U	Less than MDL
AD10422	B.F.Br	10/25/00	HRMP	<11	U	Less than MDL
AD10423	Rt.197 Br.	10/25/00	HRMP	<11	U	Less than MDL
AD10430	Rt.197 Br.	10/25/00	HRMP	<11	U	Less than MDL
AD10679	B.F.Br	11/1/00	HRMP	<11	U	Less than MDL
AD10680	Rt.197 Br.	11/1/00	HRMP	<11	U	Less than MDL
AD10683	TID-PRW2	11/1/00	HRMP	43	P	Less than PQL
AD10688	BOATLAUNCH	11/1/00	HRMP	<11	U	Less than MDL
AD10690	PLUNGEPOOL	11/1/00	HRMP	<11	U	Less than MDL
AD10948	B.F.Br	11/8/00	HRMP	<11	U	Less than MDL
AD10950	Rt.197 Br.	11/8/00	HRMP	<11	U	Less than MDL

Table A-1. Summary of Data Qualifiers Assigned to Environmental Samples

NEA ID No.	Sample ID	Date Collected	Program	PCB Concentration (ng/L)	Data Qualifiers	Notes (1)
AD10958	BOATLAUNCH	11/8/00	HRMP	<11	U	Less than MDL
AD10960	PLUNGEPOOL	11/8/00	HRMP	<11	U	Less than MDL
AD11314	B.F.Br	11/15/00	HRMP	<11	U	Less than MDL
AD11315	Rt.197 Br.	11/15/00	HRMP	<11	U	Less than MDL
AD11321	B.F.Br	11/15/00	HRMP	<11	U	Less than MDL
AD11323	BOATLAUNCH	11/15/00	HRMP	22	P	Less than PQL
AD11325	PLUNGEPOOL	11/15/00	HRMP	12	P	Less than PQL
AD11723	B.F.Br	11/22/00	HRMP	<11	U	Less than MDL
AD11724	Rt.197 Br.	11/22/00	HRMP	<11	U	Less than MDL
AD11731	BOATLAUNCH	11/22/00	HRMP	<11	U,J	Less than MDL, Surrogate recovery
AD11818	BOATLAUNCH	11/29/00	HRMP	13	P	Less than PQL
AD11819	B.F.Br	11/29/00	HRMP	<11	U	Less than MDL
AD11822	Rt.197 Br.	11/29/00	HRMP	<11	U	Less than MDL
AD11824	TID-WEST	11/29/00	HRMP	52	J	RPD >35%, but sample result <5X MDL
AD11825	TID-PRW2	11/29/00	HRMP	20	P	Less than PQL
AD11827	TID-WEST	11/29/00	HRMP	23	P,J	Less than PQL, RPD >35%, but sample result <5X MDL
AD12120	B.F.Br	12/6/00	HRMP	<11	U	Less than MDL
AD12121	Rt.197 Br.	12/6/00	HRMP	<11	U	Less than MDL
AD12129	BOATLAUNCH	12/6/00	HRMP	36	P	Less than PQL
AD12311	B.F.Br	12/13/00	HRMP	<11	U	Less than MDL
AD12312	Rt.197 Br.	12/13/00	HRMP	<11	U	Less than MDL
AD12314	TID-WEST	12/13/00	HRMP	38	P	Less than PQL
AD12315	TID-PRW2	12/13/00	HRMP	18	P	Less than PQL
AD12318	Rt.197 Br.	12/13/00	HRMP	<11	U	Less than MDL
AD12320	BOATLAUNCH	12/13/00	HRMP	13	P	Less than PQL
AD12655	B.F.Br	12/20/00	HRMP	<11	U	Less than MDL
AD12657	Rt.197 Br.	12/20/00	HRMP	<11	U	Less than MDL
AD12659	TID-WEST	12/20/00	HRMP	21	P	Less than PQL
AD12660	Rt.29 Br.	12/20/00	HRMP	27	P	Less than PQL
AD12661	TID-WEST	12/20/00	HRMP	<11	U	Less than MDL
AD12663	BOATLAUNCH	12/20/00	HRMP	42	P,J	Less than PQL, Surrogate recovery
AD12777	B.F.Br	12/27/00	HRMP	<11	U,J	Less than MDL, Matrix spike recovery
AD12779	Rt.197 Br.	12/27/00	HRMP	<11	U	Less than MDL
AD12781	TID-WEST	12/27/00	HRMP	17	P	Less than PQL
AD12782	Rt.197 Br.	12/27/00	HRMP	<11	U	Less than MDL

(1) - MDL = method detection limit, PQL = practical quantitation limit.

Table A-2. Summary of Data Qualifiers Assigned to Equipment Blank Samples

NEA ID No.	Sample ID	Date Collected	PCB Concentration (ng/L)	Data Qualifiers	Notes (1)
AD00041	TID-WEST EQBL	1/5/00	<11	U,J	Less than MDL, Internal standard area performance
AD00230	TID-PRW2 EQBL	1/12/00	<11	U	Less than MDL
AD00873	RT. 29 BR. EQBL	2/16/00	<11	U	Less than MDL
AD01182	B.F. BR. EQBL	2/23/00	<11	U	Less than MDL
AD01623	RT. 197 BR. EQBL	3/1/00	<11	U	Less than MDL
AD01764	TID-WEST EQBL	3/8/00	<11	U	Less than MDL
AD01974	TID-PRW2 EQBL	3/15/00	<11	U,J	Less than MDL, Surrogate recovery
AD02140	RT. 29 BR. EQBL	3/22/00	<11	U	Less than MDL
AD02366	RT. 29 BR. EQBL	3/30/00	<11	U,J	Less than MDL, Surrogate recovery
AD02422	RT. 197 BR. EQBL	4/5/00	<11	U	Less than MDL
AD02792	TID-PRW2 EQBL	4/12/00	<11	U	Less than MDL
AD03124	RT. 29 BR. EQBL	4/19/00	<11	U	Less than MDL
AD03803	B.F. BR. EQBL	4/26/00	<11	U	Less than MDL
AD04047	TID-PRW2 EQBL	5/3/00	<11	U	Less than MDL
AD04183	B.F. BR. EQBL	5/10/00	<11	U,J	Less than MDL, Surrogate recovery
AD04716	RT. 197 BR. EQBL	5/17/00	<11	U,J	Less than MDL, Surrogate recovery
AD04876	TID-WEST EQBL	5/24/00	<11	U	Less than MDL
AD04957	TID-PRW2 EQBL	5/31/00	<11	U	Less than MDL
AD05095	B.F. BR. EQBL	6/7/00	<11	U	Less than MDL
AD05262	TID-WEST EQBL	6/14/00	<11	U	Less than MDL
AD05605	RT. 197 BR. EQBL	6/21/00	<11	U	Less than MDL
AD05947	RT. 29 BR. EQBL	6/28/00	<11	U	Less than MDL
AD06096	B.F. BR. EQBL	7/5/00	<11	U	Less than MDL
AD06303	TID-WEST EQBL	7/12/00	<11	U	Less than MDL
AD06542	RT. 197 BR. EQBL	7/19/00	<11	U	Less than MDL
AD06927	TID-PRW2 EQBL	7/26/00	<11	U	Less than MDL
AD07235	B.F. BR. EQBL	8/2/00	<11	U	Less than MDL
AD07621	RT. 29 BR. EQBL	8/9/00	<11	U	Less than MDL
AD07655	I+90	8/9/00	<11	U	Less than MDL
AD07881	RT. 197 BR. EQBL	8/16/00	<11	U	Less than MDL
AD08197	TID-PRW2 EQBL	8/23/00	<11	U	Less than MDL
AD08476	0+50	8/30/00	<11	U	Less than MDL
AD08567	TID-WEST EQBL	9/6/00	<11	U	Less than MDL
AD08941	RT. 29 BR. EQBL	9/14/00	<11	U	Less than MDL
AD09050	B.F. BR. EQBL	9/20/00	<11	U	Less than MDL
AD09554	RT. 29 BR. EQBL	9/27/00	<11	U,J	Less than MDL, Surrogate recovery
AD09714	RT. 197 BR. EQBL	10/4/00	<11	U	Less than MDL
AD09805	RT. 197 BR. EQBL	10/11/00	<11	U	Less than MDL
AD10008	RT. 29 BR. EQBL	10/18/00	<11	U,J	Less than MDL, Surrogate recovery
AD10026	TID-PRW2 EQBL	10/25/00	<11	U,J	Less than MDL, Surrogate recovery
AD10684	RT. 29 BR. EQBL	11/1/00	<11	U,J	Less than MDL, Surrogate recovery
AD10949	B.F. BR. EQBL	11/8/00	<11	U	Less than MDL
AD11316	TID-WEST EQBL	11/15/00	<11	U	Less than MDL
AD11821	RT. 197 BR. EQBL	11/29/00	<11	U	Less than MDL
AD12125	RT. 29 BR. EQBL	12/6/00	<11	U	Less than MDL
AD12313	TID-WEST EQBL	12/13/00	<11	U,J	Less than MDL, Surrogate recovery
AD12656	RT. 197 BR. EQBL	12/20/00	<11	U	Less than MDL
AD12780	TID-WEST EQBL	12/27/00	<11	U,J	Less than MDL, Surrogate recovery

(1) - MDL = method detection limit, PQL = practical quantitation limit.

Table A-3. Summary of Environmental Data Assigned "U" Qualifier

NEA ID No.	Sample ID	Date Collected	Program	PCB Concentration (ng/L)	Data Qualifiers	Notes (1)
AD00039	B.F.Br	1/5/00	HRMP	<11	U	Less than MDL
AD00040	Rt.197 Br.	1/5/00	HRMP	<11	U	Less than MDL
AD00226	B.F.Br	1/12/00	HRMP	<11	U	Less than MDL
AD00228	Rt.197 Br.	1/12/00	HRMP	<11	U	Less than MDL
AD00231	TID-PRW2	1/12/00	HRMP	<11	U	Less than MDL
AD00233	B.F.Br	1/12/00	HRMP	<11	U	Less than MDL
AD00870	B.F.Br	2/16/00	HRMP	<11	U	Less than MDL
AD00871	Rt.197 Br.	2/16/00	HRMP	<11	U	Less than MDL
AD00875	Rt.197 Br.	2/16/00	HRMP	<11	U	Less than MDL
AD01183	B.F.Br	2/23/00	HRMP	<11	U	Less than MDL
AD01184	Rt.197 Br.	2/23/00	HRMP	<11	U	Less than MDL
AD01622	B.F.Br	3/1/00	HRMP	<11	U	Less than MDL
AD01624	Rt.197 Br.	3/1/00	HRMP	<11	U	Less than MDL
AD01627	TID-PRW2	3/1/00	HRMP	<11	U	Less than MDL
AD01759	PLUNGEPOOL	3/8/00	HRMP	<11	U	Less than MDL
AD01762	B.F.Br	3/8/00	HRMP	<11	U	Less than MDL
AD01763	Rt.197 Br.	3/8/00	HRMP	<11	U	Less than MDL
AD01766	TID-PRW2	3/8/00	HRMP	<11	U	Less than MDL
AD01769	B.F.Br	3/8/00	HRMP	<11	U	Less than MDL
AD01970	Rt.29 Br.	3/15/00	HRMP	<11	U	Less than MDL
AD01971	Rt.197 Br.	3/15/00	HRMP	<11	U	Less than MDL
AD01975	TID-PRW2	3/15/00	HRMP	<11	U	Less than MDL
AD01976	B.F.Br	3/15/00	HRMP	<11	U	Less than MDL
AD01981	PLUNGEPOOL	3/15/00	HRMP	<11	U	Less than MDL
AD02135	B.F.Br	3/22/00	HRMP	<11	U	Less than MDL
AD02136	Rt.197 Br.	3/22/00	HRMP	<11	U	Less than MDL
AD02139	TID-PRW2	3/22/00	HRMP	<11	U	Less than MDL
AD02142	B.F.Br	3/22/00	HRMP	<11	U	Less than MDL
AD02146	PLUNGEPOOL	3/22/00	HRMP	<11	U	Less than MDL
AD02350	B.F.Br	3/28/00	2000 HIGH FLOW	<11	U	Less than MDL
AD02351	Rt.197 Br.	3/28/00	2000 HIGH FLOW	<11	U	Less than MDL
AD02357	Rt.197 Br.	3/29/00	2000 HIGH FLOW	<11	U	Less than MDL
AD02358	Rt.197 Br.	3/30/00	2000 HIGH FLOW	<11	U	Less than MDL
AD02362	B.F.Br	3/29/00	HRMP	<11	U	Less than MDL
AD02420	B.F.Br	4/5/00	HRMP	<11	U	Less than MDL
AD02787	B.F.Br	4/12/00	HRMP	<11	U	Less than MDL
AD02789	Rt.197 Br.	4/12/00	HRMP	<11	U	Less than MDL
AD02793	TID-PRW2	4/12/00	HRMP	<11	U	Less than MDL
AD03118	B.F.Br	4/19/00	HRMP	<11	U	Less than MDL
AD03119	Rt.197 Br.	4/19/00	HRMP	<11	U	Less than MDL
AD03804	B.F.Br	4/26/00	HRMP	<11	U	Less than MDL
AD04043	B.F.Br	5/3/00	HRMP	<11	U	Less than MDL
AD04044	Rt.197 Br.	5/3/00	HRMP	<11	U	Less than MDL
AD04051	B.F.Br	5/3/00	HRMP	<11	U	Less than MDL
AD04182	B.F.Br	5/10/00	HRMP	<11	U	Less than MDL
AD04184	Rt.197 Br.	5/10/00	HRMP	<11	U	Less than MDL
AD04715	B.F.Br	5/17/00	HRMP	<11	U	Less than MDL

Table A-3. Summary of Environmental Data Assigned "U" Qualifier

NEA ID No.	Sample ID	Date Collected	Program	PCB Concentration (ng/L)	Data Qualifiers	Notes (1)
AD04717	Rt.197 Br.	5/17/00	HRMP	<11	U	Less than MDL
AD04722	B.F.Br	5/17/00	HRMP	<11	U	Less than MDL
AD04873	B.F.Br	5/24/00	HRMP	<11	U	Less than MDL
AD04874	Rt.197 Br.	5/24/00	HRMP	<11	U	Less than MDL
AD04953	B.F.Br	5/31/00	HRMP	<11	U	Less than MDL
AD04954	Rt.197 Br.	5/31/00	HRMP	<11	U	Less than MDL
AD05097	B.F.Br	6/7/00	HRMP	<11	U	Less than MDL
AD05098	Rt.197 Br.	6/7/00	HRMP	<11	U	Less than MDL
AD05259	B.F.Br	6/14/00	HRMP	<11	U	Less than MDL
AD05260	Rt.197 Br.	6/14/00	HRMP	<11	U	Less than MDL
AD05269	BOATLAUNCH	6/14/00	HRMP	<11	U	Less than MDL
AD05271	PLUNGEPPOOL	6/14/00	HRMP	<11	U	Less than MDL
AD05604	B.F.Br	6/21/00	HRMP	<11	U	Less than MDL
AD05606	Rt.197 Br.	6/21/00	HRMP	<11	U	Less than MDL
AD05616	PLUNGEPPOOL	6/21/00	HRMP	<11	U	Less than MDL
AD05942	B.F.Br	6/28/00	HRMP	<11	U	Less than MDL
AD05943	Rt.197 Br.	6/28/00	HRMP	<11	U	Less than MDL
AD05953	PLUNGEPPOOL	6/28/00	HRMP	<11	U	Less than MDL
AD06097	B.F.Br	7/5/00	HRMP	<11	U	Less than MDL
AD06300	B.F.Br	7/12/00	HRMP	<11	U	Less than MDL
AD06310	BOATLAUNCH	7/12/00	HRMP	<11	U	Less than MDL
AD06312	PLUNGEPPOOL	7/12/00	HRMP	<11	U	Less than MDL
AD06923	B.F.Br	7/26/00	HRMP	<11	U	Less than MDL
AD06924	Rt.197 Br.	7/26/00	HRMP	<11	U	Less than MDL
AD07236	B.F.Br	8/2/00	HRMP	<11	U	Less than MDL
AD07237	Rt.197 Br.	8/2/00	HRMP	<11	U	Less than MDL
AD07615	B.F.Br	8/9/00	HRMP	<11	U	Less than MDL
AD07635	PLUNGEPPOOL	8/9/00	HRMP	<11	U	Less than MDL
AD07636	HR-1 BL	8/9/00	TRANSECT MONITORING	<11	U	Less than MDL
AD07637	HR-2 BL	8/9/00	TRANSECT MONITORING	<11	U	Less than MDL
AD07641	HR-8 BL	8/9/00	TRANSECT MONITORING	<11	U	Less than MDL
AD07645	0+10	8/9/00	TRANSECT MONITORING	<11	U	Less than MDL
AD07646	0+30	8/9/00	TRANSECT MONITORING	<11	U	Less than MDL
AD07647	0+50	8/9/00	TRANSECT MONITORING	<11	U	Less than MDL
AD07648	0+70	8/9/00	TRANSECT MONITORING	<11	U	Less than MDL
AD07649	0+90	8/9/00	TRANSECT MONITORING	<11	U	Less than MDL
AD07650	1+10	8/9/00	TRANSECT MONITORING	<11	U	Less than MDL
AD07651	1+30	8/9/00	TRANSECT MONITORING	<11	U	Less than MDL
AD07652	1+50	8/9/00	TRANSECT MONITORING	<11	U	Less than MDL
AD07653	1+70	8/9/00	TRANSECT MONITORING	<11	U	Less than MDL
AD07654	1+90	8/9/00	TRANSECT MONITORING	<11	U	Less than MDL
AD07657	2+30	8/9/00	TRANSECT MONITORING	<11	U	Less than MDL
AD07659	2+70	8/9/00	TRANSECT MONITORING	<11	U	Less than MDL
AD07660	2+90	8/9/00	TRANSECT MONITORING	<11	U	Less than MDL
AD07663	3+30	8/9/00	TRANSECT MONITORING	<11	U	Less than MDL
AD07665	3+60	8/9/00	TRANSECT MONITORING	<11	U	Less than MDL
AD07666	3+50	8/9/00	TRANSECT MONITORING	<11	U	Less than MDL

Table A-3. Summary of Environmental Data Assigned "U" Qualifier

NEA ID No.	Sample ID	Date Collected	Program	PCB Concentration (ng/L)	Data Qualifiers	Notes (1)
AD07880	B.F.Br	8/16/00	HRMP	<11	U	Less than MDL
AD07882	Rt.197 Br.	8/16/00	HRMP	<11	U	Less than MDL
AD07888	B.F.Br	8/16/00	HRMP	<11	U	Less than MDL
AD07892	PLUNGEPOOL	8/16/00	HRMP	<11	U	Less than MDL
AD08192	B.F.Br	8/23/00	HRMP	<11	U	Less than MDL
AD08194	Rt.197 Br.	8/23/00	HRMP	<11	U	Less than MDL
AD08204	PLUNGEPOOL	8/23/00	HRMP	<11	U	Less than MDL
AD08457	B.F.Br	8/30/00	HRMP	<11	U	Less than MDL
AD08466	PLUNGEPOOL	8/30/00	HRMP	<11	U	Less than MDL
AD08467	0+50	8/30/00	TRANSECT MONITORING	<11	U	Less than MDL
AD08468	1+10	8/30/00	TRANSECT MONITORING	<11	U	Less than MDL
AD08469	1+70	8/30/00	TRANSECT MONITORING	<11	U	Less than MDL
AD08470	2+30	8/30/00	TRANSECT MONITORING	<11	U	Less than MDL
AD08471	3+10	8/30/00	TRANSECT MONITORING	<11	U	Less than MDL
AD08472	2+70	8/30/00	TRANSECT MONITORING	<11	U	Less than MDL
AD08473	3+30	8/30/00	TRANSECT MONITORING	<11	U	Less than MDL
AD08474	3+50	8/30/00	TRANSECT MONITORING	<11	U	Less than MDL
AD08475	3+60	8/30/00	TRANSECT MONITORING	<11	U	Less than MDL
AD08478	HR-2	8/30/00	TRANSECT MONITORING	<11	U	Less than MDL
AD08482	HR-8	8/30/00	TRANSECT MONITORING	<11	U	Less than MDL
AD08483	HR-9	8/30/00	TRANSECT MONITORING	<11	U	Less than MDL
AD08484	HR-10	8/30/00	TRANSECT MONITORING	<11	U	Less than MDL
AD08564	B.F.Br	9/6/00	HRMP	<11	U	Less than MDL
AD08565	Rt.197 Br.	9/6/00	HRMP	<11	U	Less than MDL
AD08574	BOATLAUNCH	9/6/00	HRMP	<11	U	Less than MDL
AD08576	PLUNGEPOOL	9/6/00	HRMP	<11	U	Less than MDL
AD08936	B.F.Br	9/13/00	HRMP	<11	U	Less than MDL
AD08937	Rt.197 Br.	9/13/00	HRMP	<11	U	Less than MDL
AD08944	BOATLAUNCH	9/13/00	HRMP	<11	U	Less than MDL
AD09051	B.F.Br	9/20/00	HRMP	<11	U	Less than MDL
AD09052	Rt.197 Br.	9/20/00	HRMP	<11	U	Less than MDL
AD09062	PLUNGEPOOL	9/20/00	HRMP	<11	U	Less than MDL
AD09407	PLUNGEPOOL	9/27/00	HRMP	<11	U	Less than MDL
AD09713	B.F.Br	10/4/00	HRMP	<11	U	Less than MDL
AD09715	Rt.197 Br.	10/4/00	HRMP	<11	U	Less than MDL
AD09724	PLUNGEPOOL	10/4/00	HRMP	<11	U	Less than MDL
AD09804	B.F.Br	10/11/00	HRMP	<11	U	Less than MDL
AD09806	Rt.197 Br.	10/11/00	HRMP	<11	U	Less than MDL
AD09812	B.F.Br	10/11/00	HRMP	<11	U	Less than MDL
AD09816	PLUNGEPOOL	10/11/00	HRMP	<11	U	Less than MDL
AD10002	B.F.Br	10/18/00	HRMP	<11	U	Less than MDL
AD10403	BOATLAUNCH	10/25/00	HRMP	<11	U	Less than MDL
AD10405	PLUNGEPOOL	10/25/00	HRMP	<11	U	Less than MDL
AD10422	B.F.Br	10/25/00	HRMP	<11	U	Less than MDL
AD10423	Rt.197 Br.	10/25/00	HRMP	<11	U	Less than MDL
AD10430	Rt.197 Br.	10/25/00	HRMP	<11	U	Less than MDL
AD10679	B.F.Br	11/1/00	HRMP	<11	U	Less than MDL

Table A-3. Summary of Environmental Data Assigned "U" Qualifier

NEA ID No.	Sample ID	Date Collected	Program	PCB Concentration (ng/L)	Data Qualifiers	Notes (1)
AD10680	Rt.197 Br.	11/1/00	HRMP	<11	U	Less than MDL
AD10688	BOATLAUNCH	11/1/00	HRMP	<11	U	Less than MDL
AD10690	PLUNGEPOOL	11/1/00	HRMP	<11	U	Less than MDL
AD10948	B.F.Br	11/8/00	HRMP	<11	U	Less than MDL
AD10950	Rt.197 Br.	11/8/00	HRMP	<11	U	Less than MDL
AD10958	BOATLAUNCH	11/8/00	HRMP	<11	U	Less than MDL
AD10960	PLUNGEPOOL	11/8/00	HRMP	<11	U	Less than MDL
AD11314	B.F.Br	11/15/00	HRMP	<11	U	Less than MDL
AD11315	Rt.197 Br.	11/15/00	HRMP	<11	U	Less than MDL
AD11321	B.F.Br	11/15/00	HRMP	<11	U	Less than MDL
AD11723	B.F.Br	11/22/00	HRMP	<11	U	Less than MDL
AD11724	Rt.197 Br.	11/22/00	HRMP	<11	U	Less than MDL
AD11819	B.F.Br	11/29/00	HRMP	<11	U	Less than MDL
AD11822	Rt.197 Br.	11/29/00	HRMP	<11	U	Less than MDL
AD12120	B.F.Br	12/6/00	HRMP	<11	U	Less than MDL
AD12121	Rt.197 Br.	12/6/00	HRMP	<11	U	Less than MDL
AD12311	B.F.Br	12/13/00	HRMP	<11	U	Less than MDL
AD12312	Rt.197 Br.	12/13/00	HRMP	<11	U	Less than MDL
AD12318	Rt.197 Br.	12/13/00	HRMP	<11	U	Less than MDL
AD12655	B.F.Br	12/20/00	HRMP	<11	U	Less than MDL
AD12657	Rt.197 Br.	12/20/00	HRMP	<11	U	Less than MDL
AD12661	TID-WEST	12/20/00	HRMP	<11	U	Less than MDL
AD12779	Rt.197 Br.	12/27/00	HRMP	<11	U	Less than MDL
AD12782	Rt.197 Br.	12/27/00	HRMP	<11	U	Less than MDL

(1) - MDL = method detection limit, PQL = practical quantitation limit.

Table A-4. Summary of Environmental Data Assigned "P" Qualifier

NEA ID No.	Sample ID	Date Collected	Program	PCB Concentration (ng/L)	Data Qualifiers	Notes (1)
AD00043	TID-WEST	1/5/00	HRMP	26	P	Less than PQL
AD00044	TID-PRW2	1/5/00	HRMP	15	P	Less than PQL
AD00045	Rt.29 Br.	1/5/00	HRMP	23	P	Less than PQL
AD00232	Rt.29 Br.	1/12/00	HRMP	13	P	Less than PQL
AD00235	BOATLAUNCH	1/12/00	HRMP	27	P	Less than PQL
AD00518	TID-WEST	1/19/00	HRMP	11	P	Less than PQL
AD00520	BOATLAUNCH	1/19/00	HRMP	20	P	Less than PQL
AD00660	BOATLAUNCH	1/26/00	HRMP	14	P	Less than PQL
AD00750	BOATLAUNCH	2/2/00	HRMP	26	P	Less than PQL
AD00788	BOATLAUNCH	2/9/00	HRMP	25	P	Less than PQL
AD00874	Rt.29 Br.	2/16/00	HRMP	19	P	Less than PQL
AD00877	BOATLAUNCH	2/16/00	HRMP	36	P	Less than PQL
AD01185	TID-WEST	2/23/00	HRMP	22	P	Less than PQL
AD01187	Rt.29 Br.	2/23/00	HRMP	30	P	Less than PQL
AD01188	TID-WEST	2/23/00	HRMP	29	P	Less than PQL
AD01190	BOATLAUNCH	2/23/00	HRMP	20	P	Less than PQL
AD01625	TID-WEST	3/1/00	HRMP	16	P	Less than PQL
AD01628	Rt.29 Br.	3/1/00	HRMP	16	P	Less than PQL
AD01629	Rt.29 Br.	3/1/00	HRMP	17	P	Less than PQL
AD01631	BOATLAUNCH	3/1/00	HRMP	20	P	Less than PQL
AD01758	BOATLAUNCH	3/8/00	HRMP	19	P	Less than PQL
AD01765	TID-WEST	3/8/00	HRMP	12	P	Less than PQL
AD01768	Rt.29 Br.	3/8/00	HRMP	21	P	Less than PQL
AD01973	TID-WEST	3/15/00	HRMP	12	P	Less than PQL
AD01979	BOATLAUNCH	3/15/00	HRMP	11	P	Less than PQL
AD02137	TID-WEST	3/22/00	HRMP	27	P	Less than PQL
AD02141	Rt.29 Br.	3/22/00	HRMP	27	P	Less than PQL
AD02352	HRM 194.2E	3/28/00	2000 HIGH FLOW	25	P	Less than PQL
AD02363	Rt.197 Br.	3/29/00	HRMP	33	P	Less than PQL
AD02423	Rt.197 Br.	4/5/00	HRMP	12	P	Less than PQL
AD02424	TID-WEST	4/5/00	HRMP	33	P	Less than PQL
AD02426	TID-WEST	4/5/00	HRMP	39	P	Less than PQL
AD02429	Rt.197 Br.	4/4/00	2000 HIGH FLOW 2	31	P	Less than PQL
AD02430	Rt.197 Br.	4/4/00	2000 HIGH FLOW 2	13	P	Less than PQL
AD02431	HRM 194.2E	4/4/00	2000 HIGH FLOW 2	15	P	Less than PQL
AD02432	Rt.197 Br.	4/5/00	2000 HIGH FLOW 2	14	P	Less than PQL
AD02791	TID-WEST	4/12/00	HRMP	13	P	Less than PQL
AD02795	Rt.29 Br.	4/12/00	HRMP	18	P	Less than PQL
AD02797	BOATLAUNCH	4/12/00	HRMP	13	P	Less than PQL
AD03122	TID-WEST	4/19/00	HRMP	19	P	Less than PQL
AD03123	TID-PRW2	4/19/00	HRMP	14	P	Less than PQL
AD03125	Rt.29 Br.	4/19/00	HRMP	29	P	Less than PQL
AD03126	TID-PRW2	4/19/00	HRMP	20	P	Less than PQL
AD03127	BOATLAUNCH	4/19/00	HRMP	15	P	Less than PQL

Table A-4. Summary of Environmental Data Assigned "P" Qualifier

NEA ID No.	Sample ID	Date Collected	Program	PCB Concentration (ng/L)	Data Qualifiers	Notes (1)
AD03805	Rt.197 Br.	4/26/00	HRMP	12	P	Less than PQL
AD03807	TID-WEST	4/26/00	HRMP	36	P	Less than PQL
AD03812	BOATLAUNCH	4/26/00	HRMP	30	P	Less than PQL
AD04046	TID-WEST	5/3/00	HRMP	35	P	Less than PQL
AD04049	TID-PRW2	5/3/00	HRMP	16	P	Less than PQL
AD04050	Rt.29 Br.	5/3/00	HRMP	30	P	Less than PQL
AD04053	BOATLAUNCH	5/3/00	HRMP	20	P	Less than PQL
AD04187	TID-PRW2	5/10/00	HRMP	42	P	Less than PQL
AD04192	BOATLAUNCH	5/10/00	HRMP	21	P	Less than PQL
AD04879	TID-PRW2	5/24/00	HRMP	39	P	Less than PQL
AD04883	BOATLAUNCH	5/24/00	HRMP	28	P	Less than PQL
AD04958	TID-PRW2	5/31/00	HRMP	39	P	Less than PQL
AD04963	BOATLAUNCH	5/31/00	HRMP	19	P	Less than PQL
AD05101	TID-PRW2	6/7/00	HRMP	32	P	Less than PQL
AD05105	BOATLAUNCH	6/7/00	HRMP	21	P	Less than PQL
AD05265	TID-PRW2	6/14/00	HRMP	41	P	Less than PQL
AD05267	TID-PRW2	6/14/00	HRMP	44	P	Less than PQL
AD05614	BOATLAUNCH	6/21/00	HRMP	44	P	Less than PQL
AD05951	BOATLAUNCH	6/28/00	HRMP	30	P	Less than PQL
AD06098	Rt.197 Br.	7/5/00	HRMP	14	P	Less than PQL
AD06106	BOATLAUNCH	7/5/00	HRMP	30	P	Less than PQL
AD06932	BOATLAUNCH	7/26/00	HRMP	31	P	Less than PQL
AD07245	BOATLAUNCH	8/2/00	HRMP	21	P	Less than PQL
AD07616	Rt.197 Br.	8/9/00	HRMP	15	P	Less than PQL
AD07633	BOATLAUNCH	8/9/00	HRMP	36	P	Less than PQL
AD07638	HR-5 BL	8/9/00	TRANSECT MONITORING	28	P	Less than PQL
AD07639	HR-6 BL	8/9/00	TRANSECT MONITORING	16	P	Less than PQL
AD07640	HR-7 BL	8/9/00	TRANSECT MONITORING	19	P	Less than PQL
AD07644	HR-11 BL	8/9/00	TRANSECT MONITORING	36	P	Less than PQL
AD07890	BOATLAUNCH	8/16/00	HRMP	32	P	Less than PQL
AD08198	TID-PRW2	8/23/00	HRMP	28	P	Less than PQL
AD08202	BOATLAUNCH	8/23/00	HRMP	22	P	Less than PQL
AD08460	TID-PRW2	8/30/00	HRMP	39	P	Less than PQL
AD08464	BOATLAUNCH	8/30/00	HRMP	19	P	Less than PQL
AD08477	HR-1	8/30/00	TRANSECT MONITORING	23	P	Less than PQL
AD08480	HR-6	8/30/00	TRANSECT MONITORING	38	P	Less than PQL
AD08485	HR-11	8/30/00	TRANSECT MONITORING	33	P	Less than PQL
AD08570	TID-PRW2	9/6/00	HRMP	37	P	Less than PQL
AD08572	TID-PRW2	9/6/00	HRMP	44	P	Less than PQL
AD08946	PLUNGEPOOL	9/13/00	HRMP	12	P	Less than PQL
AD09055	TID-PRW2	9/20/00	HRMP	42	P	Less than PQL
AD09058	TID-PRW2	9/20/00	HRMP	44	P	Less than PQL
AD09060	BOATLAUNCH	9/20/00	HRMP	20	P	Less than PQL
AD09405	BOATLAUNCH	9/27/00	HRMP	17	P	Less than PQL

Table A-4. Summary of Environmental Data Assigned "P" Qualifier

NEA ID No.	Sample ID	Date Collected	Program	PCB Concentration (ng/L)	Data Qualifiers	Notes (1)
AD09553	B.F.Br	9/27/00	HRMP	12	P	Less than PQL
AD09555	Rt.197 Br.	9/27/00	HRMP	14	P	Less than PQL
AD09561	Rt.197 Br.	9/27/00	HRMP	16	P	Less than PQL
AD09722	BOATLAUNCH	10/4/00	HRMP	17	P	Less than PQL
AD09814	BOATLAUNCH	10/11/00	HRMP	18	P	Less than PQL
AD10003	Rt.197 Br.	10/18/00	HRMP	22	P	Less than PQL
AD10683	TID-PRW2	11/1/00	HRMP	43	P	Less than PQL
AD11323	BOATLAUNCH	11/15/00	HRMP	22	P	Less than PQL
AD11325	PLUNGEPOOL	11/15/00	HRMP	12	P	Less than PQL
AD11818	BOATLAUNCH	11/29/00	HRMP	13	P	Less than PQL
AD11825	TID-PRW2	11/29/00	HRMP	20	P	Less than PQL
AD12129	BOATLAUNCH	12/6/00	HRMP	36	P	Less than PQL
AD12314	TID-WEST	12/13/00	HRMP	38	P	Less than PQL
AD12315	TID-PRW2	12/13/00	HRMP	18	P	Less than PQL
AD12320	BOATLAUNCH	12/13/00	HRMP	13	P	Less than PQL
AD12659	TID-WEST	12/20/00	HRMP	21	P	Less than PQL
AD12660	Rt.29 Br.	12/20/00	HRMP	27	P	Less than PQL
AD12781	TID-WEST	12/27/00	HRMP	17	P	Less than PQL

(1) - MDL = method detection limit, PQL = practical quantitation limit.

Table A-5. Summary of Other Data Qualifiers Assigned to Environmental Samples

NEA ID No.	Sample ID	Date Collected	Program	PCB Concentration (ng/L)	Data Qualifiers	Notes (1)
AD00046	TID-WEST	1/5/00	HRMP	20	P,J	Less than PQL, Internal standard area performance
AD02144	BOATLAUNCH	3/22/00	HRMP	19	P,J	Less than PQL, Exceeded extraction holding time
AD02355	B.F.Br	3/28/00	2000 HIGH FLOW	<11	U,J	Less than MDL, Internal standard area performance
AD02794	Rt.29 Br.	4/12/00	HRMP	18	P,J	Less than PQL, Internal standard area performance
AD06301	Rt.197 Br.	7/12/00	HRMP	<11	U,J	Less than MDL, Internal standard area performance
AD06304	TID-WEST	7/12/00	HRMP	144	R	Duplicate RPD >35%
AD06308	TID-WEST	7/12/00	HRMP	97	R	Duplicate RPD >35%
AD06934	PLUNGEPOOL	7/26/00	HRMP	<11	U,J	Less than MDL, Exceeded extraction holding time
AD07656	2+10	8/9/00	TRANSECT MONITORING	<11	U,J	Less than MDL, Internal standard area performance
AD07658	2+50	8/9/00	TRANSECT MONITORING	<11	U,J	Less than MDL, Internal standard area performance
AD07662	3+10	8/9/00	TRANSECT MONITORING	<11	U,J	Less than MDL, Internal standard area performance
AD07664	3+50	8/9/00	TRANSECT MONITORING	<11	U,J	Less than MDL, Internal standard area performance
AD11731	BOATLAUNCH	11/22/00	HRMP	<11	U,J	Less than MDL, Surrogate recovery
AD11824	TID-WEST	11/29/00	HRMP	52	J	Duplicate RPD >35%, but sample result <5X MDL
AD11827	TID-WEST	11/29/00	HRMP	23	P,J	Less than PQL, Duplicate RPD >35%, but sample result <5X MDL
AD12663	BOATLAUNCH	12/20/00	HRMP	42	P,J	Less than PQL, Surrogate recovery
AD12777	B.F.Br	12/27/00	HRMP	<11	U,J	Less than MDL, Matrix spike recovery

(1) - MDL = method detection limit, PQL = practical quantitation limit.

317720

APPENDIX B FIELD LOGS



Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
Rt.29 Br.	1/5/00	12 : 10	Vertically Stratified Composite	12	1	high TSS observed
Blind Duplicate	1/5/00	:				Sample Taken at TID-WEST.
B.F.Br	1/5/00	10 : 00	Vertically Stratified Composite	6	1	no flow over dam
Rt.197 Br.	1/5/00	10 : 30	Vertically Stratified Composite	6	1	
TID-WEST EQBL	1/5/00	10 : 55	Rinse Blank			
TID-WEST MS	1/5/00	11 : 05	Surface Grab	3	1	
TID-WEST	1/5/00	11 : 05	Surface Grab	3	1	high TSS observed
TID-PRW2	1/5/00	11 : 30	Vertically Stratified Composite	6	1	

Additional Notes:

Weather Data

Temperature 25°F
Wind Calm
Precipitation None

Fort Edward Staff Gage

Time 10:40
Gage Height (ft) 22.37
Estimated Flow (cfs) 6966

Sampled by: Mike Wirth
Date: 1/5/00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	1/12/00	10 : 15	Vertically Stratified Composite	7	1	No flow over the dam. Strong North Wind.
Rt.197 Br. MS	1/12/00	11 : 00	Vertically Stratified Composite	6	1	
Rt.197 Br.	1/12/00	11 : 00	Vertically Stratified Composite	6	1	
TID-WEST	1/12/00	11 : 45	Surface Grab	3	1	Muddy / Turbid water. Turbid flow @ Griffn Isl.
TID-PRW2 EQBL	1/12/00	11 : 20	Rinse Blank			
TID-PRW2	1/12/00	11 : 30	Vertically Stratified Composite	11	1	
Rt.29 Br.	1/12/00	12 : 15	Vertically Stratified Composite	15	1	Turbid water sample.
Blind Duplicate	1/12/00	:				Taken at B.F.Falls

Additional Notes:

Weather Data

Temperature 30°
Wind 15-25 mph N
Precipitation None

Fort Edward Staff Gage

Time 11:50
Gage Height (ft) 21.63
Estimated Flow (cfs) 4230

Sampled by: M. Hennessey
Date: 1/12/00

317723

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br MS	2/16/00	11 : 30	Vertically Stratified Composite	7	1	No Flow over the dam. North wind.
B.F.Br	2/16/00	11 : 30	Vertically Stratified Composite	7	1	
Rt.197 Br.	2/16/00	12 : 00	Vertically Stratified Composite	6	1	Possible contamination from road salt in bottle.
TID-WEST	2/16/00	13 : 00	Surface Grab	3	1	Bucket hit side wall. To icy to get out farther.
Rt.29 Br. EQBL	2/16/00	13 : 10				
Rt.29 Br.	2/16/00	13 : 15	Vertically Stratified Composite	17	1	
Blind Duplicate	2/16/00	:				

Additional Notes:

Weather Data

Temperature 30°F
Wind Slight North
Precipitation Scattered Sket

Fort Edward Staff Gage

Time 12:00
Gage Height (ft) 22.36
Estimated Flow (cfs) 6920

Sampled by: Hennessey
Date: 02/16/00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br EQBL	2/23/00	7 : 30	Rinse Blank			
B.F.Br	2/23/00	10 : 15	Vertically Stratified Composite	7	2	No Flow Over The dam.
Rt.197 Br.	2/23/00	10 : 55	Vertically Stratified Composite	7	2	
TID-WEST	2/23/00	11 : 30	Surface Grab	3	2	
TID-WEST MS	2/23/00	11 : 30	Surface Grab	3	2	
Rt.29 Br.	2/23/00	12 : 00	Vertically Stratified Composite	17	2	
Blind Duplicate	2/23/00	:				Sample Taken at TID-WEST

Additional Notes:

Weather Data

Temperature 40°F overcast.
Wind None
Precipitation None

Fort Edward Staff Gage

Time 11:00
Gage Height (ft) 22.22
Estimated Flow (cfs) 6,370

Sampled by: M. Hennessey
Date: 02/23/00

317725

**General Electric Company
Hudson River Monitoring Program**

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	3/1/00	10 : 30	Vertically Stratified Composite	8	1	no flow over the dam.
Rt.197 Br. EQBL	3/1/00	12 : 15	Rinse Blank			
Rt.197 Br.	3/1/00	12 : 40	Vertically Stratified Composite	7	1	
TID-WEST	3/1/00	11 : 15	Surface Grab	3	1	
TID-PRW2 MS	3/1/00	11 : 30	Vertically Stratified Composite		1	
TID-PRW2	3/1/00	11 : 30	Vertically Stratified Composite	11	1	Grab sample due too high flow.
Rt.29 Br.	3/1/00	13 : 00	Vertically Stratified Composite	17	1	
Blind Duplicate	3/1/00	:				Sample Taken at Rt.29 Bridge

Additional Notes:

Weather Data

Temperature 40^s
 Wind Slight North
 Precipitation None

Fort Edward Staff Gage

Time 12:45
 Gage Height (ft) 22.63
 Estimated Flow (cfs) 8360
Daily : 8748

Sampled by: M. Hennessy
 Date: 3/1/00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	3/15/00	9 : 35	Vertically Stratified Composite	7	3	No flow over the dam.
Rt.197 Br.	3/15/00	10 : 30	Vertically Stratified Composite	7	2	
TID-WEST MS	3/15/00	11 : 45	Surface Grab		2	
TID-WEST	3/15/00	11 : 45	Surface Grab	3	2	turbid at snook kill
TID-PRW2 EQBL	3/15/00	11 : 15	Rinse Blank			
TID-PRW2	3/15/00	11 : 400	Vertically Stratified Composite	11	2	
Rt.29 Br.	3/15/00	12 : 20	Vertically Stratified Composite	17	2	
Blind Duplicate	3/15/00	:				Sample Taken at Rt.29 Bridge.

Additional Notes:

Weather Data

Temperature 30°f
Wind Slight N.
Precipitation None

Fort Edward Staff Gage

Time 11:10
Gage Height (ft) 22.34
Estimated Flow (cfs) 6843

Sampled by: M. Hennessey
Date: 3/15/00

317727

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	3/22/00	10 : 00	Vertically Stratified Composite	7	4	No flow over the dam.
Rt.197 Br.	3/22/00	12 : 00	Vertically Stratified Composite	7	4	
TID-WEST	3/22/00	10 : 45	Surface Grab	3	4	Turbid at Snook Kill.
TID-PRW2 MS	3/22/00	11 : 30	Vertically Stratified Composite	11	4	
TID-PRW2	3/22/00	11 : 30	Vertically Stratified Composite	11	4	
Rt.29 Br. EQBL	3/22/00	12 : 45	Rinse Blank			
Rt.29 Br.	3/22/00	12 : 55	Vertically Stratified Composite	17	4	
Blind Duplicate	3/22/00	:				Sample taken at B.F.Bridge.

Additional Notes:

Weather Data

Temperature 60°F
Wind None
Precipitation None

Fort Edward Staff Gage

Time 11:00
Gage Height (ft) 21.92
Estimated Flow (cfs) 5248

Sampled by: M. Hennessey
Date: 3/22/00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	3/28/00	10 : 50	Vertically Stratified Composite	7	6	Slight flow over the dam.
Rt.197 Br.	3/28/00	11 : 40	Vertically Stratified Composite	7	7	flow approx = 8,050cfs
HRM 194.2E	3/28/00	22 : 00	Composite	NA	4	floating debris, grass on sampler, flow=15,296
HRM 194.2E	3/28/00	22 : 20	Composite	NA	4	Used Rt.29 Br. Nose1, Flow =16,752.
HRM 194.2E	3/28/00	22 : 45	Composite	NA	4	floating debris. Flow = 17,619.
B.F.Br	3/28/00	23 : 45	Composite	NA	4	floating debris, flow = 17,522
HRM 194.2E	3/29/00	4 : 15	Composite	NA	4	floating debris, Flow = 18749 cfs
Rt.197 Br.	3/30/00	8 : 10	Vertically Stratified Composite	10	3	floating debris, flow = 15,807cfs
Rt.197 Br.	3/29/00	17 : 50	Vertically Stratified Composite	10	4	floating debris, flow = 18,650cfs

Additional Notes:

Weather Data

Temperature ~40's
Wind Mostly North
Precipitation intermittent

Fort Edward Staff Gage

Time -
Gage Height (ft) -
Estimated Flow (cfs) "SEE COMMENTS"

Sampled by: Hennessey / LaRue

Date:

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	3/29/00	11 : 50	Vertically Stratified Composite	8	5	
Rt.29 Br. EQBL	3/29/00	13 : 00	Rinse Blank			
Rt.197 Br.	3/29/00	10 : 50	Vertically Stratified Composite	7 4.7	5	floating debris, flow = 19,500cfs
TID-WEST MS	3/29/00	12 : 25	Surface Grab	3	4	
TID-WEST	3/29/00	12 : 25	Surface Grab	3	4	Flow through culvert.
Rt.29 Br.	3/29/00	13 : 20	Vertically Stratified Composite	15	5	
Blind Duplicate	3/29/00	:				Sample taken at Rt.29.Br.

Additional Notes:

Weather Data

Temperature ~40's
Wind mostly North
Precipitation intermittent

Fort Edward Staff Gage

Time 11:00
Gage Height (ft) 22.32
Estimated Flow (cfs) 6,760

Sampled by: Hennessey/Larue
Date: 3/29/99

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
Rt. 197 Br. <u>AD02429</u>	4/4/00	15 : 30	Depth Integrated Composite	NA	2.0	flow = 12,083 cfs
Rt. 197 Br. <u>AD02430</u>	4/4/00	18 : 30 ⁴⁵	Depth Integrated Composite	NA	2.0	flow = 14,745 cfs
HRM 194.2E <u>AD02431</u>	4/4/00	21 : 20	Depth Integrated Composite	NA	2.0	flow = 16,562 cfs
Rt. 197 Br. <u>AD02432</u>	4/5/00	7 : 30	Depth Integrated Composite	NA	2.0	flow = 18,600 cfs

Additional Notes:

Weather Data

Temperature 40°
Wind Calm / cloudy
Precipitation Slight

Fort Edward Staff Gage

Time -
Gage Height (ft) -
Estimated Flow (cfs) SEE COMMENTS

Sampled by: M. Hennessey
Date: 4/4/00

317731

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	4/5/00	11 : 35	Depth Integrated Composite	NA	2	
B.F.Br MS	4/5/00	11 : 35	Depth Integrated Composite	NA	2	
Rt.197 Br. EQBL	4/5/00	9 : 30	Rinse Blank	NA		
Rt.197 Br.	4/5/00	10 : 50	Depth Integrated Composite	NA	2	flow = 18,500 cfs
TID-WEST	4/5/00	12 : 10	Surface Grab	NA	2	flow through culvert. Turbid at Griffen.
Rt.29 Br.	4/5/00	12 : 40	Depth Integrated Composite	NA	2	
Blind Duplicate	4/5/00	:				sdample taken at TID-WEST

Additional Notes:

Weather Data

Temperature 40°
Wind Calm / Cloudy
Precipitation None

Fort Edward Staff Gage

Time 10:50
Gage Height (ft) 24.9
Estimated Flow (cfs) 18,500

Sampled by: M. Hennessey

Date: 4/5/00

317732

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	4/12/00	12 : 30	Depth Integrated Composite	8.0	3	Slight flow over the falls
Rt.197 Br. MS	4/12/00	12 : 10	Depth Integrated Composite	8.0	3	
Rt.197 Br.	4/12/00	12 : 10	Depth Integrated Composite	8.0	3	
Rt.197 Br.	4/12/00	12 : 10	Depth Integrated Composite	8.0	3	
TID-WEST	4/12/00	10 : 10	Surface Grab	3.0	3	turbid flow through culvert.
TID-PRW2 EQBL	4/12/00	10 : 00	Rinse Blank			
TID-PRW2	4/12/00	10 : 45	Vertically Stratified Composite	11.0	3	
Rt.29 Br.	4/12/00	11 : 00	Vertically Stratified Composite	15.0	3	
Blind Duplicate	4/12/00	:				Sample Taken at Rt. 29 Br.

Additional Notes:

Weather Data

Temperature ~30°F
Wind Slight North
Precipitation None

Fort Edward Staff Gage

Time 12:15
Gage Height (ft) 23.35
Estimated Flow (cfs) 11,600

Sampled by: M. Hennessey
Date: 4/12/00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	4/19/00	9 : 30	Depth Integrated Composite	8.0	6	Flow over all portions of the falls.
Rt.197 Br.	4/19/00	10 : 30	Depth Integrated Composite	8.0	6	
Rt.197 Br.	4/19/00	10 : 30	Depth Integrated Composite	8.0	6	
TID-WEST MS	4/19/00	11 : 45	Surface Grab	3.0	6	Flow through culvert.
TID-WEST	4/19/00	11 : 45	Surface Grab	3.0	6	
TID-PRW2	4/19/00	11 : 10	Depth Integrated Composite	11.0	6	
Rt.29 Br. EQBL	4/19/00	12 : 15	Rinse Blank		0	
Rt.29 Br.	4/19/00	12 : 30	Depth Integrated Composite	15.0	6	
Blind Duplicate	4/19/00	:				Sample Taken at TID-PRW2

Additional Notes:

Weather Data

Temperature 45°F
Wind None
Precipitation None

Fort Edward Staff Gage

Time 10:30
Gage Height (ft) 23.83
Estimated Flow (cfs) 13,800

Sampled by: M. Hennessey
Date: 4/19/00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br EQBL	4/26/00	9 : 45	Rinse Blank			
B.F.Br	4/26/00	9 : 50	Depth Integrated Composite	NA	7.0	Flow Over all Portions of the dam.
Rt.197 Br.	4/26/00	10 : 35	Depth Integrated Composite	NA	7.0	
TID-WEST	4/26/00	11 : 00	Surface Grab	NA	7.0	Slight flow through culvert.
TID-WEST MS	4/26/00	11 : 00	Surface Grab		7.0	
Rt.29 Br.	4/26/00	11 : 30	Depth Integrated Composite	NA	7.0	
Rt.197 Br.	4/26/00	10 : 35	Depth Integrated Composite	NA	7.0	
Blind Duplicate	4/26/00	:				Sample Taken at Rt.29 br.

Additional Notes:

Weather Data

Temperature 40°F
Wind Calm
Precipitation None

Fort Edward Staff Gage

Time 10:30
Gage Height (ft) 29.64
Estimated Flow (cfs) 14,700

Sampled by: M. Hennessey
Date: 4/26/00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	5/3/00	11 : 00	Depth Integrated Composite	8.0	13	Slight flow over the dam.
Rt.197 Br.	5/3/00	11 : 50	Depth Integrated Composite	8.0	13	
Rt.197 Br.	5/3/00	11 : 50	Depth Integrated Composite	8.0	13	
TID-WEST	5/3/00	12 : 15	Surface Grab	3.0	13	flow flowing west through culvert.
TID-PRW2 EQBL	5/3/00	12 : 20	Rinse Blank			
TID-PRW2 MS	5/3/00	12 : 45	Depth Integrated Composite	11.0	13	
TID-PRW2	5/3/00	12 : 45	Depth Integrated Composite	11.0	13	
Rt.29 Br.	5/3/00	13 : 10	Depth Integrated Composite	15.0	12	
Blind Duplicate	5/3/00	:				

Additional Notes:

Weather Data

Temperature ≈ 40°
Wind None
Precipitation None

Fort Edward Staff Gage

Time 11:45
Gage Height (ft) 22.71
Estimated Flow (cfs) 8,670

Sampled by: M. Hennessey
Date: 5/3/00

317736

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	5/10/00	10 : 00	Depth Integrated Composite	8.0	15	slight flow over the falls near the hydro station.
Rt.197 Br.	5/10/00	10 : 30	Depth Integrated Composite	8.0	15	
Rt.197 Br.	5/10/00	10 : 30	Depth Integrated Composite	8.0	15	
B.F.Br EQBL	5/10/00	9 : 50	Rinse Blank			
TID-WEST	5/10/00	11 : 00	Surface Grab	3.0	15	
TID-PRW2	5/10/00	11 : 15	Depth Integrated Composite	11.0	15	
Rt.29 Br. MS	5/10/00	12 : 00	Depth Integrated Composite	12.0	15	
Rt.29 Br.	5/10/00	12 : 00	Depth Integrated Composite	15.0	15	
Blind Duplicate	5/10/00	:				Sample taken at TID-WEST.

Additional Notes:

Weather Data

Temperature 60°F
Wind Slight North
Precipitation Slight

Fort Edward Staff Gage

Time 12:20
Gage Height (ft) 22.79
Estimated Flow (cfs) 8756

Sampled by: M. Hennessey
Date: 5/10/00

317737

**General Electric Company
Hudson River Monitoring Program**

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	5/17/00	10 : 15	Depth Integrated Composite	NA	13	flow over all portions of the dam.
Rt.197 Br.	5/17/00	10 : 55	Depth Integrated Composite	NA	13	
Rt.197 Br.	5/17/00	10 : 55	Depth Integrated Composite	NA	13	
TID-WEST MS	5/17/00	11 : 30	Surface Grab	NA	13	flow through culvert into river.
TID-WEST	5/17/00	11 : 30	Surface Grab	NA	13	
Rt.29 Br.	5/17/00	12 : 00	Depth Integrated Composite	NA	13	
Rt.197 Br. EQBL	5/17/00	10 : 30	Rinse Blank			
Blind Duplicate	5/17/00	:				Sample taken at Bakers Falls.

Additional Notes:

Weather Data

Temperature 70[°]F
Wind None
Precipitation None

Fort Edward Staff Gage

Time 12:20
Gage Height (ft) 24.87
Estimated Flow (cfs) 18,850

Sampled by: M. Hennessey
Date: 5/17/00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	5/24/00	10 : 00	Depth Integrated Composite	8.0	13	Flow over the entire portion of the Dam.
Rt.197 Br.	5/24/00	11 : 45	Depth Integrated Composite	8.0	13	Clear/normal visible TSS.
Rt.197 Br.	5/24/00	11 : 45	Depth Integrated Composite	8.0	13	
TID-WEST EQBL	5/24/00	11 : 10	Rinse Blank			
TID-WEST	5/24/00	11 : 15	Surface Grab	3.0	13	Flow Through Culvert into the river.
TID-PRW2 MS	5/24/00	10 : 30	Depth Integrated Composite	11.0	13	Very high visible TSS. River is very muddy.
TID-PRW2	5/24/00	10 : 30	Depth Integrated Composite	11.0	13	
Rt.29 Br.	5/24/00	12 : 30	Depth Integrated Composite	15.0	13	High visible TSS, river muddy here as well.
Blind Duplicate	5/24/00	:				Sample taken at Rt. 29 Br.

Additional Notes:

Weather Data

Temperature ~ 50
Wind None
Precipitation Late Afternoon

Fort Edward Staff Gage

Time 10:15
Gage Height (ft) 22.80
Estimated Flow (cfs) 8,800

Sampled by: M. Hennessey
Date: 5/24/00

317739

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	5/31/00	10 : 10	Depth Integrated Composite	8.0	17	Slight Flow Over the Falls
Rt.197 Br.	5/31/00	11 : 50	Depth Integrated Composite	7.0	17	
Rt.197 Br.	5/31/00	11 : 50	Depth Integrated Composite	7.0	17	
TID-WEST	5/31/00	11 : 10	Surface Grab	3.0	17	No Flow through Culvert.
TID-PRW2 EQBL	5/31/00	11 : 00	Rinse Blank			
TID-PRW2	5/31/00	11 : 20	Depth Integrated Composite	11.0	17	
Rt.29 Br. MS	5/31/00	12 : 20	Depth Integrated Composite	15.0	17	
Rt.29 Br.	5/31/00	12 : 20	Depth Integrated Composite	15.0	17	
Blind Duplicate	5/31/00	:				Sample Taken at TID-WEST

Additional Notes:

Weather Data

Temperature 60°F
Wind Strong South
Precipitation None

Fort Edward Staff Gage

Time 11:45
Gage Height (ft) 22.63
Estimated Flow (cfs) 8,360

Sampled by: M. Hennessey
Date: 5/31/00

317740

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br EQBL	6/7/00	10 : 00	Rinse Blank			No flow over the dam.
B.F.Br MS	6/7/00	10 : 15	Depth Integrated Composite	4.0	16	
B.F.Br	6/7/00	10 : 15	Depth Integrated Composite	4.0	16	
Rt.197 Br.	6/7/00	11 : 00	Depth Integrated Composite	4.0	16	
Rt.197 Br.	6/7/00	11 : 00	Depth Integrated Composite	4.0	16	
TID-WEST	6/7/00	11 : 45	Depth Integrated Composite	3.0	16	No flow through culvert, leaf in bottle.
TID-PRW2	6/7/00	11 : 30	Depth Integrated Composite	11.0	16	River muddy from G.Island-downstream.
Rt.29 Br.	6/7/00	12 : 15	Depth Integrated Composite	15.0	16	cloudy samples
Blind Duplicate	6/7/00	:				Sample Taken at TID-WEST

Additional Notes:

Weather Data

Temperature 70°f
Wind None
Precipitation None

Fort Edward Staff Gage

Time 11:30
Gage Height (ft) 21.95
Estimated Flow (cfs) 5730

Sampled by: M. Hennessey
Date: 6/7/00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	6/14/00	9:40	Depth Integrated Composite	6	16	little water over dam near GE plant side
Rt.197 Br.	6/14/00	11:45	Depth Integrated Composite		16	
Rt.197 Br.	6/14/00	11:45	Depth Integrated Composite		16	
TID-WEST EQBL	6/14/00	10:40	Rinse Blank			
TID-WEST MS	6/14/00	10:45	Surface Grab		16	
TID-PRW2	6/14/00	10:30	Depth Integrated Composite		16	
Rt.29 Br.	6/14/00	12:45	Depth Integrated Composite		16	
TID-WEST	6/14/00	10:45	Surface Grab		16	
Blind Duplicate	6/14/00	:				Sample taken At TID-PRW2

Additional Notes:

Weather Data

Temperature 65°F
Wind None
Precipitation light rain

Fort Edward Staff Gage

Time 12:00
Gage Height (ft) 22.37
Estimated Flow (cfs) 6960

Sampled by: Michael Wenth
Date: 6/14/00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	6/21/00	10 : 10	Depth Integrated Composite	7.0	25.0	
Rt.197 Br. EQBL	6/21/00	10 : 20	Rinse Blank			
Rt.197 Br.	6/21/00	10 : 45	Depth Integrated Composite	7.0	25.0	
TID-WEST	6/21/00	12 : 10	Surface Grab	3.0	25.0	
TID-PRW2 MS	6/21/00	11 : 30	Depth Integrated Composite	11.0	25.0	
TID-PRW2	6/21/06	11 : 30	Depth Integrated Composite	11.0	25.0	
Rt.197 Br.	6/21/00	10 : 45	Depth Integrated Composite	7.0	25.0	
Rt.29 Br.	6/21/00	12 : 30	Depth Integrated Composite	15.0	25.0	
Blind Duplicate	6/21/00	:				Sample Taken at TID-WEST

Additional Notes:

Weather Data

Temperature 66°F
Wind Calm / cloudy
Precipitation None

Fort Edward Staff Gage

Time 10:45
Gage Height (ft) 22.32
Estimated Flow (cfs) 6760

Sampled by: M. Hennessey
Date: 6/21/00



General Electric Company
Hudson River Monitoring Program

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br MS	6/28/00	12 : 15	Depth Integrated Composite	7.0	23.0	Nor flow over the dam.
B.F.Br	6/28/00	12 : 15	Depth Integrated Composite	7.0	23.0	
Rt.197 Br.	6/28/00	12 : 30	Depth Integrated Composite	6.0	23.0	
Rt.197 Br.	6/28/00	12 : 30	Depth Integrated Composite	6.0	23.0	
TID-WEST	6/28/00	11 : 35	Surface Grab	3.0	23.0	No flow through culvert.
TID-PRW2	6/28/00	11 : 30	Depth Integrated Composite	11.0	23.0	
Rt.29 Br. EQBL	6/28/00	12 : 55	Rinse Blank			
Rt.29 Br.	6/28/00	13 : 00	Depth Integrated Composite	15.0	23.0	
Blind Duplicate	6/28/00	:				TID-PRW2

Additional Notes:

Weather Data

Temperature 60°s
Wind Slight
Precipitation None

Fort Edward Staff Gage

Time 12:30
Gage Height (ft) 21.36
Estimated Flow (cfs) 3,680

Sampled by: M. Hennessey
Date: 6/28/00

317744

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br EQBL	7/5/00	11 : 50	Rinse Blank			No flow over the dam.
B.F.Br	7/5/00	12 : 00	Depth Integrated Composite	NA	22.0	
Rt.197 Br.	7/5/00	12 : 35	Depth Integrated Composite	NA	22.0	
Rt.197 Br.	7/5/00	12 : 35	Depth Integrated Composite	NA	22.0	
TID-WEST MS	7/5/00	12 : 50	Surface Grab	NA	22.0	No flow through culvert.
TID-WEST	7/5/00	12 : 50	Surface Grab	NA	22.0	
TID-PRW2	7/5/00	11 : 00	Depth Integrated Composite	NA	22.0	
Rt.29 Br.	7/5/00	13 : 00	Depth Integrated Composite	NA	22.0	
Blind Duplicate	7/5/00	:				Taken at Rt.29 Br.

Additional Notes:

Weather Data

Temperature 70°
Wind None
Precipitation None

Fort Edward Staff Gage

Time -
Gage Height (ft) -
Estimated Flow (cfs) Not Available

Sampled by: Hennessey
Date: 7/5/00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	7/12/00	10:05	Depth Integrated Composite		24	- YSI temp may not be correct - No flow over dam
Rt.197 Br.	7/12/00	11:45	Depth Integrated Composite		26	
Rt.197 Br.	7/12/00	11:45	Depth Integrated Composite		26	
TID-WEST EQBL	7/12/00	11:10	Rinse Blank			
TID-PRW2 MS	7/12/00	10:45	Depth Integrated Composite			
TID-PRW2	7/12/00	10:45	Depth Integrated Composite		22	
Rt.29 Br.	7/12/00	13:15	Depth Integrated Composite		26	
TID-WEST	7/12/00	11:15	Surface Grab		22	
Blind Duplicate	7/12/00	:				Sample Taken at TID-WEST.

Additional Notes:

Weather Data

Temperature ~ 70°F
Wind Calm
Precipitation None

Fort Edward Staff Gage

Time 12:20
Gage Height (ft) 22.38
Estimated Flow (cfs) 7000

Sampled by: M. Wirth
Date: 7/12/00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br MS	7/26/00	9 : 50	Depth Integrated Composite	6.0	22	
B.F.Br	7/26/00	9 : 50	Depth Integrated Composite	6.0	22	
Rt.197 Br.	7/26/00	10 : 40	Depth Integrated Composite	6.0	22	
Rt.197 Br.	7/26/00	10 : 40	Depth Integrated Composite	6.0	22	
TID-WEST	7/26/00	11 : 15	Surface Grab	3.0	22	
TID-PRW2 EQBL	7/26/00	10 : 50	Rinse Blank			
TID-PRW2	7/26/00	11 : 00	Depth Integrated Composite	11.0	22	
Rt.29 Br.	7/26/00	12 : 00	Depth Integrated Composite	15.0	22	
Blind Duplicate	7/26/00	:			22	Taken At TID-WEST

Additional Notes:

Weather Data

Temperature 80°
Wind None
Precipitation None

Fort Edward Staff Gage

Time 10:45
Gage Height (ft) 20.14
Estimated Flow (cfs) 896

Sampled by: M. Hennessey
Date: 7/26/00

317747

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br EQBL	8/2/00	9 : 40	Rinse Blank			
B.F.Br	8/2/00	9 : 45	Depth Integrated Composite	7.0	22	No Flow over the falls.
Rt.197 Br.	8/2/00	10 : 20	Depth Integrated Composite	7.0	22	
Rt.197 Br.	8/2/00	10 : 20	Depth Integrated Composite	7.0	22	
TID-WEST MS	8/2/00	11 : 15	Surface Grab	3.0	22	No flow through culvert.
TID-WEST	8/2/00	11 : 15	Surface Grab	3.0	22	
TID-PRW2	8/2/00	11 : 30	Depth Integrated Composite	11.0	22	
Rt.29 Br.	8/2/00	12 : 00	Depth Integrated Composite	15.0	0	
Blind Duplicate	8/2/00	:				Sample Taken at Rt.29 Br.

Additional Notes:

Weather Data

Temperature Overcast (85°)
Wind None
Precipitation None

Fort Edward Staff Gage

Time 11:00
Gage Height (ft) 22.91
Estimated Flow (cfs) 7,900

Sampled by: M. Hennessey
Date: 8/2/00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	8/9/00	14:00	Depth Integrated Composite	7	25	No flow over dam
Rt.197 Br.	8/9/00	14:30	Depth Integrated Composite	5	25	
Rt.197 Br.	8/9/00	14:30	Depth Integrated Composite	5	25	
TID-WEST	8/9/00	15:00	Surface Grab		25	
TID-PRW2 MS	8/9/00	15:00	Depth Integrated Composite		25	
TID-PRW2	8/9/00	15:00	Depth Integrated Composite	8	25	
Rt.29 Br. EQBL	8/9/00	15:25	Rinse Blank	12 (new)	25	
Rt.29 Br.	8/9/00	15:30	Depth Integrated Composite	12	25	
Blind Duplicate	8/9/00	:				Sample Taken at DEBR TID-WEST

Additional Notes:

Weather Data

Temperature 85°F
Wind Strong North
Precipitation None

Fort Edward Staff Gage

Time 14:20
Gage Height (ft) 21:08 (read from gage)
Estimated Flow (cfs) 2600
Sampled by: M. Hennessy
Date: 8/9/00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	8/30/00	10 : 35	Depth Integrated Composite	7.0	22.0	
TID-WEST <i>AD08458</i> MS	8/30/00	11 : 50	Surface Grab	3.0	22.0	
TID-WEST <i>AD08459</i>	8/30/00	11 : 50	Surface Grab	3.0	22.0	
TID-PRW2 <i>AD08460</i>	8/30/00	12 : 55	Depth Integrated Composite	11.0	22.0	
Rt.29 Br.	8/30/00	11 : 20	Depth Integrated Composite	15.0	22.0	
Blind Duplicate	8/30/00	:				Taken at TID-WEST

AD08462

Additional Notes:

Weather Data

Temperature 70°F
Wind Calm
Precipitation None

Fort Edward Staff Gage

Time 12:00
Gage Height (ft) 21.27
Estimated Flow (cfs) 3,410

Sampled by: M. Hennessey
Date: 8/30/00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	9/6/00	7:25	Depth Integrated Composite	5	20	no flow over dam
Rt.197 Br.	9/6/00	9:30	Depth Integrated Composite	3	20	
Rt.197 Br.	9/6/00	9:30	Depth Integrated Composite	3	20	
TID-WEST EQBL	9/6/00	8:15	Rinse Blank			
TID-WEST MS	9/6/00	8:20	Surface Grab			one bottle neck cracked but not leaking
TID-WEST	9/6/00	8:20	Surface Grab		20	
TID-PRW2	9/6/00	8:10	Depth Integrated Composite	6	20	Blind dup taken here.
Rt.29 Br.	9/6/00	10:35	Depth Integrated Composite	12	20	
Blind Duplicate	9/6/00	:				

Additional Notes:

Weather Data

Temperature ~50°F
Wind None
Precipitation None

Fort Edward Staff Gage

Time 9:40
Gage Height (ft) 22.20
Estimated Flow (cfs) 6299

Sampled by: M. Werth
Date: 9/6/00

317751

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br MS	9/13/00	11:30	Depth Integrated Composite	8	21°	No flow over the dam
B.F.Br	9/13/00	11:30	Depth Integrated Composite	8	21°	
Rt.197 Br.	9/13/00	12:00	Depth Integrated Composite	7.0	21.0	
Rt.197 Br.	9/13/00	12:00	Depth Integrated Composite	7.0	21.0	
TID-WEST	9/13/00	12:45	Surface Grab	3.0	21.0	
TID-PRW2	9/13/00	12:55	Depth Integrated Composite	11.0	21.0	
Rt.29 Br. EQBL	9/13/00	:	Rinse Blank			
Rt.29 Br.	9/13/00	13:30	Depth Integrated Composite	15.0	21.0	
Blind Duplicate	9/13/00	:				

Additional Notes:

Weather Data

Temperature 80°
Wind None
Precipitation None

Fort Edward Staff Gage

Time 12:00
Gage Height (ft) 20.83
Estimated Flow (cfs) 7220

Sampled by: M. Hennessey
Date: 9/13/00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br EQBL	9/20/00	9:50	Rinse Blank			
B.F.Br	9/20/00	9:55	Depth Integrated Composite	7.0	19.0	
Rt.197 Br.	9/20/00	11:00	Depth Integrated Composite	7.0	19.0	
Rt.197 Br.	9/20/00	11:00	Depth Integrated Composite	7.0	19.0	
TID-WEST	9/20/00	11:45	Surface Grab	3.0	19.0	
TID-PRW2	9/20/00	12:00	Depth Integrated Composite	11.0	19.0	
Rt.29 Br. MS	9/20/00	12:10	Depth Integrated Composite	15.0		
Rt.29 Br.	9/20/00	12:10	Depth Integrated Composite	15.0	19.0	
Blind Duplicate	9/20/00	:				Sample collected at TID-PRW2

Additional Notes:

Weather Data

Temperature Sunny 80°F
Wind None
Precipitation None

Fort Edward Staff Gage

Time 11:00
Gage Height (ft) 21.21
Estimated Flow (cfs) 3230

Sampled by: M. Hennessey
Date: 09-20-00

317753

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	9/27/00	10:40	Depth Integrated Composite	7.0	17.0	No Flow over the dam
Rt. 197 Br. 29 EQBL	9/27/00	17:00	Rinse Blank			
Rt. 197 Br.	9/27/00	12:05	Depth Integrated Composite	7.0	17.0	
TID-WEST	9/27/00	14:50	Surface Grab	3.0	17.0	
TID-WEST MS	9/27/00	14:50	Surface Grab	3.0	17.0	
TID-PRW2	9/27/00	15:00	Depth Integrated Composite	11.0	17.0	
Rt. 197 Br.	9/27/00	12:05	Depth Integrated Composite	7.0	17.0	
Rt. 29 Br.	9/27/00	17:05	Depth Integrated Composite	15.0	17.0	
Blind Duplicate	9/27/00	:				Sample taken at 29 Bridge 197. br

Additional Notes:

Weather Data

Temperature 55°
Wind Calm
Precipitation None

Fort Edward Staff Gage

Time 12:00
Gage Height (ft) 21.73
Estimated Flow (cfs) 4566

Sampled by: Hennessey
Date: 9/27/00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
*B.F.Br	10/4/00	10 : 00	Depth Integrated Composite	7.0	17.0	
* Rt.197 Br. EQBL	10/4/00	10 : 10	Rinse Blank			
Rt.197 Br.	10/4/00	10 : 20	Depth Integrated Composite	7.0	17.0	
TID-WEST	10/4/00	10 : 45	Surface Grab	3.0	17.0	
* TID-PRW2 MS	10/4/00	11 : 40	Depth Integrated Composite	11.0	17.0	
TID-PRW2	10/4/00	11 : 40	Depth Integrated Composite	11.0	17.0	
Blind Duplicate	10/4/00	:				TID-WEST TID-PRW2
Rt.29 Br.	10/4/00	12 : 10	Depth Integrated Composite	15.0	17.0	
BOATLAUNCH	10/4/00	9 : 28	Surface Grab	5		

Additional Notes:

Weather Data

Temperature 60°
Wind None
Precipitation None

Fort Edward Staff Gage

Time 10:30
Gage Height (ft) 20.82
Estimated Flow (cfs) 1960

Sampled by: Hennessey
Date: 10-04-00

317755

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	10/11/00	9 : 55	Depth Integrated Composite	7.0	13	
Rt.197 Br. EQBL	10/11/00	10 : 15	Rinse Blank			
Rt.197 Br.	10/11/00	10 : 30	Depth Integrated Composite	7.0	13	
Rt.197 Br.	10/11/00	10 : 30	Depth Integrated Composite	7.0	13	
TID-WEST	10/11/00	11 : 25	Surface Grab	3.0	13	
TID-PRW2	10/11/00	11 : 25	Depth Integrated Composite	11.0	13	
Rt.29 Br. MS	10/11/00	12 : 00	Depth Integrated Composite	15.0	13	
Rt.29 Br.	10/11/00	12 : 00	Depth Integrated Composite	15.0	13	
Blind Duplicate	10/11/00	:				Sample taken at B.F.Br.

Additional Notes:

Weather Data

Temperature 60°
Wind Strong North
Precipitation None

Fort Edward Staff Gage

Time 10:00
Gage Height (ft) 21.51
Estimated Flow (cfs) 3,840
Daily Average: 3,139

Sampled by: Martin P. Hennessey
Date: 10-11-00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	10/18/00	10 : 00	Depth Integrated Composite	7	13	
Rt.197 Br.	10/18/00	10 : 40	Depth Integrated Composite	7	13	
Rt.197 Br.	10/18/00	10 : 40	Depth Integrated Composite	7	13	
TID-WEST	10/18/00	11 : 40	Surface Grab	3	13	
TID-PRW2 MS	10/18/00	11 : 15	Depth Integrated Composite	11	13	
TID-PRW2	10/18/00	11 : 15	Depth Integrated Composite	11	13	
Rt.29 Br. EQBL	10/18/00	12 : 00	Rinse Blank			
Rt.29 Br.	10/18/00	12 : 15	Depth Integrated Composite	17	13	
Blind Duplicate	10/18/00	:				sample taken at TID-WEST

Additional Notes:

Weather Data

Temperature 50°
Wind None
Precipitation Rain

Fort Edward Staff Gage

Time 21:56 11:00
Gage Height (ft) 21.56
Estimated Flow (cfs) 4000

Sampled by: M. Hennessey
Date: 10/18/00

317757

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br MS	11/1/00	9:50	Depth Integrated Composite	7.0	9.0	No flow over the falls
B.F.Br	11/1/00	9:50	Depth Integrated Composite	7.0	9.0	
Rt.197 Br.	11/1/00	10:40	Depth Integrated Composite	5.0-6.0	9.0	
Rt.197 Br.	11/1/00	10:40	Depth Integrated Composite	5.0-6.0	9.0	
TID-WEST	11/1/00	11:20	Surface Grab	3.0	9.0	Blind Dup taken here.
TID-PRW2	11/1/00	11:50	Depth Integrated Composite	10.0	9.0	
Rt.29 Br. EQBL	11/1/00	11:40	Rinse Blank			
Rt.29 Br.	11/1/00	12:15	Depth Integrated Composite	16.0	9.0	
Blind Duplicate	11/1/00	:				Blind dup taken at TID-WEST

Additional Notes:

Weather Data

Temperature 50°
Wind Strong North Wind
Precipitation None

Fort Edward Staff Gage

Time 11:45
Gage Height (ft) 22.27
Estimated Flow (cfs) 6,566
Daily Avg Flow 3,358

Sampled by: Hennessey
Date: 11/1/00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	10/25/00	7:20	Depth Integrated Composite	7.0	12.0	No flow over the falls
Rt.197 Br.	10/25/00	8:00	Depth Integrated Composite	6.0	12.0	
Rt.197 Br.	10/25/00	8:00	Depth Integrated Composite	6.0	12.0	
TID-WEST	10/25/00	8:40	Surface Grab	3.0	12.0	
TID-PRW2 EQBL	10/25/00	8:30	Rinse Blank			
TID-PRW2	10/25/00	9:00	Depth Integrated Composite	11.0	12.0	
Rt.29 Br. MS	10/25/00	9:30	Depth Integrated Composite			
Rt.29 Br.	10/25/00	9:30	Depth Integrated Composite	16.0	12.0	
Blind Duplicate	10/25/00	:				Sample taken at Rt. 197 Br.

Additional Notes:

Weather Data

Temperature 65° Sunny
Wind None
Precipitation None

Fort Edward Staff Gage

Time 09:00
Gage Height (ft) 23.21 22.34
Estimated Flow (cfs) 10,746 6840
4162

Sampled by: Hennessey/LaRue/Rurry
Date: 10-25-00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	11/8/00	10:00	Depth Integrated Composite	7.0	10.0	No flow over the falls
Rt.197 Br.	11/8/00	10:35	Depth Integrated Composite	7.0	10.0	
Rt.197 Br.	11/8/00	10:35	Depth Integrated Composite	7.0	10.0	
TID-WEST	11/8/00	11:00	Surface Grab	3.0	10.0	
TID-PRW2 MS	11/8/00	11:30	Depth Integrated Composite	11.0	10.0	
B.F.Br EQBL	11/8/00	9:50	Rinse Blank			
TID-PRW2	11/8/00	11:30	Depth Integrated Composite	11.0	10.0	
Rt.29 Br.	11/8/00	12:00	Depth Integrated Composite	15.0	10.0	
Blind Duplicate	11/8/00	:				Sample taken at Rt.29. br.

Additional Notes:

Weather Data

Temperature 50°
Wind None
Precipitation None

Fort Edward Staff Gage

Time 10:30
Gage Height (ft) 21.85
Estimated Flow (cfs) 4990
Daily Avg. 3,278

Sampled by: M. Hennessey
Date: 11-8-00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	11/15/00	7:35	Depth Integrated Composite	5	8	no flow over dam
Rt.197 Br.	11/15/00	8:20	Depth Integrated Composite	4	8	
Rt.197 Br.	11/15/00	:	Depth Integrated Composite			
TID-WEST EQBL	11/15/00	8:40	Rinse Blank			
TID-WEST MS	11/15/00	8:50				
TID-WEST	11/15/00	8:50	Surface Grab		8	
TID-PRW2	11/15/00	10:10	Depth Integrated Composite	4	8	
Rt.29 Br.	11/15/00	10:40	Depth Integrated Composite	12	8	
Blind Duplicate	11/15/00	:				Sampled at B.F. Bridge

Additional Notes:

Weather Data

Temperature 35°F
Wind None
Precipitation None

Fort Edward Staff Gage

Time 8:30
Gage Height (ft) 22.35
Estimated Flow (cfs) 6880
Daily Avg: 3901

Sampled by: M. Ukesh
Date: 11/15/00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	11/22/00	9 : 40	Depth Integrated Composite	7	21	No flow over the falls
Rt.197 Br.	11/22/00	10 : 15	Depth Integrated Composite	6	21	
Rt.197 Br.	11/22/00	10 : 15	Depth Integrated Composite	6	21	
TID-WEST	11/22/00	10 : 45	Surface Grab	3	21	
TID-WEST MS	11/22/00	10 : 45	Depth Integrated Composite	3	21	
Rt.29 Br.	11/22/00	11 : 10	Depth Integrated Composite	15	21	
Blind Duplicate	11/22/00	:				sample taken at TID-WEST
BOATLAUNCH	11/22/00	9 : 09	Surface Grab	32	21	

Additional Notes:

Weather Data

Temperature 30°
Wind Slight W.
Precipitation None

Fort Edward Staff Gage

Time 10:15
Gage Height (ft) 20.65
Estimated Flow (cfs) 1,590
Daily Average (cfs) 1,374

Sampled by: M. Hennessey
Date: 11/22/00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	11/29/00	9:50	Depth Integrated Composite	7.0	4.0	no flow over falls
B.F.Br MS	11/29/00	9:50	Depth Integrated Composite	7.0	4.0	
Rt.197 Br. EQBL	11/29/00	10:15	Rinse Blank			
Rt.197 Br.	11/29/00	10:30	Depth Integrated Composite	6.0	4.0	
Rt.197 Br.	11/29/00	10:30	Depth Integrated Composite	6.0	4.0	
TID-WEST	11/29/00	11:30	Surface Grab	3.0	4.0	No flow through culvert
TID-PRW2	11/29/00	11:00	Depth Integrated Composite	10.0	4.0	
Rt.29 Br.	11/29/00	:	Depth Integrated Composite			
Blind Duplicate	11/29/00	:				Sample taken at Rt.29 Br. TID-WEST

Additional Notes:

Weather Data

Temperature 36°
Wind Calm / Cloudy
Precipitation None

Fort Edward Staff Gage

Time 10:15
Gage Height (ft) 70.78
Estimated Flow (cfs) 1870

Sampled by: M. Hennessey
Date: 11/29/00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	12/6/00	10 :20	Depth Integrated Composite	7.0	1.0	No flow over dam
Rt.197 Br.	12/6/00	11 :00	Depth Integrated Composite	6.0	1.0	
Rt.197 Br.	12/6/00	11 :00		6.0	1.0	
TID-WEST MS	12/6/00	11 :15	Surface Grab	3.0	1.0	
TID-WEST	12/6/00	11 :15	Surface Grab	3.0	1.0	
TID-PRW2	12/6/00	:	Depth Integrated Composite			
Rt.29 Br. EQBL	12/6/00	12 :30	Rinse Blank	15.0		
Rt.29 Br.	12/6/00	12 :00	Depth Integrated Composite	15.0	1.0	
Blind Duplicate	12/6/00	:				Sample Taken at TID-PRW2 Rt.29 br.

Additional Notes:

Weather Data

Temperature 20°s
Wind North
Precipitation None

Fort Edward Staff Gage

Time 11:00
Gage Height (ft) 20.76
Estimated Flow (cfs) 4670
Avg. flow: 4145

Sampled by: Hennessey
Date: 12/6/00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	12/13/00	10 : 30	Depth Integrated Composite	7.0	1.0	No flow over the falls
Rt.197 Br.	12/13/00	11 : 00	Depth Integrated Composite	6.0	1.0	
Rt.197 Br.	12/13/00	:	Depth Integrated Composite			
TID-WEST EQBL	12/13/00	11 : 50	Rinse Blank			
TID-WEST	12/13/00	12 : 00	Surface Grab	3.0	1.0	
TID-PRW2	12/31/00	11 : 30	Depth Integrated Composite	11.0	1.0	
Rt.29 Br. MS	12/13/00	12 : 30	Depth Integrated Composite	15.0	1.0	
Rt.29 Br.	12/13/00	12 : 30	Depth Integrated Composite	15.0	1.0	
Blind Duplicate	12/13/00	:			1.0	Sample taken at Rt.197 br. TID-PRW2

Additional Notes:

Weather Data

Temperature 20.0°f
Wind Slight S.
Precipitation None

Fort Edward Staff Gage

Time 11.00
Gage Height (ft) 21.72
Estimated Flow (cfs) 4530
3751

Sampled by: Hennessey
Date: 12/13/00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br MS	12/20/00	10:45	Depth Integrated Composite	7.0	1.0	No flow over the falls
B.F.Br	12/20/00	10:45	Depth Integrated Composite	7.0	1.0	
Rt.197 Br. EQBL	12/20/00	11:10	Rinse Blank			
Rt.197 Br.	12/20/00	11:30	Depth Integrated Composite	6.0	1.0	
Rt.197 Br.	12/20/00	11:30	Depth Integrated Composite	6.0	1.0	
TID-WEST	12/20/00	12:05	Surface Grab	3.0	1.0	
Rt.29 Br.	12/20/00	12:30	Depth Integrated Composite	15.0	1.0	
Blind Duplicate	12/20/00	:				Sample Taken at TID-WEST

Additional Notes:

Weather Data

Temperature 18°F
Wind West
Precipitation None

Fort Edward Staff Gage

Time 11:00
Gage Height (ft) 22.80
Estimated Flow (cfs) 8800
Avg: 8066

Sampled by: Hennessey
Date: 12/20/00

Field Log

Sample Location	Date	Time	Sampling Method	Approximate Water Depth (ft)	Water Temp. (C)	Comments
B.F.Br	12/27/00	12 : 20	Depth Integrated Composite	7	0.5	
B.F.Br MS	12/27/00	10 : 20	Depth Integrated Composite	7	0.5	
Rt.197 Br.	12/27/00	11 : 00	Depth Integrated Composite	7	0.5	
TID-WEST EQBL	12/27/00	11 : 30	Rinse Blank			
TID-WEST	12/27/00	11 : 40	Surface Grab	3	0.5	
Blind Duplicate	12/27/00	:				Sample taken at Rt.197 Br..

Additional Notes:

Weather Data

Temperature 8.0°
Wind Calm
Precipitation None

Fort Edward Staff Gage

Time -
Gage Height (ft) -
Estimated Flow (cfs) NA
Average Daily Flow (cfs) NA

Sampled by: M. Hennessey
Date: 12/27/00

317767

317768

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